

---

**APPENDIX B.**  
**AIR QUALITY ASSESSMENT**

---

# AIR QUALITY ASSESSMENT

ARE Science Village

City of San Diego, California

*April 2022*

*This page intentionally left blank*

# Air Quality Assessment

## ARE Science Village

City of San Diego, California

Prepared for: Alexandra Real Estate Equities, Inc.  
10996 Torreyana Road, Suite 250  
San Diego, CA 92121  
Contact: Neil Hyytinen  
Phone: (858) 610-5420  
Email: [nhyytinen@hechtsolberg.com](mailto:nhyytinen@hechtsolberg.com)

Prepared by: Michael Baker International  
9755 Clairemont Mesa Boulevard, Suite 100  
San Diego, California 92124  
Contact: Bob Stark, AICP  
Phone: (858) 614-5000  
Email: [bstark@mbakerintl.com](mailto:bstark@mbakerintl.com)

April 2022

*This page intentionally left blank*

## TABLE OF CONTENTS

**Executive Summary ..... 1**

**1 Introduction ..... 2**

    1.1 Project Location ..... 2

    1.2 Environmental Setting/Existing Conditions ..... 2

    1.3 Project Description ..... 2

**2 Environmental Setting ..... 11**

**3 State and Federal Ambient Air Quality Standards ..... 12**

    3.1 Ambient Air Quality Standards ..... 12

    3.2 Ambient Air Monitoring ..... 15

    3.3 Sensitive Receptors ..... 17

**4 Regulatory Setting ..... 18**

    4.1 Air Quality Regulatory Programs ..... 18

**5 POTENTIAL AIR QUALITY Impacts ..... 23**

**6 References ..... 33**

    6.1 List of Preparers ..... 33

    6.2 Documents ..... 33

    6.3 WebSites/Programs ..... 34

## LIST OF TABLES

|   |    |
|---|----|
| Table 1. Building Use Summary .....   | 3  |
| Table 2. State and National Ambient Air Quality Standards and Attainment Status ..... | 12 |
| Table 3. Summary of Air Quality Data.....   | 15 |
| Table 4. Sensitive Receptors .....  | 17 |
| Table 5. San Diego Air Pollution Control District Pollutant Thresholds .....          | 24 |
| Table 6. Maximum Daily Construction Emissions .....                                   | 26 |
| Table 7. Long-Term Operational Emissions .....  | 27 |

## LIST OF EXHIBITS

|           |                        |   |
|-----------|------------------------|---|
| Exhibit 1 | Regional Vicinity..... | 5 |
| Exhibit 2 | Site Vicinity.....     | 7 |
| Exhibit 3 | Site Plan.....         | 9 |

## LIST OF APPENDICES

Appendix A: Air Quality Emissions Data

Appendix B: Traffic Data

## EXECUTIVE SUMMARY

The purpose of this Air Quality Assessment is to evaluate potential short- and long-term air quality impacts resulting from implementation of the proposed ARE Science Village Project (“project” or “proposed project”).

The project site is generally located west of Interstate 805 and north of State Route 52 in the City of San Diego, California. Specifically, the approximately 3.97-acre project site is located at the northeast corner of Towne Centre Drive and Executive Drive in the University Towne Center. The project site is developed and surrounded by a variety of land uses, such as light industrial, scientific/clinical research, medical, and general office uses. The project proposes to redevelop an existing commercial site. The proposed project consists of two primary components: (1) demolition of the existing on-site buildings totaling approximately 138,400 square feet (sq. ft.) and (2) redevelopment of the site with approximately 369,878 sq. ft. of mixed-use research, retail, and office uses across two buildings. The project would consist of approximately 310,416 sq. ft. of scientific research and development (R&D) uses and 59,462 sq. ft. are planned as accessory/amenity space. The accessory/amenity space is expected to consist of a 7,655 sq. ft. market, 563 sq. ft. food and beverage space, 23,397 sq. ft. fitness center, and 27,847 sq. ft. conference space(s). Additionally, 3 levels of subterranean parking with approximately 938 parking spaces are proposed.

Short-Term Construction Impacts. Construction emissions from project would not exceed established regional or localized San Diego Air Pollution Control District thresholds. A less than significant impact would occur in this regard.

Long-Term Operational Impacts. Project implementation would not result in long-term regional air quality and/or localized air quality impacts. In addition, impacts related to carbon monoxide hotspots would also be less than significant.



# 1 INTRODUCTION

The purpose of this Air Quality Assessment is to evaluate potential short- and long-term air quality impacts resulting from implementation of the proposed ARE Science Village Project (“project” or “proposed project”) in the City of San Diego (City).

## 1.1 PROJECT LOCATION

The project site is generally located west of Interstate 805 (I-805) and north of State Route 52 in the City; refer to [Exhibit 1, Regional Vicinity](#). Specifically, the approximately 3.97-acre project site is located at 9363, 9373, and 9393 Towne Center Drive at the northeast corner of Towne Centre Drive and Executive Drive in the University Towne Center; refer to [Exhibit 2, Site Vicinity](#). The site is located within the University Community Plan Area. Regional access to the project area is provided via I-805 approximately one mile to the east and Interstate 5 approximately two miles to the west.

## 1.2 ENVIRONMENTAL SETTING/EXISTING CONDITIONS

The area surrounding the project site is highly developed and urbanized with a variety of land uses, such as light industrial, scientific/clinical research, medical, and general office uses. Open space uses are located approximately 0.6 miles to the east beyond I-805. Commercial uses are located immediately adjacent to the west and south. The University of California, San Diego campus is located further west. Additionally, residential uses are located approximately 0.2 mile to the southwest.

The site currently supports existing office buildings which are connected below grade by one level of subterranean parking. Surface parking exists on the roof of the subterranean parking level. Access to the parking garage is provided from a driveway on Executive Drive and from a ramp located within the surface parking lot.

## 1.3 PROJECT DESCRIPTION

Alexandria Real Estate Equities (applicant) proposes to redevelop an existing commercial site in the community of La Jolla, located in the City of San Diego, California. The proposed project consists of two primary components: (1) demolition of the existing on-site buildings totaling approximately 138,400 square feet (sq. ft.) and (2) redevelopment of the site with approximately 369,878 sq. ft. of mixed-use research, retail, and office uses across two buildings. The project would consist of approximately 310,416 sq. ft. of scientific research and development (R&D) uses and 59,462 sq. ft. are planned as accessory/amenity space. The accessory/amenity space is expected to consist of a 7,655 sq. ft. market, 563 sq. ft. food and beverage space, 23,397 sq. ft. fitness center, and 27,847 sq. ft. conference space(s). Additionally, 3 levels of subterranean parking with approximately 938 parking spaces are proposed. Access to the parking garage would be located along Towne Centre Drive and Executive Drive (see [Exhibit 3, Site Plan](#)).

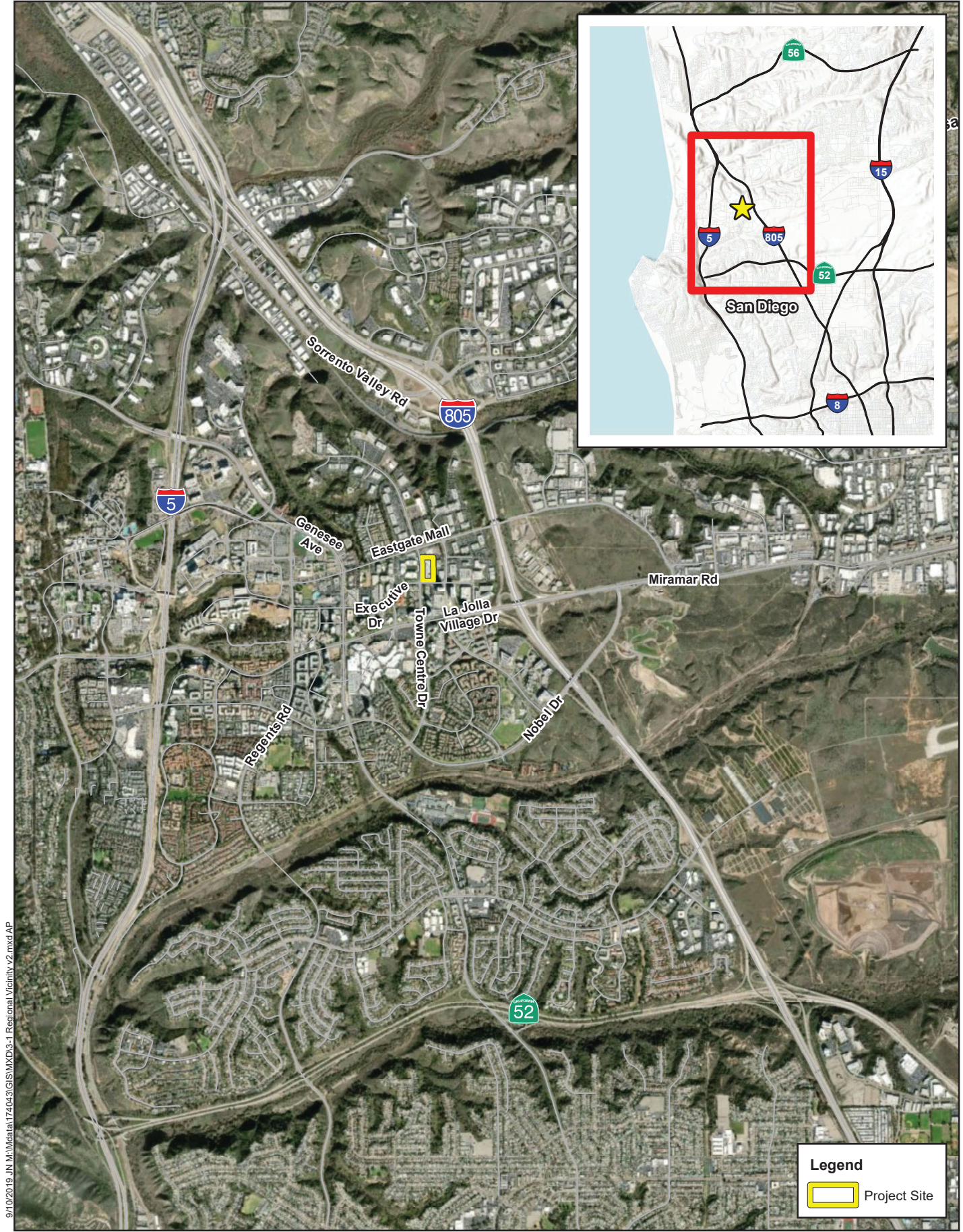
**TABLE 1. BUILDING USE SUMMARY**

| <b>Use by Building</b>                       | <b>Square Footage<br/>of Proposed Use</b> |
|--|---|
| <b>Existing Buildings (to be Demolished)</b> |   |
| Scientific Research and Development          | 138,400                                   |
| <b>Total</b>                                 | <b>138,400</b>                            |
| <b>Proposed Buildings</b>                    |   |
| Scientific Research and Development          | 310,416                                   |
| Secondary Uses                               |   |
| <i>Food and Beverage</i>                     | 563                                       |
| <i>Retail/Market</i>                         | 7,655                                     |
| <i>Fitness Center</i>                        | 23,397                                    |
| <i>Conference Space</i>                      | 27,847                                    |
| <b>Subtotal</b>                              | 59,462                                    |
| <b>Total</b>                                 | <b>369,878</b>                            |

Discretionary actions associated with the project include a Specific Plan Amendment (SPA) to the Nexus Technology Centre Specific Plan, Planned Development Permit (PDP), a Rezone, and a Community Plan Amendment (CPA). If approved, these entitlements would allow for the proposed redevelopment of the project site.

*This page intentionally left blank*





9/10/2019\_J:\M:\Data\174043\GIS\MXD\3-1\_Regional\_Vicinity\_V2.mxd.AP

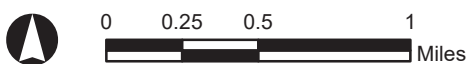
**Legend**

Project Site

ARE Science Village

# Regional Vicinity

Figure 1



Source: ESRI World Imagery, US Census Tiger/Line, National Highway Planning Network

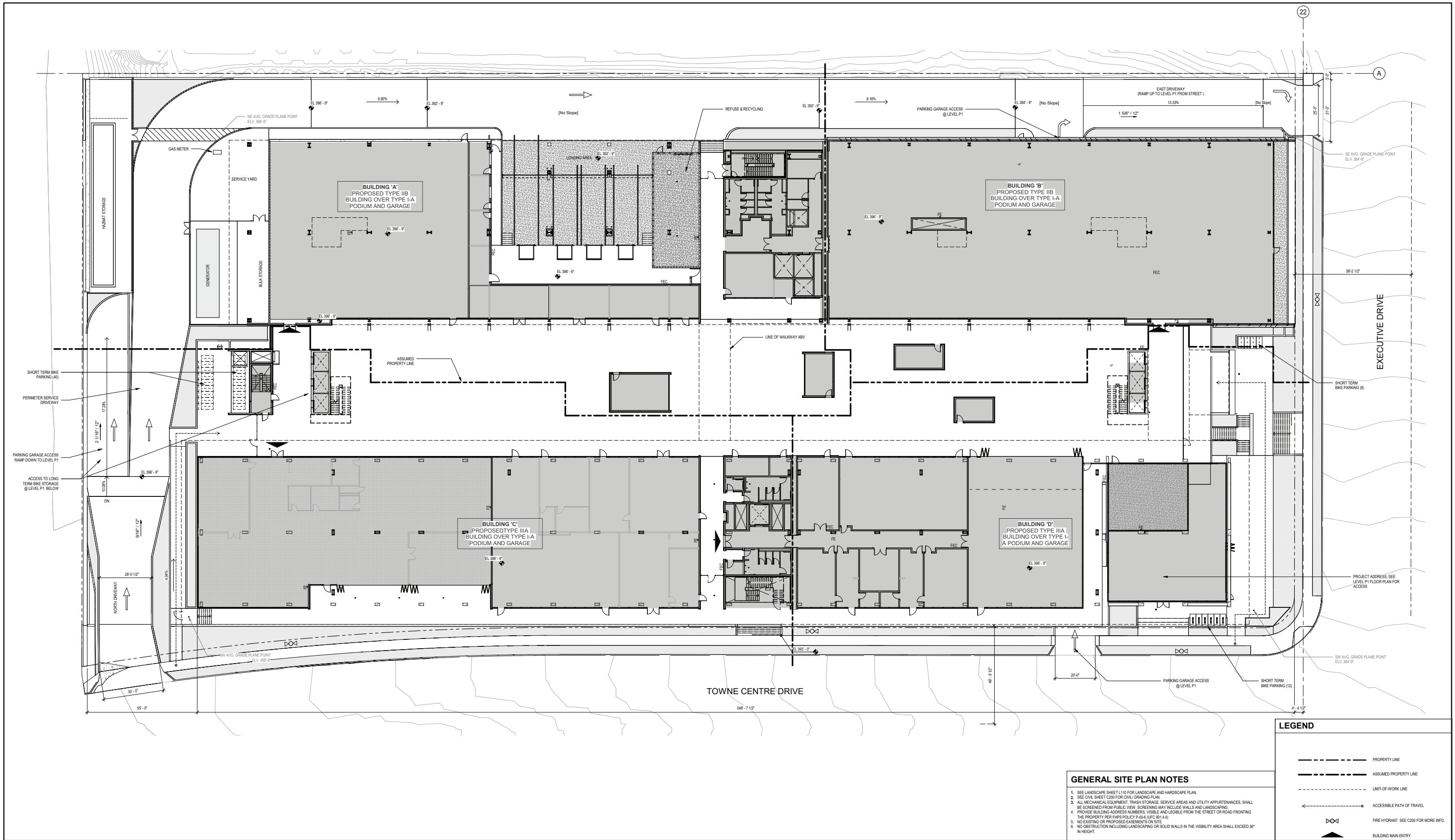


*This page intentionally left blank*



*This page intentionally left blank*







*This page intentionally left blank*

## 2 ENVIRONMENTAL SETTING

### AIR BASIN

The California Air Resources Board (CARB) divides the State into 15 air basins that share similar meteorological and topographical features. The project site lies within the western portion of the San Diego Air Basin (SDAB). The SDAB covers a roughly 4,200-square mile area and is bounded by the Pacific Ocean to the west and high mountain ranges to the east. The SDAB includes all of San Diego County with population and emissions concentrated mainly in the western portion of the County.<sup>1</sup> The topography of SDAB is highly varied, comprised of coastal plains and lagoons, flatlands and mesas, broad valleys, canyons, foothills, mountains, and deserts.

### CLIMATE

The climate of the SDAB is classified as Mediterranean, with warm, dry summers and mild winters. The area experiences an average of 201 days above 70 degrees Fahrenheit and 9 to 13 inches of rainfall annually.<sup>2</sup> During fall, the region often experiences dry, warm easterly winds, locally referred to as Santa Ana winds, which raise temperatures and lower humidity.

A common atmospheric condition known as a temperature inversion affects air quality in the SDAB. During an inversion, air temperatures get warmer rather than cooler with increasing height. Inversion layers are important for local air quality because they inhibit the dispersion of pollutants and result in a temporary degradation of air quality. The pollution potential of an area is largely dependent on a combination of winds, atmospheric stability, solar radiation, and terrain. The combination of low wind speeds and low-level inversions produce the greatest concentration of air pollutants. On days without inversions, or on days with wind speeds averaging over 15 miles per hour, the atmospheric pollution potential is greatly reduced.

---

<sup>1</sup> City of San Diego, *California Environmental Quality Act Significance Determination Thresholds*, July 2016. [https://www.sandiego.gov/sites/default/files/july\\_2016\\_ceqa\\_thresholds\\_final\\_0.pdf](https://www.sandiego.gov/sites/default/files/july_2016_ceqa_thresholds_final_0.pdf), accessed July 15, 2021.

<sup>2</sup> San Diego Air Pollution Control District (SDAPCD). *Annual Air Quality Monitoring Network Plan 2017*. April 2018.

## 3 STATE AND FEDERAL AMBIENT AIR QUALITY STANDARDS

### 3.1 AMBIENT AIR QUALITY STANDARDS

CARB and the U.S. Environmental Protection Agency (EPA) establish ambient air quality standards for major pollutants at thresholds intended to protect public health. The standards for some pollutants are based on other values such as protection of crops or avoidance of nuisance conditions. [Table 2, State and National Ambient Air Quality Standards and Attainment Status](#), summarizes the California Ambient Air Quality Standards (CAAQS) and the National Ambient Air Quality Standards (NAAQS).

CARB designates all areas within the State as either attainment (having air quality better than the CAAQS) or nonattainment (having a pollution concentration that exceeds the CAAQS more than once in three years). Likewise, the EPA designates all areas of the U.S. as either being in attainment of the NAAQS or nonattainment if pollution concentrations exceed the NAAQS. Because attainment/nonattainment is pollutant-specific, an area may be classified as nonattainment for one pollutant and attainment for another. Similarly, because the State and national standards differ, an area could be classified as attainment for the Federal standard of a pollutant while it may be nonattainment for the State standard of the same pollutant. Some areas are unclassified, which means no monitoring data are available. Unclassified areas are considered to be in attainment. The attainment status of SDAB for CAAQS and NAAQS for the project area is shown in [Table 2](#) and discussed in more detail below under “Ambient Air Monitoring.”

**TABLE 2. STATE AND NATIONAL AMBIENT AIR QUALITY STANDARDS AND ATTAINMENT STATUS**

|  |                        | Standard <sup>3</sup>                 | Attainment Status    | Standards <sup>3,4</sup>              | Attainment Status    |
|--|------------------------|---------------------------------------|----------------------|---------------------------------------|----------------------|
| Ozone (O <sub>3</sub> )                      | 1 Hour                 | 0.09 ppm<br>(180 µg/m <sup>3</sup> )  | <b>Nonattainment</b> | N/A                                   | N/A                  |
|  | 8 Hours                | 0.070 ppm<br>(137 µg/m <sup>3</sup> ) | <b>Nonattainment</b> | 0.070 ppm<br>(137 µg/m <sup>3</sup> ) | <b>Nonattainment</b> |
| Particulate Matter (PM <sub>10</sub> )       | 24 Hours               | 50 µg/m <sup>3</sup>                  | <b>Nonattainment</b> | 150 µg/m <sup>3</sup>                 | Unclassified         |
|  | Annual Arithmetic Mean | 20 µg/m <sup>3</sup>                  | Nonattainment        | N/A                                   | N/A                  |
| Fine Particulate Matter (PM <sub>2.5</sub> ) | 24 Hours               | No Separate State Standard            |                      | 35 µg/m <sup>3</sup>                  | Attainment           |
|  | Annual Arithmetic Mean | 12 µg/m <sup>3</sup>                  | <b>Nonattainment</b> | 12.0 µg/m <sup>3</sup>                | <b>Nonattainment</b> |
| Carbon Monoxide (CO)                         | 8 Hours                | 9.0 ppm<br>(10 mg/m <sup>3</sup> )    | Attainment           | 9 ppm<br>(10 mg/m <sup>3</sup> )      | Attainment           |
|  | 1 Hour                 | 20 ppm<br>(23 mg/m <sup>3</sup> )     | Attainment           | 35 ppm<br>(40 mg/m <sup>3</sup> )     | Attainment           |

**TABLE 2. STATE AND NATIONAL AMBIENT AIR QUALITY STANDARDS AND ATTAINMENT STATUS, CONTINUED**

| Pollutant  | Averaging Time                   | State <sup>1</sup>                       |                   | National <sup>2</sup>            |                   |
|--|----------------------------------|--|-------------------|----------------------------------|-------------------|
|  |                                  | Standard <sup>3</sup>                    | Attainment Status | Standards <sup>3,4</sup>         | Attainment Status |
| Nitrogen Dioxide (NO <sub>2</sub> ) <sup>5</sup> | Annual Arithmetic Mean           | 0.030 ppm (57 µg/m <sup>3</sup> )        | N/A               | 53 ppb (100 µg/m <sup>3</sup> )  | Attainment        |
|  | 1 Hour                           | 0.18 ppm (339 µg/m <sup>3</sup> )        | Attainment        | 100 ppb (188 µg/m <sup>3</sup> ) | Attainment        |
| Lead (Pb) <sup>7,8</sup>                         | 30 days Average                  | 1.5 µg/m <sup>3</sup>                    | Attainment        | N/A                              | N/A               |
|  | Calendar Quarter                 | N/A                                      | N/A               | 1.5 µg/m <sup>3</sup>            | Attainment        |
|  | Rolling 3-Month Average          | N/A                                      | N/A               | 0.15 µg/m <sup>3</sup>           | Attainment        |
| Sulfur Dioxide (SO <sub>2</sub> ) <sup>6</sup>   | 24 Hours                         | 0.04 ppm (105 µg/m <sup>3</sup> )        | Attainment        | 0.14 ppm (for certain areas)     | Attainment        |
|  | 3 Hours                          | N/A                                      | N/A               | N/A                              | N/A               |
|  | 1 Hour                           | 0.25 ppm (655 µg/m <sup>3</sup> )        | Attainment        | 75 ppb (196 µg/m <sup>3</sup> )  | N/A               |
|  | Annual Arithmetic Mean           | N/A                                      | N/A               | 0.30 ppm (for certain areas)     | Attainment        |
| Visibility-Reducing Particles <sup>9</sup>       | 8 Hours (10 a.m. to 6 p.m., PST) | Extinction coefficient = 0.23 km@<70% RH | Unclassified      | No National Standards            |                   |
| Sulfates   | 24 Hour                          | 25 µg/m <sup>3</sup>                     | Attainment        |                                  |                   |
| Hydrogen Sulfide                                 | 1 Hour                           | 0.03 ppm (42 µg/m <sup>3</sup> )         | Unclassified      |                                  |                   |
| Vinyl Chloride <sup>7</sup>                      | 24 Hour                          | 0.01 ppm (26 µg/m <sup>3</sup> )         | Unclassified      |                                  |                   |

µg/m<sup>3</sup> = micrograms per cubic meter; ppm = parts per million; ppb = parts per billion; km = kilometer(s); RH = relative humidity; PST = Pacific Standard Time; N/A = Not Applicable

- California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1- and 24-hour), nitrogen dioxide, and particulate matter (PM<sub>10</sub>, PM<sub>2.5</sub>, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. CAAQS are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
- National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM<sub>10</sub>, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m<sup>3</sup> is equal to or less than one. For PM<sub>2.5</sub>, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard.
- 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.
- National Primary Standards: The levels of air quality necessary, with an adequate margin of safety, to protect the public health.

**TABLE 2. STATE AND NATIONAL AMBIENT AIR QUALITY STANDARDS AND ATTAINMENT STATUS,  
CONTINUED**

5. 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.
6. 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. Note that the 1-hour national standard is in units of ppb. California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.
7. CARB 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.
8. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 µg/m<sup>3</sup> as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.
9. In 1989, CARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

Source: California Air Resources Board and U.S. Environmental Protection Agency, Ambient Air Quality Standards Chart, <http://www.arb.ca.gov/research/aaqs/aaqs2.pdf>, June 17, 2021.

San Diego Air Pollution Control District, Attainment Status, <https://www.sdapcd.org/content/sdc/apcd/en/air-quality-planning/attainment-status.html>, accessed June 17, 2021.

### 3.2 AMBIENT AIR MONITORING

CARB monitors ambient air quality at approximately 250 air monitoring stations across the State. Air quality monitoring stations usually measure pollutant concentrations ten feet above ground level; therefore, air quality is often referred to in terms of ground-level concentrations. The closest air monitoring station to the project site is the Kearny Villa Road Monitoring Station located at 6125A Kearny Villa Road. Local air quality data from 2018 to 2020 is provided in Table 3, Summary of Air Quality Data. Table 3 lists the monitored maximum concentrations and number of exceedances of Federal and State air quality standards for each year.

**TABLE 3. SUMMARY OF AIR QUALITY DATA**

| Pollutant   | California Standard                  | Federal Primary Standard              | Year | Maximum Concentration <sup>3</sup> | Days (Samples) State/Federal Std. Exceeded |
|---|--------------------------------------|---------------------------------------|------|------------------------------------|--|
| Ozone (O <sub>3</sub> ) <sup>1</sup><br>(1-hour)            | 0.09 ppm<br>for 1 hour               | NA <sup>6</sup>                       | 2018 | 0.102 ppm                          | 1/0  |
|   |                                      |                                       | 2019 | 0.083                              | 0/0  |
|   |                                      |                                       | 2020 | 0.123                              | 2/0  |
| Ozone (O <sub>3</sub> ) <sup>1</sup><br>(8-hour)            | 0.070 ppm<br>for 8 hours             | 0.070 ppm<br>for 8 hours              | 2018 | 0.077 ppm                          | 5/5  |
|   |                                      |                                       | 2019 | 0.075                              | 1/1  |
|   |                                      |                                       | 2020 | 0.102                              | 12/10                                      |
| Carbon Monoxide (CO) <sup>2</sup><br>(1-hour)               | 20 ppm<br>for 1 hour                 | 35 ppm<br>for 1 hour                  | 2018 | 1.9 ppm                            | 0/0  |
|   |                                      |                                       | 2019 | 4.1                                | 0/0  |
|   |                                      |                                       | 2020 | 3.3                                | 0/0  |
| Nitrogen Dioxide (NO <sub>2</sub> ) <sup>1</sup>            | 0.18 ppm<br>for 1 hour               | 0.100 ppm<br>for 1 hour               | 2018 | 0.045 ppm                          | 0/0  |
|   |                                      |                                       | 2019 | 0.046                              | 0/0  |
|   |                                      |                                       | 2020 | 0.052                              | 0/0  |
| Fine Particulate Matter (PM <sub>2.5</sub> ) <sup>1,5</sup> | No Separate Standard                 | 35 µg/m <sup>3</sup><br>for 24 hours  | 2018 | 32.2 µg/m <sup>3</sup>             | 0/0  |
|   |                                      |                                       | 2019 | 16.2                               | 0/0  |
|   |                                      |                                       | 2020 | 47.5                               | 2/*  |
| Particulate Matter (PM <sub>10</sub> ) <sup>4,5,7</sup>     | 50 µg/m <sup>3</sup><br>for 24 hours | 150 µg/m <sup>3</sup><br>for 24 hours | 2018 | 43.0 µg/m <sup>3</sup>             | 0/0  |
|   |                                      |                                       | 2019 | 38.7                               | 0/*  |
|   |                                      |                                       | 2020 | *                                  | *  |

ppm = parts per million; PM<sub>10</sub> = particulate matter 10 microns in diameter or less; µg/m<sup>3</sup> = micrograms per cubic meter; \* = insufficient data available to determine the value; PM<sub>2.5</sub> = particulate matter 2.5 microns in diameter or less; NA = not applicable.

Notes:

1. Data collected from the Kearny Villa Road Monitoring Station located at 6125A Kearny Villa Road, San Diego, CA 92145.
2. Data collected from the Rancho Carmel Drive Monitoring Station located at 11403 Rancho Carmel Drive, San Diego, CA 92198
3. Maximum concentration is measured over the same period as the California Standards.
4. PM<sub>10</sub> exceedances are based on State thresholds established prior to amendments adopted on June 20, 2002.
5. PM<sub>10</sub> and PM<sub>2.5</sub> exceedances are derived from the number of samples exceeded, not days.
6. The Federal standard was revoked in June 2005.
7. Data collected from the El Cajon-Lexington Elementary School Monitoring Station located at 533 South First Street, El Cajon CA 92019.

Sources:

California Air Resources Board, *ADAM Air Quality Data Statistics*, <http://www.arb.ca.gov/adam/>, accessed December 8, 2021.

California Air Resources Board, *AQMIS2: Air Quality Data*, <https://www.arb.ca.gov/aqmis2/aqdselect.php>, accessed December 8, 2021.

Ozone. Ozone ( $O_3$ ) occurs in two layers of the atmosphere. The layer surrounding the Earth's surface is the troposphere. The troposphere extends approximately 10 miles above ground level, where it meets the second layer, the stratosphere. The stratospheric (the "good" ozone) layer extends upward from about ten to 30 miles and protects life on Earth from the sun's harmful ultraviolet rays (UV-B). "Bad" ozone is a photochemical pollutant, and needs volatile organic compounds (VOCs), nitrogen oxides ( $NO_x$ ) and sunlight to form; therefore, VOCs and  $NO_x$  are  $O_3$  precursors. VOCs and  $NO_x$  are emitted from various sources throughout the City. Significant  $O_3$  formation generally requires an adequate amount of precursors in the atmosphere and several hours in a stable atmosphere with strong sunlight.

Many respiratory ailments, as well as cardiovascular disease, are aggravated by exposure to high  $O_3$  levels.  $O_3$  also damages natural ecosystems (such as forests and foothill plant communities) and damages agricultural crops and some man-made materials (such as rubber, paint, and plastics). Societal costs from  $O_3$  damage include increased healthcare costs, the loss of human and animal life, accelerated replacement of industrial equipment and reduced crop yields.

Carbon Monoxide. Carbon monoxide (CO) is an odorless, colorless toxic gas that is emitted by mobile and stationary sources as a result of incomplete combustion of hydrocarbons or other carbon-based fuels. In cities, automobile exhaust can cause as much as 95 percent of all CO emissions. At high concentrations, CO can reduce the oxygen-carrying capacity of the blood and cause headaches, dizziness, and unconsciousness.

Nitrogen Dioxide. Nitrogen oxides ( $NO_x$ ) are a family of highly reactive gases that are a primary precursor to the formation of ground-level  $O_3$  and react in the atmosphere to form acid rain.  $NO_2$  (often used interchangeably with  $NO_x$ ) is a reddish-brown gas that can cause breathing difficulties at high levels. Peak readings of  $NO_2$  occur in areas that have a high concentration of combustion sources (e.g., motor vehicle engines, power plants, refineries, and other industrial operations).

$NO_2$  can irritate and damage the lungs and lower resistance to respiratory infections such as influenza. The health effects of short-term exposure are still unclear. However, continued or frequent exposure to  $NO_2$  concentrations that are typically much higher than those normally found in the ambient air may increase acute respiratory illnesses in children and increase the incidence of chronic bronchitis and lung irritation. Chronic exposure to  $NO_2$  may aggravate eyes and mucus membranes and cause pulmonary dysfunction.

Coarse Particulate Matter ( $PM_{10}$ ).  $PM_{10}$  refers to suspended particulate matter, which is smaller than ten microns or ten one-millionths of a meter.  $PM_{10}$  arises from sources such as road dust, diesel soot, combustion products, construction operations, and dust storms.  $PM_{10}$  scatters light and significantly reduces visibility. In addition, these particulates penetrate the lungs and can potentially damage the respiratory tract. On June 19, 2003, CARB adopted amendments to the Statewide 24-hour particulate matter standards based upon requirements set forth in the Children's Environmental Health Protection Act (Senate Bill 25).

Fine Particulate Matter ( $PM_{2.5}$ ). Due to recent increased concerns over health impacts related to fine particulate matter (particulate matter 2.5 microns in diameter or less), both State and Federal  $PM_{2.5}$  standards have been created. Particulate matter impacts primarily affect infants, children, the elderly, and those with pre-existing cardiopulmonary disease. In 1997, the EPA announced new  $PM_{2.5}$  standards.

Industry groups challenged the new standard in court and the implementation of the standard was blocked. However, upon appeal by the EPA, the U.S. Supreme Court reversed this decision and upheld the EPA’s new standards.

On June 20, 2002, CARB adopted amendments for Statewide annual ambient particulate matter air quality standards. These standards were revised and established due to increasing concerns by CARB that previous standards were inadequate, as almost everyone in California is exposed to levels at or above the current State standards during some parts of the year, and the Statewide potential for significant health impacts associated with particulate matter exposure was determined to be large and wide-ranging.

Reactive Organic Gases and Volatile Organic Compounds. Hydrocarbons are organic gases that are formed solely of hydrogen and carbon. There are several subsets of organic gases including reactive organic gases (ROGs) and VOCs. Both ROGs and VOCs are emitted from the incomplete combustion of hydrocarbons or other carbon-based fuels. Major sources of hydrocarbons include combustion engine exhaust, oil refineries, and oil-fueled power plants; other common sources include petroleum fuels, solvents, dry cleaning solutions, and paint (via evaporation).

### 3.3 SENSITIVE RECEPTORS

Sensitive populations are more susceptible to the effects of air pollution than the general population. Sensitive populations (sensitive receptors) that are in proximity to localized sources of toxic air contaminants (TACs) and CO are of particular concern. Sensitive receptors and the facilities that house them include long-term health care facilities, rehabilitation centers, convalescent centers, retirement homes, residences (e.g., medical patients at home), churches, schools, playgrounds, child care centers, and athletic facilities. Table 4, Sensitive Receptors, lists the distances and locations of sensitive receptors within the project vicinity. The distances depicted in Table 4 are based on the distance from the project site to the property line of the closest receptor.

**TABLE 4. SENSITIVE RECEPTORS**

| Type                     | Name                        | Location                                    | Distance from Project Site <sup>1</sup> (feet) | Direction from Project Site |
|--------------------------|-----------------------------|---|--|-----------------------------|
| Multi-Family Residential | Devonshire Woods II         | 4639 Executive Drive<br>San Diego, CA 92121 | 220  | Southwest                   |
|                          | La Jolla Mesa Estates       | 9505 Easter Way<br>San Diego, CA 92121      | 780  | Northwest                   |
| Schools                  | Braille Institute           | 4555 Executive Drive<br>San Diego, CA 92121 | 710  | Southwest                   |
|                          | La Jolla Country Day School | 9490 Genesee Avenue<br>San Diego, CA 92037  | 2,750  | West                        |
|                          | University City High School | 6949 Genesee Avenue<br>San Diego, CA 92122  | 5,665  | South                       |
|                          | Doyle Elementary School     | 3950 Berino Court<br>San Diego, CA 92122    | 6,265  | Southwest                   |
|                          | Standley Middle School      | 6298 Radcliffe Drive<br>San Diego, CA 92122 | 8,375  | South                       |
| Places of Worship        | La Jolla Community Church   | 4377 Eastgate Mall<br>San Diego, CA 92121   | 1,460  | West                        |



**TABLE 4. SENSITIVE RECEPTORS,  
CONTINUED**

| Type             | Name                             | Location  | Distance from Project Site <sup>1</sup> (feet) | Direction from Project Site |
|------------------|----------------------------------|---|--|-----------------------------|
| Place of Worship | Newman Center Catholic Community | 4321 Eastgate Mall<br>San Diego, CA 92121         | 1,800  | West                        |
| Parks            | Mandell-Weiss Eastgate Park      | Regents Road & Eastgate Mall, San Diego, CA 92121 | 2,870  | West                        |
|                  | Nobel Athletic Area              | 8810 Judicial Drive<br>San Diego, CA 92121        | 3,100  | Southeast                   |

Notes:

1. The distance is measured from the project site property line to the sensitive receptor property line.

## 4 REGULATORY SETTING

### 4.1 AIR QUALITY REGULATORY PROGRAMS

#### FEDERAL

##### *Clean Air Act*

The Federal Clean Air Act (CAA) of 1970 and CAA Amendments of 1971 required the EPA to establish NAAQS, with states retaining the option to adopt more stringent standards or to include other specific pollutants. In 2007, the Supreme Court found that CO<sub>2</sub> is an air pollutant covered by the CAA; however, no NAAQS have been established for carbon dioxide.

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

The EPA has classified air basins (or portions thereof) as being in attainment, nonattainment, or unclassified for each criteria air pollutant, based on whether or not the NAAQS have been achieved. If an area is designated unclassified, it is because inadequate air quality data is available as a basis for a nonattainment or attainment designation. [Table 2](#) lists the Federal attainment status of the SDAB for criteria pollutants.

##### *National Emissions Standards for Hazardous Air Pollutants Program*

Under Federal law, 187 substances are listed as hazardous air pollutants (HAPs). Major sources of specific HAPs are subject to the requirements of the National Emissions Standards for Hazardous Air Pollutants program. The EPA is establishing regulatory schemes for specific source categories and requires implementation of Maximum Achievable Control Technology for major sources of HAPs in each source category. State law has established the framework for California’s TAC identification and control program,

which is generally more stringent than the Federal program and is aimed at HAPs that are a problem in California. Once adopted at the State level, each air district will be required to adopt a measure that is equally or more stringent.

## STATE

### *California Air Toxics "Hot Spots" Information and Assessment Act (AB 2588)*

AB 2588 is a Statewide program enacted in 1987. AB 2588 requires facilities that exceed recommended Office of Environmental Health Hazard Assessment levels to reduce risks to acceptable levels.

Typically, land development projects generate diesel emissions from construction vehicles during the construction phase, as well as some diesel emissions from small trucks during the operational phase. Diesel exhaust is mainly composed of particulate matter and gases, which contain potential cancer-causing substances. Emissions from diesel engines currently include over 40 substances that are listed by EPA as HAPs and by CARB as TACs. In 1998, CARB identified particulate matter in diesel exhaust as a TAC, based on data linking diesel particulate emissions to increased risks of lung cancer and respiratory disease.

In 2000, CARB adopted a comprehensive diesel risk reduction plan to reduce emissions from both new and existing diesel-fueled engines and vehicles. The goal of the plan is to reduce diesel PM emissions and associated health risk by 75 percent in 2010 and by 85 percent by 2020. As part of this plan, CARB identified Airborne Toxic Control Measures (ATCM) for mobile and stationary emissions sources. Each ATCM is codified in the California Code of Regulations, including the ATCM to limit diesel-fueled commercial motor vehicle idling, which puts limits on idling time for large diesel engines (13 California Code of Regulations Chapter 10 Section 2485).

### *California Clean Air Act*

The California Clean Air Act allows California to adopt ambient air quality standards and other regulations provided that they are at least as stringent as Federal standards. CARB, a part of the California Environmental Protection Agency (CAL/EPA), is responsible for the coordination and administration of both Federal and State air pollution control programs within California, including setting the CAAQS. CARB also conducts research, compiles emission inventories, develops suggested control measures, and provides oversight of local programs. CARB establishes emissions standards for motor vehicles sold in California, consumer products (such as hairspray, aerosol paints, and barbecue lighter fluid), and various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions. CARB also has primary responsibility for the development of California's State Implementation Plan (SIP), for which it works closely with the Federal government and the local air districts.

In addition to standards set for the six criteria pollutants, the State has set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility reducing particles. These standards are designed to protect the health and welfare of the populace with a reasonable margin of safety. Further, in addition to primary and secondary ambient air quality standards, the State has established a set of episode criteria for O<sub>3</sub>, carbon monoxide, nitrogen dioxide, sulfur dioxide, and particulate matter. These criteria refer to episode levels representing periods of short-term exposure to air pollutants that actually threaten public health. [Table 2](#) above lists the State attainment status of the SDAB for the criteria pollutants.

### *California State Implementation Plan*

The FCAA (and its subsequent amendments) requires each state to prepare an air quality control plan referred to as the SIP. The SIP is a living document that is periodically modified to reflect the latest emissions inventories, plans, and rules and regulations of air basins as reported by the agencies with jurisdiction over them. The FCAA amendments dictate that states containing areas violating the NAAQS revise their SIPs to include extra control measures to reduce air pollution. The SIP includes strategies and control measures to attain the NAAQS by deadlines established by the FCAA. The EPA has the responsibility to review all SIPs to determine if they conform to the requirements of the FCAA.

State law makes CARB the lead agency for all purposes related to the SIP. Local air districts and other agencies prepare SIP elements and submit them to CARB for review and approval. CARB then forwards SIP revisions to the EPA for approval and publication in the Federal Register.

### *Senate Bill 1889, Accidental Release Prevention Law/California Accidental Release Prevention Program*

Senate Bill (SB) 1889 required California to implement a new Federally-mandated program governing the accidental airborne release of chemicals promulgated under Section 112 of the FCAA. In 1997, the California Accidental Release Prevention Law (CalARP) replaced the previous California Risk Management and Prevention Program and incorporated the mandatory Federal requirements. CalARP addresses facilities that contain specified hazardous materials, known as regulated substances, which if involved in an accidental release, could result in adverse offsite consequences. CalARP defines regulated substances as chemicals that pose a threat to public health and safety or the environment because they are highly toxic, flammable, or explosive.

## REGIONAL

### *San Diego Air Pollution Control District*

The SDAPCD is one of 35 air quality management districts in California responsible for regional air quality planning, monitoring, and stationary source and facility permitting. Locally, the SDAPCD is entrusted with regulating stationary (fixed) sources of air pollution, including power plants, manufacturing and industrial facilities, stationary internal combustion engines, gas stations, landfills, and solvent cleaning and surface coating operations. However, approximately 67 percent of the air pollutants in the region are emitted by motor vehicles and other mobile sources (e.g., ships, trains, construction equipment, etc.). Emission standards for mobile sources are established by CARB and the EPA. SDAPCD rules and regulations applicable to the proposed project include the following:

- Rule 20.2: New Source Review Non-Major Stationary Sources

This rule requires new or modified stationary source units (that are not major stationary sources) with the potential to emit 10 pounds per day or more of VOC, NO<sub>x</sub>, SO<sub>x</sub>, or PM<sub>10</sub> to be equipped with best available control technology. For those units with a potential to emit above Air Quality

Impact Assessments Trigger Levels, the units must demonstrate that such emissions would not violate or interfere with the attainment of any national air quality standard.<sup>3</sup>

The proposed project does not propose specific stationary sources. If stationary sources were to be included as part of the proposed project, or at a later date, those sources would be subject to Rule 20.2 and would require appropriate operating permits from the SDAPCD. Because the SDAPCD has not adopted specific criteria air pollutant thresholds for CEQA analyses, the thresholds identified in Rule 20.2 are utilized in this analysis as screening-level thresholds to evaluate project-level impacts, as discussed in Section 5.1, CEQA Significance Criteria.

- Rule 51: Nuisance

This rule prohibits the discharge of air contaminants or other material from any sources that “cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public or which endanger the comfort, repose, health or safety of any such persons or the public or which cause or have a natural tendency to cause injury or damage to business or property.”

- Rule 55: Fugitive Dust Control

This rule applies to any commercial construction or demolition activity capable of generating fugitive dust emissions, including active operations, open storage piles, and inactive disturbed areas. The following standards apply to the proposed project:

- (1) Airborne Dust beyond the Property Line: No person shall engage in construction or demolition activity subject to this rule in a manner that discharges visible dust emissions into the atmosphere beyond the property line for a period or periods aggregating more than 3 minutes in any 60-minute period.
- (2) Track-Out/Carry-Out: Visible roadway dust as a result of active operations, spillage from transport trucks, erosion, or track-out/carry-out shall:
  - (i) be minimized by the use of any of the following or equally effective trackout/carry-out and erosion control measures that apply to the project or operation: track-out grates or gravel beds at each egress point, wheel-washing at each egress during muddy conditions, soil binders, chemical soil stabilizers, geotextiles, mulching, or seeding; and for outbound transport trucks: using secured tarps or cargo covering, watering, or treating of transported material; and
  - (ii) be removed at the conclusion of each work day when active operations cease, or every 24 hours for continuous operations. If a street sweeper is used to remove any track-out/carry-out, only PM<sub>10</sub>-efficient street sweepers certified to meet the most current South Coast Air Quality Management District Rule 1186 requirements shall be used. The use of blowers for removal of track-out/carry-out is prohibited under any circumstances.

---

<sup>3</sup> City of San Diego, *California Environmental Quality Act Significance Determination Thresholds*, July 2016. [https://www.sandiego.gov/sites/default/files/july\\_2016\\_ceqa\\_thresholds\\_final\\_0.pdf](https://www.sandiego.gov/sites/default/files/july_2016_ceqa_thresholds_final_0.pdf), accessed July 15, 2021.

- Rule 67.0.1: Architectural Coatings

This rule prohibits the application of architectural coatings with a VOC content in excess of the corresponding limits below:

- (1) Flat Coatings – 50 grams/liter
- (2) Nonflat Coatings – 50 grams/liter

### *San Diego Regional Air Quality Strategy*

In compliance with the California Clean Air Act, the SDAPCD prepared and submitted the 1991 Regional Air Quality Strategy (RAQS) to address San Diego County's nonattainment status for O<sub>3</sub>. The RAQS addresses State O<sub>3</sub> standards. It is periodically updated as new measures become technologically feasible, improve air quality, or protect public health. These measures reduce O<sub>3</sub>-forming emissions from stationary sources, such as industrial operations and manufacturing facilities. The individual measures in the RAQS are then developed into proposed rules that are reviewed by the public and considered for adoption by the SDAPCD Board. Once adopted, the SDAPCD assists affected facilities to understand and comply with new requirements that may affect their operations. The two pollutants addressed in the RAQS are VOCs and NO<sub>x</sub>, which are precursors to the formation of ground level O<sub>3</sub>.

The latest revision of the RAQS was published in October 2020. This revision discusses recent and projected future emission reduction rates of O<sub>3</sub> precursors Countywide. Between 2000 and 2018, regionwide NO<sub>x</sub> and VOC emissions were reduced by over 60 and 50 percent, respectively. Overall, San Diego County has achieved a 36 percent reduction in ozone between 1990 and 2019. Further reductions are anticipated through 2035 given the local, State, and Federal control measures already in place. Emissions are projected to decrease by more than 45 tons per day between the 2017 baseline year and 2032, which is the forecasted attainment year for the 2015 ozone NAAQS. This equates to countywide emissions reductions of VOC by 29 percent and NO<sub>x</sub> by 35 percent.<sup>4</sup>

The SDAPCD has also developed the air basin's input to the SIP, which is required under the FCAA for nonattainment areas. The SIP includes the SDAPCD's plans and control measures for attaining the O<sub>3</sub> NAAQS. The latest revisions to the SIP were submitted by CARB to the EPA in 2020. The SDAPCD has developed its *2020 Plan for Attaining the National Ambient Air Quality Standards for Ozone in San Diego County*, which provides plans for attaining and maintaining the 8-hour NAAQS for ozone. The 2020 SIP has been submitted to the EPA and is pending approval at this time.

The San Diego Association of Governments (SANDAG), the regional transportation planning agency, continues to implement regional transportation control measures to reduce motor vehicle use, thereby reducing emissions and improving air quality. The measures expand access to public transit, vanpools, and park-and-ride/bicycle facilities, as well as enhancements to the regional high-occupancy vehicle lane system.

---

<sup>4</sup> San Diego Air Pollution Control District, *Annual Air Quality Monitoring Network Plan 2019*, May 2020.

## CITY

*City of San Diego General Plan*

The City of San Diego General Plan (General Plan) is comprised of 10 elements that provide a comprehensive slate of Citywide policies and promotes smart growth strategies for growth and development in the City. Applicable goals and policies related to air quality from the General Plan Mobility and Urban Design Elements are listed below.

**Mobility Element**

- ME-B.8. Support efforts to use alternative fuels in transit vehicles to help implement air quality and energy conservation goals.
- ME-E.7. Consider TDM programs with achievable trip reduction goals as partial mitigation for development project traffic and air quality impacts.
- ME-G.5. Implement parking strategies that are designed to help reduce the number and length of automobile trips. Reduced automobile trips would lessen traffic and air quality impacts, including greenhouse gas emissions.

**Urban Design Element**

- UD-A.8 a. Maximize the planting of new trees, street trees and other plants for their shading, air quality, and livability benefits.

## 5 POTENTIAL AIR QUALITY IMPACTS

## CITY OF SAN DIEGO

According to the *City of San Diego California Environmental Quality Act Significance Determination Thresholds*, dated July 2020, a significant impact related to air quality would occur if the project would cause one or more of the following to occur:

- Conflict with or obstruct implementation of the applicable air quality plan;
- Violate any air quality standard or contribute substantially to an existing or projected air quality violation);
- Expose sensitive receptors to substantial pollutant concentrations;
- Create objectionable odors affecting a substantial number of people;
- Exceed 100 pounds per day of Particulate Matter (PM)(dust);
- Substantially alter air movement in the area of the project.

## AIR QUALITY THRESHOLDS

As stated in Appendix G of the CEQA Guidelines, the significance criteria established by the applicable air quality management board or air pollution control district may be relied on to make the impact determinations for specific program elements. As previously discussed, the SDAPCD has established thresholds in Rule 20.2 for new or modified stationary sources. With the exception of VOCs/ROGs and PM<sub>2.5</sub> thresholds, the City of San Diego screening quantities shown in the *California Environmental Quality Act Significance Determination Thresholds*, Table A-2 incorporate screening level thresholds from Rule 20.2 for use in air quality reports and for determining CEQA air quality impacts.<sup>5</sup> The City does not show a standard for PM<sub>2.5</sub> but does include a threshold for VOC/ROG emissions. Collectively, the standards shown in Table A-2 of the City's 2016 CEQA Determination Thresholds and the PM<sub>2.5</sub> threshold shown in Table 20.2-1 of SDAPCD Rule 20.2, are used herein to determine whether project emissions would cause a significant air quality impact. The hourly SDAPCD emissions screening thresholds for construction and operations are shown in Table 5, *San Diego Air Pollution Control District Pollutant Thresholds*.

**TABLE 5. SAN DIEGO AIR POLLUTION CONTROL DISTRICT POLLUTANT THRESHOLDS**

| Pollutant  | Emission Rate (Pounds per Day) |
|--|--------------------------------|
| Carbon Monoxide (CO)   | 550                            |
| Oxides of Nitrogen (NO <sub>x</sub> )                            | 250                            |
| Particulate Matter (PM <sub>10</sub> )                           | 100                            |
| Particulate Matter, 2.5 microns (PM <sub>2.5</sub> )             | 55                             |
| Oxides of Sulfur (SO <sub>x</sub> )                              | 250                            |
| Lead and Lead Compounds  | 3.2                            |
| Volatile Organic Compounds (VOC)<br>Reactive Organic Gases (ROG) | 137                            |

Source: City of San Diego California Environmental Quality Act Significance Determination Thresholds, 2016.  
San Diego Air Pollution Control District, Rule 20.2, Effective October 16, 2020.

The thresholds listed in Table 5 are used to evaluate whether project-related emissions could cause a significant impact on air quality. Emissions below the screening-level thresholds would not cause a significant impact. In the event that emissions exceed these thresholds, modeling would be required to demonstrate that the project's total air quality impacts result in ground-level concentrations below the CAAQS and NAAQS, including appropriate background levels. For nonattainment pollutants, if emissions exceed the thresholds shown in Table 5, the project could have the potential to result in a cumulatively considerable net increase in these pollutants and thus could have a significant impact on the ambient air quality. If the emissions of the project are found to be below the screening level thresholds, it can be concluded that the project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation.

## PROJECT-RELATED AIR QUALITY IMPACTS

### CONFORMANCE TO THE REGIONAL AIR QUALITY STRATEGY

<sup>5</sup> City of San Diego, *California Environmental Quality Act Significance Determination Thresholds*, July 2016. [https://www.sandiego.gov/sites/default/files/july\\_2016\\_ceqa\\_thresholds\\_final\\_0.pdf](https://www.sandiego.gov/sites/default/files/july_2016_ceqa_thresholds_final_0.pdf), accessed July 15, 2021.



As discussed in [Section 4.1, Air Quality Regulatory Programs](#), the SIP sets forth the State's strategies for attaining and maintaining the NAAQS. The SDAPCD is responsible for developing the San Diego portion of the SIP and has developed an attainment plan for attaining the 8-hour NAAQS for O<sub>3</sub>. The RAQS sets forth the plans and programs designed to meet the State air quality standards. Through the RAQS and SIP planning processes, the SDAPCD adopts rules, regulations, and programs designed to achieve attainment of the ambient air quality standards and maintain air quality in the SDAB.

Conformance with the RAQS and SIP determines whether a project will conflict with or obstruct implementation of the applicable air quality plans. Because CARB mobile source emission projections and SANDAG growth projections are based on population and vehicle trends and land use plans developed by local jurisdictions as part of their general plans, projects that propose development consistent with the growth anticipated by the general plan are assumed to be consistent with the RAQS and SIP. In the event a project proposes development which is less dense than anticipated within the general plan, the project would likewise be consistent with the RAQS and SIP.

The project site is located within University Community Plan (UCP). The UCP manages traffic volumes and development intensity through the Plan's Development Intensity Element. The University Community is divided into subareas and assigned development intensities based on a community-wide traffic forecast. Under the UCP, "Development rights may be transferred between subdivisions in conjunction with a Planned Development Permit restricting both the sending and receiving sites" (UCP, page 176) (San Diego, 2019). Effectively, this mechanism allows for an increase of development intensity in one subarea in exchange for an equivalent decrease of development intensity in another subarea, leading to no-net increases in Average Daily Trips (ADTs) in the community. The proposed project would transfer development intensity rights (3,744 ADT) from UCP Subarea 37 (City Ownership) to the newly created UCP Subarea 102 and Subarea 10, as follows: 1,933 ADT transferred to new Subarea 102 (project site) which would support an additional 241,600 square feet of scientific research/research and development (R&D) space; and 1,811 ADT transferred to Subarea 10 (Alexandria Campus Point), which would allow an additional 226,400 square feet of scientific research/R&D space. As such, the proposed project would be consistent with the development density planned for the project site. As the proposed amendments would not increase the development intensity beyond that accounted for in the RAQS, the project would be consistent with the RAQS and SIP. Therefore, this impact would be less than significant.

#### CONFORMANCE TO FEDERAL AND STATE AMBIENT AIR QUALITY STANDARDS

##### SHORT-TERM CONSTRUCTION EMISSIONS

Short-term air quality impacts would occur during grading and construction operations associated with implementation of the proposed project. Temporary air emissions would result from the following activities:

- Particulate (fugitive dust) emissions from grading and building construction; and
- Exhaust emissions from construction equipment and construction crew motor vehicles.

Construction activities would include demolition, grading, paving, building construction, and architectural coatings. Site grading would require approximately 314,900 cubic yards of cut to be exported off-site.



Project construction would require concrete saws, excavators, and rubber-tired dozers during demolition; excavators, graders, rubber-tired dozers, scrapers, and tractors/loaders/backhoes during grading; cranes, forklifts, generator sets, tractors/loaders/backhoes, and welders during building construction; pavers, paving equipment, and rollers during paving; and air compressors during architectural coatings. Emissions for each construction phase have been quantified based upon the phase durations and equipment types. The analysis of daily construction emissions has been prepared utilizing the California Emissions Estimator Model version 2020.4.0 (CalEEMod). Refer to [Appendix A, Air Quality](#), for the CalEEMod outputs and results. [Table 6, Maximum Daily Construction Emissions](#), presents the anticipated daily short-term construction emissions.

**TABLE 6. MAXIMUM DAILY CONSTRUCTION EMISSIONS**

| Emissions Source                    | Pollutant (pounds per day) <sup>1,2</sup> |                 |            |                 |                  |                   |
|-------------------------------------|---|-----------------|------------|-----------------|------------------|-------------------|
|                                     | VOC                                       | NO <sub>x</sub> | CO         | SO <sub>2</sub> | PM <sub>10</sub> | PM <sub>2.5</sub> |
| <b>Year 1</b>                       |   |                 |            |                 |                  |                   |
| Construction Emissions <sup>2</sup> | 9.10                                      | 143.53          | 77.55      | 0.43            | 15.79            | 6.80              |
| <i>SDAPCD Thresholds</i>            | <i>137</i>                                | <i>250</i>      | <i>550</i> | <i>250</i>      | <i>100</i>       | <i>55</i>         |
| <b>Threshold Exceeded?</b>          | <b>No</b>                                 | <b>No</b>       | <b>No</b>  | <b>No</b>       | <b>No</b>        | <b>No</b>         |
| <b>Year 2</b>                       |   |                 |            |                 |                  |                   |
| Construction Emissions <sup>2</sup> | 3.12                                      | 26.16           | 29.05      | 0.09            | 3.96             | 1.72              |
| <i>SDAPCD Thresholds</i>            | <i>137</i>                                | <i>250</i>      | <i>550</i> | <i>250</i>      | <i>100</i>       | <i>55</i>         |
| <b>Threshold Exceeded?</b>          | <b>No</b>                                 | <b>No</b>       | <b>No</b>  | <b>No</b>       | <b>No</b>        | <b>No</b>         |
| <b>Year 3</b>                       |   |                 |            |                 |                  |                   |
| Construction Emissions <sup>2</sup> | 71.18                                     | 35.56           | 46.43      | 0.12            | 4.95             | 2.26              |
| <i>SDAPCD Thresholds</i>            | <i>137</i>                                | <i>250</i>      | <i>550</i> | <i>250</i>      | <i>100</i>       | <i>55</i>         |
| <b>Threshold Exceeded?</b>          | <b>No</b>                                 | <b>No</b>       | <b>No</b>  | <b>No</b>       | <b>No</b>        | <b>No</b>         |

Notes: VOC = volatile organic compounds; NO<sub>x</sub> = nitrous oxides; CO = carbon monoxide; SO<sub>2</sub> = sulfur dioxide; PM<sub>10</sub> = coarse particulate matter; PM<sub>2.5</sub> = fine particulate matter

1. Emissions were calculated using CalEEMod version 2020.4.0. Winter emissions represent worst-case.
2. The mitigation reduction/credits for construction emissions are based on mitigation included in CalEEMod and are required by the SDAPCD Rule 55&67.1. The mitigation applied in CalEEMod includes the following: properly maintain mobile and other construction equipment; water exposed surfaces three times daily; limit speeds on unpaved roads to 15 miles per hour; and use of low VOC paint. The emissions results in this table represent the “mitigated” emissions shown in [Appendix A](#).

Source: Refer to [Appendix A, Air Quality Data](#).

*Total Daily Construction Emissions*

In accordance with the SDAPCD Guidelines, CalEEMod was utilized to model construction emissions for ROG, NO<sub>x</sub>, CO, SO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>. Construction would occur over a three-year period with the greatest emissions generated during the initial stages of construction. Additionally, the greatest amount of ROG emissions would typically occur during the final stages of construction due to the application of architectural coatings.

As depicted in [Table 6](#), construction emissions would not exceed the SDAPCD thresholds of significance for any criteria pollutants. Thus, construction-related air emissions would not result in a cumulatively considerable net increase of any criteria pollutant and a less than significant impact would occur.

*Naturally Occurring Asbestos*

Asbestos is a term used for several types of naturally occurring fibrous minerals that are a human health hazard when airborne. The most common type of asbestos is chrysotile, but other types such as tremolite and actinolite are also found in California. Asbestos is classified as a known human carcinogen by State, Federal, and international agencies and was identified as a TAC by the CARB in 1986.

Asbestos can be released from serpentinite and ultramafic rocks when the rock is broken or crushed. At the point of release, the asbestos fibers may become airborne, causing air quality and human health hazards. These rocks have been commonly used for unpaved gravel roads, landscaping, fill projects, and other improvement projects in some localities. Asbestos may be released to the atmosphere due to vehicular traffic on unpaved roads, during grading for development projects, and at quarry operations. All of these activities may have the effect of releasing potentially harmful asbestos into the air. Natural weathering and erosion processes can act on asbestos bearing rock and make it easier for asbestos fibers to become airborne if such rock is disturbed. According to the California Department of Conservation Division of Mines and Geology, serpentinite and ultramafic rocks are not known to occur within the project area (DOC, 2000). Thus, there would be no impact in this regard.

LONG-TERM OPERATIONAL EMISSIONS

Operational impacts associated with the project would include those generated by mobile, area, and energy sources. Table 7, *Long-Term Operational Source Emissions*, presents the project’s anticipated long-term air quality emissions. It should be noted that the emissions reduction for the existing office buildings has not been accounted for in Table 7. Therefore, the project’s operational emissions shown in Table 7 are considered conservative.

**TABLE 7. LONG-TERM OPERATIONAL EMISSIONS**

| Scenario   | Emissions (pounds per day) <sup>1</sup> |                 |              |                 |                  |                   |
|--|---|-----------------|--------------|-----------------|------------------|-------------------|
|  | ROG                                     | NO <sub>x</sub> | CO           | SO <sub>x</sub> | PM <sub>10</sub> | PM <sub>2.5</sub> |
| <b>Project Summer Emissions<sup>2</sup></b>      |   |                 |              |                 |                  |                   |
| Area Source                                      | 10.48                                   | <0.01           | 0.13         | <0.01           | <0.01            | <0.01             |
| Energy Source                                    | 0.16                                    | 1.47            | 1.23         | <0.01           | 0.11             | 0.11              |
| Mobile   | 7.69                                    | 7.49            | 66.15        | 0.14            | 15.08            | 4.09              |
| <i>Total Maximum Daily Emissions<sup>3</sup></i> | <i>18.33</i>                            | <i>8.96</i>     | <i>67.52</i> | <i>0.15</i>     | <i>15.20</i>     | <i>4.20</i>       |
| <b>SDAPCD Regional Threshold</b>                 | <b>137</b>                              | <b>250</b>      | <b>550</b>   | <b>250</b>      | <b>100</b>       | <b>55</b>         |
| <i>Threshold Exceeded?</i>                       | <i>No</i>                               | <i>No</i>       | <i>No</i>    | <i>No</i>       | <i>No</i>        | <i>No</i>         |
| <b>Project Winter Emissions<sup>2</sup></b>      |   |                 |              |                 |                  |                   |
| Area Source                                      | 10.48                                   | <0.01           | 0.13         | <0.01           | <0.01            | <0.01             |
| Energy Source                                    | 0.16                                    | 1.47            | 1.23         | <0.01           | 0.11             | 0.11              |
| Mobile   | 7.50                                    | 8.13            | 68.17        | 0.14            | 15.08            | 4.09              |
| <i>Total Maximum Daily Emissions<sup>3</sup></i> | <i>18.13</i>                            | <i>9.60</i>     | <i>69.53</i> | <i>0.15</i>     | <i>15.20</i>     | <i>4.20</i>       |
| <b>SDAPCD Regional Threshold</b>                 | <b>137</b>                              | <b>250</b>      | <b>550</b>   | <b>250</b>      | <b>100</b>       | <b>55</b>         |
| <i>Threshold Exceeded?</i>                       | <i>No</i>                               | <i>No</i>       | <i>No</i>    | <i>No</i>       | <i>No</i>        | <i>No</i>         |

Notes:

1. Emissions were calculated using CalEEMod version 2020.4.0.
2. These emissions correspond with the “unmitigated” CalEEMod operational emissions shown in Appendix A.
3. The numbers may be slightly off due to rounding.

Source: Appendix A, *Air Quality Data*

### *Mobile Source Emissions*

Mobile sources are emissions from motor vehicles, including tailpipe and evaporative emissions. Depending upon the pollutant being discussed, the potential air quality impact may be of either regional or local concern. For example, ROG, NO<sub>x</sub>, SO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> are all pollutants of regional concern (NO<sub>x</sub> and ROG react with sunlight to form O<sub>3</sub> [photochemical smog], and wind currents readily transport SO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>). However, CO tends to be a localized pollutant, dispersing rapidly at the source.

Project-generated vehicle emissions were estimated using CalEEMod. Trip generation rates associated with the project are provided in [Appendix B, Traffic Data](#). The proposed project would generate approximately 2,959 average daily trips. As shown in [Table 7](#), emissions generated by vehicular traffic associated with the proposed project would not exceed established SDAPCD regional thresholds.

### *Area Source Emissions*

Area source emissions would be generated due to an increased demand for consumer products, architectural coating, and landscaping associated with the proposed project. As shown in [Table 7](#), area source emissions from the proposed project would not exceed SDAPCD thresholds for ROG, NO<sub>x</sub>, CO, SO<sub>x</sub>, PM<sub>10</sub>, or PM<sub>2.5</sub>.

### *Energy Source Emissions*

Energy source emissions would be generated as a result of electricity and natural gas (non-hearth) usage associated with the proposed project. The primary use of electricity and natural gas by the project would be for space heating and cooling, water heating, ventilation, lighting, appliances, and electronics. As shown in [Table 7](#), energy source emissions from the proposed project would not exceed SDAPCD thresholds for ROG, NO<sub>x</sub>, CO, SO<sub>x</sub>, PM<sub>10</sub>, or PM<sub>2.5</sub>.

### *Total Long-term Operational Emissions*

As indicated in [Table 7](#), operational emissions from the proposed project would not exceed SDAPCD thresholds. If stationary sources, such as backup generators, are installed on-site, they would be required to obtain the applicable permits from SDAPCD for operation of such equipment. The SDAPCD is responsible for issuing permits for the operation of stationary sources in order to reduce air pollution, and to attain and maintain the NAAQS and CAAQS in the SDAB. If backup generators are required, they would be used only in emergency situations, and would not contribute substantial emissions capable of exceeding SDAPCD thresholds. Thus, operational air emissions would not result in a cumulatively considerable net increase of any criteria pollutant and a less than significant impact would occur.

### *Air Quality Health Impacts*

Adverse health effects induced by criteria pollutant emissions are highly dependent on a multitude of interconnected variables (e.g., cumulative concentrations, local meteorology and atmospheric conditions, and the number and character of exposed individual [e.g., age, gender]). In particular, O<sub>3</sub> precursors, VOCs, and NO<sub>x</sub> affect air quality on a regional scale. Health effects related to O<sub>3</sub> are therefore the product of emissions generated by numerous sources throughout a region. Existing models have limited sensitivity to small changes in criteria pollutant concentrations, and, as such, translating project-generated criteria

pollutants to specific health effects or additional days of nonattainment would produce meaningless results. In other words, the project's less than significant increases in regional air pollution from criteria air pollutants would have nominal or negligible impacts on human health.

As an expert agency regarding air quality and its health effects, the South Coast Air Quality Management District (SCAQMD) noted in its *Application of the South Coast Air Quality Management District for Leave to File Brief of Amicus Curiae in Support of Neither Party and [Proposed] Brief of Amicus Curiae* (SCAQMD Amicus Brief, 2015) for the Supreme Court of California decision for *Sierra Club vs. County of Fresno (Friant Ranch L.P.)*, that it would be extremely difficult, if not impossible to quantify health impacts of criteria pollutants for various reasons including modeling limitations as well as where in the atmosphere air pollutants interact and form. Furthermore, as noted by the San Joaquin Valley Air Pollution Control District (SJVAPCD) in the *Application for Leave to File Amicus Curiae Brief of San Joaquin Valley Unified Air Pollution Control District in Support of Defendant and Respondent, County of Fresno and Real Party of Interest and Respondent, Friant Ranch, L.P* (April 13, 2015), currently available modeling tools are not equipped to provide a meaningful analysis of the correlation between an individual development project's air emissions and specific human health impacts.

Additionally, the SCAQMD acknowledges that health effects quantification from O<sub>3</sub>, as an example, is correlated with the increases in ambient level of O<sub>3</sub> in the air (concentration) that an individual person breathes. SCAQMD's Brief of Amicus Curiae goes on to state that it would take a large amount of additional emissions to cause a modeled increase in ambient O<sub>3</sub> levels over the entire region. The SCAQMD states that based on their own modeling in the *SCAQMD's 2012 Air Quality Management Plan*, a reduction of 432 tons (864,000 pounds) per day of NO<sub>x</sub> and a reduction of 187 tons (374,000 pounds) per day of VOCs would reduce O<sub>3</sub> levels at highest monitored site by only nine parts per billion. As such, the SCAQMD concludes that it is not currently possible to accurately quantify O<sub>3</sub>-related health impacts caused by NO<sub>x</sub> or VOC emissions from relatively small projects (defined as projects with regional scope) due to photochemistry and regional model limitations. Thus, as the project would not exceed SDAPCD's thresholds for construction and operational air emissions, the project would have a less than significant impact for air quality health impacts.

## IMPACTS TO SENSITIVE RECEPTORS

Air quality regulators typically define sensitive receptors as schools (preschool through 12th grade), hospitals, resident care facilities, or day-care centers, or other facilities that may house individuals with health conditions that would be adversely impacted by changes in air quality. Residential land uses may also be considered sensitive to air pollution because residents (including children and the elderly) tend to be at home for extended periods of time, resulting in sustained exposure to existing pollutants. Recreational land uses are considered moderately sensitive to air pollution. Exercise places a high demand on respiratory functions, which can be impaired by air pollution even though exposure periods during exercise are generally short. In addition, noticeable air pollution can detract from the enjoyment of recreation. Industrial and commercial areas are considered the least sensitive to air pollution. Exposure periods are relatively short and intermittent as the majority of the workers tend to stay indoors most of the time.

The project vicinity includes residential, commercial, and industrial land uses. The nearest sensitive receptors to the site include a multi-family residential complex approximately 220 feet to the southwest and the Braille Institute approximately 710 feet to the southwest. Additional receptors are identified in [Table 4](#), along with their distances from the site.

## TOXIC AIR CONTAMINANTS

### *Construction*

If a project has the potential to result in TAC emissions with a cancer risk greater than 10 in 1 million or substantial non-cancer risk, the project would be deemed to have a potentially significant impact. Project construction activities are anticipated to involve the operation of diesel-powered equipment, which would emit Diesel Particulate Matter (DPM). In 1998, the CARB identified diesel exhaust as a TAC. Cancer health risks associated with exposures to diesel exhaust typically are associated with chronic exposure, in which a 30-year exposure period often is assumed. The project would construct scientific research and retail buildings while complying with the California Code of Regulations (CCR), Title 13, Sections 2449(d)(3) and 2485, which minimizes the idling time of construction equipment either by shutting it off when not in use or by reducing the time of idling to no more than five minutes. Implementation of these regulations would reduce the amount of DPM emissions from the construction of the project.

The nearest sensitive receptors to the project site include a multi-family residential complex located approximately 220 feet to the southwest and the Braille Institute located approximately 710 feet to the southwest. However, health impacts on sensitive receptors associated with exposure to DPM from project construction are anticipated to be less than significant because construction activities are expected to occur well below the 30-year exposure period used in health risk assessments. Additionally, emissions would be short-term and intermittent in nature, and therefore would not generate TAC emissions at high enough exposure concentrations to represent a health hazard. Therefore, construction of the proposed project is not anticipated to result in an elevated cancer risk to nearby sensitive receptors and the impact would be less than significant.

### *Operations*

The project would construct scientific research and development uses and would result in very limited operational activities with potential health risks, including occasional diesel truck trips<sup>6</sup> and landscaping maintenance operations. None of these activities would result in the generation of excessive TAC emissions, or associated health risks from the project's operation. Therefore, operation of the proposed project is not anticipated to result in an elevated cancer risk to nearby sensitive receptors. Impacts would be less than significant in this regard.

## CARBON MONOXIDE HOTSPOTS

CO emissions are a function of vehicle idling time, meteorological conditions, and traffic flow. Under certain extreme meteorological conditions, CO concentrations near a congested roadway or intersection

---

<sup>6</sup> Based on the CalEEMod model, diesel truck trips would account for two percent of the total trips associated with the project.

may reach unhealthful levels (i.e., adversely affecting residents, school children, hospital patients, the elderly, etc.).

The Basin is designated as an attainment area for the Federal and State CO standards. There has been a decline in CO emissions even though vehicle miles traveled on U.S. urban and rural roads have increased. Nationwide estimated anthropogenic CO emissions have decreased 68 percent between 1990 and 2014. In 2014, mobile sources accounted for 82 percent of the nation's total anthropogenic CO emissions.<sup>7</sup> CO emissions have continued to decline since this time. Three major control programs have contributed to the reduced per-vehicle CO emissions: exhaust standards, cleaner burning fuels, and motor vehicle inspection/maintenance programs.

A potential CO hotspot may occur at any location where the background CO concentration already exceeds 20 parts per million (ppm), which is the 1-hour California ambient air quality standard. As shown in [Table 3](#), the closest monitoring station to the project site that monitors CO concentration is the San Diego-Rancho Carmel Drive Monitoring Station, and the maximum CO concentration was measured at 3.300 ppm in 2020. Given that the background CO concentration does not currently exceed 20 ppm, a CO hotspot would not occur at the project site. Therefore, CO hotspot impacts would be less than significant in this regard.

### *Conclusion*

As discussed above, the proposed project would not be a significant source of TAC or result in CO hotspot emissions impacts. As such, the project would not expose sensitive receptors to substantial pollutant concentrations and a less than significant impact would occur.

### ODORS

Project construction could result in minor amounts of odor compounds associated with diesel heavy equipment exhaust. These compounds would be emitted in various amounts and at various locations during construction. The nearest sensitive receptors to the site include a multi-family residential complex approximately 220 feet to the southwest and the Braille Institute approximately 710 feet to the southwest. Odors are highest near the source and would quickly dissipate off-site. Additionally, any odors associated with construction would be temporary. In addition, the project would be required to comply with the California Code of Regulations, Title 13, Sections 2449(d)(3) and 2485, which minimizes the idling time of construction equipment either by shutting it off when not in use or by reducing the time of idling to no more than five minutes. This would further reduce the detectable odors from heavy-duty equipment exhaust. Thus, given the distance of the nearest sensitive receptors and fact that construction-related odorous emissions would be short-term and temporary, construction activities would result in less than significant impacts in this regard.

The project consists of scientific research and retail uses and would not include land uses that would be sources of objectionable odors. In addition, the project would comply with SDAPCD Rule 51 which prohibits the emission of any material, including odors, which causes a nuisance to a considerable number

---

<sup>7</sup> United States Environmental Protection Agency, *Carbon Monoxide Emissions*, [https://cfpub.epa.gov/roe/indicator\\_pdf.cfm?i=10](https://cfpub.epa.gov/roe/indicator_pdf.cfm?i=10), accessed December 9, 2021.

of people or endangers the comfort, health or safety of the public. Thus, the potential for odor impacts associated with the project is less than significant.

## DUST

Refer to As shown in in [Table 6](#) and [Table 7](#), project construction and operation would not generate any emissions that exceed SDAPCD thresholds. During construction, the greatest concentration of particulate matter to be released would be 22.59 pounds per day (both PM<sub>10</sub> and PM<sub>2.5</sub> combined) which would only occur during the first year of construction. During the operation phase of the project, the greatest concentration of particulate matter would be 19.40 pounds per day (both PM<sub>10</sub> and PM<sub>2.5</sub> combined), the majority of which is the result of vehicle traffic. Therefore, the project would not generate more than 100 pounds per day of particulate matter and this impact would be less than significant.

## AIR MOVEMENT

The project site currently consists of three, two-story office buildings, totaling 138,400 square feet. Upon completion of the proposed project, the site would contain two four-story structures that would support approximately 369,878 square feet of Scientific Research and secondary uses (i.e., Specialty Retail/Strip Commercial). Although the size of the proposed project is greater than what exists currently, the proposed project would not be of the size and scale necessary to result in a substantial alternation of air movement within the project area. Specifically, the spacing between the buildings would allow for the free movement of air. The project would also include open courtyards and landscaped areas that would further break up the bulk and mass of the proposed project (see Exhibit 3). Furthermore, the project site is located in an urbanized areas and surrounded by buildings of similar bulk and scale so air movement in the project vicinity is expected to be similar to existing conditions. As currently designed, the project is not anticipated to result in the restriction or alteration of air movement on site or in the project area.



## 6 REFERENCES

### 6.1 LIST OF PREPARERS

#### **Michael Baker International**

5 Hutton Centre Drive, Suite 500

Santa Ana, California 92707

949/472-3505

Danielle Regimbal, Senior Air Quality & Noise Specialist

Tina Yuan, Environmental Specialist

### 6.2 DOCUMENTS

CARB (California Air Resources Board), *California's 2017 Climate Change Scoping Plan*, November 2017.  
[https://www.arb.ca.gov/cc/scopingplan/scoping\\_plan\\_2017.pdf](https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf), accessed July 15, 2021

CARB and U.S. EPA (U.S. Environmental Protection Agency), Ambient Air Quality Standards Chart,  
<http://www.arb.ca.gov/research/aaqs/aaqs2.pdf>, June 17, 2021

City of San Diego, *California Environmental Quality Act Significance Determination Thresholds*, July 2016.  
[https://www.sandiego.gov/sites/default/files/july\\_2016\\_ceqa\\_thresholds\\_final\\_0.pdf](https://www.sandiego.gov/sites/default/files/july_2016_ceqa_thresholds_final_0.pdf), accessed July 15, 2021

City of San Diego, *City of San Diego General Plan*, March 10, 2008.

City of San Diego, *University Community Plan*, July 2019.

DOC (California Department of Conservation, Division of Mines and Geology). *A General Location Guide for Ultramafic Rocks in California – Areas More Likely to Contain Naturally Occurring Asbestos Report*. August 2000.

San Diego Association of Governments, *Regional Energy Strategy Goals Summary for the San Diego Region*, June 2014.

SDAPCD (San Diego Air Pollution Control District), *2020 Plan for Attaining the National Ambient Air Quality Standards for Ozone in San Diego County*, October 2020.

SDAPCD, *Annual Air Quality Monitoring Network Plan 2017*, April 2018.

SDAPCD, *Rules and Regulations*,

[https://www.sdapcd.org/content/sdc/apcd/en/Rule\\_Development/Rules\\_and\\_Regulations.html](https://www.sdapcd.org/content/sdc/apcd/en/Rule_Development/Rules_and_Regulations.html), accessed July 15, 2021.

SDAPCD, *2016 Revision of the Regional Air Quality Strategy for San Diego County*, December 2016.  
Accessed July 27, 2021.

<https://www.sdapcd.org/content/dam/sdc/apcd/PDF/Air%20Quality%20Planning/2016%20RAQS.pdf>.



SCAQMD (South Coast Air Quality Management District), *Application of the South Coast Air Quality Management District for Leave to File Brief of Amicus Curiae in Support of Neither Party and [Proposed] Brief of Amicus Curiae*, April 2015.

SCAQMD, *Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis*, 2003, <http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/mobile-source-toxics-analysis>, accessed July 15, 2021.

### 6.3 WEBSITES/PROGRAMS

California Air Resources Board, *ADAM Air Quality Data Statistics*, <http://www.arb.ca.gov/adam/>, accessed December 8, 2021.

California Air Resources Board, AQMIS2: Air Quality Data, <https://www.arb.ca.gov/aqmis2/aqdselect.php>, accessed December 8, 2021.

Google Earth, 2021.

South Coast Air Quality Management District, California Emissions Estimator Model (CalEEMod), version 2020.4.0.

# Appendix A: Air Quality Data

ARE Science Village - San Diego County, Winter

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

**ARE Science Village  
San Diego County, Winter**

**1.0 Project Characteristics**

**1.1 Land Usage**

| Land Uses                           | Size   | Metric   | Lot Acreage | Floor Surface Area | Population |
|-------------------------------------|--------|----------|-------------|--------------------|------------|
| General Office Building             | 8.91   | 1000sqft | 0.20        | 8,911.00           | 0          |
| Research & Development              | 353.47 | 1000sqft | 8.11        | 353,473.00         | 0          |
| Enclosed Parking with Elevator      | 913.00 | Space    | 8.22        | 365,200.00         | 0          |
| City Park                           | 0.54   | Acre     | 0.54        | 23,522.40          | 0          |
| Fast Food Restaurant w/o Drive Thru | 6.93   | 1000sqft | 0.16        | 6,931.00           | 0          |
| Supermarket                         | 0.56   | 1000sqft | 0.01        | 563.00             | 0          |

**1.2 Other Project Characteristics**

|                                |                          |                                |       |                                  |       |
|--------------------------------|--------------------------|--------------------------------|-------|----------------------------------|-------|
| <b>Urbanization</b>            | Urban                    | <b>Wind Speed (m/s)</b>        | 2.6   | <b>Precipitation Freq (Days)</b> | 40    |
| <b>Climate Zone</b>            | 13                       |                                |       | <b>Operational Year</b>          | 2025  |
| <b>Utility Company</b>         | San Diego Gas & Electric |                                |       |                                  |       |
| <b>CO2 Intensity (lb/MWhr)</b> | 539.98                   | <b>CH4 Intensity (lb/MWhr)</b> | 0.033 | <b>N2O Intensity (lb/MWhr)</b>   | 0.004 |

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

- Project Characteristics -
- Land Use - Update per new site plan
- Construction Phase - Per construction questionnaire.
- Off-road Equipment - Other Construction Equipment = pile driver
- Demolition -
- Grading - Per email communication
- Vehicle Trips - Per Traffic Study.

ARE Science Village - 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 - .

Vehicle Emission Factors - .

Construction Off-road Equipment Mitigation - SDAPCD Rule 55

Fleet Mix - .

Trips and VMT -

| Table Name             | Column Name                     | Default Value | New Value   |
|------------------------|---------------------------------|---------------|-------------|
| tblConstDustMitigation | CleanPavedRoadPercentReduction  | 0             | 6           |
| tblConstDustMitigation | WaterUnpavedRoadMoistureContent | 0             | 12          |
| tblConstDustMitigation | WaterUnpavedRoadVehicleSpeed    | 0             | 15          |
| tblConstructionPhase   | NumDays                         | 20.00         | 132.00      |
| tblConstructionPhase   | NumDays                         | 300.00        | 528.00      |
| tblConstructionPhase   | NumDays                         | 20.00         | 88.00       |
| tblConstructionPhase   | NumDays                         | 30.00         | 88.00       |
| tblConstructionPhase   | NumDays                         | 20.00         | 44.00       |
| tblFleetMix            | HHD                             | 6.2980e-003   | 6.2660e-003 |
| tblFleetMix            | HHD                             | 6.2980e-003   | 6.2660e-003 |
| tblFleetMix            | HHD                             | 6.2980e-003   | 6.2660e-003 |
| tblFleetMix            | HHD                             | 6.2980e-003   | 6.2660e-003 |
| tblFleetMix            | HHD                             | 6.2980e-003   | 6.2660e-003 |
| tblFleetMix            | HHD                             | 6.2980e-003   | 6.2660e-003 |
| tblFleetMix            | LDA                             | 0.56          | 0.56        |
| tblFleetMix            | LDA                             | 0.56          | 0.56        |
| tblFleetMix            | LDA                             | 0.56          | 0.56        |
| tblFleetMix            | LDA                             | 0.56          | 0.56        |
| tblFleetMix            | LDA                             | 0.56          | 0.56        |
| tblFleetMix            | LDA                             | 0.56          | 0.56        |
| tblFleetMix            | LDA                             | 0.56          | 0.56        |
| tblFleetMix            | LDT1                            | 0.06          | 0.06        |



ARE Science Village - San Diego County, Winter

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

|             |      |             |             |
|-------------|------|-------------|-------------|
| tblFleetMix | MDV  | 0.12        | 0.12        |
| tblFleetMix | MDV  | 0.12        | 0.12        |
| tblFleetMix | MDV  | 0.12        | 0.12        |
| tblFleetMix | MDV  | 0.12        | 0.12        |
| tblFleetMix | MDV  | 0.12        | 0.12        |
| tblFleetMix | MDV  | 0.12        | 0.12        |
| tblFleetMix | MH   | 4.7510e-003 | 4.9490e-003 |
| tblFleetMix | MH   | 4.7510e-003 | 4.9490e-003 |
| tblFleetMix | MH   | 4.7510e-003 | 4.9490e-003 |
| tblFleetMix | MH   | 4.7510e-003 | 4.9490e-003 |
| tblFleetMix | MH   | 4.7510e-003 | 4.9490e-003 |
| tblFleetMix | MH   | 4.7510e-003 | 4.9490e-003 |
| tblFleetMix | MHD  | 8.9490e-003 | 8.7340e-003 |
| tblFleetMix | MHD  | 8.9490e-003 | 8.7340e-003 |
| tblFleetMix | MHD  | 8.9490e-003 | 8.7340e-003 |
| tblFleetMix | MHD  | 8.9490e-003 | 8.7340e-003 |
| tblFleetMix | MHD  | 8.9490e-003 | 8.7340e-003 |
| tblFleetMix | MHD  | 8.9490e-003 | 8.7340e-003 |
| tblFleetMix | OBUS | 7.0500e-004 | 7.0800e-004 |
| tblFleetMix | OBUS | 7.0500e-004 | 7.0800e-004 |
| tblFleetMix | OBUS | 7.0500e-004 | 7.0800e-004 |
| tblFleetMix | OBUS | 7.0500e-004 | 7.0800e-004 |
| tblFleetMix | OBUS | 7.0500e-004 | 7.0800e-004 |
| tblFleetMix | OBUS | 7.0500e-004 | 7.0800e-004 |
| tblFleetMix | SBUS | 9.5500e-004 | 9.7100e-004 |
| tblFleetMix | SBUS | 9.5500e-004 | 9.7100e-004 |
| tblFleetMix | SBUS | 9.5500e-004 | 9.7100e-004 |
| tblFleetMix | SBUS | 9.5500e-004 | 9.7100e-004 |
| tblFleetMix | SBUS | 9.5500e-004 | 9.7100e-004 |

ARE Science Village - San Diego County, Winter

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

|                     |                   |             |             |
|---------------------|-------------------|-------------|-------------|
| tblFleetMix         | SBUS              | 9.5500e-004 | 9.7100e-004 |
| tblFleetMix         | UBUS              | 5.7700e-004 | 5.6600e-004 |
| tblFleetMix         | UBUS              | 5.7700e-004 | 5.6600e-004 |
| tblFleetMix         | UBUS              | 5.7700e-004 | 5.6600e-004 |
| tblFleetMix         | UBUS              | 5.7700e-004 | 5.6600e-004 |
| tblFleetMix         | UBUS              | 5.7700e-004 | 5.6600e-004 |
| tblFleetMix         | UBUS              | 5.7700e-004 | 5.6600e-004 |
| tblGrading          | MaterialExported  | 0.00        | 314,900.00  |
| tblLandUse          | LandUseSquareFeet | 8,910.00    | 8,911.00    |
| tblLandUse          | LandUseSquareFeet | 353,470.00  | 353,473.00  |
| tblLandUse          | LandUseSquareFeet | 6,930.00    | 6,931.00    |
| tblLandUse          | LandUseSquareFeet | 560.00      | 563.00      |
| tblOffRoadEquipment | HorsePower        | 172.00      | 475.00      |
| tblOffRoadEquipment | LoadFactor        | 0.42        | 0.50        |
| tblVehicleEF        | HHD               | 0.03        | 0.03        |
| tblVehicleEF        | HHD               | 0.08        | 0.08        |
| tblVehicleEF        | HHD               | 6.64        | 6.65        |
| tblVehicleEF        | HHD               | 0.51        | 0.49        |
| tblVehicleEF        | HHD               | 8.2890e-003 | 8.5080e-003 |
| tblVehicleEF        | HHD               | 1,078.46    | 1,099.27    |
| tblVehicleEF        | HHD               | 1,383.23    | 1,411.93    |
| tblVehicleEF        | HHD               | 0.08        | 0.09        |
| tblVehicleEF        | HHD               | 0.17        | 0.17        |
| tblVehicleEF        | HHD               | 0.22        | 0.22        |
| tblVehicleEF        | HHD               | 4.0000e-006 | 5.0000e-006 |
| tblVehicleEF        | HHD               | 5.65        | 5.70        |
| tblVehicleEF        | HHD               | 2.60        | 2.63        |
| tblVehicleEF        | HHD               | 2.38        | 2.38        |
| tblVehicleEF        | HHD               | 2.8750e-003 | 3.0090e-003 |

ARE Science Village - San Diego County, Winter

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

|              |     |             |             |
|--------------|-----|-------------|-------------|
| tblVehicleEF | HHD | 0.06        | 0.06        |
| tblVehicleEF | HHD | 0.04        | 0.04        |
| tblVehicleEF | HHD | 0.02        | 0.03        |
| tblVehicleEF | HHD | 2.7510e-003 | 2.8780e-003 |
| tblVehicleEF | HHD | 0.03        | 0.03        |
| tblVehicleEF | HHD | 8.8700e-003 | 8.8690e-003 |
| tblVehicleEF | HHD | 0.02        | 0.02        |
| tblVehicleEF | HHD | 3.0000e-006 | 4.0000e-006 |
| tblVehicleEF | HHD | 1.6600e-004 | 1.9400e-004 |
| tblVehicleEF | HHD | 0.45        | 0.45        |
| tblVehicleEF | HHD | 0.03        | 0.03        |
| tblVehicleEF | HHD | 7.0000e-005 | 8.2000e-005 |
| tblVehicleEF | HHD | 9.9650e-003 | 0.01        |
| tblVehicleEF | HHD | 0.01        | 0.01        |
| tblVehicleEF | HHD | 3.0000e-006 | 4.0000e-006 |
| tblVehicleEF | HHD | 1.6600e-004 | 1.9400e-004 |
| tblVehicleEF | HHD | 0.52        | 0.52        |
| tblVehicleEF | HHD | 0.11        | 0.11        |
| tblVehicleEF | HHD | 7.0000e-005 | 8.2000e-005 |
| tblVehicleEF | HHD | 0.03        | 0.03        |
| tblVehicleEF | HHD | 0.08        | 0.08        |
| tblVehicleEF | HHD | 6.54        | 6.56        |
| tblVehicleEF | HHD | 0.51        | 0.50        |
| tblVehicleEF | HHD | 7.7910e-003 | 7.9970e-003 |
| tblVehicleEF | HHD | 1,066.26    | 1,087.01    |
| tblVehicleEF | HHD | 1,383.24    | 1,411.94    |
| tblVehicleEF | HHD | 0.08        | 0.09        |
| tblVehicleEF | HHD | 0.17        | 0.17        |
| tblVehicleEF | HHD | 0.22        | 0.22        |



ARE Science Village - San Diego County, Winter

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

|              |     |             |             |
|--------------|-----|-------------|-------------|
| tblVehicleEF | HHD | 4.0000e-006 | 5.0000e-006 |
| tblVehicleEF | HHD | 5.40        | 5.45        |
| tblVehicleEF | HHD | 2.50        | 2.54        |
| tblVehicleEF | HHD | 2.38        | 2.38        |
| tblVehicleEF | HHD | 2.5110e-003 | 2.6240e-003 |
| tblVehicleEF | HHD | 0.06        | 0.06        |
| tblVehicleEF | HHD | 0.04        | 0.04        |
| tblVehicleEF | HHD | 0.02        | 0.03        |
| tblVehicleEF | HHD | 2.4020e-003 | 2.5100e-003 |
| tblVehicleEF | HHD | 0.03        | 0.03        |
| tblVehicleEF | HHD | 8.8700e-003 | 8.8690e-003 |
| tblVehicleEF | HHD | 0.02        | 0.02        |
| tblVehicleEF | HHD | 5.0000e-006 | 6.0000e-006 |
| tblVehicleEF | HHD | 1.7100e-004 | 2.0000e-004 |
| tblVehicleEF | HHD | 0.47        | 0.47        |
| tblVehicleEF | HHD | 5.0000e-006 | 6.0000e-006 |
| tblVehicleEF | HHD | 0.03        | 0.03        |
| tblVehicleEF | HHD | 6.9000e-005 | 8.0000e-005 |
| tblVehicleEF | HHD | 9.8520e-003 | 0.01        |
| tblVehicleEF | HHD | 0.01        | 0.01        |
| tblVehicleEF | HHD | 5.0000e-006 | 6.0000e-006 |
| tblVehicleEF | HHD | 1.7100e-004 | 2.0000e-004 |
| tblVehicleEF | HHD | 0.54        | 0.55        |
| tblVehicleEF | HHD | 5.0000e-006 | 6.0000e-006 |
| tblVehicleEF | HHD | 0.11        | 0.11        |
| tblVehicleEF | HHD | 6.9000e-005 | 8.0000e-005 |
| tblVehicleEF | HHD | 0.03        | 0.03        |
| tblVehicleEF | HHD | 0.08        | 0.08        |
| tblVehicleEF | HHD | 0.00        | 1.0000e-006 |

ARE Science Village - San Diego County, Winter

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

|              |     |             |             |
|--------------|-----|-------------|-------------|
| tblVehicleEF | HHD | 6.77        | 6.78        |
| tblVehicleEF | HHD | 0.51        | 0.49        |
| tblVehicleEF | HHD | 8.5100e-003 | 8.7350e-003 |
| tblVehicleEF | HHD | 1,095.31    | 1,116.20    |
| tblVehicleEF | HHD | 1,383.23    | 1,411.93    |
| tblVehicleEF | HHD | 0.08        | 0.09        |
| tblVehicleEF | HHD | 0.17        | 0.18        |
| tblVehicleEF | HHD | 0.22        | 0.22        |
| tblVehicleEF | HHD | 4.0000e-006 | 5.0000e-006 |
| tblVehicleEF | HHD | 5.99        | 6.04        |
| tblVehicleEF | HHD | 2.59        | 2.63        |
| tblVehicleEF | HHD | 2.38        | 2.38        |
| tblVehicleEF | HHD | 3.3780e-003 | 3.5400e-003 |
| tblVehicleEF | HHD | 0.06        | 0.06        |
| tblVehicleEF | HHD | 0.04        | 0.04        |
| tblVehicleEF | HHD | 0.02        | 0.03        |
| tblVehicleEF | HHD | 3.2320e-003 | 3.3870e-003 |
| tblVehicleEF | HHD | 0.03        | 0.03        |
| tblVehicleEF | HHD | 8.8700e-003 | 8.8690e-003 |
| tblVehicleEF | HHD | 0.02        | 0.02        |
| tblVehicleEF | HHD | 1.8700e-004 | 2.2100e-004 |
| tblVehicleEF | HHD | 0.41        | 0.41        |
| tblVehicleEF | HHD | 0.03        | 0.03        |
| tblVehicleEF | HHD | 7.7000e-005 | 8.9000e-005 |
| tblVehicleEF | HHD | 0.01        | 0.01        |
| tblVehicleEF | HHD | 0.01        | 0.01        |
| tblVehicleEF | HHD | 1.8700e-004 | 2.2100e-004 |
| tblVehicleEF | HHD | 0.47        | 0.48        |
| tblVehicleEF | HHD | 0.11        | 0.11        |

ARE Science Village - San Diego County, Winter

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

|              |     |             |             |
|--------------|-----|-------------|-------------|
| tblVehicleEF | HHD | 7.7000e-005 | 8.9000e-005 |
| tblVehicleEF | LDA | 1.6100e-003 | 1.8040e-003 |
| tblVehicleEF | LDA | 0.04        | 0.04        |
| tblVehicleEF | LDA | 0.48        | 0.50        |
| tblVehicleEF | LDA | 1.92        | 2.00        |
| tblVehicleEF | LDA | 243.80      | 249.94      |
| tblVehicleEF | LDA | 49.74       | 50.91       |
| tblVehicleEF | LDA | 3.7570e-003 | 3.9640e-003 |
| tblVehicleEF | LDA | 0.02        | 0.02        |
| tblVehicleEF | LDA | 0.03        | 0.03        |
| tblVehicleEF | LDA | 0.15        | 0.16        |
| tblVehicleEF | LDA | 1.3910e-003 | 1.4500e-003 |
| tblVehicleEF | LDA | 1.6660e-003 | 1.7190e-003 |
| tblVehicleEF | LDA | 1.2810e-003 | 1.3350e-003 |
| tblVehicleEF | LDA | 1.5320e-003 | 1.5810e-003 |
| tblVehicleEF | LDA | 0.03        | 0.03        |
| tblVehicleEF | LDA | 0.08        | 0.08        |
| tblVehicleEF | LDA | 0.04        | 0.04        |
| tblVehicleEF | LDA | 5.7940e-003 | 6.6080e-003 |
| tblVehicleEF | LDA | 0.02        | 0.02        |
| tblVehicleEF | LDA | 0.17        | 0.19        |
| tblVehicleEF | LDA | 2.3400e-003 | 2.4230e-003 |
| tblVehicleEF | LDA | 4.7700e-004 | 4.9400e-004 |
| tblVehicleEF | LDA | 0.03        | 0.03        |
| tblVehicleEF | LDA | 0.08        | 0.08        |
| tblVehicleEF | LDA | 0.04        | 0.04        |
| tblVehicleEF | LDA | 8.4120e-003 | 9.5960e-003 |
| tblVehicleEF | LDA | 0.02        | 0.02        |
| tblVehicleEF | LDA | 0.19        | 0.20        |

ARE Science Village - San Diego County, Winter

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

|              |     |             |             |
|--------------|-----|-------------|-------------|
| tblVehicleEF | LDA | 1.7530e-003 | 1.9650e-003 |
| tblVehicleEF | LDA | 0.03        | 0.04        |
| tblVehicleEF | LDA | 0.53        | 0.56        |
| tblVehicleEF | LDA | 1.59        | 1.65        |
| tblVehicleEF | LDA | 257.31      | 263.81      |
| tblVehicleEF | LDA | 49.13       | 50.27       |
| tblVehicleEF | LDA | 3.5390e-003 | 3.7330e-003 |
| tblVehicleEF | LDA | 0.02        | 0.02        |
| tblVehicleEF | LDA | 0.02        | 0.03        |
| tblVehicleEF | LDA | 0.14        | 0.15        |
| tblVehicleEF | LDA | 1.3910e-003 | 1.4500e-003 |
| tblVehicleEF | LDA | 1.6660e-003 | 1.7190e-003 |
| tblVehicleEF | LDA | 1.2810e-003 | 1.3350e-003 |
| tblVehicleEF | LDA | 1.5320e-003 | 1.5810e-003 |
| tblVehicleEF | LDA | 0.05        | 0.05        |
| tblVehicleEF | LDA | 0.08        | 0.09        |
| tblVehicleEF | LDA | 0.06        | 0.07        |
| tblVehicleEF | LDA | 6.2320e-003 | 7.1080e-003 |
| tblVehicleEF | LDA | 0.02        | 0.02        |
| tblVehicleEF | LDA | 0.15        | 0.16        |
| tblVehicleEF | LDA | 2.4700e-003 | 2.5570e-003 |
| tblVehicleEF | LDA | 4.7200e-004 | 4.8700e-004 |
| tblVehicleEF | LDA | 0.05        | 0.05        |
| tblVehicleEF | LDA | 0.08        | 0.09        |
| tblVehicleEF | LDA | 0.06        | 0.07        |
| tblVehicleEF | LDA | 9.0510e-003 | 0.01        |
| tblVehicleEF | LDA | 0.02        | 0.02        |
| tblVehicleEF | LDA | 0.16        | 0.18        |
| tblVehicleEF | LDA | 1.5750e-003 | 1.7660e-003 |

ARE Science Village - San Diego County, Winter

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | LDA  | 0.04        | 0.04        |
| tblVehicleEF | LDA  | 0.47        | 0.49        |
| tblVehicleEF | LDA  | 2.06        | 2.14        |
| tblVehicleEF | LDA  | 241.36      | 247.44      |
| tblVehicleEF | LDA  | 50.00       | 51.18       |
| tblVehicleEF | LDA  | 3.7810e-003 | 3.9890e-003 |
| tblVehicleEF | LDA  | 0.02        | 0.02        |
| tblVehicleEF | LDA  | 0.03        | 0.03        |
| tblVehicleEF | LDA  | 0.16        | 0.17        |
| tblVehicleEF | LDA  | 1.3910e-003 | 1.4500e-003 |
| tblVehicleEF | LDA  | 1.6660e-003 | 1.7190e-003 |
| tblVehicleEF | LDA  | 1.2810e-003 | 1.3350e-003 |
| tblVehicleEF | LDA  | 1.5320e-003 | 1.5810e-003 |
| tblVehicleEF | LDA  | 0.03        | 0.03        |
| tblVehicleEF | LDA  | 0.09        | 0.09        |
| tblVehicleEF | LDA  | 0.03        | 0.04        |
| tblVehicleEF | LDA  | 5.6970e-003 | 6.4990e-003 |
| tblVehicleEF | LDA  | 0.03        | 0.03        |
| tblVehicleEF | LDA  | 0.18        | 0.19        |
| tblVehicleEF | LDA  | 2.3170e-003 | 2.3980e-003 |
| tblVehicleEF | LDA  | 4.8000e-004 | 4.9600e-004 |
| tblVehicleEF | LDA  | 0.03        | 0.03        |
| tblVehicleEF | LDA  | 0.09        | 0.09        |
| tblVehicleEF | LDA  | 0.03        | 0.04        |
| tblVehicleEF | LDA  | 8.2710e-003 | 9.4360e-003 |
| tblVehicleEF | LDA  | 0.03        | 0.03        |
| tblVehicleEF | LDA  | 0.20        | 0.21        |
| tblVehicleEF | LDT1 | 4.5160e-003 | 5.1270e-003 |
| tblVehicleEF | LDT1 | 0.06        | 0.07        |

ARE Science Village - San Diego County, Winter

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | LDT1 | 0.93        | 1.02        |
| tblVehicleEF | LDT1 | 2.16        | 2.25        |
| tblVehicleEF | LDT1 | 299.42      | 305.63      |
| tblVehicleEF | LDT1 | 62.01       | 63.24       |
| tblVehicleEF | LDT1 | 6.4980e-003 | 7.1120e-003 |
| tblVehicleEF | LDT1 | 0.03        | 0.03        |
| tblVehicleEF | LDT1 | 0.08        | 0.09        |
| tblVehicleEF | LDT1 | 0.23        | 0.25        |
| tblVehicleEF | LDT1 | 1.8450e-003 | 1.9640e-003 |
| tblVehicleEF | LDT1 | 2.1990e-003 | 2.3220e-003 |
| tblVehicleEF | LDT1 | 1.6980e-003 | 1.8080e-003 |
| tblVehicleEF | LDT1 | 2.0220e-003 | 2.1350e-003 |
| tblVehicleEF | LDT1 | 0.09        | 0.10        |
| tblVehicleEF | LDT1 | 0.19        | 0.20        |
| tblVehicleEF | LDT1 | 0.10        | 0.11        |
| tblVehicleEF | LDT1 | 0.02        | 0.02        |
| tblVehicleEF | LDT1 | 0.09        | 0.09        |
| tblVehicleEF | LDT1 | 0.30        | 0.33        |
| tblVehicleEF | LDT1 | 2.8740e-003 | 2.9630e-003 |
| tblVehicleEF | LDT1 | 5.9500e-004 | 6.1300e-004 |
| tblVehicleEF | LDT1 | 0.09        | 0.10        |
| tblVehicleEF | LDT1 | 0.19        | 0.20        |
| tblVehicleEF | LDT1 | 0.10        | 0.11        |
| tblVehicleEF | LDT1 | 0.03        | 0.03        |
| tblVehicleEF | LDT1 | 0.09        | 0.09        |
| tblVehicleEF | LDT1 | 0.33        | 0.36        |
| tblVehicleEF | LDT1 | 4.8740e-003 | 5.5300e-003 |
| tblVehicleEF | LDT1 | 0.05        | 0.06        |
| tblVehicleEF | LDT1 | 1.03        | 1.13        |

ARE Science Village - San Diego County, Winter

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | LDT1 | 1.78        | 1.85        |
| tblVehicleEF | LDT1 | 313.69      | 320.24      |
| tblVehicleEF | LDT1 | 61.26       | 62.45       |
| tblVehicleEF | LDT1 | 6.0610e-003 | 6.6330e-003 |
| tblVehicleEF | LDT1 | 0.02        | 0.03        |
| tblVehicleEF | LDT1 | 0.07        | 0.08        |
| tblVehicleEF | LDT1 | 0.21        | 0.22        |
| tblVehicleEF | LDT1 | 1.8450e-003 | 1.9640e-003 |
| tblVehicleEF | LDT1 | 2.1990e-003 | 2.3220e-003 |
| tblVehicleEF | LDT1 | 1.6980e-003 | 1.8080e-003 |
| tblVehicleEF | LDT1 | 2.0220e-003 | 2.1350e-003 |
| tblVehicleEF | LDT1 | 0.14        | 0.15        |
| tblVehicleEF | LDT1 | 0.20        | 0.21        |
| tblVehicleEF | LDT1 | 0.17        | 0.18        |
| tblVehicleEF | LDT1 | 0.02        | 0.02        |
| tblVehicleEF | LDT1 | 0.08        | 0.08        |
| tblVehicleEF | LDT1 | 0.26        | 0.29        |
| tblVehicleEF | LDT1 | 3.0110e-003 | 3.1050e-003 |
| tblVehicleEF | LDT1 | 5.8800e-004 | 6.0500e-004 |
| tblVehicleEF | LDT1 | 0.14        | 0.15        |
| tblVehicleEF | LDT1 | 0.20        | 0.21        |
| tblVehicleEF | LDT1 | 0.17        | 0.18        |
| tblVehicleEF | LDT1 | 0.03        | 0.03        |
| tblVehicleEF | LDT1 | 0.08        | 0.08        |
| tblVehicleEF | LDT1 | 0.28        | 0.31        |
| tblVehicleEF | LDT1 | 4.4300e-003 | 5.0310e-003 |
| tblVehicleEF | LDT1 | 0.06        | 0.07        |
| tblVehicleEF | LDT1 | 0.91        | 1.00        |
| tblVehicleEF | LDT1 | 2.32        | 2.42        |

ARE Science Village - San Diego County, Winter

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | LDT1 | 296.83      | 302.99      |
| tblVehicleEF | LDT1 | 62.32       | 63.57       |
| tblVehicleEF | LDT1 | 6.5530e-003 | 7.1730e-003 |
| tblVehicleEF | LDT1 | 0.03        | 0.03        |
| tblVehicleEF | LDT1 | 0.08        | 0.09        |
| tblVehicleEF | LDT1 | 0.24        | 0.25        |
| tblVehicleEF | LDT1 | 1.8450e-003 | 1.9640e-003 |
| tblVehicleEF | LDT1 | 2.1990e-003 | 2.3220e-003 |
| tblVehicleEF | LDT1 | 1.6980e-003 | 1.8080e-003 |
| tblVehicleEF | LDT1 | 2.0220e-003 | 2.1350e-003 |
| tblVehicleEF | LDT1 | 0.08        | 0.08        |
| tblVehicleEF | LDT1 | 0.21        | 0.22        |
| tblVehicleEF | LDT1 | 0.09        | 0.09        |
| tblVehicleEF | LDT1 | 0.02        | 0.02        |
| tblVehicleEF | LDT1 | 0.11        | 0.11        |
| tblVehicleEF | LDT1 | 0.32        | 0.35        |
| tblVehicleEF | LDT1 | 2.8490e-003 | 2.9370e-003 |
| tblVehicleEF | LDT1 | 5.9800e-004 | 6.1600e-004 |
| tblVehicleEF | LDT1 | 0.08        | 0.08        |
| tblVehicleEF | LDT1 | 0.21        | 0.22        |
| tblVehicleEF | LDT1 | 0.09        | 0.09        |
| tblVehicleEF | LDT1 | 0.03        | 0.03        |
| tblVehicleEF | LDT1 | 0.11        | 0.11        |
| tblVehicleEF | LDT1 | 0.35        | 0.38        |
| tblVehicleEF | LDT2 | 2.9460e-003 | 3.2480e-003 |
| tblVehicleEF | LDT2 | 0.06        | 0.06        |
| tblVehicleEF | LDT2 | 0.69        | 0.73        |
| tblVehicleEF | LDT2 | 2.49        | 2.58        |
| tblVehicleEF | LDT2 | 313.49      | 322.57      |



ARE Science Village - San Diego County, Winter

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | LDT2 | 65.05       | 66.90       |
| tblVehicleEF | LDT2 | 5.3950e-003 | 5.7950e-003 |
| tblVehicleEF | LDT2 | 0.03        | 0.03        |
| tblVehicleEF | LDT2 | 0.05        | 0.06        |
| tblVehicleEF | LDT2 | 0.23        | 0.25        |
| tblVehicleEF | LDT2 | 1.4280e-003 | 1.4650e-003 |
| tblVehicleEF | LDT2 | 1.6540e-003 | 1.6870e-003 |
| tblVehicleEF | LDT2 | 1.3150e-003 | 1.3480e-003 |
| tblVehicleEF | LDT2 | 1.5210e-003 | 1.5510e-003 |
| tblVehicleEF | LDT2 | 0.06        | 0.06        |
| tblVehicleEF | LDT2 | 0.12        | 0.12        |
| tblVehicleEF | LDT2 | 0.08        | 0.08        |
| tblVehicleEF | LDT2 | 0.01        | 0.01        |
| tblVehicleEF | LDT2 | 0.05        | 0.05        |
| tblVehicleEF | LDT2 | 0.26        | 0.28        |
| tblVehicleEF | LDT2 | 3.0090e-003 | 3.1270e-003 |
| tblVehicleEF | LDT2 | 6.2400e-004 | 6.4900e-004 |
| tblVehicleEF | LDT2 | 0.06        | 0.06        |
| tblVehicleEF | LDT2 | 0.12        | 0.12        |
| tblVehicleEF | LDT2 | 0.08        | 0.08        |
| tblVehicleEF | LDT2 | 0.02        | 0.02        |
| tblVehicleEF | LDT2 | 0.05        | 0.05        |
| tblVehicleEF | LDT2 | 0.28        | 0.30        |
| tblVehicleEF | LDT2 | 3.1950e-003 | 3.5210e-003 |
| tblVehicleEF | LDT2 | 0.05        | 0.05        |
| tblVehicleEF | LDT2 | 0.77        | 0.81        |
| tblVehicleEF | LDT2 | 2.06        | 2.13        |
| tblVehicleEF | LDT2 | 327.02      | 336.54      |
| tblVehicleEF | LDT2 | 64.23       | 66.05       |

ARE Science Village - San Diego County, Winter

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | LDT2 | 5.0620e-003 | 5.4350e-003 |
| tblVehicleEF | LDT2 | 0.03        | 0.03        |
| tblVehicleEF | LDT2 | 0.05        | 0.06        |
| tblVehicleEF | LDT2 | 0.21        | 0.23        |
| tblVehicleEF | LDT2 | 1.4280e-003 | 1.4650e-003 |
| tblVehicleEF | LDT2 | 1.6540e-003 | 1.6870e-003 |
| tblVehicleEF | LDT2 | 1.3150e-003 | 1.3480e-003 |
| tblVehicleEF | LDT2 | 1.5210e-003 | 1.5510e-003 |
| tblVehicleEF | LDT2 | 0.09        | 0.09        |
| tblVehicleEF | LDT2 | 0.12        | 0.13        |
| tblVehicleEF | LDT2 | 0.12        | 0.13        |
| tblVehicleEF | LDT2 | 0.01        | 0.01        |
| tblVehicleEF | LDT2 | 0.05        | 0.05        |
| tblVehicleEF | LDT2 | 0.22        | 0.24        |
| tblVehicleEF | LDT2 | 3.1390e-003 | 3.2620e-003 |
| tblVehicleEF | LDT2 | 6.1700e-004 | 6.4000e-004 |
| tblVehicleEF | LDT2 | 0.09        | 0.09        |
| tblVehicleEF | LDT2 | 0.12        | 0.13        |
| tblVehicleEF | LDT2 | 0.12        | 0.13        |
| tblVehicleEF | LDT2 | 0.02        | 0.02        |
| tblVehicleEF | LDT2 | 0.05        | 0.05        |
| tblVehicleEF | LDT2 | 0.24        | 0.26        |
| tblVehicleEF | LDT2 | 2.8860e-003 | 3.1820e-003 |
| tblVehicleEF | LDT2 | 0.06        | 0.06        |
| tblVehicleEF | LDT2 | 0.67        | 0.71        |
| tblVehicleEF | LDT2 | 2.67        | 2.77        |
| tblVehicleEF | LDT2 | 311.04      | 320.04      |
| tblVehicleEF | LDT2 | 65.40       | 67.25       |
| tblVehicleEF | LDT2 | 5.4340e-003 | 5.8380e-003 |

ARE Science Village - San Diego County, Winter

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | LDT2 | 0.03        | 0.03        |
| tblVehicleEF | LDT2 | 0.06        | 0.06        |
| tblVehicleEF | LDT2 | 0.24        | 0.26        |
| tblVehicleEF | LDT2 | 1.4280e-003 | 1.4650e-003 |
| tblVehicleEF | LDT2 | 1.6540e-003 | 1.6870e-003 |
| tblVehicleEF | LDT2 | 1.3150e-003 | 1.3480e-003 |
| tblVehicleEF | LDT2 | 1.5210e-003 | 1.5510e-003 |
| tblVehicleEF | LDT2 | 0.04        | 0.05        |
| tblVehicleEF | LDT2 | 0.13        | 0.13        |
| tblVehicleEF | LDT2 | 0.07        | 0.07        |
| tblVehicleEF | LDT2 | 0.01        | 0.01        |
| tblVehicleEF | LDT2 | 0.07        | 0.07        |
| tblVehicleEF | LDT2 | 0.27        | 0.29        |
| tblVehicleEF | LDT2 | 2.9850e-003 | 3.1020e-003 |
| tblVehicleEF | LDT2 | 6.2800e-004 | 6.5200e-004 |
| tblVehicleEF | LDT2 | 0.04        | 0.05        |
| tblVehicleEF | LDT2 | 0.13        | 0.13        |
| tblVehicleEF | LDT2 | 0.07        | 0.07        |
| tblVehicleEF | LDT2 | 0.02        | 0.02        |
| tblVehicleEF | LDT2 | 0.07        | 0.07        |
| tblVehicleEF | LDT2 | 0.29        | 0.32        |
| tblVehicleEF | LHD1 | 4.3840e-003 | 4.5180e-003 |
| tblVehicleEF | LHD1 | 7.7190e-003 | 8.3670e-003 |
| tblVehicleEF | LHD1 | 0.01        | 0.01        |
| tblVehicleEF | LHD1 | 0.17        | 0.17        |
| tblVehicleEF | LHD1 | 0.72        | 0.77        |
| tblVehicleEF | LHD1 | 0.90        | 0.93        |
| tblVehicleEF | LHD1 | 9.03        | 9.13        |
| tblVehicleEF | LHD1 | 744.83      | 758.47      |

ARE Science Village - San Diego County, Winter

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | LHD1 | 10.05       | 10.27       |
| tblVehicleEF | LHD1 | 8.5400e-004 | 8.5600e-004 |
| tblVehicleEF | LHD1 | 0.05        | 0.05        |
| tblVehicleEF | LHD1 | 0.02        | 0.02        |
| tblVehicleEF | LHD1 | 0.07        | 0.07        |
| tblVehicleEF | LHD1 | 0.84        | 0.94        |
| tblVehicleEF | LHD1 | 0.26        | 0.27        |
| tblVehicleEF | LHD1 | 9.9400e-004 | 9.8200e-004 |
| tblVehicleEF | LHD1 | 0.01        | 0.01        |
| tblVehicleEF | LHD1 | 0.01        | 0.01        |
| tblVehicleEF | LHD1 | 2.1700e-004 | 2.2600e-004 |
| tblVehicleEF | LHD1 | 9.5100e-004 | 9.3900e-004 |
| tblVehicleEF | LHD1 | 2.5050e-003 | 2.5000e-003 |
| tblVehicleEF | LHD1 | 0.01        | 0.01        |
| tblVehicleEF | LHD1 | 2.0000e-004 | 2.0700e-004 |
| tblVehicleEF | LHD1 | 1.6140e-003 | 1.7130e-003 |
| tblVehicleEF | LHD1 | 0.06        | 0.07        |
| tblVehicleEF | LHD1 | 0.02        | 0.02        |
| tblVehicleEF | LHD1 | 1.2630e-003 | 1.3230e-003 |
| tblVehicleEF | LHD1 | 0.10        | 0.10        |
| tblVehicleEF | LHD1 | 0.17        | 0.18        |
| tblVehicleEF | LHD1 | 0.06        | 0.06        |
| tblVehicleEF | LHD1 | 8.7000e-005 | 8.8000e-005 |
| tblVehicleEF | LHD1 | 7.2530e-003 | 7.3870e-003 |
| tblVehicleEF | LHD1 | 9.9000e-005 | 1.0200e-004 |
| tblVehicleEF | LHD1 | 1.6140e-003 | 1.7130e-003 |
| tblVehicleEF | LHD1 | 0.06        | 0.07        |
| tblVehicleEF | LHD1 | 0.03        | 0.03        |
| tblVehicleEF | LHD1 | 1.2630e-003 | 1.3230e-003 |

ARE Science Village - San Diego County, Winter

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | LHD1 | 0.12        | 0.12        |
| tblVehicleEF | LHD1 | 0.17        | 0.18        |
| tblVehicleEF | LHD1 | 0.06        | 0.07        |
| tblVehicleEF | LHD1 | 4.3930e-003 | 4.5270e-003 |
| tblVehicleEF | LHD1 | 7.8320e-003 | 8.5000e-003 |
| tblVehicleEF | LHD1 | 0.01        | 0.01        |
| tblVehicleEF | LHD1 | 0.17        | 0.17        |
| tblVehicleEF | LHD1 | 0.73        | 0.79        |
| tblVehicleEF | LHD1 | 0.85        | 0.88        |
| tblVehicleEF | LHD1 | 9.03        | 9.13        |
| tblVehicleEF | LHD1 | 744.85      | 758.49      |
| tblVehicleEF | LHD1 | 9.97        | 10.18       |
| tblVehicleEF | LHD1 | 8.5600e-004 | 8.5800e-004 |
| tblVehicleEF | LHD1 | 0.05        | 0.05        |
| tblVehicleEF | LHD1 | 0.02        | 0.02        |
| tblVehicleEF | LHD1 | 0.07        | 0.07        |
| tblVehicleEF | LHD1 | 0.80        | 0.90        |
| tblVehicleEF | LHD1 | 0.25        | 0.26        |
| tblVehicleEF | LHD1 | 9.9400e-004 | 9.8200e-004 |
| tblVehicleEF | LHD1 | 0.01        | 0.01        |
| tblVehicleEF | LHD1 | 0.01        | 0.01        |
| tblVehicleEF | LHD1 | 2.1700e-004 | 2.2600e-004 |
| tblVehicleEF | LHD1 | 9.5100e-004 | 9.3900e-004 |
| tblVehicleEF | LHD1 | 2.5050e-003 | 2.5000e-003 |
| tblVehicleEF | LHD1 | 0.01        | 0.01        |
| tblVehicleEF | LHD1 | 2.0000e-004 | 2.0700e-004 |
| tblVehicleEF | LHD1 | 2.3300e-003 | 2.4740e-003 |
| tblVehicleEF | LHD1 | 0.07        | 0.07        |
| tblVehicleEF | LHD1 | 0.02        | 0.02        |

ARE Science Village - San Diego County, Winter

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | LHD1 | 2.1100e-003 | 2.2150e-003 |
| tblVehicleEF | LHD1 | 0.10        | 0.10        |
| tblVehicleEF | LHD1 | 0.17        | 0.17        |
| tblVehicleEF | LHD1 | 0.06        | 0.06        |
| tblVehicleEF | LHD1 | 8.7000e-005 | 8.8000e-005 |
| tblVehicleEF | LHD1 | 7.2530e-003 | 7.3870e-003 |
| tblVehicleEF | LHD1 | 9.9000e-005 | 1.0100e-004 |
| tblVehicleEF | LHD1 | 2.3300e-003 | 2.4740e-003 |
| tblVehicleEF | LHD1 | 0.07        | 0.07        |
| tblVehicleEF | LHD1 | 0.03        | 0.03        |
| tblVehicleEF | LHD1 | 2.1100e-003 | 2.2150e-003 |
| tblVehicleEF | LHD1 | 0.12        | 0.12        |
| tblVehicleEF | LHD1 | 0.17        | 0.17        |
| tblVehicleEF | LHD1 | 0.06        | 0.07        |
| tblVehicleEF | LHD1 | 4.3800e-003 | 4.5140e-003 |
| tblVehicleEF | LHD1 | 7.6700e-003 | 8.3090e-003 |
| tblVehicleEF | LHD1 | 0.01        | 0.01        |
| tblVehicleEF | LHD1 | 0.17        | 0.17        |
| tblVehicleEF | LHD1 | 0.71        | 0.77        |
| tblVehicleEF | LHD1 | 0.92        | 0.95        |
| tblVehicleEF | LHD1 | 9.03        | 9.13        |
| tblVehicleEF | LHD1 | 744.83      | 758.46      |
| tblVehicleEF | LHD1 | 10.09       | 10.31       |
| tblVehicleEF | LHD1 | 8.5300e-004 | 8.5500e-004 |
| tblVehicleEF | LHD1 | 0.05        | 0.05        |
| tblVehicleEF | LHD1 | 0.02        | 0.02        |
| tblVehicleEF | LHD1 | 0.07        | 0.07        |
| tblVehicleEF | LHD1 | 0.84        | 0.94        |
| tblVehicleEF | LHD1 | 0.26        | 0.28        |

ARE Science Village - San Diego County, Winter

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | LHD1 | 9.9400e-004 | 9.8200e-004 |
| tblVehicleEF | LHD1 | 0.01        | 0.01        |
| tblVehicleEF | LHD1 | 0.01        | 0.01        |
| tblVehicleEF | LHD1 | 2.1700e-004 | 2.2600e-004 |
| tblVehicleEF | LHD1 | 9.5100e-004 | 9.3900e-004 |
| tblVehicleEF | LHD1 | 2.5050e-003 | 2.5000e-003 |
| tblVehicleEF | LHD1 | 0.01        | 0.01        |
| tblVehicleEF | LHD1 | 2.0000e-004 | 2.0700e-004 |
| tblVehicleEF | LHD1 | 1.4760e-003 | 1.5750e-003 |
| tblVehicleEF | LHD1 | 0.08        | 0.08        |
| tblVehicleEF | LHD1 | 0.02        | 0.02        |
| tblVehicleEF | LHD1 | 1.1170e-003 | 1.1700e-003 |
| tblVehicleEF | LHD1 | 0.10        | 0.10        |
| tblVehicleEF | LHD1 | 0.19        | 0.20        |
| tblVehicleEF | LHD1 | 0.06        | 0.06        |
| tblVehicleEF | LHD1 | 8.7000e-005 | 8.8000e-005 |
| tblVehicleEF | LHD1 | 7.2530e-003 | 7.3870e-003 |
| tblVehicleEF | LHD1 | 1.0000e-004 | 1.0200e-004 |
| tblVehicleEF | LHD1 | 1.4760e-003 | 1.5750e-003 |
| tblVehicleEF | LHD1 | 0.08        | 0.08        |
| tblVehicleEF | LHD1 | 0.03        | 0.03        |
| tblVehicleEF | LHD1 | 1.1170e-003 | 1.1700e-003 |
| tblVehicleEF | LHD1 | 0.12        | 0.12        |
| tblVehicleEF | LHD1 | 0.19        | 0.20        |
| tblVehicleEF | LHD1 | 0.07        | 0.07        |
| tblVehicleEF | LHD2 | 2.9640e-003 | 3.0610e-003 |
| tblVehicleEF | LHD2 | 6.4040e-003 | 6.7000e-003 |
| tblVehicleEF | LHD2 | 7.0010e-003 | 7.5470e-003 |
| tblVehicleEF | LHD2 | 0.14        | 0.14        |

ARE Science Village - San Diego County, Winter

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | LHD2 | 0.59        | 0.61        |
| tblVehicleEF | LHD2 | 0.54        | 0.56        |
| tblVehicleEF | LHD2 | 13.96       | 14.10       |
| tblVehicleEF | LHD2 | 744.92      | 758.13      |
| tblVehicleEF | LHD2 | 7.25        | 7.44        |
| tblVehicleEF | LHD2 | 1.7690e-003 | 1.7790e-003 |
| tblVehicleEF | LHD2 | 0.07        | 0.07        |
| tblVehicleEF | LHD2 | 0.01        | 0.01        |
| tblVehicleEF | LHD2 | 0.10        | 0.10        |
| tblVehicleEF | LHD2 | 0.82        | 0.92        |
| tblVehicleEF | LHD2 | 0.16        | 0.17        |
| tblVehicleEF | LHD2 | 1.4400e-003 | 1.4270e-003 |
| tblVehicleEF | LHD2 | 0.01        | 0.01        |
| tblVehicleEF | LHD2 | 0.02        | 0.02        |
| tblVehicleEF | LHD2 | 1.1400e-004 | 1.1700e-004 |
| tblVehicleEF | LHD2 | 1.3770e-003 | 1.3650e-003 |
| tblVehicleEF | LHD2 | 2.6990e-003 | 2.6960e-003 |
| tblVehicleEF | LHD2 | 0.02        | 0.02        |
| tblVehicleEF | LHD2 | 1.0400e-004 | 1.0800e-004 |
| tblVehicleEF | LHD2 | 8.0000e-004 | 8.5000e-004 |
| tblVehicleEF | LHD2 | 0.03        | 0.04        |
| tblVehicleEF | LHD2 | 0.02        | 0.02        |
| tblVehicleEF | LHD2 | 6.6600e-004 | 6.9500e-004 |
| tblVehicleEF | LHD2 | 0.11        | 0.11        |
| tblVehicleEF | LHD2 | 0.07        | 0.08        |
| tblVehicleEF | LHD2 | 0.03        | 0.04        |
| tblVehicleEF | LHD2 | 1.3300e-004 | 1.3500e-004 |
| tblVehicleEF | LHD2 | 7.1890e-003 | 7.3180e-003 |
| tblVehicleEF | LHD2 | 7.2000e-005 | 7.4000e-005 |



ARE Science Village - San Diego County, Winter

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | LHD2 | 8.0000e-004 | 8.5000e-004 |
| tblVehicleEF | LHD2 | 0.03        | 0.04        |
| tblVehicleEF | LHD2 | 0.02        | 0.02        |
| tblVehicleEF | LHD2 | 6.6600e-004 | 6.9500e-004 |
| tblVehicleEF | LHD2 | 0.13        | 0.13        |
| tblVehicleEF | LHD2 | 0.07        | 0.08        |
| tblVehicleEF | LHD2 | 0.04        | 0.04        |
| tblVehicleEF | LHD2 | 2.9700e-003 | 3.0670e-003 |
| tblVehicleEF | LHD2 | 6.4490e-003 | 6.7500e-003 |
| tblVehicleEF | LHD2 | 6.7120e-003 | 7.2350e-003 |
| tblVehicleEF | LHD2 | 0.14        | 0.14        |
| tblVehicleEF | LHD2 | 0.59        | 0.62        |
| tblVehicleEF | LHD2 | 0.51        | 0.53        |
| tblVehicleEF | LHD2 | 13.96       | 14.10       |
| tblVehicleEF | LHD2 | 744.93      | 758.14      |
| tblVehicleEF | LHD2 | 7.20        | 7.38        |
| tblVehicleEF | LHD2 | 1.7700e-003 | 1.7810e-003 |
| tblVehicleEF | LHD2 | 0.07        | 0.07        |
| tblVehicleEF | LHD2 | 0.01        | 0.01        |
| tblVehicleEF | LHD2 | 0.10        | 0.10        |
| tblVehicleEF | LHD2 | 0.79        | 0.88        |
| tblVehicleEF | LHD2 | 0.16        | 0.16        |
| tblVehicleEF | LHD2 | 1.4400e-003 | 1.4270e-003 |
| tblVehicleEF | LHD2 | 0.01        | 0.01        |
| tblVehicleEF | LHD2 | 0.02        | 0.02        |
| tblVehicleEF | LHD2 | 1.1400e-004 | 1.1700e-004 |
| tblVehicleEF | LHD2 | 1.3770e-003 | 1.3650e-003 |
| tblVehicleEF | LHD2 | 2.6990e-003 | 2.6960e-003 |
| tblVehicleEF | LHD2 | 0.02        | 0.02        |

ARE Science Village - San Diego County, Winter

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | LHD2 | 1.0400e-004 | 1.0800e-004 |
| tblVehicleEF | LHD2 | 1.1590e-003 | 1.2310e-003 |
| tblVehicleEF | LHD2 | 0.03        | 0.04        |
| tblVehicleEF | LHD2 | 0.02        | 0.02        |
| tblVehicleEF | LHD2 | 1.1170e-003 | 1.1680e-003 |
| tblVehicleEF | LHD2 | 0.11        | 0.11        |
| tblVehicleEF | LHD2 | 0.07        | 0.08        |
| tblVehicleEF | LHD2 | 0.03        | 0.04        |
| tblVehicleEF | LHD2 | 1.3300e-004 | 1.3500e-004 |
| tblVehicleEF | LHD2 | 7.1890e-003 | 7.3180e-003 |
| tblVehicleEF | LHD2 | 7.1000e-005 | 7.3000e-005 |
| tblVehicleEF | LHD2 | 1.1590e-003 | 1.2310e-003 |
| tblVehicleEF | LHD2 | 0.03        | 0.04        |
| tblVehicleEF | LHD2 | 0.02        | 0.02        |
| tblVehicleEF | LHD2 | 1.1170e-003 | 1.1680e-003 |
| tblVehicleEF | LHD2 | 0.13        | 0.13        |
| tblVehicleEF | LHD2 | 0.07        | 0.08        |
| tblVehicleEF | LHD2 | 0.04        | 0.04        |
| tblVehicleEF | LHD2 | 2.9620e-003 | 3.0590e-003 |
| tblVehicleEF | LHD2 | 6.3850e-003 | 6.6780e-003 |
| tblVehicleEF | LHD2 | 7.1310e-003 | 7.6880e-003 |
| tblVehicleEF | LHD2 | 0.14        | 0.14        |
| tblVehicleEF | LHD2 | 0.59        | 0.61        |
| tblVehicleEF | LHD2 | 0.55        | 0.57        |
| tblVehicleEF | LHD2 | 13.96       | 14.10       |
| tblVehicleEF | LHD2 | 744.92      | 758.13      |
| tblVehicleEF | LHD2 | 7.27        | 7.46        |
| tblVehicleEF | LHD2 | 1.7680e-003 | 1.7790e-003 |
| tblVehicleEF | LHD2 | 0.07        | 0.07        |

ARE Science Village - San Diego County, Winter

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | LHD2 | 0.01        | 0.01        |
| tblVehicleEF | LHD2 | 0.10        | 0.10        |
| tblVehicleEF | LHD2 | 0.81        | 0.91        |
| tblVehicleEF | LHD2 | 0.17        | 0.18        |
| tblVehicleEF | LHD2 | 1.4400e-003 | 1.4270e-003 |
| tblVehicleEF | LHD2 | 0.01        | 0.01        |
| tblVehicleEF | LHD2 | 0.02        | 0.02        |
| tblVehicleEF | LHD2 | 1.1400e-004 | 1.1700e-004 |
| tblVehicleEF | LHD2 | 1.3770e-003 | 1.3650e-003 |
| tblVehicleEF | LHD2 | 2.6990e-003 | 2.6960e-003 |
| tblVehicleEF | LHD2 | 0.02        | 0.02        |
| tblVehicleEF | LHD2 | 1.0400e-004 | 1.0800e-004 |
| tblVehicleEF | LHD2 | 7.1400e-004 | 7.6400e-004 |
| tblVehicleEF | LHD2 | 0.04        | 0.04        |
| tblVehicleEF | LHD2 | 0.02        | 0.02        |
| tblVehicleEF | LHD2 | 5.8600e-004 | 6.1100e-004 |
| tblVehicleEF | LHD2 | 0.11        | 0.11        |
| tblVehicleEF | LHD2 | 0.08        | 0.09        |
| tblVehicleEF | LHD2 | 0.03        | 0.04        |
| tblVehicleEF | LHD2 | 1.3300e-004 | 1.3500e-004 |
| tblVehicleEF | LHD2 | 7.1890e-003 | 7.3180e-003 |
| tblVehicleEF | LHD2 | 7.2000e-005 | 7.4000e-005 |
| tblVehicleEF | LHD2 | 7.1400e-004 | 7.6400e-004 |
| tblVehicleEF | LHD2 | 0.04        | 0.04        |
| tblVehicleEF | LHD2 | 0.02        | 0.02        |
| tblVehicleEF | LHD2 | 5.8600e-004 | 6.1100e-004 |
| tblVehicleEF | LHD2 | 0.13        | 0.13        |
| tblVehicleEF | LHD2 | 0.08        | 0.09        |
| tblVehicleEF | LHD2 | 0.04        | 0.04        |

ARE Science Village - San Diego County, Winter

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

|              |     |             |             |
|--------------|-----|-------------|-------------|
| tblVehicleEF | MCY | 0.35        | 0.35        |
| tblVehicleEF | MCY | 0.24        | 0.24        |
| tblVehicleEF | MCY | 19.81       | 20.07       |
| tblVehicleEF | MCY | 8.66        | 8.64        |
| tblVehicleEF | MCY | 220.35      | 220.47      |
| tblVehicleEF | MCY | 59.87       | 60.11       |
| tblVehicleEF | MCY | 0.07        | 0.07        |
| tblVehicleEF | MCY | 0.02        | 0.02        |
| tblVehicleEF | MCY | 1.15        | 1.16        |
| tblVehicleEF | MCY | 0.27        | 0.27        |
| tblVehicleEF | MCY | 2.1740e-003 | 2.1320e-003 |
| tblVehicleEF | MCY | 2.8910e-003 | 2.8880e-003 |
| tblVehicleEF | MCY | 2.0310e-003 | 1.9920e-003 |
| tblVehicleEF | MCY | 2.7170e-003 | 2.7150e-003 |
| tblVehicleEF | MCY | 0.94        | 0.94        |
| tblVehicleEF | MCY | 0.74        | 0.74        |
| tblVehicleEF | MCY | 0.74        | 0.73        |
| tblVehicleEF | MCY | 2.40        | 2.41        |
| tblVehicleEF | MCY | 0.50        | 0.50        |
| tblVehicleEF | MCY | 1.84        | 1.85        |
| tblVehicleEF | MCY | 2.1810e-003 | 2.1820e-003 |
| tblVehicleEF | MCY | 5.9200e-004 | 5.9500e-004 |
| tblVehicleEF | MCY | 0.94        | 0.94        |
| tblVehicleEF | MCY | 0.74        | 0.74        |
| tblVehicleEF | MCY | 0.74        | 0.73        |
| tblVehicleEF | MCY | 2.98        | 2.99        |
| tblVehicleEF | MCY | 0.50        | 0.50        |
| tblVehicleEF | MCY | 2.00        | 2.01        |
| tblVehicleEF | MCY | 0.35        | 0.35        |

ARE Science Village - San Diego County, Winter

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

|              |     |             |             |
|--------------|-----|-------------|-------------|
| tblVehicleEF | MCY | 0.21        | 0.21        |
| tblVehicleEF | MCY | 18.90       | 19.13       |
| tblVehicleEF | MCY | 7.75        | 7.74        |
| tblVehicleEF | MCY | 218.65      | 218.71      |
| tblVehicleEF | MCY | 57.62       | 57.86       |
| tblVehicleEF | MCY | 0.06        | 0.06        |
| tblVehicleEF | MCY | 0.01        | 0.01        |
| tblVehicleEF | MCY | 1.04        | 1.04        |
| tblVehicleEF | MCY | 0.25        | 0.25        |
| tblVehicleEF | MCY | 2.1740e-003 | 2.1320e-003 |
| tblVehicleEF | MCY | 2.8910e-003 | 2.8880e-003 |
| tblVehicleEF | MCY | 2.0310e-003 | 1.9920e-003 |
| tblVehicleEF | MCY | 2.7170e-003 | 2.7150e-003 |
| tblVehicleEF | MCY | 1.52        | 1.51        |
| tblVehicleEF | MCY | 0.84        | 0.84        |
| tblVehicleEF | MCY | 1.42        | 1.42        |
| tblVehicleEF | MCY | 2.33        | 2.34        |
| tblVehicleEF | MCY | 0.46        | 0.46        |
| tblVehicleEF | MCY | 1.60        | 1.60        |
| tblVehicleEF | MCY | 5.7000e-004 | 5.7300e-004 |
| tblVehicleEF | MCY | 1.52        | 1.51        |
| tblVehicleEF | MCY | 0.84        | 0.84        |
| tblVehicleEF | MCY | 1.42        | 1.42        |
| tblVehicleEF | MCY | 2.89        | 2.90        |
| tblVehicleEF | MCY | 0.46        | 0.46        |
| tblVehicleEF | MCY | 1.74        | 1.74        |
| tblVehicleEF | MCY | 0.36        | 0.36        |
| tblVehicleEF | MCY | 0.25        | 0.26        |
| tblVehicleEF | MCY | 20.45       | 20.73       |

ARE Science Village - San Diego County, Winter

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

|              |     |             |             |
|--------------|-----|-------------|-------------|
| tblVehicleEF | MCY | 9.13        | 9.10        |
| tblVehicleEF | MCY | 221.50      | 221.65      |
| tblVehicleEF | MCY | 60.99       | 61.23       |
| tblVehicleEF | MCY | 0.07        | 0.07        |
| tblVehicleEF | MCY | 0.02        | 0.02        |
| tblVehicleEF | MCY | 1.17        | 1.17        |
| tblVehicleEF | MCY | 0.27        | 0.27        |
| tblVehicleEF | MCY | 2.1740e-003 | 2.1320e-003 |
| tblVehicleEF | MCY | 2.8910e-003 | 2.8880e-003 |
| tblVehicleEF | MCY | 2.0310e-003 | 1.9920e-003 |
| tblVehicleEF | MCY | 2.7170e-003 | 2.7150e-003 |
| tblVehicleEF | MCY | 0.86        | 0.85        |
| tblVehicleEF | MCY | 0.99        | 0.99        |
| tblVehicleEF | MCY | 0.58        | 0.58        |
| tblVehicleEF | MCY | 2.43        | 2.45        |
| tblVehicleEF | MCY | 0.59        | 0.60        |
| tblVehicleEF | MCY | 1.96        | 1.97        |
| tblVehicleEF | MCY | 2.1920e-003 | 2.1930e-003 |
| tblVehicleEF | MCY | 6.0400e-004 | 6.0600e-004 |
| tblVehicleEF | MCY | 0.86        | 0.85        |
| tblVehicleEF | MCY | 0.99        | 0.99        |
| tblVehicleEF | MCY | 0.58        | 0.58        |
| tblVehicleEF | MCY | 3.02        | 3.04        |
| tblVehicleEF | MCY | 0.59        | 0.60        |
| tblVehicleEF | MCY | 2.13        | 2.14        |
| tblVehicleEF | MDV | 3.1750e-003 | 3.5860e-003 |
| tblVehicleEF | MDV | 0.06        | 0.07        |
| tblVehicleEF | MDV | 0.69        | 0.75        |
| tblVehicleEF | MDV | 2.69        | 2.83        |

ARE Science Village - San Diego County, Winter

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

|              |     |             |             |
|--------------|-----|-------------|-------------|
| tblVehicleEF | MDV | 379.22      | 390.23      |
| tblVehicleEF | MDV | 78.30       | 80.55       |
| tblVehicleEF | MDV | 7.0150e-003 | 7.5630e-003 |
| tblVehicleEF | MDV | 0.03        | 0.03        |
| tblVehicleEF | MDV | 0.06        | 0.07        |
| tblVehicleEF | MDV | 0.26        | 0.29        |
| tblVehicleEF | MDV | 1.4670e-003 | 1.5270e-003 |
| tblVehicleEF | MDV | 1.6840e-003 | 1.7470e-003 |
| tblVehicleEF | MDV | 1.3530e-003 | 1.4090e-003 |
| tblVehicleEF | MDV | 1.5480e-003 | 1.6060e-003 |
| tblVehicleEF | MDV | 0.06        | 0.07        |
| tblVehicleEF | MDV | 0.13        | 0.14        |
| tblVehicleEF | MDV | 0.09        | 0.09        |
| tblVehicleEF | MDV | 0.01        | 0.01        |
| tblVehicleEF | MDV | 0.06        | 0.06        |
| tblVehicleEF | MDV | 0.30        | 0.34        |
| tblVehicleEF | MDV | 3.6390e-003 | 3.7810e-003 |
| tblVehicleEF | MDV | 7.5200e-004 | 7.8100e-004 |
| tblVehicleEF | MDV | 0.06        | 0.07        |
| tblVehicleEF | MDV | 0.13        | 0.14        |
| tblVehicleEF | MDV | 0.09        | 0.09        |
| tblVehicleEF | MDV | 0.02        | 0.02        |
| tblVehicleEF | MDV | 0.06        | 0.06        |
| tblVehicleEF | MDV | 0.33        | 0.37        |
| tblVehicleEF | MDV | 3.4450e-003 | 3.8890e-003 |
| tblVehicleEF | MDV | 0.06        | 0.06        |
| tblVehicleEF | MDV | 0.78        | 0.84        |
| tblVehicleEF | MDV | 2.22        | 2.33        |
| tblVehicleEF | MDV | 392.80      | 404.31      |

ARE Science Village - San Diego County, Winter

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

|              |     |             |             |
|--------------|-----|-------------|-------------|
| tblVehicleEF | MDV | 77.39       | 79.59       |
| tblVehicleEF | MDV | 6.6620e-003 | 7.1730e-003 |
| tblVehicleEF | MDV | 0.03        | 0.03        |
| tblVehicleEF | MDV | 0.05        | 0.06        |
| tblVehicleEF | MDV | 0.24        | 0.26        |
| tblVehicleEF | MDV | 1.4670e-003 | 1.5270e-003 |
| tblVehicleEF | MDV | 1.6840e-003 | 1.7470e-003 |
| tblVehicleEF | MDV | 1.3530e-003 | 1.4090e-003 |
| tblVehicleEF | MDV | 1.5480e-003 | 1.6060e-003 |
| tblVehicleEF | MDV | 0.10        | 0.10        |
| tblVehicleEF | MDV | 0.14        | 0.14        |
| tblVehicleEF | MDV | 0.14        | 0.15        |
| tblVehicleEF | MDV | 0.01        | 0.02        |
| tblVehicleEF | MDV | 0.05        | 0.05        |
| tblVehicleEF | MDV | 0.27        | 0.29        |
| tblVehicleEF | MDV | 3.7690e-003 | 3.9170e-003 |
| tblVehicleEF | MDV | 7.4300e-004 | 7.7200e-004 |
| tblVehicleEF | MDV | 0.10        | 0.10        |
| tblVehicleEF | MDV | 0.14        | 0.14        |
| tblVehicleEF | MDV | 0.14        | 0.15        |
| tblVehicleEF | MDV | 0.02        | 0.02        |
| tblVehicleEF | MDV | 0.05        | 0.05        |
| tblVehicleEF | MDV | 0.29        | 0.32        |
| tblVehicleEF | MDV | 3.1100e-003 | 3.5140e-003 |
| tblVehicleEF | MDV | 0.07        | 0.07        |
| tblVehicleEF | MDV | 0.68        | 0.73        |
| tblVehicleEF | MDV | 2.89        | 3.04        |
| tblVehicleEF | MDV | 376.76      | 387.68      |
| tblVehicleEF | MDV | 78.67       | 80.95       |



ARE Science Village - San Diego County, Winter

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

|              |     |             |             |
|--------------|-----|-------------|-------------|
| tblVehicleEF | MDV | 7.0560e-003 | 7.6090e-003 |
| tblVehicleEF | MDV | 0.03        | 0.03        |
| tblVehicleEF | MDV | 0.06        | 0.07        |
| tblVehicleEF | MDV | 0.27        | 0.30        |
| tblVehicleEF | MDV | 1.4670e-003 | 1.5270e-003 |
| tblVehicleEF | MDV | 1.6840e-003 | 1.7470e-003 |
| tblVehicleEF | MDV | 1.3530e-003 | 1.4090e-003 |
| tblVehicleEF | MDV | 1.5480e-003 | 1.6060e-003 |
| tblVehicleEF | MDV | 0.05        | 0.05        |
| tblVehicleEF | MDV | 0.14        | 0.15        |
| tblVehicleEF | MDV | 0.08        | 0.08        |
| tblVehicleEF | MDV | 0.01        | 0.01        |
| tblVehicleEF | MDV | 0.07        | 0.07        |
| tblVehicleEF | MDV | 0.32        | 0.35        |
| tblVehicleEF | MDV | 3.6150e-003 | 3.7560e-003 |
| tblVehicleEF | MDV | 7.5500e-004 | 7.8500e-004 |
| tblVehicleEF | MDV | 0.05        | 0.05        |
| tblVehicleEF | MDV | 0.14        | 0.15        |
| tblVehicleEF | MDV | 0.08        | 0.08        |
| tblVehicleEF | MDV | 0.02        | 0.02        |
| tblVehicleEF | MDV | 0.07        | 0.07        |
| tblVehicleEF | MDV | 0.35        | 0.39        |
| tblVehicleEF | MH  | 0.01        | 0.01        |
| tblVehicleEF | MH  | 0.02        | 0.02        |
| tblVehicleEF | MH  | 1.10        | 1.25        |
| tblVehicleEF | MH  | 1.94        | 2.02        |
| tblVehicleEF | MH  | 1,525.58    | 1,551.72    |
| tblVehicleEF | MH  | 17.93       | 18.39       |
| tblVehicleEF | MH  | 0.06        | 0.06        |

ARE Science Village - San Diego County, Winter

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

|              |    |             |             |
|--------------|----|-------------|-------------|
| tblVehicleEF | MH | 0.03        | 0.03        |
| tblVehicleEF | MH | 1.55        | 1.59        |
| tblVehicleEF | MH | 0.24        | 0.24        |
| tblVehicleEF | MH | 0.01        | 0.01        |
| tblVehicleEF | MH | 0.03        | 0.03        |
| tblVehicleEF | MH | 2.4100e-004 | 2.5200e-004 |
| tblVehicleEF | MH | 3.2890e-003 | 3.2840e-003 |
| tblVehicleEF | MH | 0.03        | 0.03        |
| tblVehicleEF | MH | 2.2200e-004 | 2.3200e-004 |
| tblVehicleEF | MH | 0.69        | 0.74        |
| tblVehicleEF | MH | 0.06        | 0.06        |
| tblVehicleEF | MH | 0.38        | 0.40        |
| tblVehicleEF | MH | 0.07        | 0.08        |
| tblVehicleEF | MH | 0.02        | 0.02        |
| tblVehicleEF | MH | 0.09        | 0.09        |
| tblVehicleEF | MH | 0.01        | 0.02        |
| tblVehicleEF | MH | 1.7700e-004 | 1.8200e-004 |
| tblVehicleEF | MH | 0.69        | 0.74        |
| tblVehicleEF | MH | 0.06        | 0.06        |
| tblVehicleEF | MH | 0.38        | 0.40        |
| tblVehicleEF | MH | 0.10        | 0.11        |
| tblVehicleEF | MH | 0.02        | 0.02        |
| tblVehicleEF | MH | 0.10        | 0.10        |
| tblVehicleEF | MH | 0.01        | 0.01        |
| tblVehicleEF | MH | 0.02        | 0.02        |
| tblVehicleEF | MH | 1.13        | 1.29        |
| tblVehicleEF | MH | 1.81        | 1.89        |
| tblVehicleEF | MH | 1,525.64    | 1,551.78    |
| tblVehicleEF | MH | 17.72       | 18.17       |

ARE Science Village - San Diego County, Winter

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

|              |    |             |             |
|--------------|----|-------------|-------------|
| tblVehicleEF | MH | 0.06        | 0.06        |
| tblVehicleEF | MH | 0.03        | 0.03        |
| tblVehicleEF | MH | 1.48        | 1.52        |
| tblVehicleEF | MH | 0.23        | 0.23        |
| tblVehicleEF | MH | 0.01        | 0.01        |
| tblVehicleEF | MH | 0.03        | 0.03        |
| tblVehicleEF | MH | 2.4100e-004 | 2.5200e-004 |
| tblVehicleEF | MH | 3.2890e-003 | 3.2840e-003 |
| tblVehicleEF | MH | 0.03        | 0.03        |
| tblVehicleEF | MH | 2.2200e-004 | 2.3200e-004 |
| tblVehicleEF | MH | 0.95        | 1.02        |
| tblVehicleEF | MH | 0.06        | 0.07        |
| tblVehicleEF | MH | 0.66        | 0.70        |
| tblVehicleEF | MH | 0.08        | 0.08        |
| tblVehicleEF | MH | 0.02        | 0.02        |
| tblVehicleEF | MH | 0.09        | 0.09        |
| tblVehicleEF | MH | 0.01        | 0.02        |
| tblVehicleEF | MH | 1.7500e-004 | 1.8000e-004 |
| tblVehicleEF | MH | 0.95        | 1.02        |
| tblVehicleEF | MH | 0.06        | 0.07        |
| tblVehicleEF | MH | 0.66        | 0.70        |
| tblVehicleEF | MH | 0.10        | 0.11        |
| tblVehicleEF | MH | 0.02        | 0.02        |
| tblVehicleEF | MH | 0.09        | 0.10        |
| tblVehicleEF | MH | 0.01        | 0.01        |
| tblVehicleEF | MH | 0.02        | 0.02        |
| tblVehicleEF | MH | 1.08        | 1.24        |
| tblVehicleEF | MH | 2.00        | 2.08        |
| tblVehicleEF | MH | 1,525.56    | 1,551.69    |

ARE Science Village - San Diego County, Winter

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

|              |     |             |             |
|--------------|-----|-------------|-------------|
| tblVehicleEF | MH  | 18.03       | 18.49       |
| tblVehicleEF | MH  | 0.06        | 0.06        |
| tblVehicleEF | MH  | 0.03        | 0.03        |
| tblVehicleEF | MH  | 1.54        | 1.59        |
| tblVehicleEF | MH  | 0.25        | 0.25        |
| tblVehicleEF | MH  | 0.01        | 0.01        |
| tblVehicleEF | MH  | 0.03        | 0.03        |
| tblVehicleEF | MH  | 2.4100e-004 | 2.5200e-004 |
| tblVehicleEF | MH  | 3.2890e-003 | 3.2840e-003 |
| tblVehicleEF | MH  | 0.03        | 0.03        |
| tblVehicleEF | MH  | 2.2200e-004 | 2.3200e-004 |
| tblVehicleEF | MH  | 0.69        | 0.76        |
| tblVehicleEF | MH  | 0.07        | 0.08        |
| tblVehicleEF | MH  | 0.35        | 0.37        |
| tblVehicleEF | MH  | 0.07        | 0.08        |
| tblVehicleEF | MH  | 0.02        | 0.02        |
| tblVehicleEF | MH  | 0.09        | 0.10        |
| tblVehicleEF | MH  | 0.01        | 0.02        |
| tblVehicleEF | MH  | 1.7800e-004 | 1.8300e-004 |
| tblVehicleEF | MH  | 0.69        | 0.76        |
| tblVehicleEF | MH  | 0.07        | 0.08        |
| tblVehicleEF | MH  | 0.35        | 0.37        |
| tblVehicleEF | MH  | 0.10        | 0.11        |
| tblVehicleEF | MH  | 0.02        | 0.02        |
| tblVehicleEF | MH  | 0.10        | 0.10        |
| tblVehicleEF | MHD | 3.9860e-003 | 4.0210e-003 |
| tblVehicleEF | MHD | 1.7800e-003 | 2.0420e-003 |
| tblVehicleEF | MHD | 9.8670e-003 | 0.01        |
| tblVehicleEF | MHD | 0.41        | 0.41        |

ARE Science Village - San Diego County, Winter

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

|              |     |             |             |
|--------------|-----|-------------|-------------|
| tblVehicleEF | MHD | 0.23        | 0.27        |
| tblVehicleEF | MHD | 1.10        | 1.18        |
| tblVehicleEF | MHD | 76.60       | 78.50       |
| tblVehicleEF | MHD | 1,072.80    | 1,091.76    |
| tblVehicleEF | MHD | 9.96        | 10.35       |
| tblVehicleEF | MHD | 0.01        | 0.01        |
| tblVehicleEF | MHD | 0.13        | 0.14        |
| tblVehicleEF | MHD | 8.0860e-003 | 8.1920e-003 |
| tblVehicleEF | MHD | 0.45        | 0.48        |
| tblVehicleEF | MHD | 1.39        | 1.39        |
| tblVehicleEF | MHD | 1.66        | 1.65        |
| tblVehicleEF | MHD | 3.5600e-004 | 4.1300e-004 |
| tblVehicleEF | MHD | 6.6970e-003 | 6.6880e-003 |
| tblVehicleEF | MHD | 1.2100e-004 | 1.2600e-004 |
| tblVehicleEF | MHD | 3.4100e-004 | 3.9500e-004 |
| tblVehicleEF | MHD | 6.4000e-003 | 6.3910e-003 |
| tblVehicleEF | MHD | 1.1100e-004 | 1.1600e-004 |
| tblVehicleEF | MHD | 3.8000e-004 | 4.1900e-004 |
| tblVehicleEF | MHD | 0.02        | 0.02        |
| tblVehicleEF | MHD | 0.02        | 0.02        |
| tblVehicleEF | MHD | 3.1200e-004 | 3.3600e-004 |
| tblVehicleEF | MHD | 0.02        | 0.02        |
| tblVehicleEF | MHD | 0.02        | 0.02        |
| tblVehicleEF | MHD | 0.05        | 0.05        |
| tblVehicleEF | MHD | 7.2700e-004 | 7.4500e-004 |
| tblVehicleEF | MHD | 0.01        | 0.01        |
| tblVehicleEF | MHD | 9.9000e-005 | 1.0200e-004 |
| tblVehicleEF | MHD | 3.8000e-004 | 4.1900e-004 |
| tblVehicleEF | MHD | 0.02        | 0.02        |

ARE Science Village - San Diego County, Winter

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

|              |     |             |             |
|--------------|-----|-------------|-------------|
| tblVehicleEF | MHD | 0.03        | 0.03        |
| tblVehicleEF | MHD | 3.1200e-004 | 3.3600e-004 |
| tblVehicleEF | MHD | 0.02        | 0.02        |
| tblVehicleEF | MHD | 0.02        | 0.02        |
| tblVehicleEF | MHD | 0.06        | 0.06        |
| tblVehicleEF | MHD | 3.7920e-003 | 3.8230e-003 |
| tblVehicleEF | MHD | 1.8160e-003 | 2.0860e-003 |
| tblVehicleEF | MHD | 9.4390e-003 | 9.8840e-003 |
| tblVehicleEF | MHD | 0.35        | 0.35        |
| tblVehicleEF | MHD | 0.24        | 0.27        |
| tblVehicleEF | MHD | 1.04        | 1.11        |
| tblVehicleEF | MHD | 76.68       | 78.69       |
| tblVehicleEF | MHD | 1,072.80    | 1,091.77    |
| tblVehicleEF | MHD | 9.85        | 10.23       |
| tblVehicleEF | MHD | 0.01        | 0.01        |
| tblVehicleEF | MHD | 0.13        | 0.13        |
| tblVehicleEF | MHD | 7.8510e-003 | 7.9550e-003 |
| tblVehicleEF | MHD | 0.45        | 0.47        |
| tblVehicleEF | MHD | 1.33        | 1.34        |
| tblVehicleEF | MHD | 1.65        | 1.64        |
| tblVehicleEF | MHD | 3.0400e-004 | 3.5200e-004 |
| tblVehicleEF | MHD | 6.6970e-003 | 6.6880e-003 |
| tblVehicleEF | MHD | 1.2100e-004 | 1.2600e-004 |
| tblVehicleEF | MHD | 2.9100e-004 | 3.3700e-004 |
| tblVehicleEF | MHD | 6.4000e-003 | 6.3910e-003 |
| tblVehicleEF | MHD | 1.1100e-004 | 1.1600e-004 |
| tblVehicleEF | MHD | 5.5800e-004 | 6.1600e-004 |
| tblVehicleEF | MHD | 0.02        | 0.02        |
| tblVehicleEF | MHD | 0.02        | 0.02        |

ARE Science Village - San Diego County, Winter

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

|              |     |             |             |
|--------------|-----|-------------|-------------|
| tblVehicleEF | MHD | 5.3800e-004 | 5.8200e-004 |
| tblVehicleEF | MHD | 0.02        | 0.02        |
| tblVehicleEF | MHD | 0.02        | 0.02        |
| tblVehicleEF | MHD | 0.05        | 0.05        |
| tblVehicleEF | MHD | 7.2800e-004 | 7.4700e-004 |
| tblVehicleEF | MHD | 0.01        | 0.01        |
| tblVehicleEF | MHD | 9.7000e-005 | 1.0100e-004 |
| tblVehicleEF | MHD | 5.5800e-004 | 6.1600e-004 |
| tblVehicleEF | MHD | 0.02        | 0.02        |
| tblVehicleEF | MHD | 0.03        | 0.03        |
| tblVehicleEF | MHD | 5.3800e-004 | 5.8200e-004 |
| tblVehicleEF | MHD | 0.02        | 0.02        |
| tblVehicleEF | MHD | 0.02        | 0.02        |
| tblVehicleEF | MHD | 0.05        | 0.06        |
| tblVehicleEF | MHD | 4.2670e-003 | 4.3040e-003 |
| tblVehicleEF | MHD | 1.7620e-003 | 2.0220e-003 |
| tblVehicleEF | MHD | 0.01        | 0.01        |
| tblVehicleEF | MHD | 0.50        | 0.50        |
| tblVehicleEF | MHD | 0.23        | 0.26        |
| tblVehicleEF | MHD | 1.13        | 1.21        |
| tblVehicleEF | MHD | 76.48       | 78.23       |
| tblVehicleEF | MHD | 1,072.79    | 1,091.76    |
| tblVehicleEF | MHD | 10.01       | 10.40       |
| tblVehicleEF | MHD | 0.01        | 0.01        |
| tblVehicleEF | MHD | 0.13        | 0.14        |
| tblVehicleEF | MHD | 8.2360e-003 | 8.3440e-003 |
| tblVehicleEF | MHD | 0.47        | 0.49        |
| tblVehicleEF | MHD | 1.38        | 1.39        |
| tblVehicleEF | MHD | 1.66        | 1.65        |

ARE Science Village - San Diego County, Winter

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | MHD  | 4.2900e-004 | 4.9800e-004 |
| tblVehicleEF | MHD  | 6.6970e-003 | 6.6880e-003 |
| tblVehicleEF | MHD  | 1.2100e-004 | 1.2600e-004 |
| tblVehicleEF | MHD  | 4.1000e-004 | 4.7700e-004 |
| tblVehicleEF | MHD  | 6.4000e-003 | 6.3910e-003 |
| tblVehicleEF | MHD  | 1.1100e-004 | 1.1600e-004 |
| tblVehicleEF | MHD  | 3.4300e-004 | 3.8100e-004 |
| tblVehicleEF | MHD  | 0.02        | 0.02        |
| tblVehicleEF | MHD  | 0.02        | 0.02        |
| tblVehicleEF | MHD  | 2.7400e-004 | 2.9500e-004 |
| tblVehicleEF | MHD  | 0.02        | 0.02        |
| tblVehicleEF | MHD  | 0.02        | 0.02        |
| tblVehicleEF | MHD  | 0.05        | 0.06        |
| tblVehicleEF | MHD  | 7.2600e-004 | 7.4200e-004 |
| tblVehicleEF | MHD  | 0.01        | 0.01        |
| tblVehicleEF | MHD  | 9.9000e-005 | 1.0300e-004 |
| tblVehicleEF | MHD  | 3.4300e-004 | 3.8100e-004 |
| tblVehicleEF | MHD  | 0.02        | 0.02        |
| tblVehicleEF | MHD  | 0.03        | 0.03        |
| tblVehicleEF | MHD  | 2.7400e-004 | 2.9500e-004 |
| tblVehicleEF | MHD  | 0.02        | 0.02        |
| tblVehicleEF | MHD  | 0.02        | 0.02        |
| tblVehicleEF | MHD  | 0.06        | 0.06        |
| tblVehicleEF | OBUS | 8.7240e-003 | 8.7170e-003 |
| tblVehicleEF | OBUS | 7.8750e-003 | 8.6700e-003 |
| tblVehicleEF | OBUS | 0.02        | 0.02        |
| tblVehicleEF | OBUS | 0.62        | 0.60        |
| tblVehicleEF | OBUS | 0.88        | 0.97        |
| tblVehicleEF | OBUS | 2.56        | 2.63        |



ARE Science Village - San Diego County, Winter

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | OBUS | 87.42       | 85.09       |
| tblVehicleEF | OBUS | 1,476.82    | 1,507.64    |
| tblVehicleEF | OBUS | 19.88       | 20.36       |
| tblVehicleEF | OBUS | 0.01        | 0.01        |
| tblVehicleEF | OBUS | 0.11        | 0.11        |
| tblVehicleEF | OBUS | 0.02        | 0.02        |
| tblVehicleEF | OBUS | 0.34        | 0.32        |
| tblVehicleEF | OBUS | 1.22        | 1.24        |
| tblVehicleEF | OBUS | 0.77        | 0.76        |
| tblVehicleEF | OBUS | 1.1700e-004 | 1.1000e-004 |
| tblVehicleEF | OBUS | 7.7290e-003 | 7.6570e-003 |
| tblVehicleEF | OBUS | 1.1200e-004 | 1.0600e-004 |
| tblVehicleEF | OBUS | 7.3700e-003 | 7.3020e-003 |
| tblVehicleEF | OBUS | 2.0040e-003 | 2.0200e-003 |
| tblVehicleEF | OBUS | 0.03        | 0.03        |
| tblVehicleEF | OBUS | 0.05        | 0.05        |
| tblVehicleEF | OBUS | 1.2610e-003 | 1.2620e-003 |
| tblVehicleEF | OBUS | 0.04        | 0.05        |
| tblVehicleEF | OBUS | 0.09        | 0.09        |
| tblVehicleEF | OBUS | 0.12        | 0.12        |
| tblVehicleEF | OBUS | 8.3200e-004 | 8.1000e-004 |
| tblVehicleEF | OBUS | 0.01        | 0.01        |
| tblVehicleEF | OBUS | 1.9700e-004 | 2.0100e-004 |
| tblVehicleEF | OBUS | 2.0040e-003 | 2.0200e-003 |
| tblVehicleEF | OBUS | 0.03        | 0.03        |
| tblVehicleEF | OBUS | 0.07        | 0.07        |
| tblVehicleEF | OBUS | 1.2610e-003 | 1.2620e-003 |
| tblVehicleEF | OBUS | 0.06        | 0.07        |
| tblVehicleEF | OBUS | 0.09        | 0.09        |

ARE Science Village - San Diego County, Winter

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | OBUS | 0.13        | 0.13        |
| tblVehicleEF | OBUS | 8.8120e-003 | 8.8010e-003 |
| tblVehicleEF | OBUS | 8.0900e-003 | 8.9050e-003 |
| tblVehicleEF | OBUS | 0.02        | 0.02        |
| tblVehicleEF | OBUS | 0.61        | 0.59        |
| tblVehicleEF | OBUS | 0.90        | 1.00        |
| tblVehicleEF | OBUS | 2.39        | 2.47        |
| tblVehicleEF | OBUS | 86.43       | 84.15       |
| tblVehicleEF | OBUS | 1,476.86    | 1,507.69    |
| tblVehicleEF | OBUS | 19.60       | 20.07       |
| tblVehicleEF | OBUS | 0.01        | 0.01        |
| tblVehicleEF | OBUS | 0.11        | 0.11        |
| tblVehicleEF | OBUS | 0.02        | 0.02        |
| tblVehicleEF | OBUS | 0.32        | 0.31        |
| tblVehicleEF | OBUS | 1.16        | 1.18        |
| tblVehicleEF | OBUS | 0.76        | 0.75        |
| tblVehicleEF | OBUS | 1.0400e-004 | 9.8000e-005 |
| tblVehicleEF | OBUS | 7.7290e-003 | 7.6570e-003 |
| tblVehicleEF | OBUS | 9.9000e-005 | 9.4000e-005 |
| tblVehicleEF | OBUS | 7.3700e-003 | 7.3020e-003 |
| tblVehicleEF | OBUS | 2.8130e-003 | 2.8360e-003 |
| tblVehicleEF | OBUS | 0.03        | 0.03        |
| tblVehicleEF | OBUS | 0.06        | 0.05        |
| tblVehicleEF | OBUS | 2.2210e-003 | 2.2290e-003 |
| tblVehicleEF | OBUS | 0.05        | 0.05        |
| tblVehicleEF | OBUS | 0.09        | 0.09        |
| tblVehicleEF | OBUS | 0.11        | 0.12        |
| tblVehicleEF | OBUS | 8.2300e-004 | 8.0100e-004 |
| tblVehicleEF | OBUS | 0.01        | 0.01        |

ARE Science Village - San Diego County, Winter

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | OBUS | 1.9400e-004 | 1.9900e-004 |
| tblVehicleEF | OBUS | 2.8130e-003 | 2.8360e-003 |
| tblVehicleEF | OBUS | 0.03        | 0.03        |
| tblVehicleEF | OBUS | 0.07        | 0.07        |
| tblVehicleEF | OBUS | 2.2210e-003 | 2.2290e-003 |
| tblVehicleEF | OBUS | 0.06        | 0.07        |
| tblVehicleEF | OBUS | 0.09        | 0.09        |
| tblVehicleEF | OBUS | 0.12        | 0.13        |
| tblVehicleEF | OBUS | 7.7810e-003 | 8.5680e-003 |
| tblVehicleEF | OBUS | 0.02        | 0.02        |
| tblVehicleEF | OBUS | 0.62        | 0.61        |
| tblVehicleEF | OBUS | 0.87        | 0.96        |
| tblVehicleEF | OBUS | 2.63        | 2.71        |
| tblVehicleEF | OBUS | 88.77       | 86.40       |
| tblVehicleEF | OBUS | 1,476.80    | 1,507.62    |
| tblVehicleEF | OBUS | 20.01       | 20.49       |
| tblVehicleEF | OBUS | 0.01        | 0.01        |
| tblVehicleEF | OBUS | 0.11        | 0.11        |
| tblVehicleEF | OBUS | 0.02        | 0.02        |
| tblVehicleEF | OBUS | 0.37        | 0.35        |
| tblVehicleEF | OBUS | 1.22        | 1.24        |
| tblVehicleEF | OBUS | 0.78        | 0.77        |
| tblVehicleEF | OBUS | 1.3500e-004 | 1.2700e-004 |
| tblVehicleEF | OBUS | 7.7290e-003 | 7.6570e-003 |
| tblVehicleEF | OBUS | 1.2900e-004 | 1.2200e-004 |
| tblVehicleEF | OBUS | 7.3700e-003 | 7.3020e-003 |
| tblVehicleEF | OBUS | 1.9500e-003 | 1.9720e-003 |
| tblVehicleEF | OBUS | 0.03        | 0.03        |
| tblVehicleEF | OBUS | 0.05        | 0.05        |

ARE Science Village - San Diego County, Winter

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | OBUS | 1.1480e-003 | 1.1510e-003 |
| tblVehicleEF | OBUS | 0.04        | 0.05        |
| tblVehicleEF | OBUS | 0.10        | 0.10        |
| tblVehicleEF | OBUS | 0.12        | 0.13        |
| tblVehicleEF | OBUS | 8.4500e-004 | 8.2300e-004 |
| tblVehicleEF | OBUS | 0.01        | 0.01        |
| tblVehicleEF | OBUS | 1.9800e-004 | 2.0300e-004 |
| tblVehicleEF | OBUS | 1.9500e-003 | 1.9720e-003 |
| tblVehicleEF | OBUS | 0.03        | 0.03        |
| tblVehicleEF | OBUS | 0.07        | 0.07        |
| tblVehicleEF | OBUS | 1.1480e-003 | 1.1510e-003 |
| tblVehicleEF | OBUS | 0.06        | 0.07        |
| tblVehicleEF | OBUS | 0.10        | 0.10        |
| tblVehicleEF | OBUS | 0.13        | 0.14        |
| tblVehicleEF | SBUS | 0.03        | 0.03        |
| tblVehicleEF | SBUS | 7.7010e-003 | 8.8070e-003 |
| tblVehicleEF | SBUS | 2.8170e-003 | 2.8250e-003 |
| tblVehicleEF | SBUS | 1.44        | 1.35        |
| tblVehicleEF | SBUS | 0.60        | 0.69        |
| tblVehicleEF | SBUS | 0.42        | 0.44        |
| tblVehicleEF | SBUS | 330.59      | 331.96      |
| tblVehicleEF | SBUS | 1,067.70    | 1,082.70    |
| tblVehicleEF | SBUS | 2.21        | 2.17        |
| tblVehicleEF | SBUS | 0.05        | 0.05        |
| tblVehicleEF | SBUS | 0.15        | 0.15        |
| tblVehicleEF | SBUS | 2.1900e-003 | 2.0180e-003 |
| tblVehicleEF | SBUS | 3.81        | 3.92        |
| tblVehicleEF | SBUS | 6.60        | 6.97        |
| tblVehicleEF | SBUS | 0.73        | 0.68        |

ARE Science Village - San Diego County, Winter

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | SBUS | 4.5360e-003 | 4.8460e-003 |
| tblVehicleEF | SBUS | 0.01        | 0.01        |
| tblVehicleEF | SBUS | 0.04        | 0.04        |
| tblVehicleEF | SBUS | 3.6000e-005 | 3.5000e-005 |
| tblVehicleEF | SBUS | 4.3400e-003 | 4.6360e-003 |
| tblVehicleEF | SBUS | 2.8100e-003 | 2.8200e-003 |
| tblVehicleEF | SBUS | 0.04        | 0.04        |
| tblVehicleEF | SBUS | 3.3000e-005 | 3.2000e-005 |
| tblVehicleEF | SBUS | 3.4400e-004 | 4.5000e-004 |
| tblVehicleEF | SBUS | 3.7250e-003 | 4.8160e-003 |
| tblVehicleEF | SBUS | 0.15        | 0.14        |
| tblVehicleEF | SBUS | 1.9200e-004 | 2.3000e-004 |
| tblVehicleEF | SBUS | 0.11        | 0.12        |
| tblVehicleEF | SBUS | 7.3780e-003 | 9.9210e-003 |
| tblVehicleEF | SBUS | 0.02        | 0.02        |
| tblVehicleEF | SBUS | 3.1360e-003 | 3.1480e-003 |
| tblVehicleEF | SBUS | 0.01        | 0.01        |
| tblVehicleEF | SBUS | 2.2000e-005 | 2.1000e-005 |
| tblVehicleEF | SBUS | 3.4400e-004 | 4.5000e-004 |
| tblVehicleEF | SBUS | 3.7250e-003 | 4.8160e-003 |
| tblVehicleEF | SBUS | 0.21        | 0.20        |
| tblVehicleEF | SBUS | 1.9200e-004 | 2.3000e-004 |
| tblVehicleEF | SBUS | 0.13        | 0.14        |
| tblVehicleEF | SBUS | 7.3780e-003 | 9.9210e-003 |
| tblVehicleEF | SBUS | 0.02        | 0.02        |
| tblVehicleEF | SBUS | 0.03        | 0.03        |
| tblVehicleEF | SBUS | 7.7920e-003 | 8.9230e-003 |
| tblVehicleEF | SBUS | 2.4510e-003 | 2.4570e-003 |
| tblVehicleEF | SBUS | 1.40        | 1.31        |

ARE Science Village - San Diego County, Winter

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | SBUS | 0.60        | 0.70        |
| tblVehicleEF | SBUS | 0.33        | 0.34        |
| tblVehicleEF | SBUS | 341.22      | 343.18      |
| tblVehicleEF | SBUS | 1,067.71    | 1,082.72    |
| tblVehicleEF | SBUS | 2.06        | 2.01        |
| tblVehicleEF | SBUS | 0.05        | 0.05        |
| tblVehicleEF | SBUS | 0.15        | 0.15        |
| tblVehicleEF | SBUS | 2.1020e-003 | 1.9380e-003 |
| tblVehicleEF | SBUS | 3.90        | 4.02        |
| tblVehicleEF | SBUS | 6.36        | 6.72        |
| tblVehicleEF | SBUS | 0.73        | 0.68        |
| tblVehicleEF | SBUS | 3.8310e-003 | 4.0920e-003 |
| tblVehicleEF | SBUS | 0.01        | 0.01        |
| tblVehicleEF | SBUS | 0.04        | 0.04        |
| tblVehicleEF | SBUS | 3.6000e-005 | 3.5000e-005 |
| tblVehicleEF | SBUS | 3.6660e-003 | 3.9150e-003 |
| tblVehicleEF | SBUS | 2.8100e-003 | 2.8200e-003 |
| tblVehicleEF | SBUS | 0.04        | 0.04        |
| tblVehicleEF | SBUS | 3.3000e-005 | 3.2000e-005 |
| tblVehicleEF | SBUS | 4.8600e-004 | 6.3500e-004 |
| tblVehicleEF | SBUS | 3.8720e-003 | 5.0370e-003 |
| tblVehicleEF | SBUS | 0.15        | 0.14        |
| tblVehicleEF | SBUS | 3.5700e-004 | 4.3000e-004 |
| tblVehicleEF | SBUS | 0.11        | 0.12        |
| tblVehicleEF | SBUS | 6.3630e-003 | 8.5120e-003 |
| tblVehicleEF | SBUS | 0.01        | 0.01        |
| tblVehicleEF | SBUS | 3.2360e-003 | 3.2540e-003 |
| tblVehicleEF | SBUS | 0.01        | 0.01        |
| tblVehicleEF | SBUS | 4.8600e-004 | 6.3500e-004 |

ARE Science Village - San Diego County, Winter

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | SBUS | 3.8720e-003 | 5.0370e-003 |
| tblVehicleEF | SBUS | 0.21        | 0.20        |
| tblVehicleEF | SBUS | 3.5700e-004 | 4.3000e-004 |
| tblVehicleEF | SBUS | 0.13        | 0.14        |
| tblVehicleEF | SBUS | 6.3630e-003 | 8.5120e-003 |
| tblVehicleEF | SBUS | 0.02        | 0.02        |
| tblVehicleEF | SBUS | 0.03        | 0.03        |
| tblVehicleEF | SBUS | 7.6590e-003 | 8.7520e-003 |
| tblVehicleEF | SBUS | 2.9980e-003 | 3.0070e-003 |
| tblVehicleEF | SBUS | 1.50        | 1.41        |
| tblVehicleEF | SBUS | 0.59        | 0.69        |
| tblVehicleEF | SBUS | 0.47        | 0.49        |
| tblVehicleEF | SBUS | 315.91      | 316.46      |
| tblVehicleEF | SBUS | 1,067.69    | 1,082.69    |
| tblVehicleEF | SBUS | 2.29        | 2.25        |
| tblVehicleEF | SBUS | 0.05        | 0.05        |
| tblVehicleEF | SBUS | 0.15        | 0.15        |
| tblVehicleEF | SBUS | 2.2480e-003 | 2.0710e-003 |
| tblVehicleEF | SBUS | 3.67        | 3.77        |
| tblVehicleEF | SBUS | 6.57        | 6.94        |
| tblVehicleEF | SBUS | 0.73        | 0.68        |
| tblVehicleEF | SBUS | 5.5100e-003 | 5.8870e-003 |
| tblVehicleEF | SBUS | 0.01        | 0.01        |
| tblVehicleEF | SBUS | 0.04        | 0.04        |
| tblVehicleEF | SBUS | 3.6000e-005 | 3.5000e-005 |
| tblVehicleEF | SBUS | 5.2720e-003 | 5.6320e-003 |
| tblVehicleEF | SBUS | 2.8100e-003 | 2.8200e-003 |
| tblVehicleEF | SBUS | 0.04        | 0.04        |
| tblVehicleEF | SBUS | 3.3000e-005 | 3.2000e-005 |

ARE Science Village - San Diego County, Winter

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | SBUS | 3.4300e-004 | 4.6100e-004 |
| tblVehicleEF | SBUS | 4.0120e-003 | 5.2490e-003 |
| tblVehicleEF | SBUS | 0.15        | 0.14        |
| tblVehicleEF | SBUS | 1.7200e-004 | 2.0500e-004 |
| tblVehicleEF | SBUS | 0.11        | 0.12        |
| tblVehicleEF | SBUS | 9.6140e-003 | 0.01        |
| tblVehicleEF | SBUS | 0.02        | 0.02        |
| tblVehicleEF | SBUS | 2.9970e-003 | 3.0020e-003 |
| tblVehicleEF | SBUS | 0.01        | 0.01        |
| tblVehicleEF | SBUS | 2.3000e-005 | 2.2000e-005 |
| tblVehicleEF | SBUS | 3.4300e-004 | 4.6100e-004 |
| tblVehicleEF | SBUS | 4.0120e-003 | 5.2490e-003 |
| tblVehicleEF | SBUS | 0.21        | 0.20        |
| tblVehicleEF | SBUS | 1.7200e-004 | 2.0500e-004 |
| tblVehicleEF | SBUS | 0.13        | 0.14        |
| tblVehicleEF | SBUS | 9.6140e-003 | 0.01        |
| tblVehicleEF | SBUS | 0.02        | 0.02        |
| tblVehicleEF | UBUS | 4.89        | 4.89        |
| tblVehicleEF | UBUS | 0.02        | 0.02        |
| tblVehicleEF | UBUS | 38.17       | 38.17       |
| tblVehicleEF | UBUS | 1.23        | 1.23        |
| tblVehicleEF | UBUS | 1,897.59    | 1,904.69    |
| tblVehicleEF | UBUS | 13.87       | 14.16       |
| tblVehicleEF | UBUS | 0.31        | 0.31        |
| tblVehicleEF | UBUS | 0.01        | 0.01        |
| tblVehicleEF | UBUS | 0.41        | 0.41        |
| tblVehicleEF | UBUS | 0.13        | 0.14        |
| tblVehicleEF | UBUS | 3.1030e-003 | 3.0820e-003 |
| tblVehicleEF | UBUS | 1.7700e-004 | 1.6800e-004 |



ARE Science Village - San Diego County, Winter

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | UBUS | 2.9470e-003 | 2.9280e-003 |
| tblVehicleEF | UBUS | 1.6300e-004 | 1.5500e-004 |
| tblVehicleEF | UBUS | 4.7400e-004 | 5.5700e-004 |
| tblVehicleEF | UBUS | 5.1760e-003 | 6.2840e-003 |
| tblVehicleEF | UBUS | 4.1000e-004 | 4.9700e-004 |
| tblVehicleEF | UBUS | 0.07        | 0.07        |
| tblVehicleEF | UBUS | 7.8400e-004 | 9.8300e-004 |
| tblVehicleEF | UBUS | 0.06        | 0.06        |
| tblVehicleEF | UBUS | 3.7080e-003 | 3.7780e-003 |
| tblVehicleEF | UBUS | 1.3700e-004 | 1.4000e-004 |
| tblVehicleEF | UBUS | 4.7400e-004 | 5.5700e-004 |
| tblVehicleEF | UBUS | 5.1760e-003 | 6.2840e-003 |
| tblVehicleEF | UBUS | 4.1000e-004 | 4.9700e-004 |
| tblVehicleEF | UBUS | 5.00        | 5.00        |
| tblVehicleEF | UBUS | 7.8400e-004 | 9.8300e-004 |
| tblVehicleEF | UBUS | 0.06        | 0.07        |
| tblVehicleEF | UBUS | 4.89        | 4.89        |
| tblVehicleEF | UBUS | 0.01        | 0.01        |
| tblVehicleEF | UBUS | 38.17       | 38.17       |
| tblVehicleEF | UBUS | 1.06        | 1.06        |
| tblVehicleEF | UBUS | 1,897.60    | 1,904.69    |
| tblVehicleEF | UBUS | 13.58       | 13.88       |
| tblVehicleEF | UBUS | 0.31        | 0.31        |
| tblVehicleEF | UBUS | 0.01        | 0.01        |
| tblVehicleEF | UBUS | 0.40        | 0.40        |
| tblVehicleEF | UBUS | 0.12        | 0.13        |
| tblVehicleEF | UBUS | 3.1030e-003 | 3.0820e-003 |
| tblVehicleEF | UBUS | 1.7700e-004 | 1.6800e-004 |
| tblVehicleEF | UBUS | 2.9470e-003 | 2.9280e-003 |

ARE Science Village - San Diego County, Winter

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | UBUS | 1.6300e-004 | 1.5500e-004 |
| tblVehicleEF | UBUS | 6.8100e-004 | 8.0200e-004 |
| tblVehicleEF | UBUS | 5.6350e-003 | 6.7540e-003 |
| tblVehicleEF | UBUS | 7.9300e-004 | 9.2700e-004 |
| tblVehicleEF | UBUS | 0.07        | 0.07        |
| tblVehicleEF | UBUS | 7.1600e-004 | 9.0300e-004 |
| tblVehicleEF | UBUS | 0.05        | 0.05        |
| tblVehicleEF | UBUS | 3.7080e-003 | 3.7780e-003 |
| tblVehicleEF | UBUS | 1.3400e-004 | 1.3700e-004 |
| tblVehicleEF | UBUS | 6.8100e-004 | 8.0200e-004 |
| tblVehicleEF | UBUS | 5.6350e-003 | 6.7540e-003 |
| tblVehicleEF | UBUS | 7.9300e-004 | 9.2700e-004 |
| tblVehicleEF | UBUS | 5.00        | 5.00        |
| tblVehicleEF | UBUS | 7.1600e-004 | 9.0300e-004 |
| tblVehicleEF | UBUS | 0.06        | 0.06        |
| tblVehicleEF | UBUS | 4.89        | 4.89        |
| tblVehicleEF | UBUS | 0.02        | 0.02        |
| tblVehicleEF | UBUS | 38.17       | 38.17       |
| tblVehicleEF | UBUS | 1.31        | 1.30        |
| tblVehicleEF | UBUS | 1,897.59    | 1,904.69    |
| tblVehicleEF | UBUS | 14.00       | 14.29       |
| tblVehicleEF | UBUS | 0.31        | 0.31        |
| tblVehicleEF | UBUS | 0.01        | 0.02        |
| tblVehicleEF | UBUS | 0.41        | 0.41        |
| tblVehicleEF | UBUS | 0.13        | 0.14        |
| tblVehicleEF | UBUS | 3.1030e-003 | 3.0820e-003 |
| tblVehicleEF | UBUS | 1.7700e-004 | 1.6800e-004 |
| tblVehicleEF | UBUS | 2.9470e-003 | 2.9280e-003 |
| tblVehicleEF | UBUS | 1.6300e-004 | 1.5500e-004 |

ARE Science Village - San Diego County, Winter

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

|                 |       |             |             |
|-----------------|-------|-------------|-------------|
| tblVehicleEF    | UBUS  | 4.4100e-004 | 5.0600e-004 |
| tblVehicleEF    | UBUS  | 6.0090e-003 | 7.1380e-003 |
| tblVehicleEF    | UBUS  | 3.6700e-004 | 4.4300e-004 |
| tblVehicleEF    | UBUS  | 0.07        | 0.07        |
| tblVehicleEF    | UBUS  | 9.5000e-004 | 1.1790e-003 |
| tblVehicleEF    | UBUS  | 0.06        | 0.06        |
| tblVehicleEF    | UBUS  | 3.7080e-003 | 3.7780e-003 |
| tblVehicleEF    | UBUS  | 1.3900e-004 | 1.4100e-004 |
| tblVehicleEF    | UBUS  | 4.4100e-004 | 5.0600e-004 |
| tblVehicleEF    | UBUS  | 6.0090e-003 | 7.1380e-003 |
| tblVehicleEF    | UBUS  | 3.6700e-004 | 4.4300e-004 |
| tblVehicleEF    | UBUS  | 5.00        | 5.00        |
| tblVehicleEF    | UBUS  | 9.5000e-004 | 1.1790e-003 |
| tblVehicleEF    | UBUS  | 0.07        | 0.07        |
| tblVehicleTrips | ST_TR | 1.96        | 0.00        |
| tblVehicleTrips | ST_TR | 696.00      | 0.00        |
| tblVehicleTrips | ST_TR | 2.21        | 0.00        |
| tblVehicleTrips | ST_TR | 1.90        | 8.03        |
| tblVehicleTrips | ST_TR | 177.62      | 0.00        |
| tblVehicleTrips | SU_TR | 2.19        | 0.00        |
| tblVehicleTrips | SU_TR | 500.00      | 0.00        |
| tblVehicleTrips | SU_TR | 0.70        | 0.00        |
| tblVehicleTrips | SU_TR | 1.11        | 8.03        |
| tblVehicleTrips | SU_TR | 166.47      | 0.00        |
| tblVehicleTrips | WD_TR | 0.78        | 0.00        |
| tblVehicleTrips | WD_TR | 346.23      | 0.00        |
| tblVehicleTrips | WD_TR | 9.74        | 0.00        |
| tblVehicleTrips | WD_TR | 11.26       | 8.03        |
| tblVehicleTrips | WD_TR | 106.78      | 0.00        |

ARE Science Village - San Diego County, Winter

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

**2.0 Emissions Summary**

---

ARE Science Village - 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        |                         |                         |               |               |                         |
| 2022           | 9.1024         | 143.5290        | 77.5497        | 0.4331        | 20.8504        | 3.4641        | 24.3145        | 6.7741         | 3.2322        | 10.0063        | 0.0000        | 46,002.47<br>57         | 46,002.47<br>57         | 4.6794        | 5.3895        | 47,725.52<br>65         |
| 2023           | 3.1196         | 26.1561         | 29.0512        | 0.0872        | 3.1564         | 0.9609        | 4.1172         | 0.8562         | 0.8999        | 1.7561         | 0.0000        | 8,775.762<br>1          | 8,775.762<br>1          | 1.2341        | 0.4536        | 8,941.781<br>1          |
| 2024           | 71.1765        | 35.5638         | 46.4321        | 0.1166        | 3.7396         | 1.3925        | 5.1322         | 1.0109         | 1.2999        | 2.3108         | 0.0000        | 11,654.81<br>81         | 11,654.81<br>81         | 1.9710        | 0.4561        | 11,840.00<br>41         |
| <b>Maximum</b> | <b>71.1765</b> | <b>143.5290</b> | <b>77.5497</b> | <b>0.4331</b> | <b>20.8504</b> | <b>3.4641</b> | <b>24.3145</b> | <b>6.7741</b>  | <b>3.2322</b> | <b>10.0063</b> | <b>0.0000</b> | <b>46,002.47<br/>57</b> | <b>46,002.47<br/>57</b> | <b>4.6794</b> | <b>5.3895</b> | <b>47,725.52<br/>65</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        |                         |                         |               |               |                         |
| 2022           | 9.1024         | 143.5290        | 77.5497        | 0.4331        | 12.3274        | 3.4641        | 15.7914        | 3.5711         | 3.2322        | 6.8033        | 0.0000        | 46,002.47<br>57         | 46,002.47<br>57         | 4.6794        | 5.3895        | 47,725.52<br>64         |
| 2023           | 3.1196         | 26.1561         | 29.0512        | 0.0872        | 2.9997         | 0.9609        | 3.9605         | 0.8178         | 0.8999        | 1.7176        | 0.0000        | 8,775.762<br>1          | 8,775.762<br>1          | 1.2341        | 0.4536        | 8,941.781<br>1          |
| 2024           | 71.1765        | 35.5638         | 46.4321        | 0.1166        | 3.5525         | 1.3925        | 4.9451         | 0.9650         | 1.2999        | 2.2649        | 0.0000        | 11,654.81<br>81         | 11,654.81<br>81         | 1.9710        | 0.4561        | 11,840.00<br>41         |
| <b>Maximum</b> | <b>71.1765</b> | <b>143.5290</b> | <b>77.5497</b> | <b>0.4331</b> | <b>12.3274</b> | <b>3.4641</b> | <b>15.7914</b> | <b>3.5711</b>  | <b>3.2322</b> | <b>6.8033</b> | <b>0.0000</b> | <b>46,002.47<br/>57</b> | <b>46,002.47<br/>57</b> | <b>4.6794</b> | <b>5.3895</b> | <b>47,725.52<br/>64</b> |



ARE Science Village - 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         | 10.4760        | 1.1800e-003   | 0.1307         | 1.0000e-005   |                | 4.6000e-004   | 4.6000e-004    |                | 4.6000e-004   | 4.6000e-004   |          | 0.2809             | 0.2809             | 7.3000e-004   |               | 0.2991             |
| Energy       | 0.1616         | 1.4694        | 1.2343         | 8.8200e-003   |                | 0.1117        | 0.1117         |                | 0.1117        | 0.1117        |          | 1,763.3248         | 1,763.3248         | 0.0338        | 0.0323        | 1,773.8034         |
| Mobile       | 7.4968         | 8.1250        | 68.1691        | 0.1366        | 14.9750        | 0.1086        | 15.0836        | 3.9891         | 0.1013        | 4.0904        |          | 14,156.0632        | 14,156.0632        | 1.0614        | 0.6626        | 14,380.0510        |
| <b>Total</b> | <b>18.1344</b> | <b>9.5956</b> | <b>69.5341</b> | <b>0.1455</b> | <b>14.9750</b> | <b>0.2208</b> | <b>15.1958</b> | <b>3.9891</b>  | <b>0.2134</b> | <b>4.2025</b> |          | <b>15,919.6689</b> | <b>15,919.6689</b> | <b>1.0960</b> | <b>0.6949</b> | <b>16,154.1535</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         | 10.4760        | 1.1800e-003   | 0.1307         | 1.0000e-005   |                | 4.6000e-004   | 4.6000e-004    |                | 4.6000e-004   | 4.6000e-004   |          | 0.2809             | 0.2809             | 7.3000e-004   |               | 0.2991             |
| Energy       | 0.1616         | 1.4694        | 1.2343         | 8.8200e-003   |                | 0.1117        | 0.1117         |                | 0.1117        | 0.1117        |          | 1,763.3248         | 1,763.3248         | 0.0338        | 0.0323        | 1,773.8034         |
| Mobile       | 7.4968         | 8.1250        | 68.1691        | 0.1366        | 14.9750        | 0.1086        | 15.0836        | 3.9891         | 0.1013        | 4.0904        |          | 14,156.0632        | 14,156.0632        | 1.0614        | 0.6626        | 14,380.0510        |
| <b>Total</b> | <b>18.1344</b> | <b>9.5956</b> | <b>69.5341</b> | <b>0.1455</b> | <b>14.9750</b> | <b>0.2208</b> | <b>15.1958</b> | <b>3.9891</b>  | <b>0.2134</b> | <b>4.2025</b> |          | <b>15,919.6689</b> | <b>15,919.6689</b> | <b>1.0960</b> | <b>0.6949</b> | <b>16,154.1535</b> |

ARE Science Village - 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 |
|-------------------|------|------|------|------|---------------|--------------|------------|----------------|---------------|-------------|----------|----------|-----------|------|------|------|
| Percent Reduction | 0.00 | 0.00 | 0.00 | 0.00 | 0.00          | 0.00         | 0.00       | 0.00           | 0.00          | 0.00        | 0.00     | 0.00     | 0.00      | 0.00 | 0.00 | 0.00 |

**3.0 Construction Detail**

**Construction Phase**

| Phase Number | Phase Name            | Phase Type            | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|--------------|-----------------------|-----------------------|------------|----------|---------------|----------|-------------------|
| 1            | Demolition            | Demolition            | 1/1/2022   | 5/4/2022 | 5             | 88       |                   |
| 2            | Grading               | Grading               | 5/5/2022   | 9/5/2022 | 5             | 88       |                   |
| 3            | Building Construction | Building Construction | 8/1/2022   | 8/7/2024 | 5             | 528      |                   |
| 4            | Architectural Coating | Architectural Coating | 1/1/2024   | 7/2/2024 | 5             | 132      |                   |
| 5            | Paving                | Paving                | 5/1/2024   | 7/1/2024 | 5             | 44       |                   |

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

**Acres of Grading (Grading Phase): 264**

**Acres of Paving: 8.22**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 554,817; Non-Residential Outdoor: 184,939; Striped Parking Area: 21,912 (Architectural Coating – sqft)**

**OffRoad Equipment**

| Phase Name | Offroad Equipment Type   | Amount | Usage Hours | Horse Power | Load Factor |
|------------|--------------------------|--------|-------------|-------------|-------------|
| Demolition | Concrete/Industrial Saws | 1      | 8.00        | 81          | 0.73        |
| Demolition | Excavators               | 3      | 8.00        | 158         | 0.38        |
| Demolition | Rubber Tired Dozers      | 2      | 8.00        | 247         | 0.40        |
| 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        |



ARE Science Village - San Diego County, Winter

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

|                       |                              |   |      |     |      |
|-----------------------|------------------------------|---|------|-----|------|
| Grading               | Scrapers                     | 2 | 8.00 | 367 | 0.48 |
| Grading               | Tractors/Loaders/Backhoes    | 2 | 8.00 | 97  | 0.37 |
| 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 | Other Construction Equipment | 1 | 6.00 | 475 | 0.50 |
| 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 |
| Paving                | Pavers                       | 2 | 8.00 | 130 | 0.42 |
| Paving                | Paving Equipment             | 2 | 8.00 | 132 | 0.36 |
| Paving                | Rollers                      | 2 | 8.00 | 80  | 0.38 |

**Trips and VMT**

| Phase Name            | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|-----------------------|-------------------------|--------------------|--------------------|---------------------|--------------------|--------------------|---------------------|----------------------|----------------------|-----------------------|
| Demolition            | 6                       | 15.00              | 0.00               | 1,351.00            | 10.80              | 7.30               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Grading               | 8                       | 20.00              | 0.00               | 39,363.00           | 10.80              | 7.30               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Building Construction | 10                      | 282.00             | 124.00             | 0.00                | 10.80              | 7.30               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Architectural Coating | 1                       | 56.00              | 0.00               | 0.00                | 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                  |

**3.1 Mitigation Measures Construction**

- Replace Ground Cover
- Water Exposed Area
- Clean Paved Roads

ARE Science Village - San Diego County, Winter

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

**3.2 Demolition - 2022**

**Unmitigated Construction On-Site**

|               | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2              | Total CO2              | CH4           | N2O | CO2e                   |
|---------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|------------------------|------------------------|---------------|-----|------------------------|
| Category      | lb/day        |                |                |               |               |               |               |                |               |               | lb/day   |                        |                        |               |     |                        |
| Fugitive Dust |               |                |                |               | 3.3634        | 0.0000        | 3.3634        | 0.5093         | 0.0000        | 0.5093        |          |                        | 0.0000                 |               |     | 0.0000                 |
| Off-Road      | 2.6392        | 25.7194        | 20.5941        | 0.0388        |               | 1.2427        | 1.2427        |                | 1.1553        | 1.1553        |          | 3,746.781<br>2         | 3,746.781<br>2         | 1.0524        |     | 3,773.092<br>0         |
| <b>Total</b>  | <b>2.6392</b> | <b>25.7194</b> | <b>20.5941</b> | <b>0.0388</b> | <b>3.3634</b> | <b>1.2427</b> | <b>4.6061</b> | <b>0.5093</b>  | <b>1.1553</b> | <b>1.6646</b> |          | <b>3,746.781<br/>2</b> | <b>3,746.781<br/>2</b> | <b>1.0524</b> |     | <b>3,773.092<br/>0</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      | 0.0670        | 2.5870        | 0.6153        | 9.6400e-003   | 0.2685        | 0.0241        | 0.2926        | 0.0736         | 0.0230        | 0.0966        |          | 1,061.014<br>1         | 1,061.014<br>1         | 0.0509        | 0.1686        | 1,112.515<br>6         |
| 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       | 0.0474        | 0.0321        | 0.3688        | 1.0600e-003   | 0.1232        | 7.0000e-004   | 0.1239        | 0.0327         | 6.4000e-004   | 0.0333        |          | 108.0858               | 108.0858               | 3.4900e-003   | 3.1900e-003   | 109.1237               |
| <b>Total</b> | <b>0.1144</b> | <b>2.6191</b> | <b>0.9841</b> | <b>0.0107</b> | <b>0.3917</b> | <b>0.0248</b> | <b>0.4165</b> | <b>0.1063</b>  | <b>0.0237</b> | <b>0.1300</b> |          | <b>1,169.099<br/>9</b> | <b>1,169.099<br/>9</b> | <b>0.0544</b> | <b>0.1717</b> | <b>1,221.639<br/>3</b> |

ARE Science Village - San Diego County, Winter

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

**3.2 Demolition - 2022**

**Mitigated Construction On-Site**

|               | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2              | Total CO2              | CH4           | N2O | CO2e                   |
|---------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|------------------------|------------------------|---------------|-----|------------------------|
| Category      | lb/day        |                |                |               |               |               |               |                |               |               | lb/day        |                        |                        |               |     |                        |
| Fugitive Dust |               |                |                |               | 0.5903        | 0.0000        | 0.5903        | 0.0894         | 0.0000        | 0.0894        |               |                        | 0.0000                 |               |     | 0.0000                 |
| Off-Road      | 2.6392        | 25.7194        | 20.5941        | 0.0388        |               | 1.2427        | 1.2427        |                | 1.1553        | 1.1553        | 0.0000        | 3,746.781<br>2         | 3,746.781<br>2         | 1.0524        |     | 3,773.092<br>0         |
| <b>Total</b>  | <b>2.6392</b> | <b>25.7194</b> | <b>20.5941</b> | <b>0.0388</b> | <b>0.5903</b> | <b>1.2427</b> | <b>1.8329</b> | <b>0.0894</b>  | <b>1.1553</b> | <b>1.2447</b> | <b>0.0000</b> | <b>3,746.781<br/>2</b> | <b>3,746.781<br/>2</b> | <b>1.0524</b> |     | <b>3,773.092<br/>0</b> |

**Mitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2              | Total CO2              | CH4           | N2O           | CO2e                   |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|------------------------|------------------------|---------------|---------------|------------------------|
| Category     | lb/day        |               |               |               |               |               |               |                |               |               | lb/day   |                        |                        |               |               |                        |
| Hauling      | 0.0670        | 2.5870        | 0.6153        | 9.6400e-003   | 0.2563        | 0.0241        | 0.2804        | 0.0706         | 0.0230        | 0.0936        |          | 1,061.014<br>1         | 1,061.014<br>1         | 0.0509        | 0.1686        | 1,112.515<br>6         |
| 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       | 0.0474        | 0.0321        | 0.3688        | 1.0600e-003   | 0.1168        | 7.0000e-004   | 0.1175        | 0.0311         | 6.4000e-004   | 0.0318        |          | 108.0858               | 108.0858               | 3.4900e-003   | 3.1900e-003   | 109.1237               |
| <b>Total</b> | <b>0.1144</b> | <b>2.6191</b> | <b>0.9841</b> | <b>0.0107</b> | <b>0.3731</b> | <b>0.0248</b> | <b>0.3979</b> | <b>0.1017</b>  | <b>0.0237</b> | <b>0.1254</b> |          | <b>1,169.099<br/>9</b> | <b>1,169.099<br/>9</b> | <b>0.0544</b> | <b>0.1717</b> | <b>1,221.639<br/>3</b> |

ARE Science Village - 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 - 2022**

**Unmitigated Construction On-Site**

|               | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total     | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|---------------|---------------|----------------|----------------|---------------|---------------|---------------|----------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category      | lb/day        |                |                |               |               |               |                |                |               |               | lb/day   |                   |                   |               |     |                   |
| Fugitive Dust |               |                |                |               | 9.7064        | 0.0000        | 9.7064         | 3.7299         | 0.0000        | 3.7299        |          |                   | 0.0000            |               |     | 0.0000            |
| Off-Road      | 3.6248        | 38.8435        | 29.0415        | 0.0621        |               | 1.6349        | 1.6349         |                | 1.5041        | 1.5041        |          | 6,011.4105        | 6,011.4105        | 1.9442        |     | 6,060.0158        |
| <b>Total</b>  | <b>3.6248</b> | <b>38.8435</b> | <b>29.0415</b> | <b>0.0621</b> | <b>9.7064</b> | <b>1.6349</b> | <b>11.3413</b> | <b>3.7299</b>  | <b>1.5041</b> | <b>5.2340</b> |          | <b>6,011.4105</b> | <b>6,011.4105</b> | <b>1.9442</b> |     | <b>6,060.0158</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      | 1.9532        | 75.3752        | 17.9280        | 0.2808        | 7.8233        | 0.7010        | 8.5243        | 2.1444         | 0.6706        | 2.8150        |          | 30,913.9145        | 30,913.9145        | 1.4830        | 4.9110        | 32,414.4722        |
| 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       | 0.0632        | 0.0428         | 0.4917         | 1.4200e-003   | 0.1643        | 9.3000e-004   | 0.1652        | 0.0436         | 8.6000e-004   | 0.0444        |          | 144.1143           | 144.1143           | 4.6500e-003   | 4.2500e-003   | 145.4982           |
| <b>Total</b> | <b>2.0164</b> | <b>75.4179</b> | <b>18.4196</b> | <b>0.2822</b> | <b>7.9876</b> | <b>0.7019</b> | <b>8.6895</b> | <b>2.1880</b>  | <b>0.6715</b> | <b>2.8594</b> |          | <b>31,058.0289</b> | <b>31,058.0289</b> | <b>1.4877</b> | <b>4.9153</b> | <b>32,559.9705</b> |

ARE Science Village - 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 - 2022**

**Mitigated Construction On-Site**

|               | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|---------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|-----|-------------------|
| Category      | lb/day        |                |                |               |               |               |               |                |               |               | lb/day        |                   |                   |               |     |                   |
| Fugitive Dust |               |                |                |               | 1.7035        | 0.0000        | 1.7035        | 0.6546         | 0.0000        | 0.6546        |               |                   | 0.0000            |               |     | 0.0000            |
| Off-Road      | 3.6248        | 38.8435        | 29.0415        | 0.0621        |               | 1.6349        | 1.6349        |                | 1.5041        | 1.5041        | 0.0000        | 6,011.4105        | 6,011.4105        | 1.9442        |     | 6,060.0158        |
| <b>Total</b>  | <b>3.6248</b> | <b>38.8435</b> | <b>29.0415</b> | <b>0.0621</b> | <b>1.7035</b> | <b>1.6349</b> | <b>3.3384</b> | <b>0.6546</b>  | <b>1.5041</b> | <b>2.1587</b> | <b>0.0000</b> | <b>6,011.4105</b> | <b>6,011.4105</b> | <b>1.9442</b> |     | <b>6,060.0158</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      | 1.9532        | 75.3752        | 17.9280        | 0.2808        | 7.4685        | 0.7010        | 8.1694        | 2.0573         | 0.6706        | 2.7279        |          | 30,913.9145        | 30,913.9145        | 1.4830        | 4.9110        | 32,414.4722        |
| 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       | 0.0632        | 0.0428         | 0.4917         | 1.4200e-003   | 0.1557        | 9.3000e-004   | 0.1567        | 0.0415         | 8.6000e-004   | 0.0423        |          | 144.1143           | 144.1143           | 4.6500e-003   | 4.2500e-003   | 145.4982           |
| <b>Total</b> | <b>2.0164</b> | <b>75.4179</b> | <b>18.4196</b> | <b>0.2822</b> | <b>7.6242</b> | <b>0.7019</b> | <b>8.3261</b> | <b>2.0988</b>  | <b>0.6715</b> | <b>2.7702</b> |          | <b>31,058.0289</b> | <b>31,058.0289</b> | <b>1.4877</b> | <b>4.9153</b> | <b>32,559.9705</b> |

ARE Science Village - San Diego County, Winter

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

**3.4 Building Construction - 2022**

**Unmitigated Construction On-Site**

|              | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category     | lb/day        |                |                |               |               |               |               |                |               |               | lb/day   |                   |                   |               |     |                   |
| Off-Road     | 2.2970        | 21.8217        | 20.8819        | 0.0424        |               | 1.0422        | 1.0422        |                | 0.9757        | 0.9757        |          | 4,049.7236        | 4,049.7236        | 1.0956        |     | 4,077.1133        |
| <b>Total</b> | <b>2.2970</b> | <b>21.8217</b> | <b>20.8819</b> | <b>0.0424</b> |               | <b>1.0422</b> | <b>1.0422</b> |                | <b>0.9757</b> | <b>0.9757</b> |          | <b>4,049.7236</b> | <b>4,049.7236</b> | <b>1.0956</b> |     | <b>4,077.1133</b> |

**Unmitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O           | CO2e              |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|---------------|-------------------|
| Category     | lb/day        |               |               |               |               |               |               |                |               |               | lb/day   |                   |                   |               |               |                   |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000         | 0.0000        | 0.0000        |          | 0.0000            | 0.0000            | 0.0000        | 0.0000        | 0.0000            |
| Vendor       | 0.2738        | 6.8432        | 2.2741        | 0.0265        | 0.8398        | 0.0719        | 0.9117        | 0.2418         | 0.0688        | 0.3106        |          | 2,851.3007        | 2,851.3007        | 0.0863        | 0.4142        | 2,976.9017        |
| Worker       | 0.8905        | 0.6028        | 6.9326        | 0.0200        | 2.3166        | 0.0131        | 2.3297        | 0.6145         | 0.0121        | 0.6265        |          | 2,032.0120        | 2,032.0120        | 0.0656        | 0.0600        | 2,051.5252        |
| <b>Total</b> | <b>1.1643</b> | <b>7.4460</b> | <b>9.2067</b> | <b>0.0464</b> | <b>3.1564</b> | <b>0.0850</b> | <b>3.2414</b> | <b>0.8562</b>  | <b>0.0809</b> | <b>0.9371</b> |          | <b>4,883.3127</b> | <b>4,883.3127</b> | <b>0.1519</b> | <b>0.4742</b> | <b>5,028.4269</b> |

ARE Science Village - San Diego County, Winter

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

**3.4 Building Construction - 2022**

**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     | 2.2970        | 21.8217        | 20.8819        | 0.0424        |               | 1.0422        | 1.0422        |                | 0.9757        | 0.9757        | 0.0000        | 4,049.7236        | 4,049.7236        | 1.0956        |     | 4,077.1132        |
| <b>Total</b> | <b>2.2970</b> | <b>21.8217</b> | <b>20.8819</b> | <b>0.0424</b> |               | <b>1.0422</b> | <b>1.0422</b> |                | <b>0.9757</b> | <b>0.9757</b> | <b>0.0000</b> | <b>4,049.7236</b> | <b>4,049.7236</b> | <b>1.0956</b> |     | <b>4,077.1132</b> |

**Mitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O           | CO2e              |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|---------------|-------------------|
| Category     | lb/day        |               |               |               |               |               |               |                |               |               | lb/day   |                   |                   |               |               |                   |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000         | 0.0000        | 0.0000        |          | 0.0000            | 0.0000            | 0.0000        | 0.0000        | 0.0000            |
| Vendor       | 0.2738        | 6.8432        | 2.2741        | 0.0265        | 0.8039        | 0.0719        | 0.8758        | 0.2330         | 0.0688        | 0.3018        |          | 2,851.3007        | 2,851.3007        | 0.0863        | 0.4142        | 2,976.9017        |
| Worker       | 0.8905        | 0.6028        | 6.9326        | 0.0200        | 2.1958        | 0.0131        | 2.2089        | 0.5848         | 0.0121        | 0.5969        |          | 2,032.0120        | 2,032.0120        | 0.0656        | 0.0600        | 2,051.5252        |
| <b>Total</b> | <b>1.1643</b> | <b>7.4460</b> | <b>9.2067</b> | <b>0.0464</b> | <b>2.9997</b> | <b>0.0850</b> | <b>3.0847</b> | <b>0.8178</b>  | <b>0.0809</b> | <b>0.8986</b> |          | <b>4,883.3127</b> | <b>4,883.3127</b> | <b>0.1519</b> | <b>0.4742</b> | <b>5,028.4269</b> |

ARE Science Village - San Diego County, Winter

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

**3.4 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     | 2.1394        | 20.0783        | 20.6295        | 0.0424        |               | 0.9159        | 0.9159        |                | 0.8573        | 0.8573        |          | 4,051.1857        | 4,051.1857        | 1.0917        |     | 4,078.4776        |
| <b>Total</b> | <b>2.1394</b> | <b>20.0783</b> | <b>20.6295</b> | <b>0.0424</b> |               | <b>0.9159</b> | <b>0.9159</b> |                | <b>0.8573</b> | <b>0.8573</b> |          | <b>4,051.1857</b> | <b>4,051.1857</b> | <b>1.0917</b> |     | <b>4,078.4776</b> |

**Unmitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O           | CO2e              |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|---------------|-------------------|
| Category     | lb/day        |               |               |               |               |               |               |                |               |               | lb/day   |                   |                   |               |               |                   |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000         | 0.0000        | 0.0000        |          | 0.0000            | 0.0000            | 0.0000        | 0.0000        | 0.0000            |
| Vendor       | 0.1440        | 5.5393        | 1.9734        | 0.0254        | 0.8398        | 0.0325        | 0.8724        | 0.2418         | 0.0311        | 0.2729        |          | 2,744.8791        | 2,744.8791        | 0.0827        | 0.3978        | 2,865.4907        |
| Worker       | 0.8362        | 0.5386        | 6.4483        | 0.0193        | 2.3166        | 0.0125        | 2.3290        | 0.6145         | 0.0115        | 0.6259        |          | 1,979.6973        | 1,979.6973        | 0.0597        | 0.0558        | 1,997.8128        |
| <b>Total</b> | <b>0.9802</b> | <b>6.0778</b> | <b>8.4217</b> | <b>0.0448</b> | <b>3.1564</b> | <b>0.0450</b> | <b>3.2014</b> | <b>0.8562</b>  | <b>0.0426</b> | <b>0.8988</b> |          | <b>4,724.5764</b> | <b>4,724.5764</b> | <b>0.1424</b> | <b>0.4536</b> | <b>4,863.3035</b> |



ARE Science Village - San Diego County, Winter

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

**3.4 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     | 2.1394        | 20.0783        | 20.6295        | 0.0424        |               | 0.9159        | 0.9159        |                | 0.8573        | 0.8573        | 0.0000        | 4,051.1857        | 4,051.1857        | 1.0917        |     | 4,078.4776        |
| <b>Total</b> | <b>2.1394</b> | <b>20.0783</b> | <b>20.6295</b> | <b>0.0424</b> |               | <b>0.9159</b> | <b>0.9159</b> |                | <b>0.8573</b> | <b>0.8573</b> | <b>0.0000</b> | <b>4,051.1857</b> | <b>4,051.1857</b> | <b>1.0917</b> |     | <b>4,078.4776</b> |

**Mitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O           | CO2e              |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|---------------|-------------------|
| Category     | lb/day        |               |               |               |               |               |               |                |               |               | lb/day   |                   |                   |               |               |                   |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000         | 0.0000        | 0.0000        |          | 0.0000            | 0.0000            | 0.0000        | 0.0000        | 0.0000            |
| Vendor       | 0.1440        | 5.5393        | 1.9734        | 0.0254        | 0.8039        | 0.0325        | 0.8365        | 0.2330         | 0.0311        | 0.2641        |          | 2,744.8791        | 2,744.8791        | 0.0827        | 0.3978        | 2,865.4907        |
| Worker       | 0.8362        | 0.5386        | 6.4483        | 0.0193        | 2.1958        | 0.0125        | 2.2082        | 0.5848         | 0.0115        | 0.5963        |          | 1,979.6973        | 1,979.6973        | 0.0597        | 0.0558        | 1,997.8128        |
| <b>Total</b> | <b>0.9802</b> | <b>6.0778</b> | <b>8.4217</b> | <b>0.0448</b> | <b>2.9997</b> | <b>0.0450</b> | <b>3.0447</b> | <b>0.8178</b>  | <b>0.0426</b> | <b>0.8604</b> |          | <b>4,724.5764</b> | <b>4,724.5764</b> | <b>0.1424</b> | <b>0.4536</b> | <b>4,863.3035</b> |

ARE Science Village - San Diego County, Winter

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

**3.4 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     | 2.0213        | 18.7120        | 20.5100        | 0.0424        |               | 0.8155        | 0.8155        |                | 0.7630        | 0.7630        |          | 4,052.614<br>4         | 4,052.614<br>4         | 1.0885        |     | 4,079.826<br>4         |
| <b>Total</b> | <b>2.0213</b> | <b>18.7120</b> | <b>20.5100</b> | <b>0.0424</b> |               | <b>0.8155</b> | <b>0.8155</b> |                | <b>0.7630</b> | <b>0.7630</b> |          | <b>4,052.614<br/>4</b> | <b>4,052.614<br/>4</b> | <b>1.0885</b> |     | <b>4,079.826<br/>4</b> |

**Unmitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2              | Total CO2              | CH4           | N2O           | CO2e                   |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|------------------------|------------------------|---------------|---------------|------------------------|
| Category     | lb/day        |               |               |               |               |               |               |                |               |               | lb/day   |                        |                        |               |               |                        |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000         | 0.0000        | 0.0000        |          | 0.0000                 | 0.0000                 | 0.0000        | 0.0000        | 0.0000                 |
| Vendor       | 0.1383        | 5.5020        | 1.9284        | 0.0250        | 0.8398        | 0.0327        | 0.8725        | 0.2418         | 0.0313        | 0.2730        |          | 2,697.132<br>5         | 2,697.132<br>5         | 0.0846        | 0.3908        | 2,815.715<br>6         |
| Worker       | 0.7874        | 0.4845        | 6.0377        | 0.0187        | 2.3166        | 0.0119        | 2.3284        | 0.6145         | 0.0109        | 0.6254        |          | 1,930.123<br>0         | 1,930.123<br>0         | 0.0545        | 0.0521        | 1,947.015<br>5         |
| <b>Total</b> | <b>0.9257</b> | <b>5.9864</b> | <b>7.9661</b> | <b>0.0437</b> | <b>3.1564</b> | <b>0.0446</b> | <b>3.2010</b> | <b>0.8562</b>  | <b>0.0422</b> | <b>0.8984</b> |          | <b>4,627.255<br/>6</b> | <b>4,627.255<br/>6</b> | <b>0.1390</b> | <b>0.4430</b> | <b>4,762.731<br/>1</b> |

ARE Science Village - San Diego County, Winter

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

**3.4 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     | 2.0213        | 18.7120        | 20.5100        | 0.0424        |               | 0.8155        | 0.8155        |                | 0.7630        | 0.7630        | 0.0000        | 4,052.614<br>4         | 4,052.614<br>4         | 1.0885        |     | 4,079.826<br>4         |
| <b>Total</b> | <b>2.0213</b> | <b>18.7120</b> | <b>20.5100</b> | <b>0.0424</b> |               | <b>0.8155</b> | <b>0.8155</b> |                | <b>0.7630</b> | <b>0.7630</b> | <b>0.0000</b> | <b>4,052.614<br/>4</b> | <b>4,052.614<br/>4</b> | <b>1.0885</b> |     | <b>4,079.826<br/>4</b> |

**Mitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2              | Total CO2              | CH4           | N2O           | CO2e                   |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|------------------------|------------------------|---------------|---------------|------------------------|
| Category     | lb/day        |               |               |               |               |               |               |                |               |               | lb/day   |                        |                        |               |               |                        |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000         | 0.0000        | 0.0000        |          | 0.0000                 | 0.0000                 | 0.0000        | 0.0000        | 0.0000                 |
| Vendor       | 0.1383        | 5.5020        | 1.9284        | 0.0250        | 0.8039        | 0.0327        | 0.8366        | 0.2330         | 0.0313        | 0.2642        |          | 2,697.132<br>5         | 2,697.132<br>5         | 0.0846        | 0.3908        | 2,815.715<br>6         |
| Worker       | 0.7874        | 0.4845        | 6.0377        | 0.0187        | 2.1958        | 0.0119        | 2.2076        | 0.5848         | 0.0109        | 0.5958        |          | 1,930.123<br>0         | 1,930.123<br>0         | 0.0545        | 0.0521        | 1,947.015<br>5         |
| <b>Total</b> | <b>0.9257</b> | <b>5.9864</b> | <b>7.9661</b> | <b>0.0437</b> | <b>2.9997</b> | <b>0.0446</b> | <b>3.0443</b> | <b>0.8178</b>  | <b>0.0422</b> | <b>0.8600</b> |          | <b>4,627.255<br/>6</b> | <b>4,627.255<br/>6</b> | <b>0.1390</b> | <b>0.4430</b> | <b>4,762.731<br/>1</b> |

ARE Science Village - San Diego County, Winter

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

**3.5 Architectural Coating - 2024**

**Unmitigated Construction On-Site**

|                 | ROG            | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4           | N2O | CO2e            |
|-----------------|----------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-----------------|-----------------|---------------|-----|-----------------|
| Category        | lb/day         |               |               |                    |               |               |               |                |               |               | lb/day   |                 |                 |               |     |                 |
| Archit. Coating | 66.8623        |               |               |                    |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          |                 | 0.0000          |               |     | 0.0000          |
| Off-Road        | 0.1808         | 1.2188        | 1.8101        | 2.9700e-003        |               | 0.0609        | 0.0609        |                | 0.0609        | 0.0609        |          | 281.4481        | 281.4481        | 0.0159        |     | 281.8443        |
| <b>Total</b>    | <b>67.0431</b> | <b>1.2188</b> | <b>1.8101</b> | <b>2.9700e-003</b> |               | <b>0.0609</b> | <b>0.0609</b> |                | <b>0.0609</b> | <b>0.0609</b> |          | <b>281.4481</b> | <b>281.4481</b> | <b>0.0159</b> |     | <b>281.8443</b> |

**Unmitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|---------------|---------------|-----------------|
| Category     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |               |               |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| Vendor       | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| Worker       | 0.1564        | 0.0962        | 1.1990        | 3.7200e-003        | 0.4600        | 2.3600e-003        | 0.4624        | 0.1220         | 2.1700e-003        | 0.1242        |          | 383.2868        | 383.2868        | 0.0108        | 0.0104        | 386.6414        |
| <b>Total</b> | <b>0.1564</b> | <b>0.0962</b> | <b>1.1990</b> | <b>3.7200e-003</b> | <b>0.4600</b> | <b>2.3600e-003</b> | <b>0.4624</b> | <b>0.1220</b>  | <b>2.1700e-003</b> | <b>0.1242</b> |          | <b>383.2868</b> | <b>383.2868</b> | <b>0.0108</b> | <b>0.0104</b> | <b>386.6414</b> |

ARE Science Village - San Diego County, Winter

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

**3.5 Architectural Coating - 2024**

**Mitigated Construction On-Site**

|                 | ROG            | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4           | N2O | CO2e            |
|-----------------|----------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|-----|-----------------|
| Category        | lb/day         |               |               |                    |               |               |               |                |               |               | lb/day        |                 |                 |               |     |                 |
| Archit. Coating | 66.8623        |               |               |                    |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |               |                 | 0.0000          |               |     | 0.0000          |
| Off-Road        | 0.1808         | 1.2188        | 1.8101        | 2.9700e-003        |               | 0.0609        | 0.0609        |                | 0.0609        | 0.0609        | 0.0000        | 281.4481        | 281.4481        | 0.0159        |     | 281.8443        |
| <b>Total</b>    | <b>67.0431</b> | <b>1.2188</b> | <b>1.8101</b> | <b>2.9700e-003</b> |               | <b>0.0609</b> | <b>0.0609</b> |                | <b>0.0609</b> | <b>0.0609</b> | <b>0.0000</b> | <b>281.4481</b> | <b>281.4481</b> | <b>0.0159</b> |     | <b>281.8443</b> |

**Mitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|---------------|---------------|-----------------|
| Category     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |               |               |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| Vendor       | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| Worker       | 0.1564        | 0.0962        | 1.1990        | 3.7200e-003        | 0.4360        | 2.3600e-003        | 0.4384        | 0.1161         | 2.1700e-003        | 0.1183        |          | 383.2868        | 383.2868        | 0.0108        | 0.0104        | 386.6414        |
| <b>Total</b> | <b>0.1564</b> | <b>0.0962</b> | <b>1.1990</b> | <b>3.7200e-003</b> | <b>0.4360</b> | <b>2.3600e-003</b> | <b>0.4384</b> | <b>0.1161</b>  | <b>2.1700e-003</b> | <b>0.1183</b> |          | <b>383.2868</b> | <b>383.2868</b> | <b>0.0108</b> | <b>0.0104</b> | <b>386.6414</b> |

ARE Science Village - San Diego County, Winter

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

**3.6 Paving - 2024**

**Unmitigated Construction On-Site**

|              | ROG           | NOx           | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2              | Total CO2              | CH4           | N2O | CO2e                   |
|--------------|---------------|---------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|------------------------|------------------------|---------------|-----|------------------------|
| Category     | lb/day        |               |                |               |               |               |               |                |               |               | lb/day   |                        |                        |               |     |                        |
| Off-Road     | 0.9882        | 9.5246        | 14.6258        | 0.0228        |               | 0.4685        | 0.4685        |                | 0.4310        | 0.4310        |          | 2,207.547<br>2         | 2,207.547<br>2         | 0.7140        |     | 2,225.396<br>3         |
| Paving       | 0.0000        |               |                |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          |                        | 0.0000                 |               |     | 0.0000                 |
| <b>Total</b> | <b>0.9882</b> | <b>9.5246</b> | <b>14.6258</b> | <b>0.0228</b> |               | <b>0.4685</b> | <b>0.4685</b> |                | <b>0.4310</b> | <b>0.4310</b> |          | <b>2,207.547<br/>2</b> | <b>2,207.547<br/>2</b> | <b>0.7140</b> |     | <b>2,225.396<br/>3</b> |

**Unmitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4                | N2O                | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|--------------------|-----------------|
| Category     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |                    |                    |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000             | 0.0000             | 0.0000          |
| Vendor       | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000             | 0.0000             | 0.0000          |
| Worker       | 0.0419        | 0.0258        | 0.3212        | 1.0000e-003        | 0.1232        | 6.3000e-004        | 0.1239        | 0.0327         | 5.8000e-004        | 0.0333        |          | 102.6661        | 102.6661        | 2.9000e-003        | 2.7700e-003        | 103.5647        |
| <b>Total</b> | <b>0.0419</b> | <b>0.0258</b> | <b>0.3212</b> | <b>1.0000e-003</b> | <b>0.1232</b> | <b>6.3000e-004</b> | <b>0.1239</b> | <b>0.0327</b>  | <b>5.8000e-004</b> | <b>0.0333</b> |          | <b>102.6661</b> | <b>102.6661</b> | <b>2.9000e-003</b> | <b>2.7700e-003</b> | <b>103.5647</b> |

ARE Science Village - San Diego County, Winter

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

**3.6 Paving - 2024**

**Mitigated Construction On-Site**

|              | ROG           | NOx           | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2              | Total CO2              | CH4           | N2O | CO2e                   |
|--------------|---------------|---------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|------------------------|------------------------|---------------|-----|------------------------|
| Category     | lb/day        |               |                |               |               |               |               |                |               |               | lb/day        |                        |                        |               |     |                        |
| Off-Road     | 0.9882        | 9.5246        | 14.6258        | 0.0228        |               | 0.4685        | 0.4685        |                | 0.4310        | 0.4310        | 0.0000        | 2,207.547<br>2         | 2,207.547<br>2         | 0.7140        |     | 2,225.396<br>3         |
| Paving       | 0.0000        |               |                |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |               |                        | 0.0000                 |               |     | 0.0000                 |
| <b>Total</b> | <b>0.9882</b> | <b>9.5246</b> | <b>14.6258</b> | <b>0.0228</b> |               | <b>0.4685</b> | <b>0.4685</b> |                | <b>0.4310</b> | <b>0.4310</b> | <b>0.0000</b> | <b>2,207.547<br/>2</b> | <b>2,207.547<br/>2</b> | <b>0.7140</b> |     | <b>2,225.396<br/>3</b> |

**Mitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4                | N2O                | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|--------------------|-----------------|
| Category     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |                    |                    |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000             | 0.0000             | 0.0000          |
| Vendor       | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000             | 0.0000             | 0.0000          |
| Worker       | 0.0419        | 0.0258        | 0.3212        | 1.0000e-003        | 0.1168        | 6.3000e-004        | 0.1174        | 0.0311         | 5.8000e-004        | 0.0317        |          | 102.6661        | 102.6661        | 2.9000e-003        | 2.7700e-003        | 103.5647        |
| <b>Total</b> | <b>0.0419</b> | <b>0.0258</b> | <b>0.3212</b> | <b>1.0000e-003</b> | <b>0.1168</b> | <b>6.3000e-004</b> | <b>0.1174</b> | <b>0.0311</b>  | <b>5.8000e-004</b> | <b>0.0317</b> |          | <b>102.6661</b> | <b>102.6661</b> | <b>2.9000e-003</b> | <b>2.7700e-003</b> | <b>103.5647</b> |

ARE Science Village - 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   | 7.4968 | 8.1250 | 68.1691 | 0.1366 | 14.9750       | 0.1086       | 15.0836    | 3.9891         | 0.1013        | 4.0904      |          | 14,156.06<br>32 | 14,156.06<br>32 | 1.0614 | 0.6626 | 14,380.05<br>10 |
| Unmitigated | 7.4968 | 8.1250 | 68.1691 | 0.1366 | 14.9750       | 0.1086       | 15.0836    | 3.9891         | 0.1013        | 4.0904      |          | 14,156.06<br>32 | 14,156.06<br>32 | 1.0614 | 0.6626 | 14,380.05<br>10 |

4.2 Trip Summary Information

| Land Use                            | Average Daily Trip Rate |          |          | Unmitigated | Mitigated  |
|-------------------------------------|-------------------------|----------|----------|-------------|------------|
|                                     | Weekday                 | Saturday | Sunday   | Annual VMT  | Annual VMT |
| City Park                           | 0.00                    | 0.00     | 0.00     |             |            |
| Enclosed Parking with Elevator      | 0.00                    | 0.00     | 0.00     |             |            |
| Fast Food Restaurant w/o Drive Thru | 0.00                    | 0.00     | 0.00     |             |            |
| General Office Building             | 0.00                    | 0.00     | 0.00     |             |            |
| Research & Development              | 2,838.36                | 2,838.36 | 2838.36  | 7,113,643   | 7,113,643  |
| Supermarket                         | 0.00                    | 0.00     | 0.00     |             |            |
| Total                               | 2,838.36                | 2,838.36 | 2,838.36 | 7,113,643   | 7,113,643  |

4.3 Trip Type Information

| Land Use  | Miles      |            |             | Trip %     |            |             | Trip Purpose % |          |         |
|-----------|------------|------------|-------------|------------|------------|-------------|----------------|----------|---------|
|           | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary        | Diverted | Pass-by |
| City Park | 9.50       | 7.30       | 7.30        | 33.00      | 48.00      | 19.00       | 66             | 28       | 6       |



ARE Science Village - San Diego County, Winter

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

| Land Use                       | Miles      |            |             | Trip %     |            |             | Trip Purpose % |          |         |
|--------------------------------|------------|------------|-------------|------------|------------|-------------|----------------|----------|---------|
|                                | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary        | Diverted | Pass-by |
| Enclosed Parking with Elevator | 9.50       | 7.30       | 7.30        | 0.00       | 0.00       | 0.00        | 0              | 0        | 0       |
| Fast Food Restaurant w/o Drive | 9.50       | 7.30       | 7.30        | 1.50       | 79.50      | 19.00       | 51             | 37       | 12      |
| General Office Building        | 9.50       | 7.30       | 7.30        | 33.00      | 48.00      | 19.00       | 77             | 19       | 4       |
| Research & Development         | 9.50       | 7.30       | 7.30        | 33.00      | 48.00      | 19.00       | 82             | 15       | 3       |
| Supermarket                    | 9.50       | 7.30       | 7.30        | 6.50       | 74.50      | 19.00       | 34             | 30       | 36      |

**4.4 Fleet Mix**

| Land Use                            | LDA      | LDT1     | LDT2     | MDV      | LHD1     | LHD2     | MHD      | HHD      | OBUS     | UBUS     | MCY      | SBUS     | MH       |
|-------------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| City Park                           | 0.557888 | 0.062607 | 0.178921 | 0.119061 | 0.024112 | 0.006269 | 0.008734 | 0.006266 | 0.000708 | 0.000566 | 0.028949 | 0.000971 | 0.004949 |
| Enclosed Parking with Elevator      | 0.557888 | 0.062607 | 0.178921 | 0.119061 | 0.024112 | 0.006269 | 0.008734 | 0.006266 | 0.000708 | 0.000566 | 0.028949 | 0.000971 | 0.004949 |
| Fast Food Restaurant w/o Drive Thru | 0.557888 | 0.062607 | 0.178921 | 0.119061 | 0.024112 | 0.006269 | 0.008734 | 0.006266 | 0.000708 | 0.000566 | 0.028949 | 0.000971 | 0.004949 |
| General Office Building             | 0.557888 | 0.062607 | 0.178921 | 0.119061 | 0.024112 | 0.006269 | 0.008734 | 0.006266 | 0.000708 | 0.000566 | 0.028949 | 0.000971 | 0.004949 |
| Research & Development              | 0.557888 | 0.062607 | 0.178921 | 0.119061 | 0.024112 | 0.006269 | 0.008734 | 0.006266 | 0.000708 | 0.000566 | 0.028949 | 0.000971 | 0.004949 |
| Supermarket                         | 0.557888 | 0.062607 | 0.178921 | 0.119061 | 0.024112 | 0.006269 | 0.008734 | 0.006266 | 0.000708 | 0.000566 | 0.028949 | 0.000971 | 0.004949 |

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

ARE Science Village - 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   |            |            |        |        |            |
| NaturalGas Mitigated   | 0.1616 | 1.4694 | 1.2343 | 8.8200e-003 |               | 0.1117       | 0.1117     |                | 0.1117        | 0.1117      |          | 1,763.3248 | 1,763.3248 | 0.0338 | 0.0323 | 1,773.8034 |
| NaturalGas Unmitigated | 0.1616 | 1.4694 | 1.2343 | 8.8200e-003 |               | 0.1117       | 0.1117     |                | 0.1117        | 0.1117      |          | 1,763.3248 | 1,763.3248 | 0.0338 | 0.0323 | 1,773.8034 |

ARE Science Village - 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   |                   |                   |               |               |                   |
| City Park                           | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000             |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 0.0000            | 0.0000            | 0.0000        | 0.0000        | 0.0000            |
| Enclosed Parking with Elevator      | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000             |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 0.0000            | 0.0000            | 0.0000        | 0.0000        | 0.0000            |
| Fast Food Restaurant w/o Drive Thru | 3304.47        | 0.0356        | 0.3240        | 0.2721        | 1.9400e-003        |               | 0.0246        | 0.0246        |                | 0.0246        | 0.0246        |          | 388.7615          | 388.7615          | 7.4500e-003   | 7.1300e-003   | 391.0717          |
| General Office Building             | 489.006        | 5.2700e-003   | 0.0479        | 0.0403        | 2.9000e-004        |               | 3.6400e-003   | 3.6400e-003   |                | 3.6400e-003   | 3.6400e-003   |          | 57.5302           | 57.5302           | 1.1000e-003   | 1.0500e-003   | 57.8720           |
| Research & Development              | 11156.2        | 0.1203        | 1.0937        | 0.9187        | 6.5600e-003        |               | 0.0831        | 0.0831        |                | 0.0831        | 0.0831        |          | 1,312.4928        | 1,312.4928        | 0.0252        | 0.0241        | 1,320.2923        |
| Supermarket                         | 38.5925        | 4.2000e-004   | 3.7800e-003   | 3.1800e-003   | 2.0000e-005        |               | 2.9000e-004   | 2.9000e-004   |                | 2.9000e-004   | 2.9000e-004   |          | 4.5403            | 4.5403            | 9.0000e-005   | 8.0000e-005   | 4.5673            |
| <b>Total</b>                        |                | <b>0.1616</b> | <b>1.4694</b> | <b>1.2343</b> | <b>8.8100e-003</b> |               | <b>0.1117</b> | <b>0.1117</b> |                | <b>0.1117</b> | <b>0.1117</b> |          | <b>1,763.3248</b> | <b>1,763.3248</b> | <b>0.0338</b> | <b>0.0323</b> | <b>1,773.8034</b> |

ARE Science Village - 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   |                   |                   |               |               |                   |
| City Park                           | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000             |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 0.0000            | 0.0000            | 0.0000        | 0.0000        | 0.0000            |
| Enclosed Parking with Elevator      | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000             |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 0.0000            | 0.0000            | 0.0000        | 0.0000        | 0.0000            |
| Fast Food Restaurant w/o Drive Thru | 3.30447        | 0.0356        | 0.3240        | 0.2721        | 1.9400e-003        |               | 0.0246        | 0.0246        |                | 0.0246        | 0.0246        |          | 388.7615          | 388.7615          | 7.4500e-003   | 7.1300e-003   | 391.0717          |
| General Office Building             | 0.489006       | 5.2700e-003   | 0.0479        | 0.0403        | 2.9000e-004        |               | 3.6400e-003   | 3.6400e-003   |                | 3.6400e-003   | 3.6400e-003   |          | 57.5302           | 57.5302           | 1.1000e-003   | 1.0500e-003   | 57.8720           |
| Research & Development              | 11.1562        | 0.1203        | 1.0937        | 0.9187        | 6.5600e-003        |               | 0.0831        | 0.0831        |                | 0.0831        | 0.0831        |          | 1,312.4928        | 1,312.4928        | 0.0252        | 0.0241        | 1,320.2923        |
| Supermarket                         | 0.0385925      | 4.2000e-004   | 3.7800e-003   | 3.1800e-003   | 2.0000e-005        |               | 2.9000e-004   | 2.9000e-004   |                | 2.9000e-004   | 2.9000e-004   |          | 4.5403            | 4.5403            | 9.0000e-005   | 8.0000e-005   | 4.5673            |
| <b>Total</b>                        |                | <b>0.1616</b> | <b>1.4694</b> | <b>1.2343</b> | <b>8.8100e-003</b> |               | <b>0.1117</b> | <b>0.1117</b> |                | <b>0.1117</b> | <b>0.1117</b> |          | <b>1,763.3248</b> | <b>1,763.3248</b> | <b>0.0338</b> | <b>0.0323</b> | <b>1,773.8034</b> |

6.0 Area Detail

6.1 Mitigation Measures Area

ARE Science Village - 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   | 10.4760 | 1.1800e-003 | 0.1307 | 1.0000e-005 |               | 4.6000e-004  | 4.6000e-004 |                | 4.6000e-004   | 4.6000e-004 |          | 0.2809    | 0.2809    | 7.3000e-004 |     | 0.2991 |
| Unmitigated | 10.4760 | 1.1800e-003 | 0.1307 | 1.0000e-005 |               | 4.6000e-004  | 4.6000e-004 |                | 4.6000e-004   | 4.6000e-004 |          | 0.2809    | 0.2809    | 7.3000e-004 |     | 0.2991 |

**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 | 2.4180         |                    |               |                    |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             |          |               | 0.0000        |                    |     | 0.0000        |
| Consumer Products     | 8.0460         |                    |               |                    |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             |          |               | 0.0000        |                    |     | 0.0000        |
| Landscaping           | 0.0120         | 1.1800e-003        | 0.1307        | 1.0000e-005        |               | 4.6000e-004        | 4.6000e-004        |                | 4.6000e-004        | 4.6000e-004        |          | 0.2809        | 0.2809        | 7.3000e-004        |     | 0.2991        |
| <b>Total</b>          | <b>10.4760</b> | <b>1.1800e-003</b> | <b>0.1307</b> | <b>1.0000e-005</b> |               | <b>4.6000e-004</b> | <b>4.6000e-004</b> |                | <b>4.6000e-004</b> | <b>4.6000e-004</b> |          | <b>0.2809</b> | <b>0.2809</b> | <b>7.3000e-004</b> |     | <b>0.2991</b> |

ARE Science Village - 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 | 2.4180         |                    |               |                    |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             |          |               | 0.0000        |                    |     | 0.0000        |
| Consumer Products     | 8.0460         |                    |               |                    |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             |          |               | 0.0000        |                    |     | 0.0000        |
| Landscaping           | 0.0120         | 1.1800e-003        | 0.1307        | 1.0000e-005        |               | 4.6000e-004        | 4.6000e-004        |                | 4.6000e-004        | 4.6000e-004        |          | 0.2809        | 0.2809        | 7.3000e-004        |     | 0.2991        |
| <b>Total</b>          | <b>10.4760</b> | <b>1.1800e-003</b> | <b>0.1307</b> | <b>1.0000e-005</b> |               | <b>4.6000e-004</b> | <b>4.6000e-004</b> |                | <b>4.6000e-004</b> | <b>4.6000e-004</b> |          | <b>0.2809</b> | <b>0.2809</b> | <b>7.3000e-004</b> |     | <b>0.2991</b> |

**7.0 Water Detail**

---

**7.1 Mitigation Measures Water**

ARE Science Village - 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**

---

**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

---

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

**10.0 Stationary Equipment**

---

**Fire Pumps and Emergency Generators**

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

**Boilers**

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

**User Defined Equipment**

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

**11.0 Vegetation**

---

ARE Science Village - San Diego County, Summer

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

**ARE Science Village  
San Diego County, Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

| Land Uses                           | Size   | Metric   | Lot Acreage | Floor Surface Area | Population |
|-------------------------------------|--------|----------|-------------|--------------------|------------|
| General Office Building             | 8.91   | 1000sqft | 0.20        | 8,911.00           | 0          |
| Research & Development              | 353.47 | 1000sqft | 8.11        | 353,473.00         | 0          |
| Enclosed Parking with Elevator      | 913.00 | Space    | 8.22        | 365,200.00         | 0          |
| City Park                           | 0.54   | Acre     | 0.54        | 23,522.40          | 0          |
| Fast Food Restaurant w/o Drive Thru | 6.93   | 1000sqft | 0.16        | 6,931.00           | 0          |
| Supermarket                         | 0.56   | 1000sqft | 0.01        | 563.00             | 0          |

**1.2 Other Project Characteristics**

|                                |                          |                                |       |                                  |       |
|--------------------------------|--------------------------|--------------------------------|-------|----------------------------------|-------|
| <b>Urbanization</b>            | Urban                    | <b>Wind Speed (m/s)</b>        | 2.6   | <b>Precipitation Freq (Days)</b> | 40    |
| <b>Climate Zone</b>            | 13                       |                                |       | <b>Operational Year</b>          | 2025  |
| <b>Utility Company</b>         | San Diego Gas & Electric |                                |       |                                  |       |
| <b>CO2 Intensity (lb/MWhr)</b> | 539.98                   | <b>CH4 Intensity (lb/MWhr)</b> | 0.033 | <b>N2O Intensity (lb/MWhr)</b>   | 0.004 |

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

- Project Characteristics -
- Land Use - Update per new site plan
- Construction Phase - Per construction questionnaire.
- Off-road Equipment - Other Construction Equipment = pile driver
- Demolition -
- Grading - Per email communication
- Vehicle Trips - Per Traffic Study.



ARE Science Village - 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 - .

Vehicle Emission Factors - .

Construction Off-road Equipment Mitigation - SDAPCD Rule 55

Fleet Mix - .

Trips and VMT -

| Table Name             | Column Name                     | Default Value | New Value   |
|------------------------|---------------------------------|---------------|-------------|
| tblConstDustMitigation | CleanPavedRoadPercentReduction  | 0             | 6           |
| tblConstDustMitigation | WaterUnpavedRoadMoistureContent | 0             | 12          |
| tblConstDustMitigation | WaterUnpavedRoadVehicleSpeed    | 0             | 15          |
| tblConstructionPhase   | NumDays                         | 20.00         | 132.00      |
| tblConstructionPhase   | NumDays                         | 300.00        | 528.00      |
| tblConstructionPhase   | NumDays                         | 20.00         | 88.00       |
| tblConstructionPhase   | NumDays                         | 30.00         | 88.00       |
| tblConstructionPhase   | NumDays                         | 20.00         | 44.00       |
| tblFleetMix            | HHD                             | 6.2980e-003   | 6.2660e-003 |
| tblFleetMix            | HHD                             | 6.2980e-003   | 6.2660e-003 |
| tblFleetMix            | HHD                             | 6.2980e-003   | 6.2660e-003 |
| tblFleetMix            | HHD                             | 6.2980e-003   | 6.2660e-003 |
| tblFleetMix            | HHD                             | 6.2980e-003   | 6.2660e-003 |
| tblFleetMix            | HHD                             | 6.2980e-003   | 6.2660e-003 |
| tblFleetMix            | LDA                             | 0.56          | 0.56        |
| tblFleetMix            | LDA                             | 0.56          | 0.56        |
| tblFleetMix            | LDA                             | 0.56          | 0.56        |
| tblFleetMix            | LDA                             | 0.56          | 0.56        |
| tblFleetMix            | LDA                             | 0.56          | 0.56        |
| tblFleetMix            | LDA                             | 0.56          | 0.56        |
| tblFleetMix            | LDA                             | 0.56          | 0.56        |
| tblFleetMix            | LDT1                            | 0.06          | 0.06        |



ARE Science Village - San Diego County, Summer

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

|             |      |             |             |
|-------------|------|-------------|-------------|
| tblFleetMix | MDV  | 0.12        | 0.12        |
| tblFleetMix | MDV  | 0.12        | 0.12        |
| tblFleetMix | MDV  | 0.12        | 0.12        |
| tblFleetMix | MDV  | 0.12        | 0.12        |
| tblFleetMix | MDV  | 0.12        | 0.12        |
| tblFleetMix | MDV  | 0.12        | 0.12        |
| tblFleetMix | MH   | 4.7510e-003 | 4.9490e-003 |
| tblFleetMix | MH   | 4.7510e-003 | 4.9490e-003 |
| tblFleetMix | MH   | 4.7510e-003 | 4.9490e-003 |
| tblFleetMix | MH   | 4.7510e-003 | 4.9490e-003 |
| tblFleetMix | MH   | 4.7510e-003 | 4.9490e-003 |
| tblFleetMix | MH   | 4.7510e-003 | 4.9490e-003 |
| tblFleetMix | MHD  | 8.9490e-003 | 8.7340e-003 |
| tblFleetMix | MHD  | 8.9490e-003 | 8.7340e-003 |
| tblFleetMix | MHD  | 8.9490e-003 | 8.7340e-003 |
| tblFleetMix | MHD  | 8.9490e-003 | 8.7340e-003 |
| tblFleetMix | MHD  | 8.9490e-003 | 8.7340e-003 |
| tblFleetMix | MHD  | 8.9490e-003 | 8.7340e-003 |
| tblFleetMix | OBUS | 7.0500e-004 | 7.0800e-004 |
| tblFleetMix | OBUS | 7.0500e-004 | 7.0800e-004 |
| tblFleetMix | OBUS | 7.0500e-004 | 7.0800e-004 |
| tblFleetMix | OBUS | 7.0500e-004 | 7.0800e-004 |
| tblFleetMix | OBUS | 7.0500e-004 | 7.0800e-004 |
| tblFleetMix | OBUS | 7.0500e-004 | 7.0800e-004 |
| tblFleetMix | SBUS | 9.5500e-004 | 9.7100e-004 |
| tblFleetMix | SBUS | 9.5500e-004 | 9.7100e-004 |
| tblFleetMix | SBUS | 9.5500e-004 | 9.7100e-004 |
| tblFleetMix | SBUS | 9.5500e-004 | 9.7100e-004 |
| tblFleetMix | SBUS | 9.5500e-004 | 9.7100e-004 |

ARE Science Village - San Diego County, Summer

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

|                     |                   |             |             |
|---------------------|-------------------|-------------|-------------|
| tblFleetMix         | SBUS              | 9.5500e-004 | 9.7100e-004 |
| tblFleetMix         | UBUS              | 5.7700e-004 | 5.6600e-004 |
| tblFleetMix         | UBUS              | 5.7700e-004 | 5.6600e-004 |
| tblFleetMix         | UBUS              | 5.7700e-004 | 5.6600e-004 |
| tblFleetMix         | UBUS              | 5.7700e-004 | 5.6600e-004 |
| tblFleetMix         | UBUS              | 5.7700e-004 | 5.6600e-004 |
| tblFleetMix         | UBUS              | 5.7700e-004 | 5.6600e-004 |
| tblGrading          | MaterialExported  | 0.00        | 314,900.00  |
| tblLandUse          | LandUseSquareFeet | 8,910.00    | 8,911.00    |
| tblLandUse          | LandUseSquareFeet | 353,470.00  | 353,473.00  |
| tblLandUse          | LandUseSquareFeet | 6,930.00    | 6,931.00    |
| tblLandUse          | LandUseSquareFeet | 560.00      | 563.00      |
| tblOffRoadEquipment | HorsePower        | 172.00      | 475.00      |
| tblOffRoadEquipment | LoadFactor        | 0.42        | 0.50        |
| tblVehicleEF        | HHD               | 0.03        | 0.03        |
| tblVehicleEF        | HHD               | 0.08        | 0.08        |
| tblVehicleEF        | HHD               | 6.64        | 6.65        |
| tblVehicleEF        | HHD               | 0.51        | 0.49        |
| tblVehicleEF        | HHD               | 8.2890e-003 | 8.5080e-003 |
| tblVehicleEF        | HHD               | 1,078.46    | 1,099.27    |
| tblVehicleEF        | HHD               | 1,383.23    | 1,411.93    |
| tblVehicleEF        | HHD               | 0.08        | 0.09        |
| tblVehicleEF        | HHD               | 0.17        | 0.17        |
| tblVehicleEF        | HHD               | 0.22        | 0.22        |
| tblVehicleEF        | HHD               | 4.0000e-006 | 5.0000e-006 |
| tblVehicleEF        | HHD               | 5.65        | 5.70        |
| tblVehicleEF        | HHD               | 2.60        | 2.63        |
| tblVehicleEF        | HHD               | 2.38        | 2.38        |
| tblVehicleEF        | HHD               | 2.8750e-003 | 3.0090e-003 |

ARE Science Village - San Diego County, Summer

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

|              |     |             |             |
|--------------|-----|-------------|-------------|
| tblVehicleEF | HHD | 0.06        | 0.06        |
| tblVehicleEF | HHD | 0.04        | 0.04        |
| tblVehicleEF | HHD | 0.02        | 0.03        |
| tblVehicleEF | HHD | 2.7510e-003 | 2.8780e-003 |
| tblVehicleEF | HHD | 0.03        | 0.03        |
| tblVehicleEF | HHD | 8.8700e-003 | 8.8690e-003 |
| tblVehicleEF | HHD | 0.02        | 0.02        |
| tblVehicleEF | HHD | 3.0000e-006 | 4.0000e-006 |
| tblVehicleEF | HHD | 1.6600e-004 | 1.9400e-004 |
| tblVehicleEF | HHD | 0.45        | 0.45        |
| tblVehicleEF | HHD | 0.03        | 0.03        |
| tblVehicleEF | HHD | 7.0000e-005 | 8.2000e-005 |
| tblVehicleEF | HHD | 9.9650e-003 | 0.01        |
| tblVehicleEF | HHD | 0.01        | 0.01        |
| tblVehicleEF | HHD | 3.0000e-006 | 4.0000e-006 |
| tblVehicleEF | HHD | 1.6600e-004 | 1.9400e-004 |
| tblVehicleEF | HHD | 0.52        | 0.52        |
| tblVehicleEF | HHD | 0.11        | 0.11        |
| tblVehicleEF | HHD | 7.0000e-005 | 8.2000e-005 |
| tblVehicleEF | HHD | 0.03        | 0.03        |
| tblVehicleEF | HHD | 0.08        | 0.08        |
| tblVehicleEF | HHD | 6.54        | 6.56        |
| tblVehicleEF | HHD | 0.51        | 0.50        |
| tblVehicleEF | HHD | 7.7910e-003 | 7.9970e-003 |
| tblVehicleEF | HHD | 1,066.26    | 1,087.01    |
| tblVehicleEF | HHD | 1,383.24    | 1,411.94    |
| tblVehicleEF | HHD | 0.08        | 0.09        |
| tblVehicleEF | HHD | 0.17        | 0.17        |
| tblVehicleEF | HHD | 0.22        | 0.22        |

ARE Science Village - San Diego County, Summer

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

|              |     |             |             |
|--------------|-----|-------------|-------------|
| tblVehicleEF | HHD | 4.0000e-006 | 5.0000e-006 |
| tblVehicleEF | HHD | 5.40        | 5.45        |
| tblVehicleEF | HHD | 2.50        | 2.54        |
| tblVehicleEF | HHD | 2.38        | 2.38        |
| tblVehicleEF | HHD | 2.5110e-003 | 2.6240e-003 |
| tblVehicleEF | HHD | 0.06        | 0.06        |
| tblVehicleEF | HHD | 0.04        | 0.04        |
| tblVehicleEF | HHD | 0.02        | 0.03        |
| tblVehicleEF | HHD | 2.4020e-003 | 2.5100e-003 |
| tblVehicleEF | HHD | 0.03        | 0.03        |
| tblVehicleEF | HHD | 8.8700e-003 | 8.8690e-003 |
| tblVehicleEF | HHD | 0.02        | 0.02        |
| tblVehicleEF | HHD | 5.0000e-006 | 6.0000e-006 |
| tblVehicleEF | HHD | 1.7100e-004 | 2.0000e-004 |
| tblVehicleEF | HHD | 0.47        | 0.47        |
| tblVehicleEF | HHD | 5.0000e-006 | 6.0000e-006 |
| tblVehicleEF | HHD | 0.03        | 0.03        |
| tblVehicleEF | HHD | 6.9000e-005 | 8.0000e-005 |
| tblVehicleEF | HHD | 9.8520e-003 | 0.01        |
| tblVehicleEF | HHD | 0.01        | 0.01        |
| tblVehicleEF | HHD | 5.0000e-006 | 6.0000e-006 |
| tblVehicleEF | HHD | 1.7100e-004 | 2.0000e-004 |
| tblVehicleEF | HHD | 0.54        | 0.55        |
| tblVehicleEF | HHD | 5.0000e-006 | 6.0000e-006 |
| tblVehicleEF | HHD | 0.11        | 0.11        |
| tblVehicleEF | HHD | 6.9000e-005 | 8.0000e-005 |
| tblVehicleEF | HHD | 0.03        | 0.03        |
| tblVehicleEF | HHD | 0.08        | 0.08        |
| tblVehicleEF | HHD | 0.00        | 1.0000e-006 |

ARE Science Village - San Diego County, Summer

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

|              |     |             |             |
|--------------|-----|-------------|-------------|
| tblVehicleEF | HHD | 6.77        | 6.78        |
| tblVehicleEF | HHD | 0.51        | 0.49        |
| tblVehicleEF | HHD | 8.5100e-003 | 8.7350e-003 |
| tblVehicleEF | HHD | 1,095.31    | 1,116.20    |
| tblVehicleEF | HHD | 1,383.23    | 1,411.93    |
| tblVehicleEF | HHD | 0.08        | 0.09        |
| tblVehicleEF | HHD | 0.17        | 0.18        |
| tblVehicleEF | HHD | 0.22        | 0.22        |
| tblVehicleEF | HHD | 4.0000e-006 | 5.0000e-006 |
| tblVehicleEF | HHD | 5.99        | 6.04        |
| tblVehicleEF | HHD | 2.59        | 2.63        |
| tblVehicleEF | HHD | 2.38        | 2.38        |
| tblVehicleEF | HHD | 3.3780e-003 | 3.5400e-003 |
| tblVehicleEF | HHD | 0.06        | 0.06        |
| tblVehicleEF | HHD | 0.04        | 0.04        |
| tblVehicleEF | HHD | 0.02        | 0.03        |
| tblVehicleEF | HHD | 3.2320e-003 | 3.3870e-003 |
| tblVehicleEF | HHD | 0.03        | 0.03        |
| tblVehicleEF | HHD | 8.8700e-003 | 8.8690e-003 |
| tblVehicleEF | HHD | 0.02        | 0.02        |
| tblVehicleEF | HHD | 1.8700e-004 | 2.2100e-004 |
| tblVehicleEF | HHD | 0.41        | 0.41        |
| tblVehicleEF | HHD | 0.03        | 0.03        |
| tblVehicleEF | HHD | 7.7000e-005 | 8.9000e-005 |
| tblVehicleEF | HHD | 0.01        | 0.01        |
| tblVehicleEF | HHD | 0.01        | 0.01        |
| tblVehicleEF | HHD | 1.8700e-004 | 2.2100e-004 |
| tblVehicleEF | HHD | 0.47        | 0.48        |
| tblVehicleEF | HHD | 0.11        | 0.11        |

ARE Science Village - San Diego County, Summer

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

|              |     |             |             |
|--------------|-----|-------------|-------------|
| tblVehicleEF | HHD | 7.7000e-005 | 8.9000e-005 |
| tblVehicleEF | LDA | 1.6100e-003 | 1.8040e-003 |
| tblVehicleEF | LDA | 0.04        | 0.04        |
| tblVehicleEF | LDA | 0.48        | 0.50        |
| tblVehicleEF | LDA | 1.92        | 2.00        |
| tblVehicleEF | LDA | 243.80      | 249.94      |
| tblVehicleEF | LDA | 49.74       | 50.91       |
| tblVehicleEF | LDA | 3.7570e-003 | 3.9640e-003 |
| tblVehicleEF | LDA | 0.02        | 0.02        |
| tblVehicleEF | LDA | 0.03        | 0.03        |
| tblVehicleEF | LDA | 0.15        | 0.16        |
| tblVehicleEF | LDA | 1.3910e-003 | 1.4500e-003 |
| tblVehicleEF | LDA | 1.6660e-003 | 1.7190e-003 |
| tblVehicleEF | LDA | 1.2810e-003 | 1.3350e-003 |
| tblVehicleEF | LDA | 1.5320e-003 | 1.5810e-003 |
| tblVehicleEF | LDA | 0.03        | 0.03        |
| tblVehicleEF | LDA | 0.08        | 0.08        |
| tblVehicleEF | LDA | 0.04        | 0.04        |
| tblVehicleEF | LDA | 5.7940e-003 | 6.6080e-003 |
| tblVehicleEF | LDA | 0.02        | 0.02        |
| tblVehicleEF | LDA | 0.17        | 0.19        |
| tblVehicleEF | LDA | 2.3400e-003 | 2.4230e-003 |
| tblVehicleEF | LDA | 4.7700e-004 | 4.9400e-004 |
| tblVehicleEF | LDA | 0.03        | 0.03        |
| tblVehicleEF | LDA | 0.08        | 0.08        |
| tblVehicleEF | LDA | 0.04        | 0.04        |
| tblVehicleEF | LDA | 8.4120e-003 | 9.5960e-003 |
| tblVehicleEF | LDA | 0.02        | 0.02        |
| tblVehicleEF | LDA | 0.19        | 0.20        |



ARE Science Village - San Diego County, Summer

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

|              |     |             |             |
|--------------|-----|-------------|-------------|
| tblVehicleEF | LDA | 1.7530e-003 | 1.9650e-003 |
| tblVehicleEF | LDA | 0.03        | 0.04        |
| tblVehicleEF | LDA | 0.53        | 0.56        |
| tblVehicleEF | LDA | 1.59        | 1.65        |
| tblVehicleEF | LDA | 257.31      | 263.81      |
| tblVehicleEF | LDA | 49.13       | 50.27       |
| tblVehicleEF | LDA | 3.5390e-003 | 3.7330e-003 |
| tblVehicleEF | LDA | 0.02        | 0.02        |
| tblVehicleEF | LDA | 0.02        | 0.03        |
| tblVehicleEF | LDA | 0.14        | 0.15        |
| tblVehicleEF | LDA | 1.3910e-003 | 1.4500e-003 |
| tblVehicleEF | LDA | 1.6660e-003 | 1.7190e-003 |
| tblVehicleEF | LDA | 1.2810e-003 | 1.3350e-003 |
| tblVehicleEF | LDA | 1.5320e-003 | 1.5810e-003 |
| tblVehicleEF | LDA | 0.05        | 0.05        |
| tblVehicleEF | LDA | 0.08        | 0.09        |
| tblVehicleEF | LDA | 0.06        | 0.07        |
| tblVehicleEF | LDA | 6.2320e-003 | 7.1080e-003 |
| tblVehicleEF | LDA | 0.02        | 0.02        |
| tblVehicleEF | LDA | 0.15        | 0.16        |
| tblVehicleEF | LDA | 2.4700e-003 | 2.5570e-003 |
| tblVehicleEF | LDA | 4.7200e-004 | 4.8700e-004 |
| tblVehicleEF | LDA | 0.05        | 0.05        |
| tblVehicleEF | LDA | 0.08        | 0.09        |
| tblVehicleEF | LDA | 0.06        | 0.07        |
| tblVehicleEF | LDA | 9.0510e-003 | 0.01        |
| tblVehicleEF | LDA | 0.02        | 0.02        |
| tblVehicleEF | LDA | 0.16        | 0.18        |
| tblVehicleEF | LDA | 1.5750e-003 | 1.7660e-003 |

ARE Science Village - San Diego County, Summer

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | LDA  | 0.04        | 0.04        |
| tblVehicleEF | LDA  | 0.47        | 0.49        |
| tblVehicleEF | LDA  | 2.06        | 2.14        |
| tblVehicleEF | LDA  | 241.36      | 247.44      |
| tblVehicleEF | LDA  | 50.00       | 51.18       |
| tblVehicleEF | LDA  | 3.7810e-003 | 3.9890e-003 |
| tblVehicleEF | LDA  | 0.02        | 0.02        |
| tblVehicleEF | LDA  | 0.03        | 0.03        |
| tblVehicleEF | LDA  | 0.16        | 0.17        |
| tblVehicleEF | LDA  | 1.3910e-003 | 1.4500e-003 |
| tblVehicleEF | LDA  | 1.6660e-003 | 1.7190e-003 |
| tblVehicleEF | LDA  | 1.2810e-003 | 1.3350e-003 |
| tblVehicleEF | LDA  | 1.5320e-003 | 1.5810e-003 |
| tblVehicleEF | LDA  | 0.03        | 0.03        |
| tblVehicleEF | LDA  | 0.09        | 0.09        |
| tblVehicleEF | LDA  | 0.03        | 0.04        |
| tblVehicleEF | LDA  | 5.6970e-003 | 6.4990e-003 |
| tblVehicleEF | LDA  | 0.03        | 0.03        |
| tblVehicleEF | LDA  | 0.18        | 0.19        |
| tblVehicleEF | LDA  | 2.3170e-003 | 2.3980e-003 |
| tblVehicleEF | LDA  | 4.8000e-004 | 4.9600e-004 |
| tblVehicleEF | LDA  | 0.03        | 0.03        |
| tblVehicleEF | LDA  | 0.09        | 0.09        |
| tblVehicleEF | LDA  | 0.03        | 0.04        |
| tblVehicleEF | LDA  | 8.2710e-003 | 9.4360e-003 |
| tblVehicleEF | LDA  | 0.03        | 0.03        |
| tblVehicleEF | LDA  | 0.20        | 0.21        |
| tblVehicleEF | LDT1 | 4.5160e-003 | 5.1270e-003 |
| tblVehicleEF | LDT1 | 0.06        | 0.07        |

ARE Science Village - San Diego County, Summer

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | LDT1 | 0.93        | 1.02        |
| tblVehicleEF | LDT1 | 2.16        | 2.25        |
| tblVehicleEF | LDT1 | 299.42      | 305.63      |
| tblVehicleEF | LDT1 | 62.01       | 63.24       |
| tblVehicleEF | LDT1 | 6.4980e-003 | 7.1120e-003 |
| tblVehicleEF | LDT1 | 0.03        | 0.03        |
| tblVehicleEF | LDT1 | 0.08        | 0.09        |
| tblVehicleEF | LDT1 | 0.23        | 0.25        |
| tblVehicleEF | LDT1 | 1.8450e-003 | 1.9640e-003 |
| tblVehicleEF | LDT1 | 2.1990e-003 | 2.3220e-003 |
| tblVehicleEF | LDT1 | 1.6980e-003 | 1.8080e-003 |
| tblVehicleEF | LDT1 | 2.0220e-003 | 2.1350e-003 |
| tblVehicleEF | LDT1 | 0.09        | 0.10        |
| tblVehicleEF | LDT1 | 0.19        | 0.20        |
| tblVehicleEF | LDT1 | 0.10        | 0.11        |
| tblVehicleEF | LDT1 | 0.02        | 0.02        |
| tblVehicleEF | LDT1 | 0.09        | 0.09        |
| tblVehicleEF | LDT1 | 0.30        | 0.33        |
| tblVehicleEF | LDT1 | 2.8740e-003 | 2.9630e-003 |
| tblVehicleEF | LDT1 | 5.9500e-004 | 6.1300e-004 |
| tblVehicleEF | LDT1 | 0.09        | 0.10        |
| tblVehicleEF | LDT1 | 0.19        | 0.20        |
| tblVehicleEF | LDT1 | 0.10        | 0.11        |
| tblVehicleEF | LDT1 | 0.03        | 0.03        |
| tblVehicleEF | LDT1 | 0.09        | 0.09        |
| tblVehicleEF | LDT1 | 0.33        | 0.36        |
| tblVehicleEF | LDT1 | 4.8740e-003 | 5.5300e-003 |
| tblVehicleEF | LDT1 | 0.05        | 0.06        |
| tblVehicleEF | LDT1 | 1.03        | 1.13        |

ARE Science Village - San Diego County, Summer

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | LDT1 | 1.78        | 1.85        |
| tblVehicleEF | LDT1 | 313.69      | 320.24      |
| tblVehicleEF | LDT1 | 61.26       | 62.45       |
| tblVehicleEF | LDT1 | 6.0610e-003 | 6.6330e-003 |
| tblVehicleEF | LDT1 | 0.02        | 0.03        |
| tblVehicleEF | LDT1 | 0.07        | 0.08        |
| tblVehicleEF | LDT1 | 0.21        | 0.22        |
| tblVehicleEF | LDT1 | 1.8450e-003 | 1.9640e-003 |
| tblVehicleEF | LDT1 | 2.1990e-003 | 2.3220e-003 |
| tblVehicleEF | LDT1 | 1.6980e-003 | 1.8080e-003 |
| tblVehicleEF | LDT1 | 2.0220e-003 | 2.1350e-003 |
| tblVehicleEF | LDT1 | 0.14        | 0.15        |
| tblVehicleEF | LDT1 | 0.20        | 0.21        |
| tblVehicleEF | LDT1 | 0.17        | 0.18        |
| tblVehicleEF | LDT1 | 0.02        | 0.02        |
| tblVehicleEF | LDT1 | 0.08        | 0.08        |
| tblVehicleEF | LDT1 | 0.26        | 0.29        |
| tblVehicleEF | LDT1 | 3.0110e-003 | 3.1050e-003 |
| tblVehicleEF | LDT1 | 5.8800e-004 | 6.0500e-004 |
| tblVehicleEF | LDT1 | 0.14        | 0.15        |
| tblVehicleEF | LDT1 | 0.20        | 0.21        |
| tblVehicleEF | LDT1 | 0.17        | 0.18        |
| tblVehicleEF | LDT1 | 0.03        | 0.03        |
| tblVehicleEF | LDT1 | 0.08        | 0.08        |
| tblVehicleEF | LDT1 | 0.28        | 0.31        |
| tblVehicleEF | LDT1 | 4.4300e-003 | 5.0310e-003 |
| tblVehicleEF | LDT1 | 0.06        | 0.07        |
| tblVehicleEF | LDT1 | 0.91        | 1.00        |
| tblVehicleEF | LDT1 | 2.32        | 2.42        |

ARE Science Village - San Diego County, Summer

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | LDT1 | 296.83      | 302.99      |
| tblVehicleEF | LDT1 | 62.32       | 63.57       |
| tblVehicleEF | LDT1 | 6.5530e-003 | 7.1730e-003 |
| tblVehicleEF | LDT1 | 0.03        | 0.03        |
| tblVehicleEF | LDT1 | 0.08        | 0.09        |
| tblVehicleEF | LDT1 | 0.24        | 0.25        |
| tblVehicleEF | LDT1 | 1.8450e-003 | 1.9640e-003 |
| tblVehicleEF | LDT1 | 2.1990e-003 | 2.3220e-003 |
| tblVehicleEF | LDT1 | 1.6980e-003 | 1.8080e-003 |
| tblVehicleEF | LDT1 | 2.0220e-003 | 2.1350e-003 |
| tblVehicleEF | LDT1 | 0.08        | 0.08        |
| tblVehicleEF | LDT1 | 0.21        | 0.22        |
| tblVehicleEF | LDT1 | 0.09        | 0.09        |
| tblVehicleEF | LDT1 | 0.02        | 0.02        |
| tblVehicleEF | LDT1 | 0.11        | 0.11        |
| tblVehicleEF | LDT1 | 0.32        | 0.35        |
| tblVehicleEF | LDT1 | 2.8490e-003 | 2.9370e-003 |
| tblVehicleEF | LDT1 | 5.9800e-004 | 6.1600e-004 |
| tblVehicleEF | LDT1 | 0.08        | 0.08        |
| tblVehicleEF | LDT1 | 0.21        | 0.22        |
| tblVehicleEF | LDT1 | 0.09        | 0.09        |
| tblVehicleEF | LDT1 | 0.03        | 0.03        |
| tblVehicleEF | LDT1 | 0.11        | 0.11        |
| tblVehicleEF | LDT1 | 0.35        | 0.38        |
| tblVehicleEF | LDT2 | 2.9460e-003 | 3.2480e-003 |
| tblVehicleEF | LDT2 | 0.06        | 0.06        |
| tblVehicleEF | LDT2 | 0.69        | 0.73        |
| tblVehicleEF | LDT2 | 2.49        | 2.58        |
| tblVehicleEF | LDT2 | 313.49      | 322.57      |

ARE Science Village - San Diego County, Summer

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | LDT2 | 65.05       | 66.90       |
| tblVehicleEF | LDT2 | 5.3950e-003 | 5.7950e-003 |
| tblVehicleEF | LDT2 | 0.03        | 0.03        |
| tblVehicleEF | LDT2 | 0.05        | 0.06        |
| tblVehicleEF | LDT2 | 0.23        | 0.25        |
| tblVehicleEF | LDT2 | 1.4280e-003 | 1.4650e-003 |
| tblVehicleEF | LDT2 | 1.6540e-003 | 1.6870e-003 |
| tblVehicleEF | LDT2 | 1.3150e-003 | 1.3480e-003 |
| tblVehicleEF | LDT2 | 1.5210e-003 | 1.5510e-003 |
| tblVehicleEF | LDT2 | 0.06        | 0.06        |
| tblVehicleEF | LDT2 | 0.12        | 0.12        |
| tblVehicleEF | LDT2 | 0.08        | 0.08        |
| tblVehicleEF | LDT2 | 0.01        | 0.01        |
| tblVehicleEF | LDT2 | 0.05        | 0.05        |
| tblVehicleEF | LDT2 | 0.26        | 0.28        |
| tblVehicleEF | LDT2 | 3.0090e-003 | 3.1270e-003 |
| tblVehicleEF | LDT2 | 6.2400e-004 | 6.4900e-004 |
| tblVehicleEF | LDT2 | 0.06        | 0.06        |
| tblVehicleEF | LDT2 | 0.12        | 0.12        |
| tblVehicleEF | LDT2 | 0.08        | 0.08        |
| tblVehicleEF | LDT2 | 0.02        | 0.02        |
| tblVehicleEF | LDT2 | 0.05        | 0.05        |
| tblVehicleEF | LDT2 | 0.28        | 0.30        |
| tblVehicleEF | LDT2 | 3.1950e-003 | 3.5210e-003 |
| tblVehicleEF | LDT2 | 0.05        | 0.05        |
| tblVehicleEF | LDT2 | 0.77        | 0.81        |
| tblVehicleEF | LDT2 | 2.06        | 2.13        |
| tblVehicleEF | LDT2 | 327.02      | 336.54      |
| tblVehicleEF | LDT2 | 64.23       | 66.05       |

ARE Science Village - San Diego County, Summer

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | LDT2 | 5.0620e-003 | 5.4350e-003 |
| tblVehicleEF | LDT2 | 0.03        | 0.03        |
| tblVehicleEF | LDT2 | 0.05        | 0.06        |
| tblVehicleEF | LDT2 | 0.21        | 0.23        |
| tblVehicleEF | LDT2 | 1.4280e-003 | 1.4650e-003 |
| tblVehicleEF | LDT2 | 1.6540e-003 | 1.6870e-003 |
| tblVehicleEF | LDT2 | 1.3150e-003 | 1.3480e-003 |
| tblVehicleEF | LDT2 | 1.5210e-003 | 1.5510e-003 |
| tblVehicleEF | LDT2 | 0.09        | 0.09        |
| tblVehicleEF | LDT2 | 0.12        | 0.13        |
| tblVehicleEF | LDT2 | 0.12        | 0.13        |
| tblVehicleEF | LDT2 | 0.01        | 0.01        |
| tblVehicleEF | LDT2 | 0.05        | 0.05        |
| tblVehicleEF | LDT2 | 0.22        | 0.24        |
| tblVehicleEF | LDT2 | 3.1390e-003 | 3.2620e-003 |
| tblVehicleEF | LDT2 | 6.1700e-004 | 6.4000e-004 |
| tblVehicleEF | LDT2 | 0.09        | 0.09        |
| tblVehicleEF | LDT2 | 0.12        | 0.13        |
| tblVehicleEF | LDT2 | 0.12        | 0.13        |
| tblVehicleEF | LDT2 | 0.02        | 0.02        |
| tblVehicleEF | LDT2 | 0.05        | 0.05        |
| tblVehicleEF | LDT2 | 0.24        | 0.26        |
| tblVehicleEF | LDT2 | 2.8860e-003 | 3.1820e-003 |
| tblVehicleEF | LDT2 | 0.06        | 0.06        |
| tblVehicleEF | LDT2 | 0.67        | 0.71        |
| tblVehicleEF | LDT2 | 2.67        | 2.77        |
| tblVehicleEF | LDT2 | 311.04      | 320.04      |
| tblVehicleEF | LDT2 | 65.40       | 67.25       |
| tblVehicleEF | LDT2 | 5.4340e-003 | 5.8380e-003 |

ARE Science Village - San Diego County, Summer

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | LDT2 | 0.03        | 0.03        |
| tblVehicleEF | LDT2 | 0.06        | 0.06        |
| tblVehicleEF | LDT2 | 0.24        | 0.26        |
| tblVehicleEF | LDT2 | 1.4280e-003 | 1.4650e-003 |
| tblVehicleEF | LDT2 | 1.6540e-003 | 1.6870e-003 |
| tblVehicleEF | LDT2 | 1.3150e-003 | 1.3480e-003 |
| tblVehicleEF | LDT2 | 1.5210e-003 | 1.5510e-003 |
| tblVehicleEF | LDT2 | 0.04        | 0.05        |
| tblVehicleEF | LDT2 | 0.13        | 0.13        |
| tblVehicleEF | LDT2 | 0.07        | 0.07        |
| tblVehicleEF | LDT2 | 0.01        | 0.01        |
| tblVehicleEF | LDT2 | 0.07        | 0.07        |
| tblVehicleEF | LDT2 | 0.27        | 0.29        |
| tblVehicleEF | LDT2 | 2.9850e-003 | 3.1020e-003 |
| tblVehicleEF | LDT2 | 6.2800e-004 | 6.5200e-004 |
| tblVehicleEF | LDT2 | 0.04        | 0.05        |
| tblVehicleEF | LDT2 | 0.13        | 0.13        |
| tblVehicleEF | LDT2 | 0.07        | 0.07        |
| tblVehicleEF | LDT2 | 0.02        | 0.02        |
| tblVehicleEF | LDT2 | 0.07        | 0.07        |
| tblVehicleEF | LDT2 | 0.29        | 0.32        |
| tblVehicleEF | LHD1 | 4.3840e-003 | 4.5180e-003 |
| tblVehicleEF | LHD1 | 7.7190e-003 | 8.3670e-003 |
| tblVehicleEF | LHD1 | 0.01        | 0.01        |
| tblVehicleEF | LHD1 | 0.17        | 0.17        |
| tblVehicleEF | LHD1 | 0.72        | 0.77        |
| tblVehicleEF | LHD1 | 0.90        | 0.93        |
| tblVehicleEF | LHD1 | 9.03        | 9.13        |
| tblVehicleEF | LHD1 | 744.83      | 758.47      |



ARE Science Village - San Diego County, Summer

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | LHD1 | 10.05       | 10.27       |
| tblVehicleEF | LHD1 | 8.5400e-004 | 8.5600e-004 |
| tblVehicleEF | LHD1 | 0.05        | 0.05        |
| tblVehicleEF | LHD1 | 0.02        | 0.02        |
| tblVehicleEF | LHD1 | 0.07        | 0.07        |
| tblVehicleEF | LHD1 | 0.84        | 0.94        |
| tblVehicleEF | LHD1 | 0.26        | 0.27        |
| tblVehicleEF | LHD1 | 9.9400e-004 | 9.8200e-004 |
| tblVehicleEF | LHD1 | 0.01        | 0.01        |
| tblVehicleEF | LHD1 | 0.01        | 0.01        |
| tblVehicleEF | LHD1 | 2.1700e-004 | 2.2600e-004 |
| tblVehicleEF | LHD1 | 9.5100e-004 | 9.3900e-004 |
| tblVehicleEF | LHD1 | 2.5050e-003 | 2.5000e-003 |
| tblVehicleEF | LHD1 | 0.01        | 0.01        |
| tblVehicleEF | LHD1 | 2.0000e-004 | 2.0700e-004 |
| tblVehicleEF | LHD1 | 1.6140e-003 | 1.7130e-003 |
| tblVehicleEF | LHD1 | 0.06        | 0.07        |
| tblVehicleEF | LHD1 | 0.02        | 0.02        |
| tblVehicleEF | LHD1 | 1.2630e-003 | 1.3230e-003 |
| tblVehicleEF | LHD1 | 0.10        | 0.10        |
| tblVehicleEF | LHD1 | 0.17        | 0.18        |
| tblVehicleEF | LHD1 | 0.06        | 0.06        |
| tblVehicleEF | LHD1 | 8.7000e-005 | 8.8000e-005 |
| tblVehicleEF | LHD1 | 7.2530e-003 | 7.3870e-003 |
| tblVehicleEF | LHD1 | 9.9000e-005 | 1.0200e-004 |
| tblVehicleEF | LHD1 | 1.6140e-003 | 1.7130e-003 |
| tblVehicleEF | LHD1 | 0.06        | 0.07        |
| tblVehicleEF | LHD1 | 0.03        | 0.03        |
| tblVehicleEF | LHD1 | 1.2630e-003 | 1.3230e-003 |

ARE Science Village - San Diego County, Summer

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | LHD1 | 0.12        | 0.12        |
| tblVehicleEF | LHD1 | 0.17        | 0.18        |
| tblVehicleEF | LHD1 | 0.06        | 0.07        |
| tblVehicleEF | LHD1 | 4.3930e-003 | 4.5270e-003 |
| tblVehicleEF | LHD1 | 7.8320e-003 | 8.5000e-003 |
| tblVehicleEF | LHD1 | 0.01        | 0.01        |
| tblVehicleEF | LHD1 | 0.17        | 0.17        |
| tblVehicleEF | LHD1 | 0.73        | 0.79        |
| tblVehicleEF | LHD1 | 0.85        | 0.88        |
| tblVehicleEF | LHD1 | 9.03        | 9.13        |
| tblVehicleEF | LHD1 | 744.85      | 758.49      |
| tblVehicleEF | LHD1 | 9.97        | 10.18       |
| tblVehicleEF | LHD1 | 8.5600e-004 | 8.5800e-004 |
| tblVehicleEF | LHD1 | 0.05        | 0.05        |
| tblVehicleEF | LHD1 | 0.02        | 0.02        |
| tblVehicleEF | LHD1 | 0.07        | 0.07        |
| tblVehicleEF | LHD1 | 0.80        | 0.90        |
| tblVehicleEF | LHD1 | 0.25        | 0.26        |
| tblVehicleEF | LHD1 | 9.9400e-004 | 9.8200e-004 |
| tblVehicleEF | LHD1 | 0.01        | 0.01        |
| tblVehicleEF | LHD1 | 0.01        | 0.01        |
| tblVehicleEF | LHD1 | 2.1700e-004 | 2.2600e-004 |
| tblVehicleEF | LHD1 | 9.5100e-004 | 9.3900e-004 |
| tblVehicleEF | LHD1 | 2.5050e-003 | 2.5000e-003 |
| tblVehicleEF | LHD1 | 0.01        | 0.01        |
| tblVehicleEF | LHD1 | 2.0000e-004 | 2.0700e-004 |
| tblVehicleEF | LHD1 | 2.3300e-003 | 2.4740e-003 |
| tblVehicleEF | LHD1 | 0.07        | 0.07        |
| tblVehicleEF | LHD1 | 0.02        | 0.02        |

ARE Science Village - San Diego County, Summer

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | LHD1 | 2.1100e-003 | 2.2150e-003 |
| tblVehicleEF | LHD1 | 0.10        | 0.10        |
| tblVehicleEF | LHD1 | 0.17        | 0.17        |
| tblVehicleEF | LHD1 | 0.06        | 0.06        |
| tblVehicleEF | LHD1 | 8.7000e-005 | 8.8000e-005 |
| tblVehicleEF | LHD1 | 7.2530e-003 | 7.3870e-003 |
| tblVehicleEF | LHD1 | 9.9000e-005 | 1.0100e-004 |
| tblVehicleEF | LHD1 | 2.3300e-003 | 2.4740e-003 |
| tblVehicleEF | LHD1 | 0.07        | 0.07        |
| tblVehicleEF | LHD1 | 0.03        | 0.03        |
| tblVehicleEF | LHD1 | 2.1100e-003 | 2.2150e-003 |
| tblVehicleEF | LHD1 | 0.12        | 0.12        |
| tblVehicleEF | LHD1 | 0.17        | 0.17        |
| tblVehicleEF | LHD1 | 0.06        | 0.07        |
| tblVehicleEF | LHD1 | 4.3800e-003 | 4.5140e-003 |
| tblVehicleEF | LHD1 | 7.6700e-003 | 8.3090e-003 |
| tblVehicleEF | LHD1 | 0.01        | 0.01        |
| tblVehicleEF | LHD1 | 0.17        | 0.17        |
| tblVehicleEF | LHD1 | 0.71        | 0.77        |
| tblVehicleEF | LHD1 | 0.92        | 0.95        |
| tblVehicleEF | LHD1 | 9.03        | 9.13        |
| tblVehicleEF | LHD1 | 744.83      | 758.46      |
| tblVehicleEF | LHD1 | 10.09       | 10.31       |
| tblVehicleEF | LHD1 | 8.5300e-004 | 8.5500e-004 |
| tblVehicleEF | LHD1 | 0.05        | 0.05        |
| tblVehicleEF | LHD1 | 0.02        | 0.02        |
| tblVehicleEF | LHD1 | 0.07        | 0.07        |
| tblVehicleEF | LHD1 | 0.84        | 0.94        |
| tblVehicleEF | LHD1 | 0.26        | 0.28        |

ARE Science Village - San Diego County, Summer

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | LHD1 | 9.9400e-004 | 9.8200e-004 |
| tblVehicleEF | LHD1 | 0.01        | 0.01        |
| tblVehicleEF | LHD1 | 0.01        | 0.01        |
| tblVehicleEF | LHD1 | 2.1700e-004 | 2.2600e-004 |
| tblVehicleEF | LHD1 | 9.5100e-004 | 9.3900e-004 |
| tblVehicleEF | LHD1 | 2.5050e-003 | 2.5000e-003 |
| tblVehicleEF | LHD1 | 0.01        | 0.01        |
| tblVehicleEF | LHD1 | 2.0000e-004 | 2.0700e-004 |
| tblVehicleEF | LHD1 | 1.4760e-003 | 1.5750e-003 |
| tblVehicleEF | LHD1 | 0.08        | 0.08        |
| tblVehicleEF | LHD1 | 0.02        | 0.02        |
| tblVehicleEF | LHD1 | 1.1170e-003 | 1.1700e-003 |
| tblVehicleEF | LHD1 | 0.10        | 0.10        |
| tblVehicleEF | LHD1 | 0.19        | 0.20        |
| tblVehicleEF | LHD1 | 0.06        | 0.06        |
| tblVehicleEF | LHD1 | 8.7000e-005 | 8.8000e-005 |
| tblVehicleEF | LHD1 | 7.2530e-003 | 7.3870e-003 |
| tblVehicleEF | LHD1 | 1.0000e-004 | 1.0200e-004 |
| tblVehicleEF | LHD1 | 1.4760e-003 | 1.5750e-003 |
| tblVehicleEF | LHD1 | 0.08        | 0.08        |
| tblVehicleEF | LHD1 | 0.03        | 0.03        |
| tblVehicleEF | LHD1 | 1.1170e-003 | 1.1700e-003 |
| tblVehicleEF | LHD1 | 0.12        | 0.12        |
| tblVehicleEF | LHD1 | 0.19        | 0.20        |
| tblVehicleEF | LHD1 | 0.07        | 0.07        |
| tblVehicleEF | LHD2 | 2.9640e-003 | 3.0610e-003 |
| tblVehicleEF | LHD2 | 6.4040e-003 | 6.7000e-003 |
| tblVehicleEF | LHD2 | 7.0010e-003 | 7.5470e-003 |
| tblVehicleEF | LHD2 | 0.14        | 0.14        |

ARE Science Village - San Diego County, Summer

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | LHD2 | 0.59        | 0.61        |
| tblVehicleEF | LHD2 | 0.54        | 0.56        |
| tblVehicleEF | LHD2 | 13.96       | 14.10       |
| tblVehicleEF | LHD2 | 744.92      | 758.13      |
| tblVehicleEF | LHD2 | 7.25        | 7.44        |
| tblVehicleEF | LHD2 | 1.7690e-003 | 1.7790e-003 |
| tblVehicleEF | LHD2 | 0.07        | 0.07        |
| tblVehicleEF | LHD2 | 0.01        | 0.01        |
| tblVehicleEF | LHD2 | 0.10        | 0.10        |
| tblVehicleEF | LHD2 | 0.82        | 0.92        |
| tblVehicleEF | LHD2 | 0.16        | 0.17        |
| tblVehicleEF | LHD2 | 1.4400e-003 | 1.4270e-003 |
| tblVehicleEF | LHD2 | 0.01        | 0.01        |
| tblVehicleEF | LHD2 | 0.02        | 0.02        |
| tblVehicleEF | LHD2 | 1.1400e-004 | 1.1700e-004 |
| tblVehicleEF | LHD2 | 1.3770e-003 | 1.3650e-003 |
| tblVehicleEF | LHD2 | 2.6990e-003 | 2.6960e-003 |
| tblVehicleEF | LHD2 | 0.02        | 0.02        |
| tblVehicleEF | LHD2 | 1.0400e-004 | 1.0800e-004 |
| tblVehicleEF | LHD2 | 8.0000e-004 | 8.5000e-004 |
| tblVehicleEF | LHD2 | 0.03        | 0.04        |
| tblVehicleEF | LHD2 | 0.02        | 0.02        |
| tblVehicleEF | LHD2 | 6.6600e-004 | 6.9500e-004 |
| tblVehicleEF | LHD2 | 0.11        | 0.11        |
| tblVehicleEF | LHD2 | 0.07        | 0.08        |
| tblVehicleEF | LHD2 | 0.03        | 0.04        |
| tblVehicleEF | LHD2 | 1.3300e-004 | 1.3500e-004 |
| tblVehicleEF | LHD2 | 7.1890e-003 | 7.3180e-003 |
| tblVehicleEF | LHD2 | 7.2000e-005 | 7.4000e-005 |

ARE Science Village - San Diego County, Summer

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | LHD2 | 8.0000e-004 | 8.5000e-004 |
| tblVehicleEF | LHD2 | 0.03        | 0.04        |
| tblVehicleEF | LHD2 | 0.02        | 0.02        |
| tblVehicleEF | LHD2 | 6.6600e-004 | 6.9500e-004 |
| tblVehicleEF | LHD2 | 0.13        | 0.13        |
| tblVehicleEF | LHD2 | 0.07        | 0.08        |
| tblVehicleEF | LHD2 | 0.04        | 0.04        |
| tblVehicleEF | LHD2 | 2.9700e-003 | 3.0670e-003 |
| tblVehicleEF | LHD2 | 6.4490e-003 | 6.7500e-003 |
| tblVehicleEF | LHD2 | 6.7120e-003 | 7.2350e-003 |
| tblVehicleEF | LHD2 | 0.14        | 0.14        |
| tblVehicleEF | LHD2 | 0.59        | 0.62        |
| tblVehicleEF | LHD2 | 0.51        | 0.53        |
| tblVehicleEF | LHD2 | 13.96       | 14.10       |
| tblVehicleEF | LHD2 | 744.93      | 758.14      |
| tblVehicleEF | LHD2 | 7.20        | 7.38        |
| tblVehicleEF | LHD2 | 1.7700e-003 | 1.7810e-003 |
| tblVehicleEF | LHD2 | 0.07        | 0.07        |
| tblVehicleEF | LHD2 | 0.01        | 0.01        |
| tblVehicleEF | LHD2 | 0.10        | 0.10        |
| tblVehicleEF | LHD2 | 0.79        | 0.88        |
| tblVehicleEF | LHD2 | 0.16        | 0.16        |
| tblVehicleEF | LHD2 | 1.4400e-003 | 1.4270e-003 |
| tblVehicleEF | LHD2 | 0.01        | 0.01        |
| tblVehicleEF | LHD2 | 0.02        | 0.02        |
| tblVehicleEF | LHD2 | 1.1400e-004 | 1.1700e-004 |
| tblVehicleEF | LHD2 | 1.3770e-003 | 1.3650e-003 |
| tblVehicleEF | LHD2 | 2.6990e-003 | 2.6960e-003 |
| tblVehicleEF | LHD2 | 0.02        | 0.02        |

ARE Science Village - San Diego County, Summer

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | LHD2 | 1.0400e-004 | 1.0800e-004 |
| tblVehicleEF | LHD2 | 1.1590e-003 | 1.2310e-003 |
| tblVehicleEF | LHD2 | 0.03        | 0.04        |
| tblVehicleEF | LHD2 | 0.02        | 0.02        |
| tblVehicleEF | LHD2 | 1.1170e-003 | 1.1680e-003 |
| tblVehicleEF | LHD2 | 0.11        | 0.11        |
| tblVehicleEF | LHD2 | 0.07        | 0.08        |
| tblVehicleEF | LHD2 | 0.03        | 0.04        |
| tblVehicleEF | LHD2 | 1.3300e-004 | 1.3500e-004 |
| tblVehicleEF | LHD2 | 7.1890e-003 | 7.3180e-003 |
| tblVehicleEF | LHD2 | 7.1000e-005 | 7.3000e-005 |
| tblVehicleEF | LHD2 | 1.1590e-003 | 1.2310e-003 |
| tblVehicleEF | LHD2 | 0.03        | 0.04        |
| tblVehicleEF | LHD2 | 0.02        | 0.02        |
| tblVehicleEF | LHD2 | 1.1170e-003 | 1.1680e-003 |
| tblVehicleEF | LHD2 | 0.13        | 0.13        |
| tblVehicleEF | LHD2 | 0.07        | 0.08        |
| tblVehicleEF | LHD2 | 0.04        | 0.04        |
| tblVehicleEF | LHD2 | 2.9620e-003 | 3.0590e-003 |
| tblVehicleEF | LHD2 | 6.3850e-003 | 6.6780e-003 |
| tblVehicleEF | LHD2 | 7.1310e-003 | 7.6880e-003 |
| tblVehicleEF | LHD2 | 0.14        | 0.14        |
| tblVehicleEF | LHD2 | 0.59        | 0.61        |
| tblVehicleEF | LHD2 | 0.55        | 0.57        |
| tblVehicleEF | LHD2 | 13.96       | 14.10       |
| tblVehicleEF | LHD2 | 744.92      | 758.13      |
| tblVehicleEF | LHD2 | 7.27        | 7.46        |
| tblVehicleEF | LHD2 | 1.7680e-003 | 1.7790e-003 |
| tblVehicleEF | LHD2 | 0.07        | 0.07        |

ARE Science Village - San Diego County, Summer

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | LHD2 | 0.01        | 0.01        |
| tblVehicleEF | LHD2 | 0.10        | 0.10        |
| tblVehicleEF | LHD2 | 0.81        | 0.91        |
| tblVehicleEF | LHD2 | 0.17        | 0.18        |
| tblVehicleEF | LHD2 | 1.4400e-003 | 1.4270e-003 |
| tblVehicleEF | LHD2 | 0.01        | 0.01        |
| tblVehicleEF | LHD2 | 0.02        | 0.02        |
| tblVehicleEF | LHD2 | 1.1400e-004 | 1.1700e-004 |
| tblVehicleEF | LHD2 | 1.3770e-003 | 1.3650e-003 |
| tblVehicleEF | LHD2 | 2.6990e-003 | 2.6960e-003 |
| tblVehicleEF | LHD2 | 0.02        | 0.02        |
| tblVehicleEF | LHD2 | 1.0400e-004 | 1.0800e-004 |
| tblVehicleEF | LHD2 | 7.1400e-004 | 7.6400e-004 |
| tblVehicleEF | LHD2 | 0.04        | 0.04        |
| tblVehicleEF | LHD2 | 0.02        | 0.02        |
| tblVehicleEF | LHD2 | 5.8600e-004 | 6.1100e-004 |
| tblVehicleEF | LHD2 | 0.11        | 0.11        |
| tblVehicleEF | LHD2 | 0.08        | 0.09        |
| tblVehicleEF | LHD2 | 0.03        | 0.04        |
| tblVehicleEF | LHD2 | 1.3300e-004 | 1.3500e-004 |
| tblVehicleEF | LHD2 | 7.1890e-003 | 7.3180e-003 |
| tblVehicleEF | LHD2 | 7.2000e-005 | 7.4000e-005 |
| tblVehicleEF | LHD2 | 7.1400e-004 | 7.6400e-004 |
| tblVehicleEF | LHD2 | 0.04        | 0.04        |
| tblVehicleEF | LHD2 | 0.02        | 0.02        |
| tblVehicleEF | LHD2 | 5.8600e-004 | 6.1100e-004 |
| tblVehicleEF | LHD2 | 0.13        | 0.13        |
| tblVehicleEF | LHD2 | 0.08        | 0.09        |
| tblVehicleEF | LHD2 | 0.04        | 0.04        |



ARE Science Village - San Diego County, Summer

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

|              |     |             |             |
|--------------|-----|-------------|-------------|
| tblVehicleEF | MCY | 0.35        | 0.35        |
| tblVehicleEF | MCY | 0.24        | 0.24        |
| tblVehicleEF | MCY | 19.81       | 20.07       |
| tblVehicleEF | MCY | 8.66        | 8.64        |
| tblVehicleEF | MCY | 220.35      | 220.47      |
| tblVehicleEF | MCY | 59.87       | 60.11       |
| tblVehicleEF | MCY | 0.07        | 0.07        |
| tblVehicleEF | MCY | 0.02        | 0.02        |
| tblVehicleEF | MCY | 1.15        | 1.16        |
| tblVehicleEF | MCY | 0.27        | 0.27        |
| tblVehicleEF | MCY | 2.1740e-003 | 2.1320e-003 |
| tblVehicleEF | MCY | 2.8910e-003 | 2.8880e-003 |
| tblVehicleEF | MCY | 2.0310e-003 | 1.9920e-003 |
| tblVehicleEF | MCY | 2.7170e-003 | 2.7150e-003 |
| tblVehicleEF | MCY | 0.94        | 0.94        |
| tblVehicleEF | MCY | 0.74        | 0.74        |
| tblVehicleEF | MCY | 0.74        | 0.73        |
| tblVehicleEF | MCY | 2.40        | 2.41        |
| tblVehicleEF | MCY | 0.50        | 0.50        |
| tblVehicleEF | MCY | 1.84        | 1.85        |
| tblVehicleEF | MCY | 2.1810e-003 | 2.1820e-003 |
| tblVehicleEF | MCY | 5.9200e-004 | 5.9500e-004 |
| tblVehicleEF | MCY | 0.94        | 0.94        |
| tblVehicleEF | MCY | 0.74        | 0.74        |
| tblVehicleEF | MCY | 0.74        | 0.73        |
| tblVehicleEF | MCY | 2.98        | 2.99        |
| tblVehicleEF | MCY | 0.50        | 0.50        |
| tblVehicleEF | MCY | 2.00        | 2.01        |
| tblVehicleEF | MCY | 0.35        | 0.35        |

ARE Science Village - San Diego County, Summer

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

|              |     |             |             |
|--------------|-----|-------------|-------------|
| tblVehicleEF | MCY | 0.21        | 0.21        |
| tblVehicleEF | MCY | 18.90       | 19.13       |
| tblVehicleEF | MCY | 7.75        | 7.74        |
| tblVehicleEF | MCY | 218.65      | 218.71      |
| tblVehicleEF | MCY | 57.62       | 57.86       |
| tblVehicleEF | MCY | 0.06        | 0.06        |
| tblVehicleEF | MCY | 0.01        | 0.01        |
| tblVehicleEF | MCY | 1.04        | 1.04        |
| tblVehicleEF | MCY | 0.25        | 0.25        |
| tblVehicleEF | MCY | 2.1740e-003 | 2.1320e-003 |
| tblVehicleEF | MCY | 2.8910e-003 | 2.8880e-003 |
| tblVehicleEF | MCY | 2.0310e-003 | 1.9920e-003 |
| tblVehicleEF | MCY | 2.7170e-003 | 2.7150e-003 |
| tblVehicleEF | MCY | 1.52        | 1.51        |
| tblVehicleEF | MCY | 0.84        | 0.84        |
| tblVehicleEF | MCY | 1.42        | 1.42        |
| tblVehicleEF | MCY | 2.33        | 2.34        |
| tblVehicleEF | MCY | 0.46        | 0.46        |
| tblVehicleEF | MCY | 1.60        | 1.60        |
| tblVehicleEF | MCY | 5.7000e-004 | 5.7300e-004 |
| tblVehicleEF | MCY | 1.52        | 1.51        |
| tblVehicleEF | MCY | 0.84        | 0.84        |
| tblVehicleEF | MCY | 1.42        | 1.42        |
| tblVehicleEF | MCY | 2.89        | 2.90        |
| tblVehicleEF | MCY | 0.46        | 0.46        |
| tblVehicleEF | MCY | 1.74        | 1.74        |
| tblVehicleEF | MCY | 0.36        | 0.36        |
| tblVehicleEF | MCY | 0.25        | 0.26        |
| tblVehicleEF | MCY | 20.45       | 20.73       |

ARE Science Village - San Diego County, Summer

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

|              |     |             |             |
|--------------|-----|-------------|-------------|
| tblVehicleEF | MCY | 9.13        | 9.10        |
| tblVehicleEF | MCY | 221.50      | 221.65      |
| tblVehicleEF | MCY | 60.99       | 61.23       |
| tblVehicleEF | MCY | 0.07        | 0.07        |
| tblVehicleEF | MCY | 0.02        | 0.02        |
| tblVehicleEF | MCY | 1.17        | 1.17        |
| tblVehicleEF | MCY | 0.27        | 0.27        |
| tblVehicleEF | MCY | 2.1740e-003 | 2.1320e-003 |
| tblVehicleEF | MCY | 2.8910e-003 | 2.8880e-003 |
| tblVehicleEF | MCY | 2.0310e-003 | 1.9920e-003 |
| tblVehicleEF | MCY | 2.7170e-003 | 2.7150e-003 |
| tblVehicleEF | MCY | 0.86        | 0.85        |
| tblVehicleEF | MCY | 0.99        | 0.99        |
| tblVehicleEF | MCY | 0.58        | 0.58        |
| tblVehicleEF | MCY | 2.43        | 2.45        |
| tblVehicleEF | MCY | 0.59        | 0.60        |
| tblVehicleEF | MCY | 1.96        | 1.97        |
| tblVehicleEF | MCY | 2.1920e-003 | 2.1930e-003 |
| tblVehicleEF | MCY | 6.0400e-004 | 6.0600e-004 |
| tblVehicleEF | MCY | 0.86        | 0.85        |
| tblVehicleEF | MCY | 0.99        | 0.99        |
| tblVehicleEF | MCY | 0.58        | 0.58        |
| tblVehicleEF | MCY | 3.02        | 3.04        |
| tblVehicleEF | MCY | 0.59        | 0.60        |
| tblVehicleEF | MCY | 2.13        | 2.14        |
| tblVehicleEF | MDV | 3.1750e-003 | 3.5860e-003 |
| tblVehicleEF | MDV | 0.06        | 0.07        |
| tblVehicleEF | MDV | 0.69        | 0.75        |
| tblVehicleEF | MDV | 2.69        | 2.83        |

ARE Science Village - San Diego County, Summer

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

|              |     |             |             |
|--------------|-----|-------------|-------------|
| tblVehicleEF | MDV | 379.22      | 390.23      |
| tblVehicleEF | MDV | 78.30       | 80.55       |
| tblVehicleEF | MDV | 7.0150e-003 | 7.5630e-003 |
| tblVehicleEF | MDV | 0.03        | 0.03        |
| tblVehicleEF | MDV | 0.06        | 0.07        |
| tblVehicleEF | MDV | 0.26        | 0.29        |
| tblVehicleEF | MDV | 1.4670e-003 | 1.5270e-003 |
| tblVehicleEF | MDV | 1.6840e-003 | 1.7470e-003 |
| tblVehicleEF | MDV | 1.3530e-003 | 1.4090e-003 |
| tblVehicleEF | MDV | 1.5480e-003 | 1.6060e-003 |
| tblVehicleEF | MDV | 0.06        | 0.07        |
| tblVehicleEF | MDV | 0.13        | 0.14        |
| tblVehicleEF | MDV | 0.09        | 0.09        |
| tblVehicleEF | MDV | 0.01        | 0.01        |
| tblVehicleEF | MDV | 0.06        | 0.06        |
| tblVehicleEF | MDV | 0.30        | 0.34        |
| tblVehicleEF | MDV | 3.6390e-003 | 3.7810e-003 |
| tblVehicleEF | MDV | 7.5200e-004 | 7.8100e-004 |
| tblVehicleEF | MDV | 0.06        | 0.07        |
| tblVehicleEF | MDV | 0.13        | 0.14        |
| tblVehicleEF | MDV | 0.09        | 0.09        |
| tblVehicleEF | MDV | 0.02        | 0.02        |
| tblVehicleEF | MDV | 0.06        | 0.06        |
| tblVehicleEF | MDV | 0.33        | 0.37        |
| tblVehicleEF | MDV | 3.4450e-003 | 3.8890e-003 |
| tblVehicleEF | MDV | 0.06        | 0.06        |
| tblVehicleEF | MDV | 0.78        | 0.84        |
| tblVehicleEF | MDV | 2.22        | 2.33        |
| tblVehicleEF | MDV | 392.80      | 404.31      |

ARE Science Village - San Diego County, Summer

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

|              |     |             |             |
|--------------|-----|-------------|-------------|
| tblVehicleEF | MDV | 77.39       | 79.59       |
| tblVehicleEF | MDV | 6.6620e-003 | 7.1730e-003 |
| tblVehicleEF | MDV | 0.03        | 0.03        |
| tblVehicleEF | MDV | 0.05        | 0.06        |
| tblVehicleEF | MDV | 0.24        | 0.26        |
| tblVehicleEF | MDV | 1.4670e-003 | 1.5270e-003 |
| tblVehicleEF | MDV | 1.6840e-003 | 1.7470e-003 |
| tblVehicleEF | MDV | 1.3530e-003 | 1.4090e-003 |
| tblVehicleEF | MDV | 1.5480e-003 | 1.6060e-003 |
| tblVehicleEF | MDV | 0.10        | 0.10        |
| tblVehicleEF | MDV | 0.14        | 0.14        |
| tblVehicleEF | MDV | 0.14        | 0.15        |
| tblVehicleEF | MDV | 0.01        | 0.02        |
| tblVehicleEF | MDV | 0.05        | 0.05        |
| tblVehicleEF | MDV | 0.27        | 0.29        |
| tblVehicleEF | MDV | 3.7690e-003 | 3.9170e-003 |
| tblVehicleEF | MDV | 7.4300e-004 | 7.7200e-004 |
| tblVehicleEF | MDV | 0.10        | 0.10        |
| tblVehicleEF | MDV | 0.14        | 0.14        |
| tblVehicleEF | MDV | 0.14        | 0.15        |
| tblVehicleEF | MDV | 0.02        | 0.02        |
| tblVehicleEF | MDV | 0.05        | 0.05        |
| tblVehicleEF | MDV | 0.29        | 0.32        |
| tblVehicleEF | MDV | 3.1100e-003 | 3.5140e-003 |
| tblVehicleEF | MDV | 0.07        | 0.07        |
| tblVehicleEF | MDV | 0.68        | 0.73        |
| tblVehicleEF | MDV | 2.89        | 3.04        |
| tblVehicleEF | MDV | 376.76      | 387.68      |
| tblVehicleEF | MDV | 78.67       | 80.95       |

ARE Science Village - San Diego County, Summer

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

|              |     |             |             |
|--------------|-----|-------------|-------------|
| tblVehicleEF | MDV | 7.0560e-003 | 7.6090e-003 |
| tblVehicleEF | MDV | 0.03        | 0.03        |
| tblVehicleEF | MDV | 0.06        | 0.07        |
| tblVehicleEF | MDV | 0.27        | 0.30        |
| tblVehicleEF | MDV | 1.4670e-003 | 1.5270e-003 |
| tblVehicleEF | MDV | 1.6840e-003 | 1.7470e-003 |
| tblVehicleEF | MDV | 1.3530e-003 | 1.4090e-003 |
| tblVehicleEF | MDV | 1.5480e-003 | 1.6060e-003 |
| tblVehicleEF | MDV | 0.05        | 0.05        |
| tblVehicleEF | MDV | 0.14        | 0.15        |
| tblVehicleEF | MDV | 0.08        | 0.08        |
| tblVehicleEF | MDV | 0.01        | 0.01        |
| tblVehicleEF | MDV | 0.07        | 0.07        |
| tblVehicleEF | MDV | 0.32        | 0.35        |
| tblVehicleEF | MDV | 3.6150e-003 | 3.7560e-003 |
| tblVehicleEF | MDV | 7.5500e-004 | 7.8500e-004 |
| tblVehicleEF | MDV | 0.05        | 0.05        |
| tblVehicleEF | MDV | 0.14        | 0.15        |
| tblVehicleEF | MDV | 0.08        | 0.08        |
| tblVehicleEF | MDV | 0.02        | 0.02        |
| tblVehicleEF | MDV | 0.07        | 0.07        |
| tblVehicleEF | MDV | 0.35        | 0.39        |
| tblVehicleEF | MH  | 0.01        | 0.01        |
| tblVehicleEF | MH  | 0.02        | 0.02        |
| tblVehicleEF | MH  | 1.10        | 1.25        |
| tblVehicleEF | MH  | 1.94        | 2.02        |
| tblVehicleEF | MH  | 1,525.58    | 1,551.72    |
| tblVehicleEF | MH  | 17.93       | 18.39       |
| tblVehicleEF | MH  | 0.06        | 0.06        |

ARE Science Village - San Diego County, Summer

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

|              |    |             |             |
|--------------|----|-------------|-------------|
| tblVehicleEF | MH | 0.03        | 0.03        |
| tblVehicleEF | MH | 1.55        | 1.59        |
| tblVehicleEF | MH | 0.24        | 0.24        |
| tblVehicleEF | MH | 0.01        | 0.01        |
| tblVehicleEF | MH | 0.03        | 0.03        |
| tblVehicleEF | MH | 2.4100e-004 | 2.5200e-004 |
| tblVehicleEF | MH | 3.2890e-003 | 3.2840e-003 |
| tblVehicleEF | MH | 0.03        | 0.03        |
| tblVehicleEF | MH | 2.2200e-004 | 2.3200e-004 |
| tblVehicleEF | MH | 0.69        | 0.74        |
| tblVehicleEF | MH | 0.06        | 0.06        |
| tblVehicleEF | MH | 0.38        | 0.40        |
| tblVehicleEF | MH | 0.07        | 0.08        |
| tblVehicleEF | MH | 0.02        | 0.02        |
| tblVehicleEF | MH | 0.09        | 0.09        |
| tblVehicleEF | MH | 0.01        | 0.02        |
| tblVehicleEF | MH | 1.7700e-004 | 1.8200e-004 |
| tblVehicleEF | MH | 0.69        | 0.74        |
| tblVehicleEF | MH | 0.06        | 0.06        |
| tblVehicleEF | MH | 0.38        | 0.40        |
| tblVehicleEF | MH | 0.10        | 0.11        |
| tblVehicleEF | MH | 0.02        | 0.02        |
| tblVehicleEF | MH | 0.10        | 0.10        |
| tblVehicleEF | MH | 0.01        | 0.01        |
| tblVehicleEF | MH | 0.02        | 0.02        |
| tblVehicleEF | MH | 1.13        | 1.29        |
| tblVehicleEF | MH | 1.81        | 1.89        |
| tblVehicleEF | MH | 1,525.64    | 1,551.78    |
| tblVehicleEF | MH | 17.72       | 18.17       |

ARE Science Village - San Diego County, Summer

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

|              |    |             |             |
|--------------|----|-------------|-------------|
| tblVehicleEF | MH | 0.06        | 0.06        |
| tblVehicleEF | MH | 0.03        | 0.03        |
| tblVehicleEF | MH | 1.48        | 1.52        |
| tblVehicleEF | MH | 0.23        | 0.23        |
| tblVehicleEF | MH | 0.01        | 0.01        |
| tblVehicleEF | MH | 0.03        | 0.03        |
| tblVehicleEF | MH | 2.4100e-004 | 2.5200e-004 |
| tblVehicleEF | MH | 3.2890e-003 | 3.2840e-003 |
| tblVehicleEF | MH | 0.03        | 0.03        |
| tblVehicleEF | MH | 2.2200e-004 | 2.3200e-004 |
| tblVehicleEF | MH | 0.95        | 1.02        |
| tblVehicleEF | MH | 0.06        | 0.07        |
| tblVehicleEF | MH | 0.66        | 0.70        |
| tblVehicleEF | MH | 0.08        | 0.08        |
| tblVehicleEF | MH | 0.02        | 0.02        |
| tblVehicleEF | MH | 0.09        | 0.09        |
| tblVehicleEF | MH | 0.01        | 0.02        |
| tblVehicleEF | MH | 1.7500e-004 | 1.8000e-004 |
| tblVehicleEF | MH | 0.95        | 1.02        |
| tblVehicleEF | MH | 0.06        | 0.07        |
| tblVehicleEF | MH | 0.66        | 0.70        |
| tblVehicleEF | MH | 0.10        | 0.11        |
| tblVehicleEF | MH | 0.02        | 0.02        |
| tblVehicleEF | MH | 0.09        | 0.10        |
| tblVehicleEF | MH | 0.01        | 0.01        |
| tblVehicleEF | MH | 0.02        | 0.02        |
| tblVehicleEF | MH | 1.08        | 1.24        |
| tblVehicleEF | MH | 2.00        | 2.08        |
| tblVehicleEF | MH | 1,525.56    | 1,551.69    |



ARE Science Village - San Diego County, Summer

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

|              |     |             |             |
|--------------|-----|-------------|-------------|
| tblVehicleEF | MH  | 18.03       | 18.49       |
| tblVehicleEF | MH  | 0.06        | 0.06        |
| tblVehicleEF | MH  | 0.03        | 0.03        |
| tblVehicleEF | MH  | 1.54        | 1.59        |
| tblVehicleEF | MH  | 0.25        | 0.25        |
| tblVehicleEF | MH  | 0.01        | 0.01        |
| tblVehicleEF | MH  | 0.03        | 0.03        |
| tblVehicleEF | MH  | 2.4100e-004 | 2.5200e-004 |
| tblVehicleEF | MH  | 3.2890e-003 | 3.2840e-003 |
| tblVehicleEF | MH  | 0.03        | 0.03        |
| tblVehicleEF | MH  | 2.2200e-004 | 2.3200e-004 |
| tblVehicleEF | MH  | 0.69        | 0.76        |
| tblVehicleEF | MH  | 0.07        | 0.08        |
| tblVehicleEF | MH  | 0.35        | 0.37        |
| tblVehicleEF | MH  | 0.07        | 0.08        |
| tblVehicleEF | MH  | 0.02        | 0.02        |
| tblVehicleEF | MH  | 0.09        | 0.10        |
| tblVehicleEF | MH  | 0.01        | 0.02        |
| tblVehicleEF | MH  | 1.7800e-004 | 1.8300e-004 |
| tblVehicleEF | MH  | 0.69        | 0.76        |
| tblVehicleEF | MH  | 0.07        | 0.08        |
| tblVehicleEF | MH  | 0.35        | 0.37        |
| tblVehicleEF | MH  | 0.10        | 0.11        |
| tblVehicleEF | MH  | 0.02        | 0.02        |
| tblVehicleEF | MH  | 0.10        | 0.10        |
| tblVehicleEF | MHD | 3.9860e-003 | 4.0210e-003 |
| tblVehicleEF | MHD | 1.7800e-003 | 2.0420e-003 |
| tblVehicleEF | MHD | 9.8670e-003 | 0.01        |
| tblVehicleEF | MHD | 0.41        | 0.41        |

ARE Science Village - San Diego County, Summer

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

|              |     |             |             |
|--------------|-----|-------------|-------------|
| tblVehicleEF | MHD | 0.23        | 0.27        |
| tblVehicleEF | MHD | 1.10        | 1.18        |
| tblVehicleEF | MHD | 76.60       | 78.50       |
| tblVehicleEF | MHD | 1,072.80    | 1,091.76    |
| tblVehicleEF | MHD | 9.96        | 10.35       |
| tblVehicleEF | MHD | 0.01        | 0.01        |
| tblVehicleEF | MHD | 0.13        | 0.14        |
| tblVehicleEF | MHD | 8.0860e-003 | 8.1920e-003 |
| tblVehicleEF | MHD | 0.45        | 0.48        |
| tblVehicleEF | MHD | 1.39        | 1.39        |
| tblVehicleEF | MHD | 1.66        | 1.65        |
| tblVehicleEF | MHD | 3.5600e-004 | 4.1300e-004 |
| tblVehicleEF | MHD | 6.6970e-003 | 6.6880e-003 |
| tblVehicleEF | MHD | 1.2100e-004 | 1.2600e-004 |
| tblVehicleEF | MHD | 3.4100e-004 | 3.9500e-004 |
| tblVehicleEF | MHD | 6.4000e-003 | 6.3910e-003 |
| tblVehicleEF | MHD | 1.1100e-004 | 1.1600e-004 |
| tblVehicleEF | MHD | 3.8000e-004 | 4.1900e-004 |
| tblVehicleEF | MHD | 0.02        | 0.02        |
| tblVehicleEF | MHD | 0.02        | 0.02        |
| tblVehicleEF | MHD | 3.1200e-004 | 3.3600e-004 |
| tblVehicleEF | MHD | 0.02        | 0.02        |
| tblVehicleEF | MHD | 0.02        | 0.02        |
| tblVehicleEF | MHD | 0.05        | 0.05        |
| tblVehicleEF | MHD | 7.2700e-004 | 7.4500e-004 |
| tblVehicleEF | MHD | 0.01        | 0.01        |
| tblVehicleEF | MHD | 9.9000e-005 | 1.0200e-004 |
| tblVehicleEF | MHD | 3.8000e-004 | 4.1900e-004 |
| tblVehicleEF | MHD | 0.02        | 0.02        |

ARE Science Village - San Diego County, Summer

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

|              |     |             |             |
|--------------|-----|-------------|-------------|
| tblVehicleEF | MHD | 0.03        | 0.03        |
| tblVehicleEF | MHD | 3.1200e-004 | 3.3600e-004 |
| tblVehicleEF | MHD | 0.02        | 0.02        |
| tblVehicleEF | MHD | 0.02        | 0.02        |
| tblVehicleEF | MHD | 0.06        | 0.06        |
| tblVehicleEF | MHD | 3.7920e-003 | 3.8230e-003 |
| tblVehicleEF | MHD | 1.8160e-003 | 2.0860e-003 |
| tblVehicleEF | MHD | 9.4390e-003 | 9.8840e-003 |
| tblVehicleEF | MHD | 0.35        | 0.35        |
| tblVehicleEF | MHD | 0.24        | 0.27        |
| tblVehicleEF | MHD | 1.04        | 1.11        |
| tblVehicleEF | MHD | 76.68       | 78.69       |
| tblVehicleEF | MHD | 1,072.80    | 1,091.77    |
| tblVehicleEF | MHD | 9.85        | 10.23       |
| tblVehicleEF | MHD | 0.01        | 0.01        |
| tblVehicleEF | MHD | 0.13        | 0.13        |
| tblVehicleEF | MHD | 7.8510e-003 | 7.9550e-003 |
| tblVehicleEF | MHD | 0.45        | 0.47        |
| tblVehicleEF | MHD | 1.33        | 1.34        |
| tblVehicleEF | MHD | 1.65        | 1.64        |
| tblVehicleEF | MHD | 3.0400e-004 | 3.5200e-004 |
| tblVehicleEF | MHD | 6.6970e-003 | 6.6880e-003 |
| tblVehicleEF | MHD | 1.2100e-004 | 1.2600e-004 |
| tblVehicleEF | MHD | 2.9100e-004 | 3.3700e-004 |
| tblVehicleEF | MHD | 6.4000e-003 | 6.3910e-003 |
| tblVehicleEF | MHD | 1.1100e-004 | 1.1600e-004 |
| tblVehicleEF | MHD | 5.5800e-004 | 6.1600e-004 |
| tblVehicleEF | MHD | 0.02        | 0.02        |
| tblVehicleEF | MHD | 0.02        | 0.02        |

ARE Science Village - San Diego County, Summer

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

|              |     |             |             |
|--------------|-----|-------------|-------------|
| tblVehicleEF | MHD | 5.3800e-004 | 5.8200e-004 |
| tblVehicleEF | MHD | 0.02        | 0.02        |
| tblVehicleEF | MHD | 0.02        | 0.02        |
| tblVehicleEF | MHD | 0.05        | 0.05        |
| tblVehicleEF | MHD | 7.2800e-004 | 7.4700e-004 |
| tblVehicleEF | MHD | 0.01        | 0.01        |
| tblVehicleEF | MHD | 9.7000e-005 | 1.0100e-004 |
| tblVehicleEF | MHD | 5.5800e-004 | 6.1600e-004 |
| tblVehicleEF | MHD | 0.02        | 0.02        |
| tblVehicleEF | MHD | 0.03        | 0.03        |
| tblVehicleEF | MHD | 5.3800e-004 | 5.8200e-004 |
| tblVehicleEF | MHD | 0.02        | 0.02        |
| tblVehicleEF | MHD | 0.02        | 0.02        |
| tblVehicleEF | MHD | 0.05        | 0.06        |
| tblVehicleEF | MHD | 4.2670e-003 | 4.3040e-003 |
| tblVehicleEF | MHD | 1.7620e-003 | 2.0220e-003 |
| tblVehicleEF | MHD | 0.01        | 0.01        |
| tblVehicleEF | MHD | 0.50        | 0.50        |
| tblVehicleEF | MHD | 0.23        | 0.26        |
| tblVehicleEF | MHD | 1.13        | 1.21        |
| tblVehicleEF | MHD | 76.48       | 78.23       |
| tblVehicleEF | MHD | 1,072.79    | 1,091.76    |
| tblVehicleEF | MHD | 10.01       | 10.40       |
| tblVehicleEF | MHD | 0.01        | 0.01        |
| tblVehicleEF | MHD | 0.13        | 0.14        |
| tblVehicleEF | MHD | 8.2360e-003 | 8.3440e-003 |
| tblVehicleEF | MHD | 0.47        | 0.49        |
| tblVehicleEF | MHD | 1.38        | 1.39        |
| tblVehicleEF | MHD | 1.66        | 1.65        |

ARE Science Village - San Diego County, Summer

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | MHD  | 4.2900e-004 | 4.9800e-004 |
| tblVehicleEF | MHD  | 6.6970e-003 | 6.6880e-003 |
| tblVehicleEF | MHD  | 1.2100e-004 | 1.2600e-004 |
| tblVehicleEF | MHD  | 4.1000e-004 | 4.7700e-004 |
| tblVehicleEF | MHD  | 6.4000e-003 | 6.3910e-003 |
| tblVehicleEF | MHD  | 1.1100e-004 | 1.1600e-004 |
| tblVehicleEF | MHD  | 3.4300e-004 | 3.8100e-004 |
| tblVehicleEF | MHD  | 0.02        | 0.02        |
| tblVehicleEF | MHD  | 0.02        | 0.02        |
| tblVehicleEF | MHD  | 2.7400e-004 | 2.9500e-004 |
| tblVehicleEF | MHD  | 0.02        | 0.02        |
| tblVehicleEF | MHD  | 0.02        | 0.02        |
| tblVehicleEF | MHD  | 0.05        | 0.06        |
| tblVehicleEF | MHD  | 7.2600e-004 | 7.4200e-004 |
| tblVehicleEF | MHD  | 0.01        | 0.01        |
| tblVehicleEF | MHD  | 9.9000e-005 | 1.0300e-004 |
| tblVehicleEF | MHD  | 3.4300e-004 | 3.8100e-004 |
| tblVehicleEF | MHD  | 0.02        | 0.02        |
| tblVehicleEF | MHD  | 0.03        | 0.03        |
| tblVehicleEF | MHD  | 2.7400e-004 | 2.9500e-004 |
| tblVehicleEF | MHD  | 0.02        | 0.02        |
| tblVehicleEF | MHD  | 0.02        | 0.02        |
| tblVehicleEF | MHD  | 0.06        | 0.06        |
| tblVehicleEF | OBUS | 8.7240e-003 | 8.7170e-003 |
| tblVehicleEF | OBUS | 7.8750e-003 | 8.6700e-003 |
| tblVehicleEF | OBUS | 0.02        | 0.02        |
| tblVehicleEF | OBUS | 0.62        | 0.60        |
| tblVehicleEF | OBUS | 0.88        | 0.97        |
| tblVehicleEF | OBUS | 2.56        | 2.63        |

ARE Science Village - San Diego County, Summer

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | OBUS | 87.42       | 85.09       |
| tblVehicleEF | OBUS | 1,476.82    | 1,507.64    |
| tblVehicleEF | OBUS | 19.88       | 20.36       |
| tblVehicleEF | OBUS | 0.01        | 0.01        |
| tblVehicleEF | OBUS | 0.11        | 0.11        |
| tblVehicleEF | OBUS | 0.02        | 0.02        |
| tblVehicleEF | OBUS | 0.34        | 0.32        |
| tblVehicleEF | OBUS | 1.22        | 1.24        |
| tblVehicleEF | OBUS | 0.77        | 0.76        |
| tblVehicleEF | OBUS | 1.1700e-004 | 1.1000e-004 |
| tblVehicleEF | OBUS | 7.7290e-003 | 7.6570e-003 |
| tblVehicleEF | OBUS | 1.1200e-004 | 1.0600e-004 |
| tblVehicleEF | OBUS | 7.3700e-003 | 7.3020e-003 |
| tblVehicleEF | OBUS | 2.0040e-003 | 2.0200e-003 |
| tblVehicleEF | OBUS | 0.03        | 0.03        |
| tblVehicleEF | OBUS | 0.05        | 0.05        |
| tblVehicleEF | OBUS | 1.2610e-003 | 1.2620e-003 |
| tblVehicleEF | OBUS | 0.04        | 0.05        |
| tblVehicleEF | OBUS | 0.09        | 0.09        |
| tblVehicleEF | OBUS | 0.12        | 0.12        |
| tblVehicleEF | OBUS | 8.3200e-004 | 8.1000e-004 |
| tblVehicleEF | OBUS | 0.01        | 0.01        |
| tblVehicleEF | OBUS | 1.9700e-004 | 2.0100e-004 |
| tblVehicleEF | OBUS | 2.0040e-003 | 2.0200e-003 |
| tblVehicleEF | OBUS | 0.03        | 0.03        |
| tblVehicleEF | OBUS | 0.07        | 0.07        |
| tblVehicleEF | OBUS | 1.2610e-003 | 1.2620e-003 |
| tblVehicleEF | OBUS | 0.06        | 0.07        |
| tblVehicleEF | OBUS | 0.09        | 0.09        |

ARE Science Village - San Diego County, Summer

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | OBUS | 0.13        | 0.13        |
| tblVehicleEF | OBUS | 8.8120e-003 | 8.8010e-003 |
| tblVehicleEF | OBUS | 8.0900e-003 | 8.9050e-003 |
| tblVehicleEF | OBUS | 0.02        | 0.02        |
| tblVehicleEF | OBUS | 0.61        | 0.59        |
| tblVehicleEF | OBUS | 0.90        | 1.00        |
| tblVehicleEF | OBUS | 2.39        | 2.47        |
| tblVehicleEF | OBUS | 86.43       | 84.15       |
| tblVehicleEF | OBUS | 1,476.86    | 1,507.69    |
| tblVehicleEF | OBUS | 19.60       | 20.07       |
| tblVehicleEF | OBUS | 0.01        | 0.01        |
| tblVehicleEF | OBUS | 0.11        | 0.11        |
| tblVehicleEF | OBUS | 0.02        | 0.02        |
| tblVehicleEF | OBUS | 0.32        | 0.31        |
| tblVehicleEF | OBUS | 1.16        | 1.18        |
| tblVehicleEF | OBUS | 0.76        | 0.75        |
| tblVehicleEF | OBUS | 1.0400e-004 | 9.8000e-005 |
| tblVehicleEF | OBUS | 7.7290e-003 | 7.6570e-003 |
| tblVehicleEF | OBUS | 9.9000e-005 | 9.4000e-005 |
| tblVehicleEF | OBUS | 7.3700e-003 | 7.3020e-003 |
| tblVehicleEF | OBUS | 2.8130e-003 | 2.8360e-003 |
| tblVehicleEF | OBUS | 0.03        | 0.03        |
| tblVehicleEF | OBUS | 0.06        | 0.05        |
| tblVehicleEF | OBUS | 2.2210e-003 | 2.2290e-003 |
| tblVehicleEF | OBUS | 0.05        | 0.05        |
| tblVehicleEF | OBUS | 0.09        | 0.09        |
| tblVehicleEF | OBUS | 0.11        | 0.12        |
| tblVehicleEF | OBUS | 8.2300e-004 | 8.0100e-004 |
| tblVehicleEF | OBUS | 0.01        | 0.01        |

ARE Science Village - San Diego County, Summer

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | OBUS | 1.9400e-004 | 1.9900e-004 |
| tblVehicleEF | OBUS | 2.8130e-003 | 2.8360e-003 |
| tblVehicleEF | OBUS | 0.03        | 0.03        |
| tblVehicleEF | OBUS | 0.07        | 0.07        |
| tblVehicleEF | OBUS | 2.2210e-003 | 2.2290e-003 |
| tblVehicleEF | OBUS | 0.06        | 0.07        |
| tblVehicleEF | OBUS | 0.09        | 0.09        |
| tblVehicleEF | OBUS | 0.12        | 0.13        |
| tblVehicleEF | OBUS | 7.7810e-003 | 8.5680e-003 |
| tblVehicleEF | OBUS | 0.02        | 0.02        |
| tblVehicleEF | OBUS | 0.62        | 0.61        |
| tblVehicleEF | OBUS | 0.87        | 0.96        |
| tblVehicleEF | OBUS | 2.63        | 2.71        |
| tblVehicleEF | OBUS | 88.77       | 86.40       |
| tblVehicleEF | OBUS | 1,476.80    | 1,507.62    |
| tblVehicleEF | OBUS | 20.01       | 20.49       |
| tblVehicleEF | OBUS | 0.01        | 0.01        |
| tblVehicleEF | OBUS | 0.11        | 0.11        |
| tblVehicleEF | OBUS | 0.02        | 0.02        |
| tblVehicleEF | OBUS | 0.37        | 0.35        |
| tblVehicleEF | OBUS | 1.22        | 1.24        |
| tblVehicleEF | OBUS | 0.78        | 0.77        |
| tblVehicleEF | OBUS | 1.3500e-004 | 1.2700e-004 |
| tblVehicleEF | OBUS | 7.7290e-003 | 7.6570e-003 |
| tblVehicleEF | OBUS | 1.2900e-004 | 1.2200e-004 |
| tblVehicleEF | OBUS | 7.3700e-003 | 7.3020e-003 |
| tblVehicleEF | OBUS | 1.9500e-003 | 1.9720e-003 |
| tblVehicleEF | OBUS | 0.03        | 0.03        |
| tblVehicleEF | OBUS | 0.05        | 0.05        |



ARE Science Village - San Diego County, Summer

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | OBUS | 1.1480e-003 | 1.1510e-003 |
| tblVehicleEF | OBUS | 0.04        | 0.05        |
| tblVehicleEF | OBUS | 0.10        | 0.10        |
| tblVehicleEF | OBUS | 0.12        | 0.13        |
| tblVehicleEF | OBUS | 8.4500e-004 | 8.2300e-004 |
| tblVehicleEF | OBUS | 0.01        | 0.01        |
| tblVehicleEF | OBUS | 1.9800e-004 | 2.0300e-004 |
| tblVehicleEF | OBUS | 1.9500e-003 | 1.9720e-003 |
| tblVehicleEF | OBUS | 0.03        | 0.03        |
| tblVehicleEF | OBUS | 0.07        | 0.07        |
| tblVehicleEF | OBUS | 1.1480e-003 | 1.1510e-003 |
| tblVehicleEF | OBUS | 0.06        | 0.07        |
| tblVehicleEF | OBUS | 0.10        | 0.10        |
| tblVehicleEF | OBUS | 0.13        | 0.14        |
| tblVehicleEF | SBUS | 0.03        | 0.03        |
| tblVehicleEF | SBUS | 7.7010e-003 | 8.8070e-003 |
| tblVehicleEF | SBUS | 2.8170e-003 | 2.8250e-003 |
| tblVehicleEF | SBUS | 1.44        | 1.35        |
| tblVehicleEF | SBUS | 0.60        | 0.69        |
| tblVehicleEF | SBUS | 0.42        | 0.44        |
| tblVehicleEF | SBUS | 330.59      | 331.96      |
| tblVehicleEF | SBUS | 1,067.70    | 1,082.70    |
| tblVehicleEF | SBUS | 2.21        | 2.17        |
| tblVehicleEF | SBUS | 0.05        | 0.05        |
| tblVehicleEF | SBUS | 0.15        | 0.15        |
| tblVehicleEF | SBUS | 2.1900e-003 | 2.0180e-003 |
| tblVehicleEF | SBUS | 3.81        | 3.92        |
| tblVehicleEF | SBUS | 6.60        | 6.97        |
| tblVehicleEF | SBUS | 0.73        | 0.68        |

ARE Science Village - San Diego County, Summer

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | SBUS | 4.5360e-003 | 4.8460e-003 |
| tblVehicleEF | SBUS | 0.01        | 0.01        |
| tblVehicleEF | SBUS | 0.04        | 0.04        |
| tblVehicleEF | SBUS | 3.6000e-005 | 3.5000e-005 |
| tblVehicleEF | SBUS | 4.3400e-003 | 4.6360e-003 |
| tblVehicleEF | SBUS | 2.8100e-003 | 2.8200e-003 |
| tblVehicleEF | SBUS | 0.04        | 0.04        |
| tblVehicleEF | SBUS | 3.3000e-005 | 3.2000e-005 |
| tblVehicleEF | SBUS | 3.4400e-004 | 4.5000e-004 |
| tblVehicleEF | SBUS | 3.7250e-003 | 4.8160e-003 |
| tblVehicleEF | SBUS | 0.15        | 0.14        |
| tblVehicleEF | SBUS | 1.9200e-004 | 2.3000e-004 |
| tblVehicleEF | SBUS | 0.11        | 0.12        |
| tblVehicleEF | SBUS | 7.3780e-003 | 9.9210e-003 |
| tblVehicleEF | SBUS | 0.02        | 0.02        |
| tblVehicleEF | SBUS | 3.1360e-003 | 3.1480e-003 |
| tblVehicleEF | SBUS | 0.01        | 0.01        |
| tblVehicleEF | SBUS | 2.2000e-005 | 2.1000e-005 |
| tblVehicleEF | SBUS | 3.4400e-004 | 4.5000e-004 |
| tblVehicleEF | SBUS | 3.7250e-003 | 4.8160e-003 |
| tblVehicleEF | SBUS | 0.21        | 0.20        |
| tblVehicleEF | SBUS | 1.9200e-004 | 2.3000e-004 |
| tblVehicleEF | SBUS | 0.13        | 0.14        |
| tblVehicleEF | SBUS | 7.3780e-003 | 9.9210e-003 |
| tblVehicleEF | SBUS | 0.02        | 0.02        |
| tblVehicleEF | SBUS | 0.03        | 0.03        |
| tblVehicleEF | SBUS | 7.7920e-003 | 8.9230e-003 |
| tblVehicleEF | SBUS | 2.4510e-003 | 2.4570e-003 |
| tblVehicleEF | SBUS | 1.40        | 1.31        |

ARE Science Village - San Diego County, Summer

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | SBUS | 0.60        | 0.70        |
| tblVehicleEF | SBUS | 0.33        | 0.34        |
| tblVehicleEF | SBUS | 341.22      | 343.18      |
| tblVehicleEF | SBUS | 1,067.71    | 1,082.72    |
| tblVehicleEF | SBUS | 2.06        | 2.01        |
| tblVehicleEF | SBUS | 0.05        | 0.05        |
| tblVehicleEF | SBUS | 0.15        | 0.15        |
| tblVehicleEF | SBUS | 2.1020e-003 | 1.9380e-003 |
| tblVehicleEF | SBUS | 3.90        | 4.02        |
| tblVehicleEF | SBUS | 6.36        | 6.72        |
| tblVehicleEF | SBUS | 0.73        | 0.68        |
| tblVehicleEF | SBUS | 3.8310e-003 | 4.0920e-003 |
| tblVehicleEF | SBUS | 0.01        | 0.01        |
| tblVehicleEF | SBUS | 0.04        | 0.04        |
| tblVehicleEF | SBUS | 3.6000e-005 | 3.5000e-005 |
| tblVehicleEF | SBUS | 3.6660e-003 | 3.9150e-003 |
| tblVehicleEF | SBUS | 2.8100e-003 | 2.8200e-003 |
| tblVehicleEF | SBUS | 0.04        | 0.04        |
| tblVehicleEF | SBUS | 3.3000e-005 | 3.2000e-005 |
| tblVehicleEF | SBUS | 4.8600e-004 | 6.3500e-004 |
| tblVehicleEF | SBUS | 3.8720e-003 | 5.0370e-003 |
| tblVehicleEF | SBUS | 0.15        | 0.14        |
| tblVehicleEF | SBUS | 3.5700e-004 | 4.3000e-004 |
| tblVehicleEF | SBUS | 0.11        | 0.12        |
| tblVehicleEF | SBUS | 6.3630e-003 | 8.5120e-003 |
| tblVehicleEF | SBUS | 0.01        | 0.01        |
| tblVehicleEF | SBUS | 3.2360e-003 | 3.2540e-003 |
| tblVehicleEF | SBUS | 0.01        | 0.01        |
| tblVehicleEF | SBUS | 4.8600e-004 | 6.3500e-004 |

ARE Science Village - San Diego County, Summer

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | SBUS | 3.8720e-003 | 5.0370e-003 |
| tblVehicleEF | SBUS | 0.21        | 0.20        |
| tblVehicleEF | SBUS | 3.5700e-004 | 4.3000e-004 |
| tblVehicleEF | SBUS | 0.13        | 0.14        |
| tblVehicleEF | SBUS | 6.3630e-003 | 8.5120e-003 |
| tblVehicleEF | SBUS | 0.02        | 0.02        |
| tblVehicleEF | SBUS | 0.03        | 0.03        |
| tblVehicleEF | SBUS | 7.6590e-003 | 8.7520e-003 |
| tblVehicleEF | SBUS | 2.9980e-003 | 3.0070e-003 |
| tblVehicleEF | SBUS | 1.50        | 1.41        |
| tblVehicleEF | SBUS | 0.59        | 0.69        |
| tblVehicleEF | SBUS | 0.47        | 0.49        |
| tblVehicleEF | SBUS | 315.91      | 316.46      |
| tblVehicleEF | SBUS | 1,067.69    | 1,082.69    |
| tblVehicleEF | SBUS | 2.29        | 2.25        |
| tblVehicleEF | SBUS | 0.05        | 0.05        |
| tblVehicleEF | SBUS | 0.15        | 0.15        |
| tblVehicleEF | SBUS | 2.2480e-003 | 2.0710e-003 |
| tblVehicleEF | SBUS | 3.67        | 3.77        |
| tblVehicleEF | SBUS | 6.57        | 6.94        |
| tblVehicleEF | SBUS | 0.73        | 0.68        |
| tblVehicleEF | SBUS | 5.5100e-003 | 5.8870e-003 |
| tblVehicleEF | SBUS | 0.01        | 0.01        |
| tblVehicleEF | SBUS | 0.04        | 0.04        |
| tblVehicleEF | SBUS | 3.6000e-005 | 3.5000e-005 |
| tblVehicleEF | SBUS | 5.2720e-003 | 5.6320e-003 |
| tblVehicleEF | SBUS | 2.8100e-003 | 2.8200e-003 |
| tblVehicleEF | SBUS | 0.04        | 0.04        |
| tblVehicleEF | SBUS | 3.3000e-005 | 3.2000e-005 |

ARE Science Village - San Diego County, Summer

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | SBUS | 3.4300e-004 | 4.6100e-004 |
| tblVehicleEF | SBUS | 4.0120e-003 | 5.2490e-003 |
| tblVehicleEF | SBUS | 0.15        | 0.14        |
| tblVehicleEF | SBUS | 1.7200e-004 | 2.0500e-004 |
| tblVehicleEF | SBUS | 0.11        | 0.12        |
| tblVehicleEF | SBUS | 9.6140e-003 | 0.01        |
| tblVehicleEF | SBUS | 0.02        | 0.02        |
| tblVehicleEF | SBUS | 2.9970e-003 | 3.0020e-003 |
| tblVehicleEF | SBUS | 0.01        | 0.01        |
| tblVehicleEF | SBUS | 2.3000e-005 | 2.2000e-005 |
| tblVehicleEF | SBUS | 3.4300e-004 | 4.6100e-004 |
| tblVehicleEF | SBUS | 4.0120e-003 | 5.2490e-003 |
| tblVehicleEF | SBUS | 0.21        | 0.20        |
| tblVehicleEF | SBUS | 1.7200e-004 | 2.0500e-004 |
| tblVehicleEF | SBUS | 0.13        | 0.14        |
| tblVehicleEF | SBUS | 9.6140e-003 | 0.01        |
| tblVehicleEF | SBUS | 0.02        | 0.02        |
| tblVehicleEF | UBUS | 4.89        | 4.89        |
| tblVehicleEF | UBUS | 0.02        | 0.02        |
| tblVehicleEF | UBUS | 38.17       | 38.17       |
| tblVehicleEF | UBUS | 1.23        | 1.23        |
| tblVehicleEF | UBUS | 1,897.59    | 1,904.69    |
| tblVehicleEF | UBUS | 13.87       | 14.16       |
| tblVehicleEF | UBUS | 0.31        | 0.31        |
| tblVehicleEF | UBUS | 0.01        | 0.01        |
| tblVehicleEF | UBUS | 0.41        | 0.41        |
| tblVehicleEF | UBUS | 0.13        | 0.14        |
| tblVehicleEF | UBUS | 3.1030e-003 | 3.0820e-003 |
| tblVehicleEF | UBUS | 1.7700e-004 | 1.6800e-004 |

ARE Science Village - San Diego County, Summer

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | UBUS | 2.9470e-003 | 2.9280e-003 |
| tblVehicleEF | UBUS | 1.6300e-004 | 1.5500e-004 |
| tblVehicleEF | UBUS | 4.7400e-004 | 5.5700e-004 |
| tblVehicleEF | UBUS | 5.1760e-003 | 6.2840e-003 |
| tblVehicleEF | UBUS | 4.1000e-004 | 4.9700e-004 |
| tblVehicleEF | UBUS | 0.07        | 0.07        |
| tblVehicleEF | UBUS | 7.8400e-004 | 9.8300e-004 |
| tblVehicleEF | UBUS | 0.06        | 0.06        |
| tblVehicleEF | UBUS | 3.7080e-003 | 3.7780e-003 |
| tblVehicleEF | UBUS | 1.3700e-004 | 1.4000e-004 |
| tblVehicleEF | UBUS | 4.7400e-004 | 5.5700e-004 |
| tblVehicleEF | UBUS | 5.1760e-003 | 6.2840e-003 |
| tblVehicleEF | UBUS | 4.1000e-004 | 4.9700e-004 |
| tblVehicleEF | UBUS | 5.00        | 5.00        |
| tblVehicleEF | UBUS | 7.8400e-004 | 9.8300e-004 |
| tblVehicleEF | UBUS | 0.06        | 0.07        |
| tblVehicleEF | UBUS | 4.89        | 4.89        |
| tblVehicleEF | UBUS | 0.01        | 0.01        |
| tblVehicleEF | UBUS | 38.17       | 38.17       |
| tblVehicleEF | UBUS | 1.06        | 1.06        |
| tblVehicleEF | UBUS | 1,897.60    | 1,904.69    |
| tblVehicleEF | UBUS | 13.58       | 13.88       |
| tblVehicleEF | UBUS | 0.31        | 0.31        |
| tblVehicleEF | UBUS | 0.01        | 0.01        |
| tblVehicleEF | UBUS | 0.40        | 0.40        |
| tblVehicleEF | UBUS | 0.12        | 0.13        |
| tblVehicleEF | UBUS | 3.1030e-003 | 3.0820e-003 |
| tblVehicleEF | UBUS | 1.7700e-004 | 1.6800e-004 |
| tblVehicleEF | UBUS | 2.9470e-003 | 2.9280e-003 |

ARE Science Village - San Diego County, Summer

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | UBUS | 1.6300e-004 | 1.5500e-004 |
| tblVehicleEF | UBUS | 6.8100e-004 | 8.0200e-004 |
| tblVehicleEF | UBUS | 5.6350e-003 | 6.7540e-003 |
| tblVehicleEF | UBUS | 7.9300e-004 | 9.2700e-004 |
| tblVehicleEF | UBUS | 0.07        | 0.07        |
| tblVehicleEF | UBUS | 7.1600e-004 | 9.0300e-004 |
| tblVehicleEF | UBUS | 0.05        | 0.05        |
| tblVehicleEF | UBUS | 3.7080e-003 | 3.7780e-003 |
| tblVehicleEF | UBUS | 1.3400e-004 | 1.3700e-004 |
| tblVehicleEF | UBUS | 6.8100e-004 | 8.0200e-004 |
| tblVehicleEF | UBUS | 5.6350e-003 | 6.7540e-003 |
| tblVehicleEF | UBUS | 7.9300e-004 | 9.2700e-004 |
| tblVehicleEF | UBUS | 5.00        | 5.00        |
| tblVehicleEF | UBUS | 7.1600e-004 | 9.0300e-004 |
| tblVehicleEF | UBUS | 0.06        | 0.06        |
| tblVehicleEF | UBUS | 4.89        | 4.89        |
| tblVehicleEF | UBUS | 0.02        | 0.02        |
| tblVehicleEF | UBUS | 38.17       | 38.17       |
| tblVehicleEF | UBUS | 1.31        | 1.30        |
| tblVehicleEF | UBUS | 1,897.59    | 1,904.69    |
| tblVehicleEF | UBUS | 14.00       | 14.29       |
| tblVehicleEF | UBUS | 0.31        | 0.31        |
| tblVehicleEF | UBUS | 0.01        | 0.02        |
| tblVehicleEF | UBUS | 0.41        | 0.41        |
| tblVehicleEF | UBUS | 0.13        | 0.14        |
| tblVehicleEF | UBUS | 3.1030e-003 | 3.0820e-003 |
| tblVehicleEF | UBUS | 1.7700e-004 | 1.6800e-004 |
| tblVehicleEF | UBUS | 2.9470e-003 | 2.9280e-003 |
| tblVehicleEF | UBUS | 1.6300e-004 | 1.5500e-004 |

ARE Science Village - San Diego County, Summer

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

|                 |       |             |             |
|-----------------|-------|-------------|-------------|
| tblVehicleEF    | UBUS  | 4.4100e-004 | 5.0600e-004 |
| tblVehicleEF    | UBUS  | 6.0090e-003 | 7.1380e-003 |
| tblVehicleEF    | UBUS  | 3.6700e-004 | 4.4300e-004 |
| tblVehicleEF    | UBUS  | 0.07        | 0.07        |
| tblVehicleEF    | UBUS  | 9.5000e-004 | 1.1790e-003 |
| tblVehicleEF    | UBUS  | 0.06        | 0.06        |
| tblVehicleEF    | UBUS  | 3.7080e-003 | 3.7780e-003 |
| tblVehicleEF    | UBUS  | 1.3900e-004 | 1.4100e-004 |
| tblVehicleEF    | UBUS  | 4.4100e-004 | 5.0600e-004 |
| tblVehicleEF    | UBUS  | 6.0090e-003 | 7.1380e-003 |
| tblVehicleEF    | UBUS  | 3.6700e-004 | 4.4300e-004 |
| tblVehicleEF    | UBUS  | 5.00        | 5.00        |
| tblVehicleEF    | UBUS  | 9.5000e-004 | 1.1790e-003 |
| tblVehicleEF    | UBUS  | 0.07        | 0.07        |
| tblVehicleTrips | ST_TR | 1.96        | 0.00        |
| tblVehicleTrips | ST_TR | 696.00      | 0.00        |
| tblVehicleTrips | ST_TR | 2.21        | 0.00        |
| tblVehicleTrips | ST_TR | 1.90        | 8.03        |
| tblVehicleTrips | ST_TR | 177.62      | 0.00        |
| tblVehicleTrips | SU_TR | 2.19        | 0.00        |
| tblVehicleTrips | SU_TR | 500.00      | 0.00        |
| tblVehicleTrips | SU_TR | 0.70        | 0.00        |
| tblVehicleTrips | SU_TR | 1.11        | 8.03        |
| tblVehicleTrips | SU_TR | 166.47      | 0.00        |
| tblVehicleTrips | WD_TR | 0.78        | 0.00        |
| tblVehicleTrips | WD_TR | 346.23      | 0.00        |
| tblVehicleTrips | WD_TR | 9.74        | 0.00        |
| tblVehicleTrips | WD_TR | 11.26       | 8.03        |
| tblVehicleTrips | WD_TR | 106.78      | 0.00        |



ARE Science Village - San Diego County, Summer

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

**2.0 Emissions Summary**

---

ARE Science Village - 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        |                    |                    |               |               |                    |
| 2022           | 9.0844         | 140.4811        | 77.6191        | 0.4343        | 20.8504        | 3.4627        | 24.3131        | 6.7741         | 3.2309        | 10.0049        | 0.0000        | 46,114.8674        | 46,114.8674        | 4.6787        | 5.3817        | 47,835.5895        |
| 2023           | 3.0587         | 25.8728         | 29.3311        | 0.0883        | 3.1564         | 0.9607        | 4.1171         | 0.8562         | 0.8997        | 1.7560         | 0.0000        | 8,887.0149         | 8,887.0149         | 1.2308        | 0.4484        | 9,051.4230         |
| 2024           | 71.1019        | 35.2740         | 46.7547        | 0.1179        | 3.7396         | 1.3924        | 5.1320         | 1.0109         | 1.2997        | 2.3107         | 0.0000        | 11,791.0806        | 11,791.0806        | 1.9672        | 0.4503        | 11,974.4381        |
| <b>Maximum</b> | <b>71.1019</b> | <b>140.4811</b> | <b>77.6191</b> | <b>0.4343</b> | <b>20.8504</b> | <b>3.4627</b> | <b>24.3131</b> | <b>6.7741</b>  | <b>3.2309</b> | <b>10.0049</b> | <b>0.0000</b> | <b>46,114.8674</b> | <b>46,114.8674</b> | <b>4.6787</b> | <b>5.3817</b> | <b>47,835.5895</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        |                    |                    |               |               |                    |
| 2022           | 9.0844         | 140.4811        | 77.6191        | 0.4343        | 12.3274        | 3.4627        | 15.7900        | 3.5711         | 3.2309        | 6.8020        | 0.0000        | 46,114.8674        | 46,114.8674        | 4.6787        | 5.3817        | 47,835.5895        |
| 2023           | 3.0587         | 25.8728         | 29.3311        | 0.0883        | 2.9997         | 0.9607        | 3.9604         | 0.8178         | 0.8997        | 1.7175        | 0.0000        | 8,887.0149         | 8,887.0149         | 1.2308        | 0.4484        | 9,051.4230         |
| 2024           | 71.1019        | 35.2740         | 46.7547        | 0.1179        | 3.5525         | 1.3924        | 4.9449         | 0.9650         | 1.2997        | 2.2647        | 0.0000        | 11,791.0806        | 11,791.0806        | 1.9672        | 0.4503        | 11,974.4381        |
| <b>Maximum</b> | <b>71.1019</b> | <b>140.4811</b> | <b>77.6191</b> | <b>0.4343</b> | <b>12.3274</b> | <b>3.4627</b> | <b>15.7900</b> | <b>3.5711</b>  | <b>3.2309</b> | <b>6.8020</b> | <b>0.0000</b> | <b>46,114.8674</b> | <b>46,114.8674</b> | <b>4.6787</b> | <b>5.3817</b> | <b>47,835.5895</b> |



ARE Science Village - 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         | 10.4760        | 1.1800e-003   | 0.1307         | 1.0000e-005   |                | 4.6000e-004   | 4.6000e-004    |                | 4.6000e-004   | 4.6000e-004   |          | 0.2809             | 0.2809             | 7.3000e-004   |               | 0.2991             |
| Energy       | 0.1616         | 1.4694        | 1.2343         | 8.8200e-003   |                | 0.1117        | 0.1117         |                | 0.1117        | 0.1117        |          | 1,763.3248         | 1,763.3248         | 0.0338        | 0.0323        | 1,773.8034         |
| Mobile       | 7.6921         | 7.4928        | 66.1528        | 0.1428        | 14.9750        | 0.1086        | 15.0836        | 3.9891         | 0.1013        | 4.0903        |          | 14,797.4038        | 14,797.4038        | 0.9994        | 0.6283        | 15,009.6061        |
| <b>Total</b> | <b>18.3298</b> | <b>8.9635</b> | <b>67.5178</b> | <b>0.1517</b> | <b>14.9750</b> | <b>0.2207</b> | <b>15.1957</b> | <b>3.9891</b>  | <b>0.2134</b> | <b>4.2025</b> |          | <b>16,561.0095</b> | <b>16,561.0095</b> | <b>1.0339</b> | <b>0.6606</b> | <b>16,783.7086</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         | 10.4760        | 1.1800e-003   | 0.1307         | 1.0000e-005   |                | 4.6000e-004   | 4.6000e-004    |                | 4.6000e-004   | 4.6000e-004   |          | 0.2809             | 0.2809             | 7.3000e-004   |               | 0.2991             |
| Energy       | 0.1616         | 1.4694        | 1.2343         | 8.8200e-003   |                | 0.1117        | 0.1117         |                | 0.1117        | 0.1117        |          | 1,763.3248         | 1,763.3248         | 0.0338        | 0.0323        | 1,773.8034         |
| Mobile       | 7.6921         | 7.4928        | 66.1528        | 0.1428        | 14.9750        | 0.1086        | 15.0836        | 3.9891         | 0.1013        | 4.0903        |          | 14,797.4038        | 14,797.4038        | 0.9994        | 0.6283        | 15,009.6061        |
| <b>Total</b> | <b>18.3298</b> | <b>8.9635</b> | <b>67.5178</b> | <b>0.1517</b> | <b>14.9750</b> | <b>0.2207</b> | <b>15.1957</b> | <b>3.9891</b>  | <b>0.2134</b> | <b>4.2025</b> |          | <b>16,561.0095</b> | <b>16,561.0095</b> | <b>1.0339</b> | <b>0.6606</b> | <b>16,783.7086</b> |

ARE Science Village - 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 |
|-------------------|------|------|------|------|---------------|--------------|------------|----------------|---------------|-------------|----------|----------|-----------|------|------|------|
| Percent Reduction | 0.00 | 0.00 | 0.00 | 0.00 | 0.00          | 0.00         | 0.00       | 0.00           | 0.00          | 0.00        | 0.00     | 0.00     | 0.00      | 0.00 | 0.00 | 0.00 |

**3.0 Construction Detail**

**Construction Phase**

| Phase Number | Phase Name            | Phase Type            | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|--------------|-----------------------|-----------------------|------------|----------|---------------|----------|-------------------|
| 1            | Demolition            | Demolition            | 1/1/2022   | 5/4/2022 | 5             | 88       |                   |
| 2            | Grading               | Grading               | 5/5/2022   | 9/5/2022 | 5             | 88       |                   |
| 3            | Building Construction | Building Construction | 8/1/2022   | 8/7/2024 | 5             | 528      |                   |
| 4            | Architectural Coating | Architectural Coating | 1/1/2024   | 7/2/2024 | 5             | 132      |                   |
| 5            | Paving                | Paving                | 5/1/2024   | 7/1/2024 | 5             | 44       |                   |

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

**Acres of Grading (Grading Phase): 264**

**Acres of Paving: 8.22**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 554,817; Non-Residential Outdoor: 184,939; Striped Parking Area: 21,912 (Architectural Coating – sqft)**

**OffRoad Equipment**

| Phase Name | Offroad Equipment Type   | Amount | Usage Hours | Horse Power | Load Factor |
|------------|--------------------------|--------|-------------|-------------|-------------|
| Demolition | Concrete/Industrial Saws | 1      | 8.00        | 81          | 0.73        |
| Demolition | Excavators               | 3      | 8.00        | 158         | 0.38        |
| Demolition | Rubber Tired Dozers      | 2      | 8.00        | 247         | 0.40        |
| 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        |

ARE Science Village - San Diego County, Summer

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

|                       |                              |   |      |     |      |
|-----------------------|------------------------------|---|------|-----|------|
| Grading               | Scrapers                     | 2 | 8.00 | 367 | 0.48 |
| Grading               | Tractors/Loaders/Backhoes    | 2 | 8.00 | 97  | 0.37 |
| 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 | Other Construction Equipment | 1 | 6.00 | 475 | 0.50 |
| 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 |
| Paving                | Pavers                       | 2 | 8.00 | 130 | 0.42 |
| Paving                | Paving Equipment             | 2 | 8.00 | 132 | 0.36 |
| Paving                | Rollers                      | 2 | 8.00 | 80  | 0.38 |

**Trips and VMT**

| Phase Name            | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|-----------------------|-------------------------|--------------------|--------------------|---------------------|--------------------|--------------------|---------------------|----------------------|----------------------|-----------------------|
| Demolition            | 6                       | 15.00              | 0.00               | 1,351.00            | 10.80              | 7.30               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Grading               | 8                       | 20.00              | 0.00               | 39,363.00           | 10.80              | 7.30               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Building Construction | 10                      | 282.00             | 124.00             | 0.00                | 10.80              | 7.30               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Architectural Coating | 1                       | 56.00              | 0.00               | 0.00                | 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                  |

**3.1 Mitigation Measures Construction**

- Replace Ground Cover
- Water Exposed Area
- Clean Paved Roads

ARE Science Village - San Diego County, Summer

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

**3.2 Demolition - 2022**

**Unmitigated Construction On-Site**

|               | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2              | Total CO2              | CH4           | N2O | CO2e                   |
|---------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|------------------------|------------------------|---------------|-----|------------------------|
| Category      | lb/day        |                |                |               |               |               |               |                |               |               | lb/day   |                        |                        |               |     |                        |
| Fugitive Dust |               |                |                |               | 3.3634        | 0.0000        | 3.3634        | 0.5093         | 0.0000        | 0.5093        |          |                        | 0.0000                 |               |     | 0.0000                 |
| Off-Road      | 2.6392        | 25.7194        | 20.5941        | 0.0388        |               | 1.2427        | 1.2427        |                | 1.1553        | 1.1553        |          | 3,746.781<br>2         | 3,746.781<br>2         | 1.0524        |     | 3,773.092<br>0         |
| <b>Total</b>  | <b>2.6392</b> | <b>25.7194</b> | <b>20.5941</b> | <b>0.0388</b> | <b>3.3634</b> | <b>1.2427</b> | <b>4.6061</b> | <b>0.5093</b>  | <b>1.1553</b> | <b>1.6646</b> |          | <b>3,746.781<br/>2</b> | <b>3,746.781<br/>2</b> | <b>1.0524</b> |     | <b>3,773.092<br/>0</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      | 0.0688        | 2.4934        | 0.6061        | 9.6300e-003   | 0.2685        | 0.0240        | 0.2925        | 0.0736         | 0.0230        | 0.0966        |          | 1,060.565<br>0         | 1,060.565<br>0         | 0.0510        | 0.1685        | 1,112.045<br>5         |
| 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       | 0.0438        | 0.0285        | 0.3889        | 1.1200e-003   | 0.1232        | 7.0000e-004   | 0.1239        | 0.0327         | 6.4000e-004   | 0.0333        |          | 114.3907               | 114.3907               | 3.2800e-003   | 2.9500e-003   | 115.3516               |
| <b>Total</b> | <b>0.1126</b> | <b>2.5219</b> | <b>0.9950</b> | <b>0.0108</b> | <b>0.3917</b> | <b>0.0247</b> | <b>0.4165</b> | <b>0.1063</b>  | <b>0.0236</b> | <b>0.1299</b> |          | <b>1,174.955<br/>7</b> | <b>1,174.955<br/>7</b> | <b>0.0543</b> | <b>0.1714</b> | <b>1,227.397<br/>1</b> |

ARE Science Village - San Diego County, Summer

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

**3.2 Demolition - 2022**

**Mitigated Construction On-Site**

|               | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2              | Total CO2              | CH4           | N2O | CO2e                   |
|---------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|------------------------|------------------------|---------------|-----|------------------------|
| Category      | lb/day        |                |                |               |               |               |               |                |               |               | lb/day        |                        |                        |               |     |                        |
| Fugitive Dust |               |                |                |               | 0.5903        | 0.0000        | 0.5903        | 0.0894         | 0.0000        | 0.0894        |               |                        | 0.0000                 |               |     | 0.0000                 |
| Off-Road      | 2.6392        | 25.7194        | 20.5941        | 0.0388        |               | 1.2427        | 1.2427        |                | 1.1553        | 1.1553        | 0.0000        | 3,746.781<br>2         | 3,746.781<br>2         | 1.0524        |     | 3,773.092<br>0         |
| <b>Total</b>  | <b>2.6392</b> | <b>25.7194</b> | <b>20.5941</b> | <b>0.0388</b> | <b>0.5903</b> | <b>1.2427</b> | <b>1.8329</b> | <b>0.0894</b>  | <b>1.1553</b> | <b>1.2447</b> | <b>0.0000</b> | <b>3,746.781<br/>2</b> | <b>3,746.781<br/>2</b> | <b>1.0524</b> |     | <b>3,773.092<br/>0</b> |

**Mitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2              | Total CO2              | CH4           | N2O           | CO2e                   |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|------------------------|------------------------|---------------|---------------|------------------------|
| Category     | lb/day        |               |               |               |               |               |               |                |               |               | lb/day   |                        |                        |               |               |                        |
| Hauling      | 0.0688        | 2.4934        | 0.6061        | 9.6300e-003   | 0.2563        | 0.0240        | 0.2804        | 0.0706         | 0.0230        | 0.0936        |          | 1,060.565<br>0         | 1,060.565<br>0         | 0.0510        | 0.1685        | 1,112.045<br>5         |
| 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       | 0.0438        | 0.0285        | 0.3889        | 1.1200e-003   | 0.1168        | 7.0000e-004   | 0.1175        | 0.0311         | 6.4000e-004   | 0.0318        |          | 114.3907               | 114.3907               | 3.2800e-003   | 2.9500e-003   | 115.3516               |
| <b>Total</b> | <b>0.1126</b> | <b>2.5219</b> | <b>0.9950</b> | <b>0.0108</b> | <b>0.3731</b> | <b>0.0247</b> | <b>0.3978</b> | <b>0.1017</b>  | <b>0.0236</b> | <b>0.1253</b> |          | <b>1,174.955<br/>7</b> | <b>1,174.955<br/>7</b> | <b>0.0543</b> | <b>0.1714</b> | <b>1,227.397<br/>1</b> |



ARE Science Village - 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 - 2022**

**Unmitigated Construction On-Site**

|               | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total     | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|---------------|---------------|----------------|----------------|---------------|---------------|---------------|----------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category      | lb/day        |                |                |               |               |               |                |                |               |               | lb/day   |                   |                   |               |     |                   |
| Fugitive Dust |               |                |                |               | 9.7064        | 0.0000        | 9.7064         | 3.7299         | 0.0000        | 3.7299        |          |                   | 0.0000            |               |     | 0.0000            |
| Off-Road      | 3.6248        | 38.8435        | 29.0415        | 0.0621        |               | 1.6349        | 1.6349         |                | 1.5041        | 1.5041        |          | 6,011.4105        | 6,011.4105        | 1.9442        |     | 6,060.0158        |
| <b>Total</b>  | <b>3.6248</b> | <b>38.8435</b> | <b>29.0415</b> | <b>0.0621</b> | <b>9.7064</b> | <b>1.6349</b> | <b>11.3413</b> | <b>3.7299</b>  | <b>1.5041</b> | <b>5.2340</b> |          | <b>6,011.4105</b> | <b>6,011.4105</b> | <b>1.9442</b> |     | <b>6,060.0158</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      | 2.0046        | 72.6476        | 17.6591        | 0.2807        | 7.8233        | 0.6998        | 8.5231        | 2.1444         | 0.6695        | 2.8139        |          | 30,900.8297        | 30,900.8297        | 1.4861        | 4.9087        | 32,400.7745        |
| 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       | 0.0584        | 0.0380         | 0.5186         | 1.5000e-003   | 0.1643        | 9.3000e-004   | 0.1652        | 0.0436         | 8.6000e-004   | 0.0444        |          | 152.5209           | 152.5209           | 4.3800e-003   | 3.9300e-003   | 153.8022           |
| <b>Total</b> | <b>2.0630</b> | <b>72.6856</b> | <b>18.1776</b> | <b>0.2822</b> | <b>7.9876</b> | <b>0.7007</b> | <b>8.6883</b> | <b>2.1880</b>  | <b>0.6704</b> | <b>2.8583</b> |          | <b>31,053.3506</b> | <b>31,053.3506</b> | <b>1.4905</b> | <b>4.9126</b> | <b>32,554.5766</b> |

ARE Science Village - 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 - 2022**

**Mitigated Construction On-Site**

|               | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|---------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|-----|-------------------|
| Category      | lb/day        |                |                |               |               |               |               |                |               |               | lb/day        |                   |                   |               |     |                   |
| Fugitive Dust |               |                |                |               | 1.7035        | 0.0000        | 1.7035        | 0.6546         | 0.0000        | 0.6546        |               |                   | 0.0000            |               |     | 0.0000            |
| Off-Road      | 3.6248        | 38.8435        | 29.0415        | 0.0621        |               | 1.6349        | 1.6349        |                | 1.5041        | 1.5041        | 0.0000        | 6,011.4105        | 6,011.4105        | 1.9442        |     | 6,060.0158        |
| <b>Total</b>  | <b>3.6248</b> | <b>38.8435</b> | <b>29.0415</b> | <b>0.0621</b> | <b>1.7035</b> | <b>1.6349</b> | <b>3.3384</b> | <b>0.6546</b>  | <b>1.5041</b> | <b>2.1587</b> | <b>0.0000</b> | <b>6,011.4105</b> | <b>6,011.4105</b> | <b>1.9442</b> |     | <b>6,060.0158</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      | 2.0046        | 72.6476        | 17.6591        | 0.2807        | 7.4685        | 0.6998        | 8.1683        | 2.0573         | 0.6695        | 2.7268        |          | 30,900.8297        | 30,900.8297        | 1.4861        | 4.9087        | 32,400.7745        |
| 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       | 0.0584        | 0.0380         | 0.5186         | 1.5000e-003   | 0.1557        | 9.3000e-004   | 0.1567        | 0.0415         | 8.6000e-004   | 0.0423        |          | 152.5209           | 152.5209           | 4.3800e-003   | 3.9300e-003   | 153.8022           |
| <b>Total</b> | <b>2.0630</b> | <b>72.6856</b> | <b>18.1776</b> | <b>0.2822</b> | <b>7.6242</b> | <b>0.7007</b> | <b>8.3249</b> | <b>2.0988</b>  | <b>0.6704</b> | <b>2.7691</b> |          | <b>31,053.3506</b> | <b>31,053.3506</b> | <b>1.4905</b> | <b>4.9126</b> | <b>32,554.5766</b> |

ARE Science Village - San Diego County, Summer

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

**3.4 Building Construction - 2022**

**Unmitigated Construction On-Site**

|              | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category     | lb/day        |                |                |               |               |               |               |                |               |               | lb/day   |                   |                   |               |     |                   |
| Off-Road     | 2.2970        | 21.8217        | 20.8819        | 0.0424        |               | 1.0422        | 1.0422        |                | 0.9757        | 0.9757        |          | 4,049.7236        | 4,049.7236        | 1.0956        |     | 4,077.1133        |
| <b>Total</b> | <b>2.2970</b> | <b>21.8217</b> | <b>20.8819</b> | <b>0.0424</b> |               | <b>1.0422</b> | <b>1.0422</b> |                | <b>0.9757</b> | <b>0.9757</b> |          | <b>4,049.7236</b> | <b>4,049.7236</b> | <b>1.0956</b> |     | <b>4,077.1133</b> |

**Unmitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O           | CO2e              |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|---------------|-------------------|
| Category     | lb/day        |               |               |               |               |               |               |                |               |               | lb/day   |                   |                   |               |               |                   |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000         | 0.0000        | 0.0000        |          | 0.0000            | 0.0000            | 0.0000        | 0.0000        | 0.0000            |
| Vendor       | 0.2763        | 6.5944        | 2.2060        | 0.0265        | 0.8398        | 0.0717        | 0.9115        | 0.2418         | 0.0686        | 0.3103        |          | 2,849.8378        | 2,849.8378        | 0.0867        | 0.4137        | 2,975.2736        |
| Worker       | 0.8233        | 0.5359        | 7.3120        | 0.0211        | 2.3166        | 0.0131        | 2.3297        | 0.6145         | 0.0121        | 0.6265        |          | 2,150.5449        | 2,150.5449        | 0.0617        | 0.0554        | 2,168.6103        |
| <b>Total</b> | <b>1.0996</b> | <b>7.1304</b> | <b>9.5180</b> | <b>0.0476</b> | <b>3.1564</b> | <b>0.0848</b> | <b>3.2412</b> | <b>0.8562</b>  | <b>0.0807</b> | <b>0.9369</b> |          | <b>5,000.3827</b> | <b>5,000.3827</b> | <b>0.1484</b> | <b>0.4691</b> | <b>5,143.8838</b> |

ARE Science Village - San Diego County, Summer

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

**3.4 Building Construction - 2022**

**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     | 2.2970        | 21.8217        | 20.8819        | 0.0424        |               | 1.0422        | 1.0422        |                | 0.9757        | 0.9757        | 0.0000        | 4,049.7236        | 4,049.7236        | 1.0956        |     | 4,077.1132        |
| <b>Total</b> | <b>2.2970</b> | <b>21.8217</b> | <b>20.8819</b> | <b>0.0424</b> |               | <b>1.0422</b> | <b>1.0422</b> |                | <b>0.9757</b> | <b>0.9757</b> | <b>0.0000</b> | <b>4,049.7236</b> | <b>4,049.7236</b> | <b>1.0956</b> |     | <b>4,077.1132</b> |

**Mitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O           | CO2e              |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|---------------|-------------------|
| Category     | lb/day        |               |               |               |               |               |               |                |               |               | lb/day   |                   |                   |               |               |                   |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000         | 0.0000        | 0.0000        |          | 0.0000            | 0.0000            | 0.0000        | 0.0000        | 0.0000            |
| Vendor       | 0.2763        | 6.5944        | 2.2060        | 0.0265        | 0.8039        | 0.0717        | 0.8756        | 0.2330         | 0.0686        | 0.3015        |          | 2,849.8378        | 2,849.8378        | 0.0867        | 0.4137        | 2,975.2736        |
| Worker       | 0.8233        | 0.5359        | 7.3120        | 0.0211        | 2.1958        | 0.0131        | 2.2089        | 0.5848         | 0.0121        | 0.5969        |          | 2,150.5449        | 2,150.5449        | 0.0617        | 0.0554        | 2,168.6103        |
| <b>Total</b> | <b>1.0996</b> | <b>7.1304</b> | <b>9.5180</b> | <b>0.0476</b> | <b>2.9997</b> | <b>0.0848</b> | <b>3.0845</b> | <b>0.8178</b>  | <b>0.0807</b> | <b>0.8984</b> |          | <b>5,000.3827</b> | <b>5,000.3827</b> | <b>0.1484</b> | <b>0.4691</b> | <b>5,143.8838</b> |

ARE Science Village - San Diego County, Summer

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

**3.4 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     | 2.1394        | 20.0783        | 20.6295        | 0.0424        |               | 0.9159        | 0.9159        |                | 0.8573        | 0.8573        |          | 4,051.1857        | 4,051.1857        | 1.0917        |     | 4,078.4776        |
| <b>Total</b> | <b>2.1394</b> | <b>20.0783</b> | <b>20.6295</b> | <b>0.0424</b> |               | <b>0.9159</b> | <b>0.9159</b> |                | <b>0.8573</b> | <b>0.8573</b> |          | <b>4,051.1857</b> | <b>4,051.1857</b> | <b>1.0917</b> |     | <b>4,078.4776</b> |

**Unmitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O           | CO2e              |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|---------------|-------------------|
| Category     | lb/day        |               |               |               |               |               |               |                |               |               | lb/day   |                   |                   |               |               |                   |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000         | 0.0000        | 0.0000        |          | 0.0000            | 0.0000            | 0.0000        | 0.0000        | 0.0000            |
| Vendor       | 0.1481        | 5.3156        | 1.9156        | 0.0254        | 0.8398        | 0.0324        | 0.8722        | 0.2418         | 0.0310        | 0.2728        |          | 2,740.9822        | 2,740.9822        | 0.0831        | 0.3969        | 2,861.3273        |
| Worker       | 0.7711        | 0.4789        | 6.7860        | 0.0205        | 2.3166        | 0.0125        | 2.3290        | 0.6145         | 0.0115        | 0.6259        |          | 2,094.8470        | 2,094.8470        | 0.0561        | 0.0516        | 2,111.6181        |
| <b>Total</b> | <b>0.9193</b> | <b>5.7945</b> | <b>8.7015</b> | <b>0.0459</b> | <b>3.1564</b> | <b>0.0449</b> | <b>3.2012</b> | <b>0.8562</b>  | <b>0.0425</b> | <b>0.8987</b> |          | <b>4,835.8292</b> | <b>4,835.8292</b> | <b>0.1392</b> | <b>0.4484</b> | <b>4,972.9454</b> |

ARE Science Village - San Diego County, Summer

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

**3.4 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     | 2.1394        | 20.0783        | 20.6295        | 0.0424        |               | 0.9159        | 0.9159        |                | 0.8573        | 0.8573        | 0.0000        | 4,051.1857        | 4,051.1857        | 1.0917        |     | 4,078.4776        |
| <b>Total</b> | <b>2.1394</b> | <b>20.0783</b> | <b>20.6295</b> | <b>0.0424</b> |               | <b>0.9159</b> | <b>0.9159</b> |                | <b>0.8573</b> | <b>0.8573</b> | <b>0.0000</b> | <b>4,051.1857</b> | <b>4,051.1857</b> | <b>1.0917</b> |     | <b>4,078.4776</b> |

**Mitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O           | CO2e              |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|---------------|-------------------|
| Category     | lb/day        |               |               |               |               |               |               |                |               |               | lb/day   |                   |                   |               |               |                   |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000         | 0.0000        | 0.0000        |          | 0.0000            | 0.0000            | 0.0000        | 0.0000        | 0.0000            |
| Vendor       | 0.1481        | 5.3156        | 1.9156        | 0.0254        | 0.8039        | 0.0324        | 0.8363        | 0.2330         | 0.0310        | 0.2639        |          | 2,740.9822        | 2,740.9822        | 0.0831        | 0.3969        | 2,861.3273        |
| Worker       | 0.7711        | 0.4789        | 6.7860        | 0.0205        | 2.1958        | 0.0125        | 2.2082        | 0.5848         | 0.0115        | 0.5963        |          | 2,094.8470        | 2,094.8470        | 0.0561        | 0.0516        | 2,111.6181        |
| <b>Total</b> | <b>0.9193</b> | <b>5.7945</b> | <b>8.7015</b> | <b>0.0459</b> | <b>2.9997</b> | <b>0.0449</b> | <b>3.0445</b> | <b>0.8178</b>  | <b>0.0425</b> | <b>0.8602</b> |          | <b>4,835.8292</b> | <b>4,835.8292</b> | <b>0.1392</b> | <b>0.4484</b> | <b>4,972.9454</b> |

ARE Science Village - San Diego County, Summer

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

**3.4 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     | 2.0213        | 18.7120        | 20.5100        | 0.0424        |               | 0.8155        | 0.8155        |                | 0.7630        | 0.7630        |          | 4,052.614<br>4         | 4,052.614<br>4         | 1.0885        |     | 4,079.826<br>4         |
| <b>Total</b> | <b>2.0213</b> | <b>18.7120</b> | <b>20.5100</b> | <b>0.0424</b> |               | <b>0.8155</b> | <b>0.8155</b> |                | <b>0.7630</b> | <b>0.7630</b> |          | <b>4,052.614<br/>4</b> | <b>4,052.614<br/>4</b> | <b>1.0885</b> |     | <b>4,079.826<br/>4</b> |

**Unmitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2              | Total CO2              | CH4           | N2O           | CO2e                   |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|------------------------|------------------------|---------------|---------------|------------------------|
| Category     | lb/day        |               |               |               |               |               |               |                |               |               | lb/day   |                        |                        |               |               |                        |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000         | 0.0000        | 0.0000        |          | 0.0000                 | 0.0000                 | 0.0000        | 0.0000        | 0.0000                 |
| Vendor       | 0.1426        | 5.2794        | 1.8708        | 0.0249        | 0.8398        | 0.0326        | 0.8724        | 0.2418         | 0.0311        | 0.2729        |          | 2,693.194<br>0         | 2,693.194<br>0         | 0.0850        | 0.3899        | 2,811.517<br>8         |
| Worker       | 0.7244        | 0.4308        | 6.3414        | 0.0198        | 2.3166        | 0.0119        | 2.3284        | 0.6145         | 0.0109        | 0.6254        |          | 2,042.125<br>0         | 2,042.125<br>0         | 0.0510        | 0.0482        | 2,057.763<br>9         |
| <b>Total</b> | <b>0.8670</b> | <b>5.7102</b> | <b>8.2122</b> | <b>0.0447</b> | <b>3.1564</b> | <b>0.0444</b> | <b>3.2008</b> | <b>0.8562</b>  | <b>0.0421</b> | <b>0.8983</b> |          | <b>4,735.319<br/>0</b> | <b>4,735.319<br/>0</b> | <b>0.1360</b> | <b>0.4381</b> | <b>4,869.281<br/>6</b> |

ARE Science Village - San Diego County, Summer

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

**3.4 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     | 2.0213        | 18.7120        | 20.5100        | 0.0424        |               | 0.8155        | 0.8155        |                | 0.7630        | 0.7630        | 0.0000        | 4,052.614<br>4         | 4,052.614<br>4         | 1.0885        |     | 4,079.826<br>4         |
| <b>Total</b> | <b>2.0213</b> | <b>18.7120</b> | <b>20.5100</b> | <b>0.0424</b> |               | <b>0.8155</b> | <b>0.8155</b> |                | <b>0.7630</b> | <b>0.7630</b> | <b>0.0000</b> | <b>4,052.614<br/>4</b> | <b>4,052.614<br/>4</b> | <b>1.0885</b> |     | <b>4,079.826<br/>4</b> |

**Mitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2              | Total CO2              | CH4           | N2O           | CO2e                   |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|------------------------|------------------------|---------------|---------------|------------------------|
| Category     | lb/day        |               |               |               |               |               |               |                |               |               | lb/day   |                        |                        |               |               |                        |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000         | 0.0000        | 0.0000        |          | 0.0000                 | 0.0000                 | 0.0000        | 0.0000        | 0.0000                 |
| Vendor       | 0.1426        | 5.2794        | 1.8708        | 0.0249        | 0.8039        | 0.0326        | 0.8365        | 0.2330         | 0.0311        | 0.2641        |          | 2,693.194<br>0         | 2,693.194<br>0         | 0.0850        | 0.3899        | 2,811.517<br>8         |
| Worker       | 0.7244        | 0.4308        | 6.3414        | 0.0198        | 2.1958        | 0.0119        | 2.2076        | 0.5848         | 0.0109        | 0.5958        |          | 2,042.125<br>0         | 2,042.125<br>0         | 0.0510        | 0.0482        | 2,057.763<br>9         |
| <b>Total</b> | <b>0.8670</b> | <b>5.7102</b> | <b>8.2122</b> | <b>0.0447</b> | <b>2.9997</b> | <b>0.0444</b> | <b>3.0441</b> | <b>0.8178</b>  | <b>0.0421</b> | <b>0.8598</b> |          | <b>4,735.319<br/>0</b> | <b>4,735.319<br/>0</b> | <b>0.1360</b> | <b>0.4381</b> | <b>4,869.281<br/>6</b> |



ARE Science Village - San Diego County, Summer

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

**3.5 Architectural Coating - 2024**

**Unmitigated Construction On-Site**

|                 | ROG            | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4           | N2O | CO2e            |
|-----------------|----------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-----------------|-----------------|---------------|-----|-----------------|
| Category        | lb/day         |               |               |                    |               |               |               |                |               |               | lb/day   |                 |                 |               |     |                 |
| Archit. Coating | 66.8623        |               |               |                    |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          |                 | 0.0000          |               |     | 0.0000          |
| Off-Road        | 0.1808         | 1.2188        | 1.8101        | 2.9700e-003        |               | 0.0609        | 0.0609        |                | 0.0609        | 0.0609        |          | 281.4481        | 281.4481        | 0.0159        |     | 281.8443        |
| <b>Total</b>    | <b>67.0431</b> | <b>1.2188</b> | <b>1.8101</b> | <b>2.9700e-003</b> |               | <b>0.0609</b> | <b>0.0609</b> |                | <b>0.0609</b> | <b>0.0609</b> |          | <b>281.4481</b> | <b>281.4481</b> | <b>0.0159</b> |     | <b>281.8443</b> |

**Unmitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4           | N2O                | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|---------------|--------------------|-----------------|
| Category     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |               |                    |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000        | 0.0000             | 0.0000          |
| Vendor       | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000        | 0.0000             | 0.0000          |
| Worker       | 0.1438        | 0.0856        | 1.2593        | 3.9300e-003        | 0.4600        | 2.3600e-003        | 0.4624        | 0.1220         | 2.1700e-003        | 0.1242        |          | 405.5284        | 405.5284        | 0.0101        | 9.5700e-003        | 408.6340        |
| <b>Total</b> | <b>0.1438</b> | <b>0.0856</b> | <b>1.2593</b> | <b>3.9300e-003</b> | <b>0.4600</b> | <b>2.3600e-003</b> | <b>0.4624</b> | <b>0.1220</b>  | <b>2.1700e-003</b> | <b>0.1242</b> |          | <b>405.5284</b> | <b>405.5284</b> | <b>0.0101</b> | <b>9.5700e-003</b> | <b>408.6340</b> |

ARE Science Village - San Diego County, Summer

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

**3.5 Architectural Coating - 2024**

**Mitigated Construction On-Site**

|                 | ROG            | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4           | N2O | CO2e            |
|-----------------|----------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|-----|-----------------|
| Category        | lb/day         |               |               |                    |               |               |               |                |               |               | lb/day        |                 |                 |               |     |                 |
| Archit. Coating | 66.8623        |               |               |                    |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |               |                 | 0.0000          |               |     | 0.0000          |
| Off-Road        | 0.1808         | 1.2188        | 1.8101        | 2.9700e-003        |               | 0.0609        | 0.0609        |                | 0.0609        | 0.0609        | 0.0000        | 281.4481        | 281.4481        | 0.0159        |     | 281.8443        |
| <b>Total</b>    | <b>67.0431</b> | <b>1.2188</b> | <b>1.8101</b> | <b>2.9700e-003</b> |               | <b>0.0609</b> | <b>0.0609</b> |                | <b>0.0609</b> | <b>0.0609</b> | <b>0.0000</b> | <b>281.4481</b> | <b>281.4481</b> | <b>0.0159</b> |     | <b>281.8443</b> |

**Mitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4           | N2O                | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|---------------|--------------------|-----------------|
| Category     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |               |                    |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000        | 0.0000             | 0.0000          |
| Vendor       | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000        | 0.0000             | 0.0000          |
| Worker       | 0.1438        | 0.0856        | 1.2593        | 3.9300e-003        | 0.4360        | 2.3600e-003        | 0.4384        | 0.1161         | 2.1700e-003        | 0.1183        |          | 405.5284        | 405.5284        | 0.0101        | 9.5700e-003        | 408.6340        |
| <b>Total</b> | <b>0.1438</b> | <b>0.0856</b> | <b>1.2593</b> | <b>3.9300e-003</b> | <b>0.4360</b> | <b>2.3600e-003</b> | <b>0.4384</b> | <b>0.1161</b>  | <b>2.1700e-003</b> | <b>0.1183</b> |          | <b>405.5284</b> | <b>405.5284</b> | <b>0.0101</b> | <b>9.5700e-003</b> | <b>408.6340</b> |

ARE Science Village - San Diego County, Summer

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

**3.6 Paving - 2024**

**Unmitigated Construction On-Site**

|              | ROG           | NOx           | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2              | Total CO2              | CH4           | N2O | CO2e                   |
|--------------|---------------|---------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|------------------------|------------------------|---------------|-----|------------------------|
| Category     | lb/day        |               |                |               |               |               |               |                |               |               | lb/day   |                        |                        |               |     |                        |
| Off-Road     | 0.9882        | 9.5246        | 14.6258        | 0.0228        |               | 0.4685        | 0.4685        |                | 0.4310        | 0.4310        |          | 2,207.547<br>2         | 2,207.547<br>2         | 0.7140        |     | 2,225.396<br>3         |
| Paving       | 0.0000        |               |                |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          |                        | 0.0000                 |               |     | 0.0000                 |
| <b>Total</b> | <b>0.9882</b> | <b>9.5246</b> | <b>14.6258</b> | <b>0.0228</b> |               | <b>0.4685</b> | <b>0.4685</b> |                | <b>0.4310</b> | <b>0.4310</b> |          | <b>2,207.547<br/>2</b> | <b>2,207.547<br/>2</b> | <b>0.7140</b> |     | <b>2,225.396<br/>3</b> |

**Unmitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4                | N2O                | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|--------------------|-----------------|
| Category     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |                    |                    |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000             | 0.0000             | 0.0000          |
| Vendor       | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000             | 0.0000             | 0.0000          |
| Worker       | 0.0385        | 0.0229        | 0.3373        | 1.0500e-003        | 0.1232        | 6.3000e-004        | 0.1239        | 0.0327         | 5.8000e-004        | 0.0333        |          | 108.6237        | 108.6237        | 2.7100e-003        | 2.5600e-003        | 109.4555        |
| <b>Total</b> | <b>0.0385</b> | <b>0.0229</b> | <b>0.3373</b> | <b>1.0500e-003</b> | <b>0.1232</b> | <b>6.3000e-004</b> | <b>0.1239</b> | <b>0.0327</b>  | <b>5.8000e-004</b> | <b>0.0333</b> |          | <b>108.6237</b> | <b>108.6237</b> | <b>2.7100e-003</b> | <b>2.5600e-003</b> | <b>109.4555</b> |

ARE Science Village - San Diego County, Summer

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

**3.6 Paving - 2024**

**Mitigated Construction On-Site**

|              | ROG           | NOx           | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2              | Total CO2              | CH4           | N2O | CO2e                   |
|--------------|---------------|---------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|------------------------|------------------------|---------------|-----|------------------------|
| Category     | lb/day        |               |                |               |               |               |               |                |               |               | lb/day        |                        |                        |               |     |                        |
| Off-Road     | 0.9882        | 9.5246        | 14.6258        | 0.0228        |               | 0.4685        | 0.4685        |                | 0.4310        | 0.4310        | 0.0000        | 2,207.547<br>2         | 2,207.547<br>2         | 0.7140        |     | 2,225.396<br>3         |
| Paving       | 0.0000        |               |                |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |               |                        | 0.0000                 |               |     | 0.0000                 |
| <b>Total</b> | <b>0.9882</b> | <b>9.5246</b> | <b>14.6258</b> | <b>0.0228</b> |               | <b>0.4685</b> | <b>0.4685</b> |                | <b>0.4310</b> | <b>0.4310</b> | <b>0.0000</b> | <b>2,207.547<br/>2</b> | <b>2,207.547<br/>2</b> | <b>0.7140</b> |     | <b>2,225.396<br/>3</b> |

**Mitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4                | N2O                | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|--------------------|-----------------|
| Category     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |                    |                    |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000             | 0.0000             | 0.0000          |
| Vendor       | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000             | 0.0000             | 0.0000          |
| Worker       | 0.0385        | 0.0229        | 0.3373        | 1.0500e-003        | 0.1168        | 6.3000e-004        | 0.1174        | 0.0311         | 5.8000e-004        | 0.0317        |          | 108.6237        | 108.6237        | 2.7100e-003        | 2.5600e-003        | 109.4555        |
| <b>Total</b> | <b>0.0385</b> | <b>0.0229</b> | <b>0.3373</b> | <b>1.0500e-003</b> | <b>0.1168</b> | <b>6.3000e-004</b> | <b>0.1174</b> | <b>0.0311</b>  | <b>5.8000e-004</b> | <b>0.0317</b> |          | <b>108.6237</b> | <b>108.6237</b> | <b>2.7100e-003</b> | <b>2.5600e-003</b> | <b>109.4555</b> |

ARE Science Village - 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   | 7.6921 | 7.4928 | 66.1528 | 0.1428 | 14.9750       | 0.1086       | 15.0836    | 3.9891         | 0.1013        | 4.0903      |          | 14,797.40<br>38 | 14,797.40<br>38 | 0.9994 | 0.6283 | 15,009.60<br>61 |
| Unmitigated | 7.6921 | 7.4928 | 66.1528 | 0.1428 | 14.9750       | 0.1086       | 15.0836    | 3.9891         | 0.1013        | 4.0903      |          | 14,797.40<br>38 | 14,797.40<br>38 | 0.9994 | 0.6283 | 15,009.60<br>61 |

4.2 Trip Summary Information

| Land Use                            | Average Daily Trip Rate |                 |                 | Unmitigated      | Mitigated        |
|-------------------------------------|-------------------------|-----------------|-----------------|------------------|------------------|
|                                     | Weekday                 | Saturday        | Sunday          | Annual VMT       | Annual VMT       |
| City Park                           | 0.00                    | 0.00            | 0.00            |                  |                  |
| Enclosed Parking with Elevator      | 0.00                    | 0.00            | 0.00            |                  |                  |
| Fast Food Restaurant w/o Drive Thru | 0.00                    | 0.00            | 0.00            |                  |                  |
| General Office Building             | 0.00                    | 0.00            | 0.00            |                  |                  |
| Research & Development              | 2,838.36                | 2,838.36        | 2838.36         | 7,113,643        | 7,113,643        |
| Supermarket                         | 0.00                    | 0.00            | 0.00            |                  |                  |
| <b>Total</b>                        | <b>2,838.36</b>         | <b>2,838.36</b> | <b>2,838.36</b> | <b>7,113,643</b> | <b>7,113,643</b> |

4.3 Trip Type Information

| Land Use  | Miles      |            |             | Trip %     |            |             | Trip Purpose % |          |         |
|-----------|------------|------------|-------------|------------|------------|-------------|----------------|----------|---------|
|           | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary        | Diverted | Pass-by |
| City Park | 9.50       | 7.30       | 7.30        | 33.00      | 48.00      | 19.00       | 66             | 28       | 6       |

ARE Science Village - San Diego County, Summer

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

| Land Use                       | Miles      |            |             | Trip %     |            |             | Trip Purpose % |          |         |
|--------------------------------|------------|------------|-------------|------------|------------|-------------|----------------|----------|---------|
|                                | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary        | Diverted | Pass-by |
| Enclosed Parking with Elevator | 9.50       | 7.30       | 7.30        | 0.00       | 0.00       | 0.00        | 0              | 0        | 0       |
| Fast Food Restaurant w/o Drive | 9.50       | 7.30       | 7.30        | 1.50       | 79.50      | 19.00       | 51             | 37       | 12      |
| General Office Building        | 9.50       | 7.30       | 7.30        | 33.00      | 48.00      | 19.00       | 77             | 19       | 4       |
| Research & Development         | 9.50       | 7.30       | 7.30        | 33.00      | 48.00      | 19.00       | 82             | 15       | 3       |
| Supermarket                    | 9.50       | 7.30       | 7.30        | 6.50       | 74.50      | 19.00       | 34             | 30       | 36      |

**4.4 Fleet Mix**

| Land Use                            | LDA      | LDT1     | LDT2     | MDV      | LHD1     | LHD2     | MHD      | HHD      | OBUS     | UBUS     | MCY      | SBUS     | MH       |
|-------------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| City Park                           | 0.557888 | 0.062607 | 0.178921 | 0.119061 | 0.024112 | 0.006269 | 0.008734 | 0.006266 | 0.000708 | 0.000566 | 0.028949 | 0.000971 | 0.004949 |
| Enclosed Parking with Elevator      | 0.557888 | 0.062607 | 0.178921 | 0.119061 | 0.024112 | 0.006269 | 0.008734 | 0.006266 | 0.000708 | 0.000566 | 0.028949 | 0.000971 | 0.004949 |
| Fast Food Restaurant w/o Drive Thru | 0.557888 | 0.062607 | 0.178921 | 0.119061 | 0.024112 | 0.006269 | 0.008734 | 0.006266 | 0.000708 | 0.000566 | 0.028949 | 0.000971 | 0.004949 |
| General Office Building             | 0.557888 | 0.062607 | 0.178921 | 0.119061 | 0.024112 | 0.006269 | 0.008734 | 0.006266 | 0.000708 | 0.000566 | 0.028949 | 0.000971 | 0.004949 |
| Research & Development              | 0.557888 | 0.062607 | 0.178921 | 0.119061 | 0.024112 | 0.006269 | 0.008734 | 0.006266 | 0.000708 | 0.000566 | 0.028949 | 0.000971 | 0.004949 |
| Supermarket                         | 0.557888 | 0.062607 | 0.178921 | 0.119061 | 0.024112 | 0.006269 | 0.008734 | 0.006266 | 0.000708 | 0.000566 | 0.028949 | 0.000971 | 0.004949 |

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

ARE Science Village - 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   |            |            |        |        |            |
| NaturalGas Mitigated   | 0.1616 | 1.4694 | 1.2343 | 8.8200e-003 |               | 0.1117       | 0.1117     |                | 0.1117        | 0.1117      |          | 1,763.3248 | 1,763.3248 | 0.0338 | 0.0323 | 1,773.8034 |
| NaturalGas Unmitigated | 0.1616 | 1.4694 | 1.2343 | 8.8200e-003 |               | 0.1117       | 0.1117     |                | 0.1117        | 0.1117      |          | 1,763.3248 | 1,763.3248 | 0.0338 | 0.0323 | 1,773.8034 |

ARE Science Village - 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   |                   |                   |               |               |                   |
| City Park                           | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000             |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 0.0000            | 0.0000            | 0.0000        | 0.0000        | 0.0000            |
| Enclosed Parking with Elevator      | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000             |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 0.0000            | 0.0000            | 0.0000        | 0.0000        | 0.0000            |
| Fast Food Restaurant w/o Drive Thru | 3304.47        | 0.0356        | 0.3240        | 0.2721        | 1.9400e-003        |               | 0.0246        | 0.0246        |                | 0.0246        | 0.0246        |          | 388.7615          | 388.7615          | 7.4500e-003   | 7.1300e-003   | 391.0717          |
| General Office Building             | 489.006        | 5.2700e-003   | 0.0479        | 0.0403        | 2.9000e-004        |               | 3.6400e-003   | 3.6400e-003   |                | 3.6400e-003   | 3.6400e-003   |          | 57.5302           | 57.5302           | 1.1000e-003   | 1.0500e-003   | 57.8720           |
| Research & Development              | 11156.2        | 0.1203        | 1.0937        | 0.9187        | 6.5600e-003        |               | 0.0831        | 0.0831        |                | 0.0831        | 0.0831        |          | 1,312.4928        | 1,312.4928        | 0.0252        | 0.0241        | 1,320.2923        |
| Supermarket                         | 38.5925        | 4.2000e-004   | 3.7800e-003   | 3.1800e-003   | 2.0000e-005        |               | 2.9000e-004   | 2.9000e-004   |                | 2.9000e-004   | 2.9000e-004   |          | 4.5403            | 4.5403            | 9.0000e-005   | 8.0000e-005   | 4.5673            |
| <b>Total</b>                        |                | <b>0.1616</b> | <b>1.4694</b> | <b>1.2343</b> | <b>8.8100e-003</b> |               | <b>0.1117</b> | <b>0.1117</b> |                | <b>0.1117</b> | <b>0.1117</b> |          | <b>1,763.3248</b> | <b>1,763.3248</b> | <b>0.0338</b> | <b>0.0323</b> | <b>1,773.8034</b> |



ARE Science Village - 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   |                   |                   |               |               |                   |
| City Park                           | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000             |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 0.0000            | 0.0000            | 0.0000        | 0.0000        | 0.0000            |
| Enclosed Parking with Elevator      | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000             |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 0.0000            | 0.0000            | 0.0000        | 0.0000        | 0.0000            |
| Fast Food Restaurant w/o Drive Thru | 3.30447        | 0.0356        | 0.3240        | 0.2721        | 1.9400e-003        |               | 0.0246        | 0.0246        |                | 0.0246        | 0.0246        |          | 388.7615          | 388.7615          | 7.4500e-003   | 7.1300e-003   | 391.0717          |
| General Office Building             | 0.489006       | 5.2700e-003   | 0.0479        | 0.0403        | 2.9000e-004        |               | 3.6400e-003   | 3.6400e-003   |                | 3.6400e-003   | 3.6400e-003   |          | 57.5302           | 57.5302           | 1.1000e-003   | 1.0500e-003   | 57.8720           |
| Research & Development              | 11.1562        | 0.1203        | 1.0937        | 0.9187        | 6.5600e-003        |               | 0.0831        | 0.0831        |                | 0.0831        | 0.0831        |          | 1,312.4928        | 1,312.4928        | 0.0252        | 0.0241        | 1,320.2923        |
| Supermarket                         | 0.0385925      | 4.2000e-004   | 3.7800e-003   | 3.1800e-003   | 2.0000e-005        |               | 2.9000e-004   | 2.9000e-004   |                | 2.9000e-004   | 2.9000e-004   |          | 4.5403            | 4.5403            | 9.0000e-005   | 8.0000e-005   | 4.5673            |
| <b>Total</b>                        |                | <b>0.1616</b> | <b>1.4694</b> | <b>1.2343</b> | <b>8.8100e-003</b> |               | <b>0.1117</b> | <b>0.1117</b> |                | <b>0.1117</b> | <b>0.1117</b> |          | <b>1,763.3248</b> | <b>1,763.3248</b> | <b>0.0338</b> | <b>0.0323</b> | <b>1,773.8034</b> |

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

ARE Science Village - 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   | 10.4760 | 1.1800e-003 | 0.1307 | 1.0000e-005 |               | 4.6000e-004  | 4.6000e-004 |                | 4.6000e-004   | 4.6000e-004 |          | 0.2809    | 0.2809    | 7.3000e-004 |     | 0.2991 |
| Unmitigated | 10.4760 | 1.1800e-003 | 0.1307 | 1.0000e-005 |               | 4.6000e-004  | 4.6000e-004 |                | 4.6000e-004   | 4.6000e-004 |          | 0.2809    | 0.2809    | 7.3000e-004 |     | 0.2991 |

**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 | 2.4180         |                    |               |                    |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             |          |               | 0.0000        |                    |     | 0.0000        |
| Consumer Products     | 8.0460         |                    |               |                    |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             |          |               | 0.0000        |                    |     | 0.0000        |
| Landscaping           | 0.0120         | 1.1800e-003        | 0.1307        | 1.0000e-005        |               | 4.6000e-004        | 4.6000e-004        |                | 4.6000e-004        | 4.6000e-004        |          | 0.2809        | 0.2809        | 7.3000e-004        |     | 0.2991        |
| <b>Total</b>          | <b>10.4760</b> | <b>1.1800e-003</b> | <b>0.1307</b> | <b>1.0000e-005</b> |               | <b>4.6000e-004</b> | <b>4.6000e-004</b> |                | <b>4.6000e-004</b> | <b>4.6000e-004</b> |          | <b>0.2809</b> | <b>0.2809</b> | <b>7.3000e-004</b> |     | <b>0.2991</b> |

ARE Science Village - 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 | 2.4180         |                    |               |                    |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             |          |               | 0.0000        |                    |     | 0.0000        |
| Consumer Products     | 8.0460         |                    |               |                    |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             |          |               | 0.0000        |                    |     | 0.0000        |
| Landscaping           | 0.0120         | 1.1800e-003        | 0.1307        | 1.0000e-005        |               | 4.6000e-004        | 4.6000e-004        |                | 4.6000e-004        | 4.6000e-004        |          | 0.2809        | 0.2809        | 7.3000e-004        |     | 0.2991        |
| <b>Total</b>          | <b>10.4760</b> | <b>1.1800e-003</b> | <b>0.1307</b> | <b>1.0000e-005</b> |               | <b>4.6000e-004</b> | <b>4.6000e-004</b> |                | <b>4.6000e-004</b> | <b>4.6000e-004</b> |          | <b>0.2809</b> | <b>0.2809</b> | <b>7.3000e-004</b> |     | <b>0.2991</b> |

**7.0 Water Detail**

---

**7.1 Mitigation Measures Water**

ARE Science Village - 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**

---

**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

---

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

**10.0 Stationary Equipment**

---

**Fire Pumps and Emergency Generators**

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

**Boilers**

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

**User Defined Equipment**

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

**11.0 Vegetation**

---

ARE Science Village - San Diego County, Annual

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

**ARE Science Village  
San Diego County, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

| Land Uses                           | Size   | Metric   | Lot Acreage | Floor Surface Area | Population |
|-------------------------------------|--------|----------|-------------|--------------------|------------|
| General Office Building             | 8.91   | 1000sqft | 0.20        | 8,911.00           | 0          |
| Research & Development              | 353.47 | 1000sqft | 8.11        | 353,473.00         | 0          |
| Enclosed Parking with Elevator      | 913.00 | Space    | 8.22        | 365,200.00         | 0          |
| City Park                           | 0.54   | Acre     | 0.54        | 23,522.40          | 0          |
| Fast Food Restaurant w/o Drive Thru | 6.93   | 1000sqft | 0.16        | 6,931.00           | 0          |
| Supermarket                         | 0.56   | 1000sqft | 0.01        | 563.00             | 0          |

**1.2 Other Project Characteristics**

|                                |                          |                                |       |                                  |       |
|--------------------------------|--------------------------|--------------------------------|-------|----------------------------------|-------|
| <b>Urbanization</b>            | Urban                    | <b>Wind Speed (m/s)</b>        | 2.6   | <b>Precipitation Freq (Days)</b> | 40    |
| <b>Climate Zone</b>            | 13                       |                                |       | <b>Operational Year</b>          | 2025  |
| <b>Utility Company</b>         | San Diego Gas & Electric |                                |       |                                  |       |
| <b>CO2 Intensity (lb/MWhr)</b> | 539.98                   | <b>CH4 Intensity (lb/MWhr)</b> | 0.033 | <b>N2O Intensity (lb/MWhr)</b>   | 0.004 |

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

- Project Characteristics -
- Land Use - Update per new site plan
- Construction Phase - Per construction questionnaire.
- Off-road Equipment - Other Construction Equipment = pile driver
- Demolition -
- Grading - Per email communication
- Vehicle Trips - Per Traffic Study.

ARE Science Village - 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 - .

Vehicle Emission Factors - .

Construction Off-road Equipment Mitigation - SDAPCD Rule 55

Fleet Mix - .

Trips and VMT -

| Table Name             | Column Name                     | Default Value | New Value   |
|------------------------|---------------------------------|---------------|-------------|
| tblConstDustMitigation | CleanPavedRoadPercentReduction  | 0             | 6           |
| tblConstDustMitigation | WaterUnpavedRoadMoistureContent | 0             | 12          |
| tblConstDustMitigation | WaterUnpavedRoadVehicleSpeed    | 0             | 15          |
| tblConstructionPhase   | NumDays                         | 20.00         | 132.00      |
| tblConstructionPhase   | NumDays                         | 300.00        | 528.00      |
| tblConstructionPhase   | NumDays                         | 20.00         | 88.00       |
| tblConstructionPhase   | NumDays                         | 30.00         | 88.00       |
| tblConstructionPhase   | NumDays                         | 20.00         | 44.00       |
| tblFleetMix            | HHD                             | 6.2980e-003   | 6.2660e-003 |
| tblFleetMix            | HHD                             | 6.2980e-003   | 6.2660e-003 |
| tblFleetMix            | HHD                             | 6.2980e-003   | 6.2660e-003 |
| tblFleetMix            | HHD                             | 6.2980e-003   | 6.2660e-003 |
| tblFleetMix            | HHD                             | 6.2980e-003   | 6.2660e-003 |
| tblFleetMix            | HHD                             | 6.2980e-003   | 6.2660e-003 |
| tblFleetMix            | LDA                             | 0.56          | 0.56        |
| tblFleetMix            | LDA                             | 0.56          | 0.56        |
| tblFleetMix            | LDA                             | 0.56          | 0.56        |
| tblFleetMix            | LDA                             | 0.56          | 0.56        |
| tblFleetMix            | LDA                             | 0.56          | 0.56        |
| tblFleetMix            | LDA                             | 0.56          | 0.56        |
| tblFleetMix            | LDA                             | 0.56          | 0.56        |
| tblFleetMix            | LDT1                            | 0.06          | 0.06        |



ARE Science Village - San Diego County, Annual

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

|             |      |             |             |
|-------------|------|-------------|-------------|
| tblFleetMix | MDV  | 0.12        | 0.12        |
| tblFleetMix | MDV  | 0.12        | 0.12        |
| tblFleetMix | MDV  | 0.12        | 0.12        |
| tblFleetMix | MDV  | 0.12        | 0.12        |
| tblFleetMix | MDV  | 0.12        | 0.12        |
| tblFleetMix | MDV  | 0.12        | 0.12        |
| tblFleetMix | MH   | 4.7510e-003 | 4.9490e-003 |
| tblFleetMix | MH   | 4.7510e-003 | 4.9490e-003 |
| tblFleetMix | MH   | 4.7510e-003 | 4.9490e-003 |
| tblFleetMix | MH   | 4.7510e-003 | 4.9490e-003 |
| tblFleetMix | MH   | 4.7510e-003 | 4.9490e-003 |
| tblFleetMix | MH   | 4.7510e-003 | 4.9490e-003 |
| tblFleetMix | MHD  | 8.9490e-003 | 8.7340e-003 |
| tblFleetMix | MHD  | 8.9490e-003 | 8.7340e-003 |
| tblFleetMix | MHD  | 8.9490e-003 | 8.7340e-003 |
| tblFleetMix | MHD  | 8.9490e-003 | 8.7340e-003 |
| tblFleetMix | MHD  | 8.9490e-003 | 8.7340e-003 |
| tblFleetMix | MHD  | 8.9490e-003 | 8.7340e-003 |
| tblFleetMix | OBUS | 7.0500e-004 | 7.0800e-004 |
| tblFleetMix | OBUS | 7.0500e-004 | 7.0800e-004 |
| tblFleetMix | OBUS | 7.0500e-004 | 7.0800e-004 |
| tblFleetMix | OBUS | 7.0500e-004 | 7.0800e-004 |
| tblFleetMix | OBUS | 7.0500e-004 | 7.0800e-004 |
| tblFleetMix | OBUS | 7.0500e-004 | 7.0800e-004 |
| tblFleetMix | SBUS | 9.5500e-004 | 9.7100e-004 |
| tblFleetMix | SBUS | 9.5500e-004 | 9.7100e-004 |
| tblFleetMix | SBUS | 9.5500e-004 | 9.7100e-004 |
| tblFleetMix | SBUS | 9.5500e-004 | 9.7100e-004 |
| tblFleetMix | SBUS | 9.5500e-004 | 9.7100e-004 |



ARE Science Village - San Diego County, Annual

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

|                     |                   |             |             |
|---------------------|-------------------|-------------|-------------|
| tblFleetMix         | SBUS              | 9.5500e-004 | 9.7100e-004 |
| tblFleetMix         | UBUS              | 5.7700e-004 | 5.6600e-004 |
| tblFleetMix         | UBUS              | 5.7700e-004 | 5.6600e-004 |
| tblFleetMix         | UBUS              | 5.7700e-004 | 5.6600e-004 |
| tblFleetMix         | UBUS              | 5.7700e-004 | 5.6600e-004 |
| tblFleetMix         | UBUS              | 5.7700e-004 | 5.6600e-004 |
| tblFleetMix         | UBUS              | 5.7700e-004 | 5.6600e-004 |
| tblGrading          | MaterialExported  | 0.00        | 314,900.00  |
| tblLandUse          | LandUseSquareFeet | 8,910.00    | 8,911.00    |
| tblLandUse          | LandUseSquareFeet | 353,470.00  | 353,473.00  |
| tblLandUse          | LandUseSquareFeet | 6,930.00    | 6,931.00    |
| tblLandUse          | LandUseSquareFeet | 560.00      | 563.00      |
| tblOffRoadEquipment | HorsePower        | 172.00      | 475.00      |
| tblOffRoadEquipment | LoadFactor        | 0.42        | 0.50        |
| tblVehicleEF        | HHD               | 0.03        | 0.03        |
| tblVehicleEF        | HHD               | 0.08        | 0.08        |
| tblVehicleEF        | HHD               | 6.64        | 6.65        |
| tblVehicleEF        | HHD               | 0.51        | 0.49        |
| tblVehicleEF        | HHD               | 8.2890e-003 | 8.5080e-003 |
| tblVehicleEF        | HHD               | 1,078.46    | 1,099.27    |
| tblVehicleEF        | HHD               | 1,383.23    | 1,411.93    |
| tblVehicleEF        | HHD               | 0.08        | 0.09        |
| tblVehicleEF        | HHD               | 0.17        | 0.17        |
| tblVehicleEF        | HHD               | 0.22        | 0.22        |
| tblVehicleEF        | HHD               | 4.0000e-006 | 5.0000e-006 |
| tblVehicleEF        | HHD               | 5.65        | 5.70        |
| tblVehicleEF        | HHD               | 2.60        | 2.63        |
| tblVehicleEF        | HHD               | 2.38        | 2.38        |
| tblVehicleEF        | HHD               | 2.8750e-003 | 3.0090e-003 |

ARE Science Village - San Diego County, Annual

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

|              |     |             |             |
|--------------|-----|-------------|-------------|
| tblVehicleEF | HHD | 0.06        | 0.06        |
| tblVehicleEF | HHD | 0.04        | 0.04        |
| tblVehicleEF | HHD | 0.02        | 0.03        |
| tblVehicleEF | HHD | 2.7510e-003 | 2.8780e-003 |
| tblVehicleEF | HHD | 0.03        | 0.03        |
| tblVehicleEF | HHD | 8.8700e-003 | 8.8690e-003 |
| tblVehicleEF | HHD | 0.02        | 0.02        |
| tblVehicleEF | HHD | 3.0000e-006 | 4.0000e-006 |
| tblVehicleEF | HHD | 1.6600e-004 | 1.9400e-004 |
| tblVehicleEF | HHD | 0.45        | 0.45        |
| tblVehicleEF | HHD | 0.03        | 0.03        |
| tblVehicleEF | HHD | 7.0000e-005 | 8.2000e-005 |
| tblVehicleEF | HHD | 9.9650e-003 | 0.01        |
| tblVehicleEF | HHD | 0.01        | 0.01        |
| tblVehicleEF | HHD | 3.0000e-006 | 4.0000e-006 |
| tblVehicleEF | HHD | 1.6600e-004 | 1.9400e-004 |
| tblVehicleEF | HHD | 0.52        | 0.52        |
| tblVehicleEF | HHD | 0.11        | 0.11        |
| tblVehicleEF | HHD | 7.0000e-005 | 8.2000e-005 |
| tblVehicleEF | HHD | 0.03        | 0.03        |
| tblVehicleEF | HHD | 0.08        | 0.08        |
| tblVehicleEF | HHD | 6.54        | 6.56        |
| tblVehicleEF | HHD | 0.51        | 0.50        |
| tblVehicleEF | HHD | 7.7910e-003 | 7.9970e-003 |
| tblVehicleEF | HHD | 1,066.26    | 1,087.01    |
| tblVehicleEF | HHD | 1,383.24    | 1,411.94    |
| tblVehicleEF | HHD | 0.08        | 0.09        |
| tblVehicleEF | HHD | 0.17        | 0.17        |
| tblVehicleEF | HHD | 0.22        | 0.22        |

ARE Science Village - San Diego County, Annual

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

|              |     |             |             |
|--------------|-----|-------------|-------------|
| tblVehicleEF | HHD | 4.0000e-006 | 5.0000e-006 |
| tblVehicleEF | HHD | 5.40        | 5.45        |
| tblVehicleEF | HHD | 2.50        | 2.54        |
| tblVehicleEF | HHD | 2.38        | 2.38        |
| tblVehicleEF | HHD | 2.5110e-003 | 2.6240e-003 |
| tblVehicleEF | HHD | 0.06        | 0.06        |
| tblVehicleEF | HHD | 0.04        | 0.04        |
| tblVehicleEF | HHD | 0.02        | 0.03        |
| tblVehicleEF | HHD | 2.4020e-003 | 2.5100e-003 |
| tblVehicleEF | HHD | 0.03        | 0.03        |
| tblVehicleEF | HHD | 8.8700e-003 | 8.8690e-003 |
| tblVehicleEF | HHD | 0.02        | 0.02        |
| tblVehicleEF | HHD | 5.0000e-006 | 6.0000e-006 |
| tblVehicleEF | HHD | 1.7100e-004 | 2.0000e-004 |
| tblVehicleEF | HHD | 0.47        | 0.47        |
| tblVehicleEF | HHD | 5.0000e-006 | 6.0000e-006 |
| tblVehicleEF | HHD | 0.03        | 0.03        |
| tblVehicleEF | HHD | 6.9000e-005 | 8.0000e-005 |
| tblVehicleEF | HHD | 9.8520e-003 | 0.01        |
| tblVehicleEF | HHD | 0.01        | 0.01        |
| tblVehicleEF | HHD | 5.0000e-006 | 6.0000e-006 |
| tblVehicleEF | HHD | 1.7100e-004 | 2.0000e-004 |
| tblVehicleEF | HHD | 0.54        | 0.55        |
| tblVehicleEF | HHD | 5.0000e-006 | 6.0000e-006 |
| tblVehicleEF | HHD | 0.11        | 0.11        |
| tblVehicleEF | HHD | 6.9000e-005 | 8.0000e-005 |
| tblVehicleEF | HHD | 0.03        | 0.03        |
| tblVehicleEF | HHD | 0.08        | 0.08        |
| tblVehicleEF | HHD | 0.00        | 1.0000e-006 |

ARE Science Village - San Diego County, Annual

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

|              |     |             |             |
|--------------|-----|-------------|-------------|
| tblVehicleEF | HHD | 6.77        | 6.78        |
| tblVehicleEF | HHD | 0.51        | 0.49        |
| tblVehicleEF | HHD | 8.5100e-003 | 8.7350e-003 |
| tblVehicleEF | HHD | 1,095.31    | 1,116.20    |
| tblVehicleEF | HHD | 1,383.23    | 1,411.93    |
| tblVehicleEF | HHD | 0.08        | 0.09        |
| tblVehicleEF | HHD | 0.17        | 0.18        |
| tblVehicleEF | HHD | 0.22        | 0.22        |
| tblVehicleEF | HHD | 4.0000e-006 | 5.0000e-006 |
| tblVehicleEF | HHD | 5.99        | 6.04        |
| tblVehicleEF | HHD | 2.59        | 2.63        |
| tblVehicleEF | HHD | 2.38        | 2.38        |
| tblVehicleEF | HHD | 3.3780e-003 | 3.5400e-003 |
| tblVehicleEF | HHD | 0.06        | 0.06        |
| tblVehicleEF | HHD | 0.04        | 0.04        |
| tblVehicleEF | HHD | 0.02        | 0.03        |
| tblVehicleEF | HHD | 3.2320e-003 | 3.3870e-003 |
| tblVehicleEF | HHD | 0.03        | 0.03        |
| tblVehicleEF | HHD | 8.8700e-003 | 8.8690e-003 |
| tblVehicleEF | HHD | 0.02        | 0.02        |
| tblVehicleEF | HHD | 1.8700e-004 | 2.2100e-004 |
| tblVehicleEF | HHD | 0.41        | 0.41        |
| tblVehicleEF | HHD | 0.03        | 0.03        |
| tblVehicleEF | HHD | 7.7000e-005 | 8.9000e-005 |
| tblVehicleEF | HHD | 0.01        | 0.01        |
| tblVehicleEF | HHD | 0.01        | 0.01        |
| tblVehicleEF | HHD | 1.8700e-004 | 2.2100e-004 |
| tblVehicleEF | HHD | 0.47        | 0.48        |
| tblVehicleEF | HHD | 0.11        | 0.11        |

ARE Science Village - San Diego County, Annual

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

|              |     |             |             |
|--------------|-----|-------------|-------------|
| tblVehicleEF | HHD | 7.7000e-005 | 8.9000e-005 |
| tblVehicleEF | LDA | 1.6100e-003 | 1.8040e-003 |
| tblVehicleEF | LDA | 0.04        | 0.04        |
| tblVehicleEF | LDA | 0.48        | 0.50        |
| tblVehicleEF | LDA | 1.92        | 2.00        |
| tblVehicleEF | LDA | 243.80      | 249.94      |
| tblVehicleEF | LDA | 49.74       | 50.91       |
| tblVehicleEF | LDA | 3.7570e-003 | 3.9640e-003 |
| tblVehicleEF | LDA | 0.02        | 0.02        |
| tblVehicleEF | LDA | 0.03        | 0.03        |
| tblVehicleEF | LDA | 0.15        | 0.16        |
| tblVehicleEF | LDA | 1.3910e-003 | 1.4500e-003 |
| tblVehicleEF | LDA | 1.6660e-003 | 1.7190e-003 |
| tblVehicleEF | LDA | 1.2810e-003 | 1.3350e-003 |
| tblVehicleEF | LDA | 1.5320e-003 | 1.5810e-003 |
| tblVehicleEF | LDA | 0.03        | 0.03        |
| tblVehicleEF | LDA | 0.08        | 0.08        |
| tblVehicleEF | LDA | 0.04        | 0.04        |
| tblVehicleEF | LDA | 5.7940e-003 | 6.6080e-003 |
| tblVehicleEF | LDA | 0.02        | 0.02        |
| tblVehicleEF | LDA | 0.17        | 0.19        |
| tblVehicleEF | LDA | 2.3400e-003 | 2.4230e-003 |
| tblVehicleEF | LDA | 4.7700e-004 | 4.9400e-004 |
| tblVehicleEF | LDA | 0.03        | 0.03        |
| tblVehicleEF | LDA | 0.08        | 0.08        |
| tblVehicleEF | LDA | 0.04        | 0.04        |
| tblVehicleEF | LDA | 8.4120e-003 | 9.5960e-003 |
| tblVehicleEF | LDA | 0.02        | 0.02        |
| tblVehicleEF | LDA | 0.19        | 0.20        |

ARE Science Village - San Diego County, Annual

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

|              |     |             |             |
|--------------|-----|-------------|-------------|
| tblVehicleEF | LDA | 1.7530e-003 | 1.9650e-003 |
| tblVehicleEF | LDA | 0.03        | 0.04        |
| tblVehicleEF | LDA | 0.53        | 0.56        |
| tblVehicleEF | LDA | 1.59        | 1.65        |
| tblVehicleEF | LDA | 257.31      | 263.81      |
| tblVehicleEF | LDA | 49.13       | 50.27       |
| tblVehicleEF | LDA | 3.5390e-003 | 3.7330e-003 |
| tblVehicleEF | LDA | 0.02        | 0.02        |
| tblVehicleEF | LDA | 0.02        | 0.03        |
| tblVehicleEF | LDA | 0.14        | 0.15        |
| tblVehicleEF | LDA | 1.3910e-003 | 1.4500e-003 |
| tblVehicleEF | LDA | 1.6660e-003 | 1.7190e-003 |
| tblVehicleEF | LDA | 1.2810e-003 | 1.3350e-003 |
| tblVehicleEF | LDA | 1.5320e-003 | 1.5810e-003 |
| tblVehicleEF | LDA | 0.05        | 0.05        |
| tblVehicleEF | LDA | 0.08        | 0.09        |
| tblVehicleEF | LDA | 0.06        | 0.07        |
| tblVehicleEF | LDA | 6.2320e-003 | 7.1080e-003 |
| tblVehicleEF | LDA | 0.02        | 0.02        |
| tblVehicleEF | LDA | 0.15        | 0.16        |
| tblVehicleEF | LDA | 2.4700e-003 | 2.5570e-003 |
| tblVehicleEF | LDA | 4.7200e-004 | 4.8700e-004 |
| tblVehicleEF | LDA | 0.05        | 0.05        |
| tblVehicleEF | LDA | 0.08        | 0.09        |
| tblVehicleEF | LDA | 0.06        | 0.07        |
| tblVehicleEF | LDA | 9.0510e-003 | 0.01        |
| tblVehicleEF | LDA | 0.02        | 0.02        |
| tblVehicleEF | LDA | 0.16        | 0.18        |
| tblVehicleEF | LDA | 1.5750e-003 | 1.7660e-003 |

ARE Science Village - San Diego County, Annual

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | LDA  | 0.04        | 0.04        |
| tblVehicleEF | LDA  | 0.47        | 0.49        |
| tblVehicleEF | LDA  | 2.06        | 2.14        |
| tblVehicleEF | LDA  | 241.36      | 247.44      |
| tblVehicleEF | LDA  | 50.00       | 51.18       |
| tblVehicleEF | LDA  | 3.7810e-003 | 3.9890e-003 |
| tblVehicleEF | LDA  | 0.02        | 0.02        |
| tblVehicleEF | LDA  | 0.03        | 0.03        |
| tblVehicleEF | LDA  | 0.16        | 0.17        |
| tblVehicleEF | LDA  | 1.3910e-003 | 1.4500e-003 |
| tblVehicleEF | LDA  | 1.6660e-003 | 1.7190e-003 |
| tblVehicleEF | LDA  | 1.2810e-003 | 1.3350e-003 |
| tblVehicleEF | LDA  | 1.5320e-003 | 1.5810e-003 |
| tblVehicleEF | LDA  | 0.03        | 0.03        |
| tblVehicleEF | LDA  | 0.09        | 0.09        |
| tblVehicleEF | LDA  | 0.03        | 0.04        |
| tblVehicleEF | LDA  | 5.6970e-003 | 6.4990e-003 |
| tblVehicleEF | LDA  | 0.03        | 0.03        |
| tblVehicleEF | LDA  | 0.18        | 0.19        |
| tblVehicleEF | LDA  | 2.3170e-003 | 2.3980e-003 |
| tblVehicleEF | LDA  | 4.8000e-004 | 4.9600e-004 |
| tblVehicleEF | LDA  | 0.03        | 0.03        |
| tblVehicleEF | LDA  | 0.09        | 0.09        |
| tblVehicleEF | LDA  | 0.03        | 0.04        |
| tblVehicleEF | LDA  | 8.2710e-003 | 9.4360e-003 |
| tblVehicleEF | LDA  | 0.03        | 0.03        |
| tblVehicleEF | LDA  | 0.20        | 0.21        |
| tblVehicleEF | LDT1 | 4.5160e-003 | 5.1270e-003 |
| tblVehicleEF | LDT1 | 0.06        | 0.07        |

ARE Science Village - San Diego County, Annual

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | LDT1 | 0.93        | 1.02        |
| tblVehicleEF | LDT1 | 2.16        | 2.25        |
| tblVehicleEF | LDT1 | 299.42      | 305.63      |
| tblVehicleEF | LDT1 | 62.01       | 63.24       |
| tblVehicleEF | LDT1 | 6.4980e-003 | 7.1120e-003 |
| tblVehicleEF | LDT1 | 0.03        | 0.03        |
| tblVehicleEF | LDT1 | 0.08        | 0.09        |
| tblVehicleEF | LDT1 | 0.23        | 0.25        |
| tblVehicleEF | LDT1 | 1.8450e-003 | 1.9640e-003 |
| tblVehicleEF | LDT1 | 2.1990e-003 | 2.3220e-003 |
| tblVehicleEF | LDT1 | 1.6980e-003 | 1.8080e-003 |
| tblVehicleEF | LDT1 | 2.0220e-003 | 2.1350e-003 |
| tblVehicleEF | LDT1 | 0.09        | 0.10        |
| tblVehicleEF | LDT1 | 0.19        | 0.20        |
| tblVehicleEF | LDT1 | 0.10        | 0.11        |
| tblVehicleEF | LDT1 | 0.02        | 0.02        |
| tblVehicleEF | LDT1 | 0.09        | 0.09        |
| tblVehicleEF | LDT1 | 0.30        | 0.33        |
| tblVehicleEF | LDT1 | 2.8740e-003 | 2.9630e-003 |
| tblVehicleEF | LDT1 | 5.9500e-004 | 6.1300e-004 |
| tblVehicleEF | LDT1 | 0.09        | 0.10        |
| tblVehicleEF | LDT1 | 0.19        | 0.20        |
| tblVehicleEF | LDT1 | 0.10        | 0.11        |
| tblVehicleEF | LDT1 | 0.03        | 0.03        |
| tblVehicleEF | LDT1 | 0.09        | 0.09        |
| tblVehicleEF | LDT1 | 0.33        | 0.36        |
| tblVehicleEF | LDT1 | 4.8740e-003 | 5.5300e-003 |
| tblVehicleEF | LDT1 | 0.05        | 0.06        |
| tblVehicleEF | LDT1 | 1.03        | 1.13        |



ARE Science Village - San Diego County, Annual

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | LDT1 | 1.78        | 1.85        |
| tblVehicleEF | LDT1 | 313.69      | 320.24      |
| tblVehicleEF | LDT1 | 61.26       | 62.45       |
| tblVehicleEF | LDT1 | 6.0610e-003 | 6.6330e-003 |
| tblVehicleEF | LDT1 | 0.02        | 0.03        |
| tblVehicleEF | LDT1 | 0.07        | 0.08        |
| tblVehicleEF | LDT1 | 0.21        | 0.22        |
| tblVehicleEF | LDT1 | 1.8450e-003 | 1.9640e-003 |
| tblVehicleEF | LDT1 | 2.1990e-003 | 2.3220e-003 |
| tblVehicleEF | LDT1 | 1.6980e-003 | 1.8080e-003 |
| tblVehicleEF | LDT1 | 2.0220e-003 | 2.1350e-003 |
| tblVehicleEF | LDT1 | 0.14        | 0.15        |
| tblVehicleEF | LDT1 | 0.20        | 0.21        |
| tblVehicleEF | LDT1 | 0.17        | 0.18        |
| tblVehicleEF | LDT1 | 0.02        | 0.02        |
| tblVehicleEF | LDT1 | 0.08        | 0.08        |
| tblVehicleEF | LDT1 | 0.26        | 0.29        |
| tblVehicleEF | LDT1 | 3.0110e-003 | 3.1050e-003 |
| tblVehicleEF | LDT1 | 5.8800e-004 | 6.0500e-004 |
| tblVehicleEF | LDT1 | 0.14        | 0.15        |
| tblVehicleEF | LDT1 | 0.20        | 0.21        |
| tblVehicleEF | LDT1 | 0.17        | 0.18        |
| tblVehicleEF | LDT1 | 0.03        | 0.03        |
| tblVehicleEF | LDT1 | 0.08        | 0.08        |
| tblVehicleEF | LDT1 | 0.28        | 0.31        |
| tblVehicleEF | LDT1 | 4.4300e-003 | 5.0310e-003 |
| tblVehicleEF | LDT1 | 0.06        | 0.07        |
| tblVehicleEF | LDT1 | 0.91        | 1.00        |
| tblVehicleEF | LDT1 | 2.32        | 2.42        |

ARE Science Village - San Diego County, Annual

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | LDT1 | 296.83      | 302.99      |
| tblVehicleEF | LDT1 | 62.32       | 63.57       |
| tblVehicleEF | LDT1 | 6.5530e-003 | 7.1730e-003 |
| tblVehicleEF | LDT1 | 0.03        | 0.03        |
| tblVehicleEF | LDT1 | 0.08        | 0.09        |
| tblVehicleEF | LDT1 | 0.24        | 0.25        |
| tblVehicleEF | LDT1 | 1.8450e-003 | 1.9640e-003 |
| tblVehicleEF | LDT1 | 2.1990e-003 | 2.3220e-003 |
| tblVehicleEF | LDT1 | 1.6980e-003 | 1.8080e-003 |
| tblVehicleEF | LDT1 | 2.0220e-003 | 2.1350e-003 |
| tblVehicleEF | LDT1 | 0.08        | 0.08        |
| tblVehicleEF | LDT1 | 0.21        | 0.22        |
| tblVehicleEF | LDT1 | 0.09        | 0.09        |
| tblVehicleEF | LDT1 | 0.02        | 0.02        |
| tblVehicleEF | LDT1 | 0.11        | 0.11        |
| tblVehicleEF | LDT1 | 0.32        | 0.35        |
| tblVehicleEF | LDT1 | 2.8490e-003 | 2.9370e-003 |
| tblVehicleEF | LDT1 | 5.9800e-004 | 6.1600e-004 |
| tblVehicleEF | LDT1 | 0.08        | 0.08        |
| tblVehicleEF | LDT1 | 0.21        | 0.22        |
| tblVehicleEF | LDT1 | 0.09        | 0.09        |
| tblVehicleEF | LDT1 | 0.03        | 0.03        |
| tblVehicleEF | LDT1 | 0.11        | 0.11        |
| tblVehicleEF | LDT1 | 0.35        | 0.38        |
| tblVehicleEF | LDT2 | 2.9460e-003 | 3.2480e-003 |
| tblVehicleEF | LDT2 | 0.06        | 0.06        |
| tblVehicleEF | LDT2 | 0.69        | 0.73        |
| tblVehicleEF | LDT2 | 2.49        | 2.58        |
| tblVehicleEF | LDT2 | 313.49      | 322.57      |

ARE Science Village - San Diego County, Annual

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | LDT2 | 65.05       | 66.90       |
| tblVehicleEF | LDT2 | 5.3950e-003 | 5.7950e-003 |
| tblVehicleEF | LDT2 | 0.03        | 0.03        |
| tblVehicleEF | LDT2 | 0.05        | 0.06        |
| tblVehicleEF | LDT2 | 0.23        | 0.25        |
| tblVehicleEF | LDT2 | 1.4280e-003 | 1.4650e-003 |
| tblVehicleEF | LDT2 | 1.6540e-003 | 1.6870e-003 |
| tblVehicleEF | LDT2 | 1.3150e-003 | 1.3480e-003 |
| tblVehicleEF | LDT2 | 1.5210e-003 | 1.5510e-003 |
| tblVehicleEF | LDT2 | 0.06        | 0.06        |
| tblVehicleEF | LDT2 | 0.12        | 0.12        |
| tblVehicleEF | LDT2 | 0.08        | 0.08        |
| tblVehicleEF | LDT2 | 0.01        | 0.01        |
| tblVehicleEF | LDT2 | 0.05        | 0.05        |
| tblVehicleEF | LDT2 | 0.26        | 0.28        |
| tblVehicleEF | LDT2 | 3.0090e-003 | 3.1270e-003 |
| tblVehicleEF | LDT2 | 6.2400e-004 | 6.4900e-004 |
| tblVehicleEF | LDT2 | 0.06        | 0.06        |
| tblVehicleEF | LDT2 | 0.12        | 0.12        |
| tblVehicleEF | LDT2 | 0.08        | 0.08        |
| tblVehicleEF | LDT2 | 0.02        | 0.02        |
| tblVehicleEF | LDT2 | 0.05        | 0.05        |
| tblVehicleEF | LDT2 | 0.28        | 0.30        |
| tblVehicleEF | LDT2 | 3.1950e-003 | 3.5210e-003 |
| tblVehicleEF | LDT2 | 0.05        | 0.05        |
| tblVehicleEF | LDT2 | 0.77        | 0.81        |
| tblVehicleEF | LDT2 | 2.06        | 2.13        |
| tblVehicleEF | LDT2 | 327.02      | 336.54      |
| tblVehicleEF | LDT2 | 64.23       | 66.05       |

ARE Science Village - San Diego County, Annual

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | LDT2 | 5.0620e-003 | 5.4350e-003 |
| tblVehicleEF | LDT2 | 0.03        | 0.03        |
| tblVehicleEF | LDT2 | 0.05        | 0.06        |
| tblVehicleEF | LDT2 | 0.21        | 0.23        |
| tblVehicleEF | LDT2 | 1.4280e-003 | 1.4650e-003 |
| tblVehicleEF | LDT2 | 1.6540e-003 | 1.6870e-003 |
| tblVehicleEF | LDT2 | 1.3150e-003 | 1.3480e-003 |
| tblVehicleEF | LDT2 | 1.5210e-003 | 1.5510e-003 |
| tblVehicleEF | LDT2 | 0.09        | 0.09        |
| tblVehicleEF | LDT2 | 0.12        | 0.13        |
| tblVehicleEF | LDT2 | 0.12        | 0.13        |
| tblVehicleEF | LDT2 | 0.01        | 0.01        |
| tblVehicleEF | LDT2 | 0.05        | 0.05        |
| tblVehicleEF | LDT2 | 0.22        | 0.24        |
| tblVehicleEF | LDT2 | 3.1390e-003 | 3.2620e-003 |
| tblVehicleEF | LDT2 | 6.1700e-004 | 6.4000e-004 |
| tblVehicleEF | LDT2 | 0.09        | 0.09        |
| tblVehicleEF | LDT2 | 0.12        | 0.13        |
| tblVehicleEF | LDT2 | 0.12        | 0.13        |
| tblVehicleEF | LDT2 | 0.02        | 0.02        |
| tblVehicleEF | LDT2 | 0.05        | 0.05        |
| tblVehicleEF | LDT2 | 0.24        | 0.26        |
| tblVehicleEF | LDT2 | 2.8860e-003 | 3.1820e-003 |
| tblVehicleEF | LDT2 | 0.06        | 0.06        |
| tblVehicleEF | LDT2 | 0.67        | 0.71        |
| tblVehicleEF | LDT2 | 2.67        | 2.77        |
| tblVehicleEF | LDT2 | 311.04      | 320.04      |
| tblVehicleEF | LDT2 | 65.40       | 67.25       |
| tblVehicleEF | LDT2 | 5.4340e-003 | 5.8380e-003 |

ARE Science Village - San Diego County, Annual

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | LDT2 | 0.03        | 0.03        |
| tblVehicleEF | LDT2 | 0.06        | 0.06        |
| tblVehicleEF | LDT2 | 0.24        | 0.26        |
| tblVehicleEF | LDT2 | 1.4280e-003 | 1.4650e-003 |
| tblVehicleEF | LDT2 | 1.6540e-003 | 1.6870e-003 |
| tblVehicleEF | LDT2 | 1.3150e-003 | 1.3480e-003 |
| tblVehicleEF | LDT2 | 1.5210e-003 | 1.5510e-003 |
| tblVehicleEF | LDT2 | 0.04        | 0.05        |
| tblVehicleEF | LDT2 | 0.13        | 0.13        |
| tblVehicleEF | LDT2 | 0.07        | 0.07        |
| tblVehicleEF | LDT2 | 0.01        | 0.01        |
| tblVehicleEF | LDT2 | 0.07        | 0.07        |
| tblVehicleEF | LDT2 | 0.27        | 0.29        |
| tblVehicleEF | LDT2 | 2.9850e-003 | 3.1020e-003 |
| tblVehicleEF | LDT2 | 6.2800e-004 | 6.5200e-004 |
| tblVehicleEF | LDT2 | 0.04        | 0.05        |
| tblVehicleEF | LDT2 | 0.13        | 0.13        |
| tblVehicleEF | LDT2 | 0.07        | 0.07        |
| tblVehicleEF | LDT2 | 0.02        | 0.02        |
| tblVehicleEF | LDT2 | 0.07        | 0.07        |
| tblVehicleEF | LDT2 | 0.29        | 0.32        |
| tblVehicleEF | LHD1 | 4.3840e-003 | 4.5180e-003 |
| tblVehicleEF | LHD1 | 7.7190e-003 | 8.3670e-003 |
| tblVehicleEF | LHD1 | 0.01        | 0.01        |
| tblVehicleEF | LHD1 | 0.17        | 0.17        |
| tblVehicleEF | LHD1 | 0.72        | 0.77        |
| tblVehicleEF | LHD1 | 0.90        | 0.93        |
| tblVehicleEF | LHD1 | 9.03        | 9.13        |
| tblVehicleEF | LHD1 | 744.83      | 758.47      |

ARE Science Village - San Diego County, Annual

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | LHD1 | 10.05       | 10.27       |
| tblVehicleEF | LHD1 | 8.5400e-004 | 8.5600e-004 |
| tblVehicleEF | LHD1 | 0.05        | 0.05        |
| tblVehicleEF | LHD1 | 0.02        | 0.02        |
| tblVehicleEF | LHD1 | 0.07        | 0.07        |
| tblVehicleEF | LHD1 | 0.84        | 0.94        |
| tblVehicleEF | LHD1 | 0.26        | 0.27        |
| tblVehicleEF | LHD1 | 9.9400e-004 | 9.8200e-004 |
| tblVehicleEF | LHD1 | 0.01        | 0.01        |
| tblVehicleEF | LHD1 | 0.01        | 0.01        |
| tblVehicleEF | LHD1 | 2.1700e-004 | 2.2600e-004 |
| tblVehicleEF | LHD1 | 9.5100e-004 | 9.3900e-004 |
| tblVehicleEF | LHD1 | 2.5050e-003 | 2.5000e-003 |
| tblVehicleEF | LHD1 | 0.01        | 0.01        |
| tblVehicleEF | LHD1 | 2.0000e-004 | 2.0700e-004 |
| tblVehicleEF | LHD1 | 1.6140e-003 | 1.7130e-003 |
| tblVehicleEF | LHD1 | 0.06        | 0.07        |
| tblVehicleEF | LHD1 | 0.02        | 0.02        |
| tblVehicleEF | LHD1 | 1.2630e-003 | 1.3230e-003 |
| tblVehicleEF | LHD1 | 0.10        | 0.10        |
| tblVehicleEF | LHD1 | 0.17        | 0.18        |
| tblVehicleEF | LHD1 | 0.06        | 0.06        |
| tblVehicleEF | LHD1 | 8.7000e-005 | 8.8000e-005 |
| tblVehicleEF | LHD1 | 7.2530e-003 | 7.3870e-003 |
| tblVehicleEF | LHD1 | 9.9000e-005 | 1.0200e-004 |
| tblVehicleEF | LHD1 | 1.6140e-003 | 1.7130e-003 |
| tblVehicleEF | LHD1 | 0.06        | 0.07        |
| tblVehicleEF | LHD1 | 0.03        | 0.03        |
| tblVehicleEF | LHD1 | 1.2630e-003 | 1.3230e-003 |

ARE Science Village - San Diego County, Annual

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | LHD1 | 0.12        | 0.12        |
| tblVehicleEF | LHD1 | 0.17        | 0.18        |
| tblVehicleEF | LHD1 | 0.06        | 0.07        |
| tblVehicleEF | LHD1 | 4.3930e-003 | 4.5270e-003 |
| tblVehicleEF | LHD1 | 7.8320e-003 | 8.5000e-003 |
| tblVehicleEF | LHD1 | 0.01        | 0.01        |
| tblVehicleEF | LHD1 | 0.17        | 0.17        |
| tblVehicleEF | LHD1 | 0.73        | 0.79        |
| tblVehicleEF | LHD1 | 0.85        | 0.88        |
| tblVehicleEF | LHD1 | 9.03        | 9.13        |
| tblVehicleEF | LHD1 | 744.85      | 758.49      |
| tblVehicleEF | LHD1 | 9.97        | 10.18       |
| tblVehicleEF | LHD1 | 8.5600e-004 | 8.5800e-004 |
| tblVehicleEF | LHD1 | 0.05        | 0.05        |
| tblVehicleEF | LHD1 | 0.02        | 0.02        |
| tblVehicleEF | LHD1 | 0.07        | 0.07        |
| tblVehicleEF | LHD1 | 0.80        | 0.90        |
| tblVehicleEF | LHD1 | 0.25        | 0.26        |
| tblVehicleEF | LHD1 | 9.9400e-004 | 9.8200e-004 |
| tblVehicleEF | LHD1 | 0.01        | 0.01        |
| tblVehicleEF | LHD1 | 0.01        | 0.01        |
| tblVehicleEF | LHD1 | 2.1700e-004 | 2.2600e-004 |
| tblVehicleEF | LHD1 | 9.5100e-004 | 9.3900e-004 |
| tblVehicleEF | LHD1 | 2.5050e-003 | 2.5000e-003 |
| tblVehicleEF | LHD1 | 0.01        | 0.01        |
| tblVehicleEF | LHD1 | 2.0000e-004 | 2.0700e-004 |
| tblVehicleEF | LHD1 | 2.3300e-003 | 2.4740e-003 |
| tblVehicleEF | LHD1 | 0.07        | 0.07        |
| tblVehicleEF | LHD1 | 0.02        | 0.02        |

ARE Science Village - San Diego County, Annual

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | LHD1 | 2.1100e-003 | 2.2150e-003 |
| tblVehicleEF | LHD1 | 0.10        | 0.10        |
| tblVehicleEF | LHD1 | 0.17        | 0.17        |
| tblVehicleEF | LHD1 | 0.06        | 0.06        |
| tblVehicleEF | LHD1 | 8.7000e-005 | 8.8000e-005 |
| tblVehicleEF | LHD1 | 7.2530e-003 | 7.3870e-003 |
| tblVehicleEF | LHD1 | 9.9000e-005 | 1.0100e-004 |
| tblVehicleEF | LHD1 | 2.3300e-003 | 2.4740e-003 |
| tblVehicleEF | LHD1 | 0.07        | 0.07        |
| tblVehicleEF | LHD1 | 0.03        | 0.03        |
| tblVehicleEF | LHD1 | 2.1100e-003 | 2.2150e-003 |
| tblVehicleEF | LHD1 | 0.12        | 0.12        |
| tblVehicleEF | LHD1 | 0.17        | 0.17        |
| tblVehicleEF | LHD1 | 0.06        | 0.07        |
| tblVehicleEF | LHD1 | 4.3800e-003 | 4.5140e-003 |
| tblVehicleEF | LHD1 | 7.6700e-003 | 8.3090e-003 |
| tblVehicleEF | LHD1 | 0.01        | 0.01        |
| tblVehicleEF | LHD1 | 0.17        | 0.17        |
| tblVehicleEF | LHD1 | 0.71        | 0.77        |
| tblVehicleEF | LHD1 | 0.92        | 0.95        |
| tblVehicleEF | LHD1 | 9.03        | 9.13        |
| tblVehicleEF | LHD1 | 744.83      | 758.46      |
| tblVehicleEF | LHD1 | 10.09       | 10.31       |
| tblVehicleEF | LHD1 | 8.5300e-004 | 8.5500e-004 |
| tblVehicleEF | LHD1 | 0.05        | 0.05        |
| tblVehicleEF | LHD1 | 0.02        | 0.02        |
| tblVehicleEF | LHD1 | 0.07        | 0.07        |
| tblVehicleEF | LHD1 | 0.84        | 0.94        |
| tblVehicleEF | LHD1 | 0.26        | 0.28        |



ARE Science Village - San Diego County, Annual

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | LHD1 | 9.9400e-004 | 9.8200e-004 |
| tblVehicleEF | LHD1 | 0.01        | 0.01        |
| tblVehicleEF | LHD1 | 0.01        | 0.01        |
| tblVehicleEF | LHD1 | 2.1700e-004 | 2.2600e-004 |
| tblVehicleEF | LHD1 | 9.5100e-004 | 9.3900e-004 |
| tblVehicleEF | LHD1 | 2.5050e-003 | 2.5000e-003 |
| tblVehicleEF | LHD1 | 0.01        | 0.01        |
| tblVehicleEF | LHD1 | 2.0000e-004 | 2.0700e-004 |
| tblVehicleEF | LHD1 | 1.4760e-003 | 1.5750e-003 |
| tblVehicleEF | LHD1 | 0.08        | 0.08        |
| tblVehicleEF | LHD1 | 0.02        | 0.02        |
| tblVehicleEF | LHD1 | 1.1170e-003 | 1.1700e-003 |
| tblVehicleEF | LHD1 | 0.10        | 0.10        |
| tblVehicleEF | LHD1 | 0.19        | 0.20        |
| tblVehicleEF | LHD1 | 0.06        | 0.06        |
| tblVehicleEF | LHD1 | 8.7000e-005 | 8.8000e-005 |
| tblVehicleEF | LHD1 | 7.2530e-003 | 7.3870e-003 |
| tblVehicleEF | LHD1 | 1.0000e-004 | 1.0200e-004 |
| tblVehicleEF | LHD1 | 1.4760e-003 | 1.5750e-003 |
| tblVehicleEF | LHD1 | 0.08        | 0.08        |
| tblVehicleEF | LHD1 | 0.03        | 0.03        |
| tblVehicleEF | LHD1 | 1.1170e-003 | 1.1700e-003 |
| tblVehicleEF | LHD1 | 0.12        | 0.12        |
| tblVehicleEF | LHD1 | 0.19        | 0.20        |
| tblVehicleEF | LHD1 | 0.07        | 0.07        |
| tblVehicleEF | LHD2 | 2.9640e-003 | 3.0610e-003 |
| tblVehicleEF | LHD2 | 6.4040e-003 | 6.7000e-003 |
| tblVehicleEF | LHD2 | 7.0010e-003 | 7.5470e-003 |
| tblVehicleEF | LHD2 | 0.14        | 0.14        |

ARE Science Village - San Diego County, Annual

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | LHD2 | 0.59        | 0.61        |
| tblVehicleEF | LHD2 | 0.54        | 0.56        |
| tblVehicleEF | LHD2 | 13.96       | 14.10       |
| tblVehicleEF | LHD2 | 744.92      | 758.13      |
| tblVehicleEF | LHD2 | 7.25        | 7.44        |
| tblVehicleEF | LHD2 | 1.7690e-003 | 1.7790e-003 |
| tblVehicleEF | LHD2 | 0.07        | 0.07        |
| tblVehicleEF | LHD2 | 0.01        | 0.01        |
| tblVehicleEF | LHD2 | 0.10        | 0.10        |
| tblVehicleEF | LHD2 | 0.82        | 0.92        |
| tblVehicleEF | LHD2 | 0.16        | 0.17        |
| tblVehicleEF | LHD2 | 1.4400e-003 | 1.4270e-003 |
| tblVehicleEF | LHD2 | 0.01        | 0.01        |
| tblVehicleEF | LHD2 | 0.02        | 0.02        |
| tblVehicleEF | LHD2 | 1.1400e-004 | 1.1700e-004 |
| tblVehicleEF | LHD2 | 1.3770e-003 | 1.3650e-003 |
| tblVehicleEF | LHD2 | 2.6990e-003 | 2.6960e-003 |
| tblVehicleEF | LHD2 | 0.02        | 0.02        |
| tblVehicleEF | LHD2 | 1.0400e-004 | 1.0800e-004 |
| tblVehicleEF | LHD2 | 8.0000e-004 | 8.5000e-004 |
| tblVehicleEF | LHD2 | 0.03        | 0.04        |
| tblVehicleEF | LHD2 | 0.02        | 0.02        |
| tblVehicleEF | LHD2 | 6.6600e-004 | 6.9500e-004 |
| tblVehicleEF | LHD2 | 0.11        | 0.11        |
| tblVehicleEF | LHD2 | 0.07        | 0.08        |
| tblVehicleEF | LHD2 | 0.03        | 0.04        |
| tblVehicleEF | LHD2 | 1.3300e-004 | 1.3500e-004 |
| tblVehicleEF | LHD2 | 7.1890e-003 | 7.3180e-003 |
| tblVehicleEF | LHD2 | 7.2000e-005 | 7.4000e-005 |

ARE Science Village - San Diego County, Annual

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | LHD2 | 8.0000e-004 | 8.5000e-004 |
| tblVehicleEF | LHD2 | 0.03        | 0.04        |
| tblVehicleEF | LHD2 | 0.02        | 0.02        |
| tblVehicleEF | LHD2 | 6.6600e-004 | 6.9500e-004 |
| tblVehicleEF | LHD2 | 0.13        | 0.13        |
| tblVehicleEF | LHD2 | 0.07        | 0.08        |
| tblVehicleEF | LHD2 | 0.04        | 0.04        |
| tblVehicleEF | LHD2 | 2.9700e-003 | 3.0670e-003 |
| tblVehicleEF | LHD2 | 6.4490e-003 | 6.7500e-003 |
| tblVehicleEF | LHD2 | 6.7120e-003 | 7.2350e-003 |
| tblVehicleEF | LHD2 | 0.14        | 0.14        |
| tblVehicleEF | LHD2 | 0.59        | 0.62        |
| tblVehicleEF | LHD2 | 0.51        | 0.53        |
| tblVehicleEF | LHD2 | 13.96       | 14.10       |
| tblVehicleEF | LHD2 | 744.93      | 758.14      |
| tblVehicleEF | LHD2 | 7.20        | 7.38        |
| tblVehicleEF | LHD2 | 1.7700e-003 | 1.7810e-003 |
| tblVehicleEF | LHD2 | 0.07        | 0.07        |
| tblVehicleEF | LHD2 | 0.01        | 0.01        |
| tblVehicleEF | LHD2 | 0.10        | 0.10        |
| tblVehicleEF | LHD2 | 0.79        | 0.88        |
| tblVehicleEF | LHD2 | 0.16        | 0.16        |
| tblVehicleEF | LHD2 | 1.4400e-003 | 1.4270e-003 |
| tblVehicleEF | LHD2 | 0.01        | 0.01        |
| tblVehicleEF | LHD2 | 0.02        | 0.02        |
| tblVehicleEF | LHD2 | 1.1400e-004 | 1.1700e-004 |
| tblVehicleEF | LHD2 | 1.3770e-003 | 1.3650e-003 |
| tblVehicleEF | LHD2 | 2.6990e-003 | 2.6960e-003 |
| tblVehicleEF | LHD2 | 0.02        | 0.02        |

ARE Science Village - San Diego County, Annual

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | LHD2 | 1.0400e-004 | 1.0800e-004 |
| tblVehicleEF | LHD2 | 1.1590e-003 | 1.2310e-003 |
| tblVehicleEF | LHD2 | 0.03        | 0.04        |
| tblVehicleEF | LHD2 | 0.02        | 0.02        |
| tblVehicleEF | LHD2 | 1.1170e-003 | 1.1680e-003 |
| tblVehicleEF | LHD2 | 0.11        | 0.11        |
| tblVehicleEF | LHD2 | 0.07        | 0.08        |
| tblVehicleEF | LHD2 | 0.03        | 0.04        |
| tblVehicleEF | LHD2 | 1.3300e-004 | 1.3500e-004 |
| tblVehicleEF | LHD2 | 7.1890e-003 | 7.3180e-003 |
| tblVehicleEF | LHD2 | 7.1000e-005 | 7.3000e-005 |
| tblVehicleEF | LHD2 | 1.1590e-003 | 1.2310e-003 |
| tblVehicleEF | LHD2 | 0.03        | 0.04        |
| tblVehicleEF | LHD2 | 0.02        | 0.02        |
| tblVehicleEF | LHD2 | 1.1170e-003 | 1.1680e-003 |
| tblVehicleEF | LHD2 | 0.13        | 0.13        |
| tblVehicleEF | LHD2 | 0.07        | 0.08        |
| tblVehicleEF | LHD2 | 0.04        | 0.04        |
| tblVehicleEF | LHD2 | 2.9620e-003 | 3.0590e-003 |
| tblVehicleEF | LHD2 | 6.3850e-003 | 6.6780e-003 |
| tblVehicleEF | LHD2 | 7.1310e-003 | 7.6880e-003 |
| tblVehicleEF | LHD2 | 0.14        | 0.14        |
| tblVehicleEF | LHD2 | 0.59        | 0.61        |
| tblVehicleEF | LHD2 | 0.55        | 0.57        |
| tblVehicleEF | LHD2 | 13.96       | 14.10       |
| tblVehicleEF | LHD2 | 744.92      | 758.13      |
| tblVehicleEF | LHD2 | 7.27        | 7.46        |
| tblVehicleEF | LHD2 | 1.7680e-003 | 1.7790e-003 |
| tblVehicleEF | LHD2 | 0.07        | 0.07        |

ARE Science Village - San Diego County, Annual

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | LHD2 | 0.01        | 0.01        |
| tblVehicleEF | LHD2 | 0.10        | 0.10        |
| tblVehicleEF | LHD2 | 0.81        | 0.91        |
| tblVehicleEF | LHD2 | 0.17        | 0.18        |
| tblVehicleEF | LHD2 | 1.4400e-003 | 1.4270e-003 |
| tblVehicleEF | LHD2 | 0.01        | 0.01        |
| tblVehicleEF | LHD2 | 0.02        | 0.02        |
| tblVehicleEF | LHD2 | 1.1400e-004 | 1.1700e-004 |
| tblVehicleEF | LHD2 | 1.3770e-003 | 1.3650e-003 |
| tblVehicleEF | LHD2 | 2.6990e-003 | 2.6960e-003 |
| tblVehicleEF | LHD2 | 0.02        | 0.02        |
| tblVehicleEF | LHD2 | 1.0400e-004 | 1.0800e-004 |
| tblVehicleEF | LHD2 | 7.1400e-004 | 7.6400e-004 |
| tblVehicleEF | LHD2 | 0.04        | 0.04        |
| tblVehicleEF | LHD2 | 0.02        | 0.02        |
| tblVehicleEF | LHD2 | 5.8600e-004 | 6.1100e-004 |
| tblVehicleEF | LHD2 | 0.11        | 0.11        |
| tblVehicleEF | LHD2 | 0.08        | 0.09        |
| tblVehicleEF | LHD2 | 0.03        | 0.04        |
| tblVehicleEF | LHD2 | 1.3300e-004 | 1.3500e-004 |
| tblVehicleEF | LHD2 | 7.1890e-003 | 7.3180e-003 |
| tblVehicleEF | LHD2 | 7.2000e-005 | 7.4000e-005 |
| tblVehicleEF | LHD2 | 7.1400e-004 | 7.6400e-004 |
| tblVehicleEF | LHD2 | 0.04        | 0.04        |
| tblVehicleEF | LHD2 | 0.02        | 0.02        |
| tblVehicleEF | LHD2 | 5.8600e-004 | 6.1100e-004 |
| tblVehicleEF | LHD2 | 0.13        | 0.13        |
| tblVehicleEF | LHD2 | 0.08        | 0.09        |
| tblVehicleEF | LHD2 | 0.04        | 0.04        |

ARE Science Village - San Diego County, Annual

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

|              |     |             |             |
|--------------|-----|-------------|-------------|
| tblVehicleEF | MCY | 0.35        | 0.35        |
| tblVehicleEF | MCY | 0.24        | 0.24        |
| tblVehicleEF | MCY | 19.81       | 20.07       |
| tblVehicleEF | MCY | 8.66        | 8.64        |
| tblVehicleEF | MCY | 220.35      | 220.47      |
| tblVehicleEF | MCY | 59.87       | 60.11       |
| tblVehicleEF | MCY | 0.07        | 0.07        |
| tblVehicleEF | MCY | 0.02        | 0.02        |
| tblVehicleEF | MCY | 1.15        | 1.16        |
| tblVehicleEF | MCY | 0.27        | 0.27        |
| tblVehicleEF | MCY | 2.1740e-003 | 2.1320e-003 |
| tblVehicleEF | MCY | 2.8910e-003 | 2.8880e-003 |
| tblVehicleEF | MCY | 2.0310e-003 | 1.9920e-003 |
| tblVehicleEF | MCY | 2.7170e-003 | 2.7150e-003 |
| tblVehicleEF | MCY | 0.94        | 0.94        |
| tblVehicleEF | MCY | 0.74        | 0.74        |
| tblVehicleEF | MCY | 0.74        | 0.73        |
| tblVehicleEF | MCY | 2.40        | 2.41        |
| tblVehicleEF | MCY | 0.50        | 0.50        |
| tblVehicleEF | MCY | 1.84        | 1.85        |
| tblVehicleEF | MCY | 2.1810e-003 | 2.1820e-003 |
| tblVehicleEF | MCY | 5.9200e-004 | 5.9500e-004 |
| tblVehicleEF | MCY | 0.94        | 0.94        |
| tblVehicleEF | MCY | 0.74        | 0.74        |
| tblVehicleEF | MCY | 0.74        | 0.73        |
| tblVehicleEF | MCY | 2.98        | 2.99        |
| tblVehicleEF | MCY | 0.50        | 0.50        |
| tblVehicleEF | MCY | 2.00        | 2.01        |
| tblVehicleEF | MCY | 0.35        | 0.35        |

ARE Science Village - San Diego County, Annual

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

|              |     |             |             |
|--------------|-----|-------------|-------------|
| tblVehicleEF | MCY | 0.21        | 0.21        |
| tblVehicleEF | MCY | 18.90       | 19.13       |
| tblVehicleEF | MCY | 7.75        | 7.74        |
| tblVehicleEF | MCY | 218.65      | 218.71      |
| tblVehicleEF | MCY | 57.62       | 57.86       |
| tblVehicleEF | MCY | 0.06        | 0.06        |
| tblVehicleEF | MCY | 0.01        | 0.01        |
| tblVehicleEF | MCY | 1.04        | 1.04        |
| tblVehicleEF | MCY | 0.25        | 0.25        |
| tblVehicleEF | MCY | 2.1740e-003 | 2.1320e-003 |
| tblVehicleEF | MCY | 2.8910e-003 | 2.8880e-003 |
| tblVehicleEF | MCY | 2.0310e-003 | 1.9920e-003 |
| tblVehicleEF | MCY | 2.7170e-003 | 2.7150e-003 |
| tblVehicleEF | MCY | 1.52        | 1.51        |
| tblVehicleEF | MCY | 0.84        | 0.84        |
| tblVehicleEF | MCY | 1.42        | 1.42        |
| tblVehicleEF | MCY | 2.33        | 2.34        |
| tblVehicleEF | MCY | 0.46        | 0.46        |
| tblVehicleEF | MCY | 1.60        | 1.60        |
| tblVehicleEF | MCY | 5.7000e-004 | 5.7300e-004 |
| tblVehicleEF | MCY | 1.52        | 1.51        |
| tblVehicleEF | MCY | 0.84        | 0.84        |
| tblVehicleEF | MCY | 1.42        | 1.42        |
| tblVehicleEF | MCY | 2.89        | 2.90        |
| tblVehicleEF | MCY | 0.46        | 0.46        |
| tblVehicleEF | MCY | 1.74        | 1.74        |
| tblVehicleEF | MCY | 0.36        | 0.36        |
| tblVehicleEF | MCY | 0.25        | 0.26        |
| tblVehicleEF | MCY | 20.45       | 20.73       |

ARE Science Village - San Diego County, Annual

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

|              |     |             |             |
|--------------|-----|-------------|-------------|
| tblVehicleEF | MCY | 9.13        | 9.10        |
| tblVehicleEF | MCY | 221.50      | 221.65      |
| tblVehicleEF | MCY | 60.99       | 61.23       |
| tblVehicleEF | MCY | 0.07        | 0.07        |
| tblVehicleEF | MCY | 0.02        | 0.02        |
| tblVehicleEF | MCY | 1.17        | 1.17        |
| tblVehicleEF | MCY | 0.27        | 0.27        |
| tblVehicleEF | MCY | 2.1740e-003 | 2.1320e-003 |
| tblVehicleEF | MCY | 2.8910e-003 | 2.8880e-003 |
| tblVehicleEF | MCY | 2.0310e-003 | 1.9920e-003 |
| tblVehicleEF | MCY | 2.7170e-003 | 2.7150e-003 |
| tblVehicleEF | MCY | 0.86        | 0.85        |
| tblVehicleEF | MCY | 0.99        | 0.99        |
| tblVehicleEF | MCY | 0.58        | 0.58        |
| tblVehicleEF | MCY | 2.43        | 2.45        |
| tblVehicleEF | MCY | 0.59        | 0.60        |
| tblVehicleEF | MCY | 1.96        | 1.97        |
| tblVehicleEF | MCY | 2.1920e-003 | 2.1930e-003 |
| tblVehicleEF | MCY | 6.0400e-004 | 6.0600e-004 |
| tblVehicleEF | MCY | 0.86        | 0.85        |
| tblVehicleEF | MCY | 0.99        | 0.99        |
| tblVehicleEF | MCY | 0.58        | 0.58        |
| tblVehicleEF | MCY | 3.02        | 3.04        |
| tblVehicleEF | MCY | 0.59        | 0.60        |
| tblVehicleEF | MCY | 2.13        | 2.14        |
| tblVehicleEF | MDV | 3.1750e-003 | 3.5860e-003 |
| tblVehicleEF | MDV | 0.06        | 0.07        |
| tblVehicleEF | MDV | 0.69        | 0.75        |
| tblVehicleEF | MDV | 2.69        | 2.83        |



ARE Science Village - San Diego County, Annual

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

|              |     |             |             |
|--------------|-----|-------------|-------------|
| tblVehicleEF | MDV | 379.22      | 390.23      |
| tblVehicleEF | MDV | 78.30       | 80.55       |
| tblVehicleEF | MDV | 7.0150e-003 | 7.5630e-003 |
| tblVehicleEF | MDV | 0.03        | 0.03        |
| tblVehicleEF | MDV | 0.06        | 0.07        |
| tblVehicleEF | MDV | 0.26        | 0.29        |
| tblVehicleEF | MDV | 1.4670e-003 | 1.5270e-003 |
| tblVehicleEF | MDV | 1.6840e-003 | 1.7470e-003 |
| tblVehicleEF | MDV | 1.3530e-003 | 1.4090e-003 |
| tblVehicleEF | MDV | 1.5480e-003 | 1.6060e-003 |
| tblVehicleEF | MDV | 0.06        | 0.07        |
| tblVehicleEF | MDV | 0.13        | 0.14        |
| tblVehicleEF | MDV | 0.09        | 0.09        |
| tblVehicleEF | MDV | 0.01        | 0.01        |
| tblVehicleEF | MDV | 0.06        | 0.06        |
| tblVehicleEF | MDV | 0.30        | 0.34        |
| tblVehicleEF | MDV | 3.6390e-003 | 3.7810e-003 |
| tblVehicleEF | MDV | 7.5200e-004 | 7.8100e-004 |
| tblVehicleEF | MDV | 0.06        | 0.07        |
| tblVehicleEF | MDV | 0.13        | 0.14        |
| tblVehicleEF | MDV | 0.09        | 0.09        |
| tblVehicleEF | MDV | 0.02        | 0.02        |
| tblVehicleEF | MDV | 0.06        | 0.06        |
| tblVehicleEF | MDV | 0.33        | 0.37        |
| tblVehicleEF | MDV | 3.4450e-003 | 3.8890e-003 |
| tblVehicleEF | MDV | 0.06        | 0.06        |
| tblVehicleEF | MDV | 0.78        | 0.84        |
| tblVehicleEF | MDV | 2.22        | 2.33        |
| tblVehicleEF | MDV | 392.80      | 404.31      |

ARE Science Village - San Diego County, Annual

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

|              |     |             |             |
|--------------|-----|-------------|-------------|
| tblVehicleEF | MDV | 77.39       | 79.59       |
| tblVehicleEF | MDV | 6.6620e-003 | 7.1730e-003 |
| tblVehicleEF | MDV | 0.03        | 0.03        |
| tblVehicleEF | MDV | 0.05        | 0.06        |
| tblVehicleEF | MDV | 0.24        | 0.26        |
| tblVehicleEF | MDV | 1.4670e-003 | 1.5270e-003 |
| tblVehicleEF | MDV | 1.6840e-003 | 1.7470e-003 |
| tblVehicleEF | MDV | 1.3530e-003 | 1.4090e-003 |
| tblVehicleEF | MDV | 1.5480e-003 | 1.6060e-003 |
| tblVehicleEF | MDV | 0.10        | 0.10        |
| tblVehicleEF | MDV | 0.14        | 0.14        |
| tblVehicleEF | MDV | 0.14        | 0.15        |
| tblVehicleEF | MDV | 0.01        | 0.02        |
| tblVehicleEF | MDV | 0.05        | 0.05        |
| tblVehicleEF | MDV | 0.27        | 0.29        |
| tblVehicleEF | MDV | 3.7690e-003 | 3.9170e-003 |
| tblVehicleEF | MDV | 7.4300e-004 | 7.7200e-004 |
| tblVehicleEF | MDV | 0.10        | 0.10        |
| tblVehicleEF | MDV | 0.14        | 0.14        |
| tblVehicleEF | MDV | 0.14        | 0.15        |
| tblVehicleEF | MDV | 0.02        | 0.02        |
| tblVehicleEF | MDV | 0.05        | 0.05        |
| tblVehicleEF | MDV | 0.29        | 0.32        |
| tblVehicleEF | MDV | 3.1100e-003 | 3.5140e-003 |
| tblVehicleEF | MDV | 0.07        | 0.07        |
| tblVehicleEF | MDV | 0.68        | 0.73        |
| tblVehicleEF | MDV | 2.89        | 3.04        |
| tblVehicleEF | MDV | 376.76      | 387.68      |
| tblVehicleEF | MDV | 78.67       | 80.95       |

ARE Science Village - San Diego County, Annual

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

|              |     |             |             |
|--------------|-----|-------------|-------------|
| tblVehicleEF | MDV | 7.0560e-003 | 7.6090e-003 |
| tblVehicleEF | MDV | 0.03        | 0.03        |
| tblVehicleEF | MDV | 0.06        | 0.07        |
| tblVehicleEF | MDV | 0.27        | 0.30        |
| tblVehicleEF | MDV | 1.4670e-003 | 1.5270e-003 |
| tblVehicleEF | MDV | 1.6840e-003 | 1.7470e-003 |
| tblVehicleEF | MDV | 1.3530e-003 | 1.4090e-003 |
| tblVehicleEF | MDV | 1.5480e-003 | 1.6060e-003 |
| tblVehicleEF | MDV | 0.05        | 0.05        |
| tblVehicleEF | MDV | 0.14        | 0.15        |
| tblVehicleEF | MDV | 0.08        | 0.08        |
| tblVehicleEF | MDV | 0.01        | 0.01        |
| tblVehicleEF | MDV | 0.07        | 0.07        |
| tblVehicleEF | MDV | 0.32        | 0.35        |
| tblVehicleEF | MDV | 3.6150e-003 | 3.7560e-003 |
| tblVehicleEF | MDV | 7.5500e-004 | 7.8500e-004 |
| tblVehicleEF | MDV | 0.05        | 0.05        |
| tblVehicleEF | MDV | 0.14        | 0.15        |
| tblVehicleEF | MDV | 0.08        | 0.08        |
| tblVehicleEF | MDV | 0.02        | 0.02        |
| tblVehicleEF | MDV | 0.07        | 0.07        |
| tblVehicleEF | MDV | 0.35        | 0.39        |
| tblVehicleEF | MH  | 0.01        | 0.01        |
| tblVehicleEF | MH  | 0.02        | 0.02        |
| tblVehicleEF | MH  | 1.10        | 1.25        |
| tblVehicleEF | MH  | 1.94        | 2.02        |
| tblVehicleEF | MH  | 1,525.58    | 1,551.72    |
| tblVehicleEF | MH  | 17.93       | 18.39       |
| tblVehicleEF | MH  | 0.06        | 0.06        |

ARE Science Village - San Diego County, Annual

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

|              |    |             |             |
|--------------|----|-------------|-------------|
| tblVehicleEF | MH | 0.03        | 0.03        |
| tblVehicleEF | MH | 1.55        | 1.59        |
| tblVehicleEF | MH | 0.24        | 0.24        |
| tblVehicleEF | MH | 0.01        | 0.01        |
| tblVehicleEF | MH | 0.03        | 0.03        |
| tblVehicleEF | MH | 2.4100e-004 | 2.5200e-004 |
| tblVehicleEF | MH | 3.2890e-003 | 3.2840e-003 |
| tblVehicleEF | MH | 0.03        | 0.03        |
| tblVehicleEF | MH | 2.2200e-004 | 2.3200e-004 |
| tblVehicleEF | MH | 0.69        | 0.74        |
| tblVehicleEF | MH | 0.06        | 0.06        |
| tblVehicleEF | MH | 0.38        | 0.40        |
| tblVehicleEF | MH | 0.07        | 0.08        |
| tblVehicleEF | MH | 0.02        | 0.02        |
| tblVehicleEF | MH | 0.09        | 0.09        |
| tblVehicleEF | MH | 0.01        | 0.02        |
| tblVehicleEF | MH | 1.7700e-004 | 1.8200e-004 |
| tblVehicleEF | MH | 0.69        | 0.74        |
| tblVehicleEF | MH | 0.06        | 0.06        |
| tblVehicleEF | MH | 0.38        | 0.40        |
| tblVehicleEF | MH | 0.10        | 0.11        |
| tblVehicleEF | MH | 0.02        | 0.02        |
| tblVehicleEF | MH | 0.10        | 0.10        |
| tblVehicleEF | MH | 0.01        | 0.01        |
| tblVehicleEF | MH | 0.02        | 0.02        |
| tblVehicleEF | MH | 1.13        | 1.29        |
| tblVehicleEF | MH | 1.81        | 1.89        |
| tblVehicleEF | MH | 1,525.64    | 1,551.78    |
| tblVehicleEF | MH | 17.72       | 18.17       |

ARE Science Village - San Diego County, Annual

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

|              |    |             |             |
|--------------|----|-------------|-------------|
| tblVehicleEF | MH | 0.06        | 0.06        |
| tblVehicleEF | MH | 0.03        | 0.03        |
| tblVehicleEF | MH | 1.48        | 1.52        |
| tblVehicleEF | MH | 0.23        | 0.23        |
| tblVehicleEF | MH | 0.01        | 0.01        |
| tblVehicleEF | MH | 0.03        | 0.03        |
| tblVehicleEF | MH | 2.4100e-004 | 2.5200e-004 |
| tblVehicleEF | MH | 3.2890e-003 | 3.2840e-003 |
| tblVehicleEF | MH | 0.03        | 0.03        |
| tblVehicleEF | MH | 2.2200e-004 | 2.3200e-004 |
| tblVehicleEF | MH | 0.95        | 1.02        |
| tblVehicleEF | MH | 0.06        | 0.07        |
| tblVehicleEF | MH | 0.66        | 0.70        |
| tblVehicleEF | MH | 0.08        | 0.08        |
| tblVehicleEF | MH | 0.02        | 0.02        |
| tblVehicleEF | MH | 0.09        | 0.09        |
| tblVehicleEF | MH | 0.01        | 0.02        |
| tblVehicleEF | MH | 1.7500e-004 | 1.8000e-004 |
| tblVehicleEF | MH | 0.95        | 1.02        |
| tblVehicleEF | MH | 0.06        | 0.07        |
| tblVehicleEF | MH | 0.66        | 0.70        |
| tblVehicleEF | MH | 0.10        | 0.11        |
| tblVehicleEF | MH | 0.02        | 0.02        |
| tblVehicleEF | MH | 0.09        | 0.10        |
| tblVehicleEF | MH | 0.01        | 0.01        |
| tblVehicleEF | MH | 0.02        | 0.02        |
| tblVehicleEF | MH | 1.08        | 1.24        |
| tblVehicleEF | MH | 2.00        | 2.08        |
| tblVehicleEF | MH | 1,525.56    | 1,551.69    |

ARE Science Village - San Diego County, Annual

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

|              |     |             |             |
|--------------|-----|-------------|-------------|
| tblVehicleEF | MH  | 18.03       | 18.49       |
| tblVehicleEF | MH  | 0.06        | 0.06        |
| tblVehicleEF | MH  | 0.03        | 0.03        |
| tblVehicleEF | MH  | 1.54        | 1.59        |
| tblVehicleEF | MH  | 0.25        | 0.25        |
| tblVehicleEF | MH  | 0.01        | 0.01        |
| tblVehicleEF | MH  | 0.03        | 0.03        |
| tblVehicleEF | MH  | 2.4100e-004 | 2.5200e-004 |
| tblVehicleEF | MH  | 3.2890e-003 | 3.2840e-003 |
| tblVehicleEF | MH  | 0.03        | 0.03        |
| tblVehicleEF | MH  | 2.2200e-004 | 2.3200e-004 |
| tblVehicleEF | MH  | 0.69        | 0.76        |
| tblVehicleEF | MH  | 0.07        | 0.08        |
| tblVehicleEF | MH  | 0.35        | 0.37        |
| tblVehicleEF | MH  | 0.07        | 0.08        |
| tblVehicleEF | MH  | 0.02        | 0.02        |
| tblVehicleEF | MH  | 0.09        | 0.10        |
| tblVehicleEF | MH  | 0.01        | 0.02        |
| tblVehicleEF | MH  | 1.7800e-004 | 1.8300e-004 |
| tblVehicleEF | MH  | 0.69        | 0.76        |
| tblVehicleEF | MH  | 0.07        | 0.08        |
| tblVehicleEF | MH  | 0.35        | 0.37        |
| tblVehicleEF | MH  | 0.10        | 0.11        |
| tblVehicleEF | MH  | 0.02        | 0.02        |
| tblVehicleEF | MH  | 0.10        | 0.10        |
| tblVehicleEF | MHD | 3.9860e-003 | 4.0210e-003 |
| tblVehicleEF | MHD | 1.7800e-003 | 2.0420e-003 |
| tblVehicleEF | MHD | 9.8670e-003 | 0.01        |
| tblVehicleEF | MHD | 0.41        | 0.41        |

ARE Science Village - San Diego County, Annual

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

|              |     |             |             |
|--------------|-----|-------------|-------------|
| tblVehicleEF | MHD | 0.23        | 0.27        |
| tblVehicleEF | MHD | 1.10        | 1.18        |
| tblVehicleEF | MHD | 76.60       | 78.50       |
| tblVehicleEF | MHD | 1,072.80    | 1,091.76    |
| tblVehicleEF | MHD | 9.96        | 10.35       |
| tblVehicleEF | MHD | 0.01        | 0.01        |
| tblVehicleEF | MHD | 0.13        | 0.14        |
| tblVehicleEF | MHD | 8.0860e-003 | 8.1920e-003 |
| tblVehicleEF | MHD | 0.45        | 0.48        |
| tblVehicleEF | MHD | 1.39        | 1.39        |
| tblVehicleEF | MHD | 1.66        | 1.65        |
| tblVehicleEF | MHD | 3.5600e-004 | 4.1300e-004 |
| tblVehicleEF | MHD | 6.6970e-003 | 6.6880e-003 |
| tblVehicleEF | MHD | 1.2100e-004 | 1.2600e-004 |
| tblVehicleEF | MHD | 3.4100e-004 | 3.9500e-004 |
| tblVehicleEF | MHD | 6.4000e-003 | 6.3910e-003 |
| tblVehicleEF | MHD | 1.1100e-004 | 1.1600e-004 |
| tblVehicleEF | MHD | 3.8000e-004 | 4.1900e-004 |
| tblVehicleEF | MHD | 0.02        | 0.02        |
| tblVehicleEF | MHD | 0.02        | 0.02        |
| tblVehicleEF | MHD | 3.1200e-004 | 3.3600e-004 |
| tblVehicleEF | MHD | 0.02        | 0.02        |
| tblVehicleEF | MHD | 0.02        | 0.02        |
| tblVehicleEF | MHD | 0.05        | 0.05        |
| tblVehicleEF | MHD | 7.2700e-004 | 7.4500e-004 |
| tblVehicleEF | MHD | 0.01        | 0.01        |
| tblVehicleEF | MHD | 9.9000e-005 | 1.0200e-004 |
| tblVehicleEF | MHD | 3.8000e-004 | 4.1900e-004 |
| tblVehicleEF | MHD | 0.02        | 0.02        |

ARE Science Village - San Diego County, Annual

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

|              |     |             |             |
|--------------|-----|-------------|-------------|
| tblVehicleEF | MHD | 0.03        | 0.03        |
| tblVehicleEF | MHD | 3.1200e-004 | 3.3600e-004 |
| tblVehicleEF | MHD | 0.02        | 0.02        |
| tblVehicleEF | MHD | 0.02        | 0.02        |
| tblVehicleEF | MHD | 0.06        | 0.06        |
| tblVehicleEF | MHD | 3.7920e-003 | 3.8230e-003 |
| tblVehicleEF | MHD | 1.8160e-003 | 2.0860e-003 |
| tblVehicleEF | MHD | 9.4390e-003 | 9.8840e-003 |
| tblVehicleEF | MHD | 0.35        | 0.35        |
| tblVehicleEF | MHD | 0.24        | 0.27        |
| tblVehicleEF | MHD | 1.04        | 1.11        |
| tblVehicleEF | MHD | 76.68       | 78.69       |
| tblVehicleEF | MHD | 1,072.80    | 1,091.77    |
| tblVehicleEF | MHD | 9.85        | 10.23       |
| tblVehicleEF | MHD | 0.01        | 0.01        |
| tblVehicleEF | MHD | 0.13        | 0.13        |
| tblVehicleEF | MHD | 7.8510e-003 | 7.9550e-003 |
| tblVehicleEF | MHD | 0.45        | 0.47        |
| tblVehicleEF | MHD | 1.33        | 1.34        |
| tblVehicleEF | MHD | 1.65        | 1.64        |
| tblVehicleEF | MHD | 3.0400e-004 | 3.5200e-004 |
| tblVehicleEF | MHD | 6.6970e-003 | 6.6880e-003 |
| tblVehicleEF | MHD | 1.2100e-004 | 1.2600e-004 |
| tblVehicleEF | MHD | 2.9100e-004 | 3.3700e-004 |
| tblVehicleEF | MHD | 6.4000e-003 | 6.3910e-003 |
| tblVehicleEF | MHD | 1.1100e-004 | 1.1600e-004 |
| tblVehicleEF | MHD | 5.5800e-004 | 6.1600e-004 |
| tblVehicleEF | MHD | 0.02        | 0.02        |
| tblVehicleEF | MHD | 0.02        | 0.02        |



ARE Science Village - San Diego County, Annual

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

|              |     |             |             |
|--------------|-----|-------------|-------------|
| tblVehicleEF | MHD | 5.3800e-004 | 5.8200e-004 |
| tblVehicleEF | MHD | 0.02        | 0.02        |
| tblVehicleEF | MHD | 0.02        | 0.02        |
| tblVehicleEF | MHD | 0.05        | 0.05        |
| tblVehicleEF | MHD | 7.2800e-004 | 7.4700e-004 |
| tblVehicleEF | MHD | 0.01        | 0.01        |
| tblVehicleEF | MHD | 9.7000e-005 | 1.0100e-004 |
| tblVehicleEF | MHD | 5.5800e-004 | 6.1600e-004 |
| tblVehicleEF | MHD | 0.02        | 0.02        |
| tblVehicleEF | MHD | 0.03        | 0.03        |
| tblVehicleEF | MHD | 5.3800e-004 | 5.8200e-004 |
| tblVehicleEF | MHD | 0.02        | 0.02        |
| tblVehicleEF | MHD | 0.02        | 0.02        |
| tblVehicleEF | MHD | 0.05        | 0.06        |
| tblVehicleEF | MHD | 4.2670e-003 | 4.3040e-003 |
| tblVehicleEF | MHD | 1.7620e-003 | 2.0220e-003 |
| tblVehicleEF | MHD | 0.01        | 0.01        |
| tblVehicleEF | MHD | 0.50        | 0.50        |
| tblVehicleEF | MHD | 0.23        | 0.26        |
| tblVehicleEF | MHD | 1.13        | 1.21        |
| tblVehicleEF | MHD | 76.48       | 78.23       |
| tblVehicleEF | MHD | 1,072.79    | 1,091.76    |
| tblVehicleEF | MHD | 10.01       | 10.40       |
| tblVehicleEF | MHD | 0.01        | 0.01        |
| tblVehicleEF | MHD | 0.13        | 0.14        |
| tblVehicleEF | MHD | 8.2360e-003 | 8.3440e-003 |
| tblVehicleEF | MHD | 0.47        | 0.49        |
| tblVehicleEF | MHD | 1.38        | 1.39        |
| tblVehicleEF | MHD | 1.66        | 1.65        |

ARE Science Village - San Diego County, Annual

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | MHD  | 4.2900e-004 | 4.9800e-004 |
| tblVehicleEF | MHD  | 6.6970e-003 | 6.6880e-003 |
| tblVehicleEF | MHD  | 1.2100e-004 | 1.2600e-004 |
| tblVehicleEF | MHD  | 4.1000e-004 | 4.7700e-004 |
| tblVehicleEF | MHD  | 6.4000e-003 | 6.3910e-003 |
| tblVehicleEF | MHD  | 1.1100e-004 | 1.1600e-004 |
| tblVehicleEF | MHD  | 3.4300e-004 | 3.8100e-004 |
| tblVehicleEF | MHD  | 0.02        | 0.02        |
| tblVehicleEF | MHD  | 0.02        | 0.02        |
| tblVehicleEF | MHD  | 2.7400e-004 | 2.9500e-004 |
| tblVehicleEF | MHD  | 0.02        | 0.02        |
| tblVehicleEF | MHD  | 0.02        | 0.02        |
| tblVehicleEF | MHD  | 0.05        | 0.06        |
| tblVehicleEF | MHD  | 7.2600e-004 | 7.4200e-004 |
| tblVehicleEF | MHD  | 0.01        | 0.01        |
| tblVehicleEF | MHD  | 9.9000e-005 | 1.0300e-004 |
| tblVehicleEF | MHD  | 3.4300e-004 | 3.8100e-004 |
| tblVehicleEF | MHD  | 0.02        | 0.02        |
| tblVehicleEF | MHD  | 0.03        | 0.03        |
| tblVehicleEF | MHD  | 2.7400e-004 | 2.9500e-004 |
| tblVehicleEF | MHD  | 0.02        | 0.02        |
| tblVehicleEF | MHD  | 0.02        | 0.02        |
| tblVehicleEF | MHD  | 0.06        | 0.06        |
| tblVehicleEF | OBUS | 8.7240e-003 | 8.7170e-003 |
| tblVehicleEF | OBUS | 7.8750e-003 | 8.6700e-003 |
| tblVehicleEF | OBUS | 0.02        | 0.02        |
| tblVehicleEF | OBUS | 0.62        | 0.60        |
| tblVehicleEF | OBUS | 0.88        | 0.97        |
| tblVehicleEF | OBUS | 2.56        | 2.63        |

ARE Science Village - San Diego County, Annual

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | OBUS | 87.42       | 85.09       |
| tblVehicleEF | OBUS | 1,476.82    | 1,507.64    |
| tblVehicleEF | OBUS | 19.88       | 20.36       |
| tblVehicleEF | OBUS | 0.01        | 0.01        |
| tblVehicleEF | OBUS | 0.11        | 0.11        |
| tblVehicleEF | OBUS | 0.02        | 0.02        |
| tblVehicleEF | OBUS | 0.34        | 0.32        |
| tblVehicleEF | OBUS | 1.22        | 1.24        |
| tblVehicleEF | OBUS | 0.77        | 0.76        |
| tblVehicleEF | OBUS | 1.1700e-004 | 1.1000e-004 |
| tblVehicleEF | OBUS | 7.7290e-003 | 7.6570e-003 |
| tblVehicleEF | OBUS | 1.1200e-004 | 1.0600e-004 |
| tblVehicleEF | OBUS | 7.3700e-003 | 7.3020e-003 |
| tblVehicleEF | OBUS | 2.0040e-003 | 2.0200e-003 |
| tblVehicleEF | OBUS | 0.03        | 0.03        |
| tblVehicleEF | OBUS | 0.05        | 0.05        |
| tblVehicleEF | OBUS | 1.2610e-003 | 1.2620e-003 |
| tblVehicleEF | OBUS | 0.04        | 0.05        |
| tblVehicleEF | OBUS | 0.09        | 0.09        |
| tblVehicleEF | OBUS | 0.12        | 0.12        |
| tblVehicleEF | OBUS | 8.3200e-004 | 8.1000e-004 |
| tblVehicleEF | OBUS | 0.01        | 0.01        |
| tblVehicleEF | OBUS | 1.9700e-004 | 2.0100e-004 |
| tblVehicleEF | OBUS | 2.0040e-003 | 2.0200e-003 |
| tblVehicleEF | OBUS | 0.03        | 0.03        |
| tblVehicleEF | OBUS | 0.07        | 0.07        |
| tblVehicleEF | OBUS | 1.2610e-003 | 1.2620e-003 |
| tblVehicleEF | OBUS | 0.06        | 0.07        |
| tblVehicleEF | OBUS | 0.09        | 0.09        |

ARE Science Village - San Diego County, Annual

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | OBUS | 0.13        | 0.13        |
| tblVehicleEF | OBUS | 8.8120e-003 | 8.8010e-003 |
| tblVehicleEF | OBUS | 8.0900e-003 | 8.9050e-003 |
| tblVehicleEF | OBUS | 0.02        | 0.02        |
| tblVehicleEF | OBUS | 0.61        | 0.59        |
| tblVehicleEF | OBUS | 0.90        | 1.00        |
| tblVehicleEF | OBUS | 2.39        | 2.47        |
| tblVehicleEF | OBUS | 86.43       | 84.15       |
| tblVehicleEF | OBUS | 1,476.86    | 1,507.69    |
| tblVehicleEF | OBUS | 19.60       | 20.07       |
| tblVehicleEF | OBUS | 0.01        | 0.01        |
| tblVehicleEF | OBUS | 0.11        | 0.11        |
| tblVehicleEF | OBUS | 0.02        | 0.02        |
| tblVehicleEF | OBUS | 0.32        | 0.31        |
| tblVehicleEF | OBUS | 1.16        | 1.18        |
| tblVehicleEF | OBUS | 0.76        | 0.75        |
| tblVehicleEF | OBUS | 1.0400e-004 | 9.8000e-005 |
| tblVehicleEF | OBUS | 7.7290e-003 | 7.6570e-003 |
| tblVehicleEF | OBUS | 9.9000e-005 | 9.4000e-005 |
| tblVehicleEF | OBUS | 7.3700e-003 | 7.3020e-003 |
| tblVehicleEF | OBUS | 2.8130e-003 | 2.8360e-003 |
| tblVehicleEF | OBUS | 0.03        | 0.03        |
| tblVehicleEF | OBUS | 0.06        | 0.05        |
| tblVehicleEF | OBUS | 2.2210e-003 | 2.2290e-003 |
| tblVehicleEF | OBUS | 0.05        | 0.05        |
| tblVehicleEF | OBUS | 0.09        | 0.09        |
| tblVehicleEF | OBUS | 0.11        | 0.12        |
| tblVehicleEF | OBUS | 8.2300e-004 | 8.0100e-004 |
| tblVehicleEF | OBUS | 0.01        | 0.01        |

ARE Science Village - San Diego County, Annual

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | OBUS | 1.9400e-004 | 1.9900e-004 |
| tblVehicleEF | OBUS | 2.8130e-003 | 2.8360e-003 |
| tblVehicleEF | OBUS | 0.03        | 0.03        |
| tblVehicleEF | OBUS | 0.07        | 0.07        |
| tblVehicleEF | OBUS | 2.2210e-003 | 2.2290e-003 |
| tblVehicleEF | OBUS | 0.06        | 0.07        |
| tblVehicleEF | OBUS | 0.09        | 0.09        |
| tblVehicleEF | OBUS | 0.12        | 0.13        |
| tblVehicleEF | OBUS | 7.7810e-003 | 8.5680e-003 |
| tblVehicleEF | OBUS | 0.02        | 0.02        |
| tblVehicleEF | OBUS | 0.62        | 0.61        |
| tblVehicleEF | OBUS | 0.87        | 0.96        |
| tblVehicleEF | OBUS | 2.63        | 2.71        |
| tblVehicleEF | OBUS | 88.77       | 86.40       |
| tblVehicleEF | OBUS | 1,476.80    | 1,507.62    |
| tblVehicleEF | OBUS | 20.01       | 20.49       |
| tblVehicleEF | OBUS | 0.01        | 0.01        |
| tblVehicleEF | OBUS | 0.11        | 0.11        |
| tblVehicleEF | OBUS | 0.02        | 0.02        |
| tblVehicleEF | OBUS | 0.37        | 0.35        |
| tblVehicleEF | OBUS | 1.22        | 1.24        |
| tblVehicleEF | OBUS | 0.78        | 0.77        |
| tblVehicleEF | OBUS | 1.3500e-004 | 1.2700e-004 |
| tblVehicleEF | OBUS | 7.7290e-003 | 7.6570e-003 |
| tblVehicleEF | OBUS | 1.2900e-004 | 1.2200e-004 |
| tblVehicleEF | OBUS | 7.3700e-003 | 7.3020e-003 |
| tblVehicleEF | OBUS | 1.9500e-003 | 1.9720e-003 |
| tblVehicleEF | OBUS | 0.03        | 0.03        |
| tblVehicleEF | OBUS | 0.05        | 0.05        |

ARE Science Village - San Diego County, Annual

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | OBUS | 1.1480e-003 | 1.1510e-003 |
| tblVehicleEF | OBUS | 0.04        | 0.05        |
| tblVehicleEF | OBUS | 0.10        | 0.10        |
| tblVehicleEF | OBUS | 0.12        | 0.13        |
| tblVehicleEF | OBUS | 8.4500e-004 | 8.2300e-004 |
| tblVehicleEF | OBUS | 0.01        | 0.01        |
| tblVehicleEF | OBUS | 1.9800e-004 | 2.0300e-004 |
| tblVehicleEF | OBUS | 1.9500e-003 | 1.9720e-003 |
| tblVehicleEF | OBUS | 0.03        | 0.03        |
| tblVehicleEF | OBUS | 0.07        | 0.07        |
| tblVehicleEF | OBUS | 1.1480e-003 | 1.1510e-003 |
| tblVehicleEF | OBUS | 0.06        | 0.07        |
| tblVehicleEF | OBUS | 0.10        | 0.10        |
| tblVehicleEF | OBUS | 0.13        | 0.14        |
| tblVehicleEF | SBUS | 0.03        | 0.03        |
| tblVehicleEF | SBUS | 7.7010e-003 | 8.8070e-003 |
| tblVehicleEF | SBUS | 2.8170e-003 | 2.8250e-003 |
| tblVehicleEF | SBUS | 1.44        | 1.35        |
| tblVehicleEF | SBUS | 0.60        | 0.69        |
| tblVehicleEF | SBUS | 0.42        | 0.44        |
| tblVehicleEF | SBUS | 330.59      | 331.96      |
| tblVehicleEF | SBUS | 1,067.70    | 1,082.70    |
| tblVehicleEF | SBUS | 2.21        | 2.17        |
| tblVehicleEF | SBUS | 0.05        | 0.05        |
| tblVehicleEF | SBUS | 0.15        | 0.15        |
| tblVehicleEF | SBUS | 2.1900e-003 | 2.0180e-003 |
| tblVehicleEF | SBUS | 3.81        | 3.92        |
| tblVehicleEF | SBUS | 6.60        | 6.97        |
| tblVehicleEF | SBUS | 0.73        | 0.68        |

ARE Science Village - San Diego County, Annual

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | SBUS | 4.5360e-003 | 4.8460e-003 |
| tblVehicleEF | SBUS | 0.01        | 0.01        |
| tblVehicleEF | SBUS | 0.04        | 0.04        |
| tblVehicleEF | SBUS | 3.6000e-005 | 3.5000e-005 |
| tblVehicleEF | SBUS | 4.3400e-003 | 4.6360e-003 |
| tblVehicleEF | SBUS | 2.8100e-003 | 2.8200e-003 |
| tblVehicleEF | SBUS | 0.04        | 0.04        |
| tblVehicleEF | SBUS | 3.3000e-005 | 3.2000e-005 |
| tblVehicleEF | SBUS | 3.4400e-004 | 4.5000e-004 |
| tblVehicleEF | SBUS | 3.7250e-003 | 4.8160e-003 |
| tblVehicleEF | SBUS | 0.15        | 0.14        |
| tblVehicleEF | SBUS | 1.9200e-004 | 2.3000e-004 |
| tblVehicleEF | SBUS | 0.11        | 0.12        |
| tblVehicleEF | SBUS | 7.3780e-003 | 9.9210e-003 |
| tblVehicleEF | SBUS | 0.02        | 0.02        |
| tblVehicleEF | SBUS | 3.1360e-003 | 3.1480e-003 |
| tblVehicleEF | SBUS | 0.01        | 0.01        |
| tblVehicleEF | SBUS | 2.2000e-005 | 2.1000e-005 |
| tblVehicleEF | SBUS | 3.4400e-004 | 4.5000e-004 |
| tblVehicleEF | SBUS | 3.7250e-003 | 4.8160e-003 |
| tblVehicleEF | SBUS | 0.21        | 0.20        |
| tblVehicleEF | SBUS | 1.9200e-004 | 2.3000e-004 |
| tblVehicleEF | SBUS | 0.13        | 0.14        |
| tblVehicleEF | SBUS | 7.3780e-003 | 9.9210e-003 |
| tblVehicleEF | SBUS | 0.02        | 0.02        |
| tblVehicleEF | SBUS | 0.03        | 0.03        |
| tblVehicleEF | SBUS | 7.7920e-003 | 8.9230e-003 |
| tblVehicleEF | SBUS | 2.4510e-003 | 2.4570e-003 |
| tblVehicleEF | SBUS | 1.40        | 1.31        |

ARE Science Village - San Diego County, Annual

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | SBUS | 0.60        | 0.70        |
| tblVehicleEF | SBUS | 0.33        | 0.34        |
| tblVehicleEF | SBUS | 341.22      | 343.18      |
| tblVehicleEF | SBUS | 1,067.71    | 1,082.72    |
| tblVehicleEF | SBUS | 2.06        | 2.01        |
| tblVehicleEF | SBUS | 0.05        | 0.05        |
| tblVehicleEF | SBUS | 0.15        | 0.15        |
| tblVehicleEF | SBUS | 2.1020e-003 | 1.9380e-003 |
| tblVehicleEF | SBUS | 3.90        | 4.02        |
| tblVehicleEF | SBUS | 6.36        | 6.72        |
| tblVehicleEF | SBUS | 0.73        | 0.68        |
| tblVehicleEF | SBUS | 3.8310e-003 | 4.0920e-003 |
| tblVehicleEF | SBUS | 0.01        | 0.01        |
| tblVehicleEF | SBUS | 0.04        | 0.04        |
| tblVehicleEF | SBUS | 3.6000e-005 | 3.5000e-005 |
| tblVehicleEF | SBUS | 3.6660e-003 | 3.9150e-003 |
| tblVehicleEF | SBUS | 2.8100e-003 | 2.8200e-003 |
| tblVehicleEF | SBUS | 0.04        | 0.04        |
| tblVehicleEF | SBUS | 3.3000e-005 | 3.2000e-005 |
| tblVehicleEF | SBUS | 4.8600e-004 | 6.3500e-004 |
| tblVehicleEF | SBUS | 3.8720e-003 | 5.0370e-003 |
| tblVehicleEF | SBUS | 0.15        | 0.14        |
| tblVehicleEF | SBUS | 3.5700e-004 | 4.3000e-004 |
| tblVehicleEF | SBUS | 0.11        | 0.12        |
| tblVehicleEF | SBUS | 6.3630e-003 | 8.5120e-003 |
| tblVehicleEF | SBUS | 0.01        | 0.01        |
| tblVehicleEF | SBUS | 3.2360e-003 | 3.2540e-003 |
| tblVehicleEF | SBUS | 0.01        | 0.01        |
| tblVehicleEF | SBUS | 4.8600e-004 | 6.3500e-004 |



ARE Science Village - San Diego County, Annual

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | SBUS | 3.8720e-003 | 5.0370e-003 |
| tblVehicleEF | SBUS | 0.21        | 0.20        |
| tblVehicleEF | SBUS | 3.5700e-004 | 4.3000e-004 |
| tblVehicleEF | SBUS | 0.13        | 0.14        |
| tblVehicleEF | SBUS | 6.3630e-003 | 8.5120e-003 |
| tblVehicleEF | SBUS | 0.02        | 0.02        |
| tblVehicleEF | SBUS | 0.03        | 0.03        |
| tblVehicleEF | SBUS | 7.6590e-003 | 8.7520e-003 |
| tblVehicleEF | SBUS | 2.9980e-003 | 3.0070e-003 |
| tblVehicleEF | SBUS | 1.50        | 1.41        |
| tblVehicleEF | SBUS | 0.59        | 0.69        |
| tblVehicleEF | SBUS | 0.47        | 0.49        |
| tblVehicleEF | SBUS | 315.91      | 316.46      |
| tblVehicleEF | SBUS | 1,067.69    | 1,082.69    |
| tblVehicleEF | SBUS | 2.29        | 2.25        |
| tblVehicleEF | SBUS | 0.05        | 0.05        |
| tblVehicleEF | SBUS | 0.15        | 0.15        |
| tblVehicleEF | SBUS | 2.2480e-003 | 2.0710e-003 |
| tblVehicleEF | SBUS | 3.67        | 3.77        |
| tblVehicleEF | SBUS | 6.57        | 6.94        |
| tblVehicleEF | SBUS | 0.73        | 0.68        |
| tblVehicleEF | SBUS | 5.5100e-003 | 5.8870e-003 |
| tblVehicleEF | SBUS | 0.01        | 0.01        |
| tblVehicleEF | SBUS | 0.04        | 0.04        |
| tblVehicleEF | SBUS | 3.6000e-005 | 3.5000e-005 |
| tblVehicleEF | SBUS | 5.2720e-003 | 5.6320e-003 |
| tblVehicleEF | SBUS | 2.8100e-003 | 2.8200e-003 |
| tblVehicleEF | SBUS | 0.04        | 0.04        |
| tblVehicleEF | SBUS | 3.3000e-005 | 3.2000e-005 |

ARE Science Village - San Diego County, Annual

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | SBUS | 3.4300e-004 | 4.6100e-004 |
| tblVehicleEF | SBUS | 4.0120e-003 | 5.2490e-003 |
| tblVehicleEF | SBUS | 0.15        | 0.14        |
| tblVehicleEF | SBUS | 1.7200e-004 | 2.0500e-004 |
| tblVehicleEF | SBUS | 0.11        | 0.12        |
| tblVehicleEF | SBUS | 9.6140e-003 | 0.01        |
| tblVehicleEF | SBUS | 0.02        | 0.02        |
| tblVehicleEF | SBUS | 2.9970e-003 | 3.0020e-003 |
| tblVehicleEF | SBUS | 0.01        | 0.01        |
| tblVehicleEF | SBUS | 2.3000e-005 | 2.2000e-005 |
| tblVehicleEF | SBUS | 3.4300e-004 | 4.6100e-004 |
| tblVehicleEF | SBUS | 4.0120e-003 | 5.2490e-003 |
| tblVehicleEF | SBUS | 0.21        | 0.20        |
| tblVehicleEF | SBUS | 1.7200e-004 | 2.0500e-004 |
| tblVehicleEF | SBUS | 0.13        | 0.14        |
| tblVehicleEF | SBUS | 9.6140e-003 | 0.01        |
| tblVehicleEF | SBUS | 0.02        | 0.02        |
| tblVehicleEF | UBUS | 4.89        | 4.89        |
| tblVehicleEF | UBUS | 0.02        | 0.02        |
| tblVehicleEF | UBUS | 38.17       | 38.17       |
| tblVehicleEF | UBUS | 1.23        | 1.23        |
| tblVehicleEF | UBUS | 1,897.59    | 1,904.69    |
| tblVehicleEF | UBUS | 13.87       | 14.16       |
| tblVehicleEF | UBUS | 0.31        | 0.31        |
| tblVehicleEF | UBUS | 0.01        | 0.01        |
| tblVehicleEF | UBUS | 0.41        | 0.41        |
| tblVehicleEF | UBUS | 0.13        | 0.14        |
| tblVehicleEF | UBUS | 3.1030e-003 | 3.0820e-003 |
| tblVehicleEF | UBUS | 1.7700e-004 | 1.6800e-004 |

ARE Science Village - San Diego County, Annual

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | UBUS | 2.9470e-003 | 2.9280e-003 |
| tblVehicleEF | UBUS | 1.6300e-004 | 1.5500e-004 |
| tblVehicleEF | UBUS | 4.7400e-004 | 5.5700e-004 |
| tblVehicleEF | UBUS | 5.1760e-003 | 6.2840e-003 |
| tblVehicleEF | UBUS | 4.1000e-004 | 4.9700e-004 |
| tblVehicleEF | UBUS | 0.07        | 0.07        |
| tblVehicleEF | UBUS | 7.8400e-004 | 9.8300e-004 |
| tblVehicleEF | UBUS | 0.06        | 0.06        |
| tblVehicleEF | UBUS | 3.7080e-003 | 3.7780e-003 |
| tblVehicleEF | UBUS | 1.3700e-004 | 1.4000e-004 |
| tblVehicleEF | UBUS | 4.7400e-004 | 5.5700e-004 |
| tblVehicleEF | UBUS | 5.1760e-003 | 6.2840e-003 |
| tblVehicleEF | UBUS | 4.1000e-004 | 4.9700e-004 |
| tblVehicleEF | UBUS | 5.00        | 5.00        |
| tblVehicleEF | UBUS | 7.8400e-004 | 9.8300e-004 |
| tblVehicleEF | UBUS | 0.06        | 0.07        |
| tblVehicleEF | UBUS | 4.89        | 4.89        |
| tblVehicleEF | UBUS | 0.01        | 0.01        |
| tblVehicleEF | UBUS | 38.17       | 38.17       |
| tblVehicleEF | UBUS | 1.06        | 1.06        |
| tblVehicleEF | UBUS | 1,897.60    | 1,904.69    |
| tblVehicleEF | UBUS | 13.58       | 13.88       |
| tblVehicleEF | UBUS | 0.31        | 0.31        |
| tblVehicleEF | UBUS | 0.01        | 0.01        |
| tblVehicleEF | UBUS | 0.40        | 0.40        |
| tblVehicleEF | UBUS | 0.12        | 0.13        |
| tblVehicleEF | UBUS | 3.1030e-003 | 3.0820e-003 |
| tblVehicleEF | UBUS | 1.7700e-004 | 1.6800e-004 |
| tblVehicleEF | UBUS | 2.9470e-003 | 2.9280e-003 |

ARE Science Village - San Diego County, Annual

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

|              |      |             |             |
|--------------|------|-------------|-------------|
| tblVehicleEF | UBUS | 1.6300e-004 | 1.5500e-004 |
| tblVehicleEF | UBUS | 6.8100e-004 | 8.0200e-004 |
| tblVehicleEF | UBUS | 5.6350e-003 | 6.7540e-003 |
| tblVehicleEF | UBUS | 7.9300e-004 | 9.2700e-004 |
| tblVehicleEF | UBUS | 0.07        | 0.07        |
| tblVehicleEF | UBUS | 7.1600e-004 | 9.0300e-004 |
| tblVehicleEF | UBUS | 0.05        | 0.05        |
| tblVehicleEF | UBUS | 3.7080e-003 | 3.7780e-003 |
| tblVehicleEF | UBUS | 1.3400e-004 | 1.3700e-004 |
| tblVehicleEF | UBUS | 6.8100e-004 | 8.0200e-004 |
| tblVehicleEF | UBUS | 5.6350e-003 | 6.7540e-003 |
| tblVehicleEF | UBUS | 7.9300e-004 | 9.2700e-004 |
| tblVehicleEF | UBUS | 5.00        | 5.00        |
| tblVehicleEF | UBUS | 7.1600e-004 | 9.0300e-004 |
| tblVehicleEF | UBUS | 0.06        | 0.06        |
| tblVehicleEF | UBUS | 4.89        | 4.89        |
| tblVehicleEF | UBUS | 0.02        | 0.02        |
| tblVehicleEF | UBUS | 38.17       | 38.17       |
| tblVehicleEF | UBUS | 1.31        | 1.30        |
| tblVehicleEF | UBUS | 1,897.59    | 1,904.69    |
| tblVehicleEF | UBUS | 14.00       | 14.29       |
| tblVehicleEF | UBUS | 0.31        | 0.31        |
| tblVehicleEF | UBUS | 0.01        | 0.02        |
| tblVehicleEF | UBUS | 0.41        | 0.41        |
| tblVehicleEF | UBUS | 0.13        | 0.14        |
| tblVehicleEF | UBUS | 3.1030e-003 | 3.0820e-003 |
| tblVehicleEF | UBUS | 1.7700e-004 | 1.6800e-004 |
| tblVehicleEF | UBUS | 2.9470e-003 | 2.9280e-003 |
| tblVehicleEF | UBUS | 1.6300e-004 | 1.5500e-004 |

ARE Science Village - San Diego County, Annual

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

|                 |       |             |             |
|-----------------|-------|-------------|-------------|
| tblVehicleEF    | UBUS  | 4.4100e-004 | 5.0600e-004 |
| tblVehicleEF    | UBUS  | 6.0090e-003 | 7.1380e-003 |
| tblVehicleEF    | UBUS  | 3.6700e-004 | 4.4300e-004 |
| tblVehicleEF    | UBUS  | 0.07        | 0.07        |
| tblVehicleEF    | UBUS  | 9.5000e-004 | 1.1790e-003 |
| tblVehicleEF    | UBUS  | 0.06        | 0.06        |
| tblVehicleEF    | UBUS  | 3.7080e-003 | 3.7780e-003 |
| tblVehicleEF    | UBUS  | 1.3900e-004 | 1.4100e-004 |
| tblVehicleEF    | UBUS  | 4.4100e-004 | 5.0600e-004 |
| tblVehicleEF    | UBUS  | 6.0090e-003 | 7.1380e-003 |
| tblVehicleEF    | UBUS  | 3.6700e-004 | 4.4300e-004 |
| tblVehicleEF    | UBUS  | 5.00        | 5.00        |
| tblVehicleEF    | UBUS  | 9.5000e-004 | 1.1790e-003 |
| tblVehicleEF    | UBUS  | 0.07        | 0.07        |
| tblVehicleTrips | ST_TR | 1.96        | 0.00        |
| tblVehicleTrips | ST_TR | 696.00      | 0.00        |
| tblVehicleTrips | ST_TR | 2.21        | 0.00        |
| tblVehicleTrips | ST_TR | 1.90        | 8.03        |
| tblVehicleTrips | ST_TR | 177.62      | 0.00        |
| tblVehicleTrips | SU_TR | 2.19        | 0.00        |
| tblVehicleTrips | SU_TR | 500.00      | 0.00        |
| tblVehicleTrips | SU_TR | 0.70        | 0.00        |
| tblVehicleTrips | SU_TR | 1.11        | 8.03        |
| tblVehicleTrips | SU_TR | 166.47      | 0.00        |
| tblVehicleTrips | WD_TR | 0.78        | 0.00        |
| tblVehicleTrips | WD_TR | 346.23      | 0.00        |
| tblVehicleTrips | WD_TR | 9.74        | 0.00        |
| tblVehicleTrips | WD_TR | 11.26       | 8.03        |
| tblVehicleTrips | WD_TR | 106.78      | 0.00        |

ARE Science Village - San Diego County, Annual

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

**2.0 Emissions Summary**

---

ARE Science Village - 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         |                   |                   |               |               |                   |
| 2022           | 0.5565        | 7.8799        | 4.6829        | 0.0222        | 1.1058        | 0.2206        | 1.3263        | 0.3317         | 0.2057        | 0.5374        | 0.0000        | 2,122.2407        | 2,122.2407        | 0.2434        | 0.2266        | 2,195.8565        |
| 2023           | 0.3962        | 3.3945        | 3.7719        | 0.0114        | 0.4010        | 0.1249        | 0.5259        | 0.1090         | 0.1170        | 0.2260        | 0.0000        | 1,036.7633        | 1,036.7633        | 0.1454        | 0.0534        | 1,056.2993        |
| 2024           | 4.6842        | 2.2445        | 2.7739        | 7.7800e-003   | 0.2760        | 0.0824        | 0.3584        | 0.0748         | 0.0773        | 0.1521        | 0.0000        | 709.2536          | 709.2536          | 0.1038        | 0.0323        | 721.4836          |
| <b>Maximum</b> | <b>4.6842</b> | <b>7.8799</b> | <b>4.6829</b> | <b>0.0222</b> | <b>1.1058</b> | <b>0.2206</b> | <b>1.3263</b> | <b>0.3317</b>  | <b>0.2057</b> | <b>0.5374</b> | <b>0.0000</b> | <b>2,122.2407</b> | <b>2,122.2407</b> | <b>0.2434</b> | <b>0.2266</b> | <b>2,195.8565</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           | tons/yr       |               |               |               |               |               |               |                |               |               | MT/yr         |                   |                   |               |               |                   |
| 2022           | 0.5565        | 7.8799        | 4.6829        | 0.0222        | 0.6069        | 0.2206        | 0.8274        | 0.1719         | 0.2057        | 0.3775        | 0.0000        | 2,122.2400        | 2,122.2400        | 0.2434        | 0.2266        | 2,195.8558        |
| 2023           | 0.3962        | 3.3945        | 3.7719        | 0.0114        | 0.3812        | 0.1249        | 0.5061        | 0.1042         | 0.1170        | 0.2211        | 0.0000        | 1,036.7627        | 1,036.7627        | 0.1454        | 0.0534        | 1,056.2987        |
| 2024           | 4.6842        | 2.2445        | 2.7739        | 7.7800e-003   | 0.2623        | 0.0824        | 0.3447        | 0.0715         | 0.0773        | 0.1487        | 0.0000        | 709.2532          | 709.2532          | 0.1038        | 0.0323        | 721.4831          |
| <b>Maximum</b> | <b>4.6842</b> | <b>7.8799</b> | <b>4.6829</b> | <b>0.0222</b> | <b>0.6069</b> | <b>0.2206</b> | <b>0.8274</b> | <b>0.1719</b>  | <b>0.2057</b> | <b>0.3775</b> | <b>0.0000</b> | <b>2,122.2400</b> | <b>2,122.2400</b> | <b>0.2434</b> | <b>0.2266</b> | <b>2,195.8558</b> |

ARE Science Village - 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 |
|-------------------|------|------|------|------|---------------|--------------|------------|----------------|---------------|-------------|----------|----------|-----------|------|------|------|
| Percent Reduction | 0.00 | 0.00 | 0.00 | 0.00 | 29.86         | 0.00         | 24.08      | 32.60          | 0.00          | 18.36       | 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       | 1-1-2022   | 3-31-2022  | 0.9994                                       | 0.9994                                     |
| 2       | 4-1-2022   | 6-30-2022  | 2.7625                                       | 2.7625                                     |
| 3       | 7-1-2022   | 9-30-2022  | 3.5096                                       | 3.5096                                     |
| 4       | 10-1-2022  | 12-31-2022 | 1.0754                                       | 1.0754                                     |
| 5       | 1-1-2023   | 3-31-2023  | 0.9410                                       | 0.9410                                     |
| 6       | 4-1-2023   | 6-30-2023  | 0.9403                                       | 0.9403                                     |
| 7       | 7-1-2023   | 9-30-2023  | 0.9506                                       | 0.9506                                     |
| 8       | 10-1-2023  | 12-31-2023 | 0.9619                                       | 0.9619                                     |
| 9       | 1-1-2024   | 3-31-2024  | 3.1252                                       | 3.1252                                     |
| 10      | 4-1-2024   | 6-30-2024  | 3.3439                                       | 3.3439                                     |
| 11      | 7-1-2024   | 9-30-2024  | 0.4233                                       | 0.4233                                     |
|         |            | Highest    | 3.5096                                       | 3.5096                                     |



ARE Science Village - 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         | 1.9108        | 1.1000e-004   | 0.0118         | 0.0000        |               | 4.0000e-005   | 4.0000e-005   |                | 4.0000e-005   | 4.0000e-005   | 0.0000         | 0.0229            | 0.0229            | 6.0000e-005   | 0.0000        | 0.0244            |
| Energy       | 0.0295        | 0.2682        | 0.2253         | 1.6100e-003   |               | 0.0204        | 0.0204        |                | 0.0204        | 0.0204        | 0.0000         | 1,584.0596        | 1,584.0596        | 0.0846        | 0.0149        | 1,590.6210        |
| Mobile       | 1.3383        | 1.4614        | 12.1458        | 0.0250        | 2.6610        | 0.0197        | 2.6808        | 0.7102         | 0.0184        | 0.7286        | 0.0000         | 2,350.3173        | 2,350.3173        | 0.1718        | 0.1082        | 2,386.8658        |
| Waste        |               |               |                |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 23.9915        | 0.0000            | 23.9915           | 1.4179        | 0.0000        | 59.4379           |
| Water        |               |               |                |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 56.3301        | 571.0300          | 627.3600          | 5.8205        | 0.1408        | 814.8442          |
| <b>Total</b> | <b>3.2785</b> | <b>1.7296</b> | <b>12.3828</b> | <b>0.0266</b> | <b>2.6610</b> | <b>0.0402</b> | <b>2.7012</b> | <b>0.7102</b>  | <b>0.0388</b> | <b>0.7490</b> | <b>80.3216</b> | <b>4,505.4298</b> | <b>4,585.7514</b> | <b>7.4948</b> | <b>0.2640</b> | <b>4,851.7933</b> |

ARE Science Village - 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         | 1.9108        | 1.1000e-004   | 0.0118         | 0.0000        |               | 4.0000e-005   | 4.0000e-005   |                | 4.0000e-005   | 4.0000e-005   | 0.0000         | 0.0229            | 0.0229            | 6.0000e-005   | 0.0000        | 0.0244            |
| Energy       | 0.0295        | 0.2682        | 0.2253         | 1.6100e-003   |               | 0.0204        | 0.0204        |                | 0.0204        | 0.0204        | 0.0000         | 1,584.0596        | 1,584.0596        | 0.0846        | 0.0149        | 1,590.6210        |
| Mobile       | 1.3383        | 1.4614        | 12.1458        | 0.0250        | 2.6610        | 0.0197        | 2.6808        | 0.7102         | 0.0184        | 0.7286        | 0.0000         | 2,350.3173        | 2,350.3173        | 0.1718        | 0.1082        | 2,386.8658        |
| Waste        |               |               |                |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 23.9915        | 0.0000            | 23.9915           | 1.4179        | 0.0000        | 59.4379           |
| Water        |               |               |                |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 56.3301        | 571.0300          | 627.3600          | 5.8205        | 0.1408        | 814.8442          |
| <b>Total</b> | <b>3.2785</b> | <b>1.7296</b> | <b>12.3828</b> | <b>0.0266</b> | <b>2.6610</b> | <b>0.0402</b> | <b>2.7012</b> | <b>0.7102</b>  | <b>0.0388</b> | <b>0.7490</b> | <b>80.3216</b> | <b>4,505.4298</b> | <b>4,585.7514</b> | <b>7.4948</b> | <b>0.2640</b> | <b>4,851.7933</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        |
|--------------------------|-------------|-------------|-------------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <b>Percent Reduction</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b>   | <b>0.00</b>  | <b>0.00</b> | <b>0.00</b>    | <b>0.00</b>   | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> |

3.0 Construction Detail

Construction Phase

| Phase Number | Phase Name            | Phase Type            | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|--------------|-----------------------|-----------------------|------------|----------|---------------|----------|-------------------|
| 1            | Demolition            | Demolition            | 1/1/2022   | 5/4/2022 | 5             | 88       |                   |
| 2            | Grading               | Grading               | 5/5/2022   | 9/5/2022 | 5             | 88       |                   |
| 3            | Building Construction | Building Construction | 8/1/2022   | 8/7/2024 | 5             | 528      |                   |

ARE Science Village - San Diego County, Annual

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

|   |                       |                       |          |          |   |     |
|---|-----------------------|-----------------------|----------|----------|---|-----|
| 4 | Architectural Coating | Architectural Coating | 1/1/2024 | 7/2/2024 | 5 | 132 |
| 5 | Paving                | Paving                | 5/1/2024 | 7/1/2024 | 5 | 44  |

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

**Acres of Grading (Grading Phase): 264**

**Acres of Paving: 8.22**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 554,817; Non-Residential Outdoor: 184,939; Striped Parking Area: 21,912 (Architectural Coating – sqft)**

**OffRoad Equipment**

| Phase Name            | Offroad Equipment Type       | Amount | Usage Hours | Horse Power | Load Factor |
|-----------------------|------------------------------|--------|-------------|-------------|-------------|
| Demolition            | Concrete/Industrial Saws     | 1      | 8.00        | 81          | 0.73        |
| Demolition            | Excavators                   | 3      | 8.00        | 158         | 0.38        |
| Demolition            | Rubber Tired Dozers          | 2      | 8.00        | 247         | 0.40        |
| 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        |
| 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 | Other Construction Equipment | 1      | 6.00        | 475         | 0.50        |
| 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        |
| 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        |

ARE Science Village - San Diego County, Annual

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

**Trips and VMT**

| Phase Name            | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|-----------------------|-------------------------|--------------------|--------------------|---------------------|--------------------|--------------------|---------------------|----------------------|----------------------|-----------------------|
| Demolition            | 6                       | 15.00              | 0.00               | 1,351.00            | 10.80              | 7.30               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Grading               | 8                       | 20.00              | 0.00               | 39,363.00           | 10.80              | 7.30               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Building Construction | 10                      | 282.00             | 124.00             | 0.00                | 10.80              | 7.30               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Architectural Coating | 1                       | 56.00              | 0.00               | 0.00                | 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                  |

**3.1 Mitigation Measures Construction**

Replace Ground Cover

Water Exposed Area

Clean Paved Roads

**3.2 Demolition - 2022**

**Unmitigated Construction On-Site**

|               | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|---------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Category      | tons/yr       |               |               |                    |               |               |               |                |               |               | MT/yr         |                 |                 |               |               |                 |
| Fugitive Dust |               |               |               |                    | 0.1480        | 0.0000        | 0.1480        | 0.0224         | 0.0000        | 0.0224        | 0.0000        | 0.0000          | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| Off-Road      | 0.1161        | 1.1317        | 0.9061        | 1.7100e-003        |               | 0.0547        | 0.0547        |                | 0.0508        | 0.0508        | 0.0000        | 149.5570        | 149.5570        | 0.0420        | 0.0000        | 150.6072        |
| <b>Total</b>  | <b>0.1161</b> | <b>1.1317</b> | <b>0.9061</b> | <b>1.7100e-003</b> | <b>0.1480</b> | <b>0.0547</b> | <b>0.2027</b> | <b>0.0224</b>  | <b>0.0508</b> | <b>0.0732</b> | <b>0.0000</b> | <b>149.5570</b> | <b>149.5570</b> | <b>0.0420</b> | <b>0.0000</b> | <b>150.6072</b> |

ARE Science Village - San Diego County, Annual

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

**3.2 Demolition - 2022**

**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      | 2.9900e-003        | 0.1138        | 0.0268        | 4.2000e-004        | 0.0116        | 1.0600e-003        | 0.0126        | 3.1800e-003        | 1.0100e-003        | 4.1900e-003        | 0.0000        | 42.3412        | 42.3412        | 2.0300e-003        | 6.7300e-003        | 44.3965        |
| 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       | 1.9100e-003        | 1.3800e-003   | 0.0162        | 5.0000e-005        | 5.2900e-003   | 3.0000e-005        | 5.3200e-003   | 1.4100e-003        | 3.0000e-005        | 1.4300e-003        | 0.0000        | 4.3527         | 4.3527         | 1.4000e-004        | 1.3000e-004        | 4.3936         |
| <b>Total</b> | <b>4.9000e-003</b> | <b>0.1151</b> | <b>0.0430</b> | <b>4.7000e-004</b> | <b>0.0169</b> | <b>1.0900e-003</b> | <b>0.0180</b> | <b>4.5900e-003</b> | <b>1.0400e-003</b> | <b>5.6200e-003</b> | <b>0.0000</b> | <b>46.6939</b> | <b>46.6939</b> | <b>2.1700e-003</b> | <b>6.8600e-003</b> | <b>48.7900</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 |               |               |               |                    | 0.0260        | 0.0000        | 0.0260        | 3.9300e-003        | 0.0000        | 3.9300e-003   | 0.0000        | 0.0000          | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| Off-Road      | 0.1161        | 1.1317        | 0.9061        | 1.7100e-003        |               | 0.0547        | 0.0547        |                    | 0.0508        | 0.0508        | 0.0000        | 149.5568        | 149.5568        | 0.0420        | 0.0000        | 150.6071        |
| <b>Total</b>  | <b>0.1161</b> | <b>1.1317</b> | <b>0.9061</b> | <b>1.7100e-003</b> | <b>0.0260</b> | <b>0.0547</b> | <b>0.0807</b> | <b>3.9300e-003</b> | <b>0.0508</b> | <b>0.0548</b> | <b>0.0000</b> | <b>149.5568</b> | <b>149.5568</b> | <b>0.0420</b> | <b>0.0000</b> | <b>150.6071</b> |

ARE Science Village - San Diego County, Annual

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

**3.2 Demolition - 2022**

**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      | 2.9900e-003        | 0.1138        | 0.0268        | 4.2000e-004        | 0.0111        | 1.0600e-003        | 0.0121        | 3.0500e-003        | 1.0100e-003        | 4.0600e-003        | 0.0000        | 42.3412        | 42.3412        | 2.0300e-003        | 6.7300e-003        | 44.3965        |
| 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       | 1.9100e-003        | 1.3800e-003   | 0.0162        | 5.0000e-005        | 5.0200e-003   | 3.0000e-005        | 5.0500e-003   | 1.3400e-003        | 3.0000e-005        | 1.3700e-003        | 0.0000        | 4.3527         | 4.3527         | 1.4000e-004        | 1.3000e-004        | 4.3936         |
| <b>Total</b> | <b>4.9000e-003</b> | <b>0.1151</b> | <b>0.0430</b> | <b>4.7000e-004</b> | <b>0.0161</b> | <b>1.0900e-003</b> | <b>0.0172</b> | <b>4.3900e-003</b> | <b>1.0400e-003</b> | <b>5.4300e-003</b> | <b>0.0000</b> | <b>46.6939</b> | <b>46.6939</b> | <b>2.1700e-003</b> | <b>6.8600e-003</b> | <b>48.7900</b> |

**3.3 Grading - 2022**

**Unmitigated Construction On-Site**

|               | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|---------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Category      | tons/yr       |               |               |                    |               |               |               |                |               |               | MT/yr         |                 |                 |               |               |                 |
| Fugitive Dust |               |               |               |                    | 0.4271        | 0.0000        | 0.4271        | 0.1641         | 0.0000        | 0.1641        | 0.0000        | 0.0000          | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| Off-Road      | 0.1595        | 1.7091        | 1.2778        | 2.7300e-003        |               | 0.0719        | 0.0719        |                | 0.0662        | 0.0662        | 0.0000        | 239.9522        | 239.9522        | 0.0776        | 0.0000        | 241.8924        |
| <b>Total</b>  | <b>0.1595</b> | <b>1.7091</b> | <b>1.2778</b> | <b>2.7300e-003</b> | <b>0.4271</b> | <b>0.0719</b> | <b>0.4990</b> | <b>0.1641</b>  | <b>0.0662</b> | <b>0.2303</b> | <b>0.0000</b> | <b>239.9522</b> | <b>239.9522</b> | <b>0.0776</b> | <b>0.0000</b> | <b>241.8924</b> |

ARE Science Village - 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 - 2022**

**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      | 0.0872          | 3.3141          | 0.7816        | 0.0124          | 0.3371          | 0.0308          | 0.3679          | 0.0926          | 0.0295          | 0.1221          | 0.0000        | 1,233.660<br>2         | 1,233.660<br>2         | 0.0593          | 0.1960          | 1,293.543<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       | 2.5400e-<br>003 | 1.8400e-<br>003 | 0.0216        | 6.0000e-<br>005 | 7.0600e-<br>003 | 4.0000e-<br>005 | 7.1000e-<br>003 | 1.8800e-<br>003 | 4.0000e-<br>005 | 1.9100e-<br>003 | 0.0000        | 5.8036                 | 5.8036                 | 1.8000e-<br>004 | 1.7000e-<br>004 | 5.8581                 |
| <b>Total</b> | <b>0.0898</b>   | <b>3.3160</b>   | <b>0.8032</b> | <b>0.0124</b>   | <b>0.3442</b>   | <b>0.0309</b>   | <b>0.3750</b>   | <b>0.0945</b>   | <b>0.0295</b>   | <b>0.1240</b>   | <b>0.0000</b> | <b>1,239.463<br/>8</b> | <b>1,239.463<br/>8</b> | <b>0.0595</b>   | <b>0.1962</b>   | <b>1,299.402<br/>0</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 |               |               |               |                         | 0.0750        | 0.0000        | 0.0750        | 0.0288         | 0.0000        | 0.0288        | 0.0000        | 0.0000          | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| Off-Road      | 0.1595        | 1.7091        | 1.2778        | 2.7300e-<br>003         |               | 0.0719        | 0.0719        |                | 0.0662        | 0.0662        | 0.0000        | 239.9520        | 239.9520        | 0.0776        | 0.0000        | 241.8921        |
| <b>Total</b>  | <b>0.1595</b> | <b>1.7091</b> | <b>1.2778</b> | <b>2.7300e-<br/>003</b> | <b>0.0750</b> | <b>0.0719</b> | <b>0.1469</b> | <b>0.0288</b>  | <b>0.0662</b> | <b>0.0950</b> | <b>0.0000</b> | <b>239.9520</b> | <b>239.9520</b> | <b>0.0776</b> | <b>0.0000</b> | <b>241.8921</b> |

ARE Science Village - 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 - 2022**

**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      | 0.0872        | 3.3141        | 0.7816        | 0.0124        | 0.3219        | 0.0308        | 0.3527        | 0.0889         | 0.0295        | 0.1184        | 0.0000        | 1,233.660<br>2         | 1,233.660<br>2         | 0.0593        | 0.1960        | 1,293.543<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       | 2.5400e-003   | 1.8400e-003   | 0.0216        | 6.0000e-005   | 6.6900e-003   | 4.0000e-005   | 6.7300e-003   | 1.7900e-003    | 4.0000e-005   | 1.8200e-003   | 0.0000        | 5.8036                 | 5.8036                 | 1.8000e-004   | 1.7000e-004   | 5.8581                 |
| <b>Total</b> | <b>0.0898</b> | <b>3.3160</b> | <b>0.8032</b> | <b>0.0124</b> | <b>0.3286</b> | <b>0.0309</b> | <b>0.3595</b> | <b>0.0907</b>  | <b>0.0295</b> | <b>0.1202</b> | <b>0.0000</b> | <b>1,239.463<br/>8</b> | <b>1,239.463<br/>8</b> | <b>0.0595</b> | <b>0.1962</b> | <b>1,299.402<br/>0</b> |

**3.4 Building Construction - 2022**

**Unmitigated Construction On-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Category     | tons/yr       |               |               |                    |               |               |               |                |               |               | MT/yr         |                 |                 |               |               |                 |
| Off-Road     | 0.1263        | 1.2002        | 1.1485        | 2.3300e-003        |               | 0.0573        | 0.0573        |                | 0.0537        | 0.0537        | 0.0000        | 202.0616        | 202.0616        | 0.0547        | 0.0000        | 203.4282        |
| <b>Total</b> | <b>0.1263</b> | <b>1.2002</b> | <b>1.1485</b> | <b>2.3300e-003</b> |               | <b>0.0573</b> | <b>0.0573</b> |                | <b>0.0537</b> | <b>0.0537</b> | <b>0.0000</b> | <b>202.0616</b> | <b>202.0616</b> | <b>0.0547</b> | <b>0.0000</b> | <b>203.4282</b> |



ARE Science Village - San Diego County, Annual

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

**3.4 Building Construction - 2022**

**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       | 0.0151        | 0.3754        | 0.1230        | 1.4600e-003        | 0.0453        | 3.9500e-003        | 0.0492        | 0.0131         | 3.7800e-003        | 0.0169        | 0.0000        | 142.2239        | 142.2239        | 4.3200e-003        | 0.0207        | 148.4883        |
| Worker       | 0.0448        | 0.0325        | 0.3813        | 1.1100e-003        | 0.1244        | 7.2000e-004        | 0.1251        | 0.0331         | 6.6000e-004        | 0.0337        | 0.0000        | 102.2884        | 102.2884        | 3.2100e-003        | 2.9500e-003   | 103.2484        |
| <b>Total</b> | <b>0.0599</b> | <b>0.4079</b> | <b>0.5042</b> | <b>2.5700e-003</b> | <b>0.1697</b> | <b>4.6700e-003</b> | <b>0.1743</b> | <b>0.0461</b>  | <b>4.4400e-003</b> | <b>0.0506</b> | <b>0.0000</b> | <b>244.5122</b> | <b>244.5122</b> | <b>7.5300e-003</b> | <b>0.0236</b> | <b>251.7367</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     | 0.1263        | 1.2002        | 1.1485        | 2.3300e-003        |               | 0.0573        | 0.0573        |                | 0.0537        | 0.0537        | 0.0000        | 202.0614        | 202.0614        | 0.0547        | 0.0000        | 203.4280        |
| <b>Total</b> | <b>0.1263</b> | <b>1.2002</b> | <b>1.1485</b> | <b>2.3300e-003</b> |               | <b>0.0573</b> | <b>0.0573</b> |                | <b>0.0537</b> | <b>0.0537</b> | <b>0.0000</b> | <b>202.0614</b> | <b>202.0614</b> | <b>0.0547</b> | <b>0.0000</b> | <b>203.4280</b> |

ARE Science Village - San Diego County, Annual

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

**3.4 Building Construction - 2022**

**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       | 0.0151        | 0.3754        | 0.1230        | 1.4600e-003        | 0.0434        | 3.9500e-003        | 0.0473        | 0.0126         | 3.7800e-003        | 0.0164        | 0.0000        | 142.2239        | 142.2239        | 4.3200e-003        | 0.0207        | 148.4883        |
| Worker       | 0.0448        | 0.0325        | 0.3813        | 1.1100e-003        | 0.1179        | 7.2000e-004        | 0.1186        | 0.0315         | 6.6000e-004        | 0.0321        | 0.0000        | 102.2884        | 102.2884        | 3.2100e-003        | 2.9500e-003   | 103.2484        |
| <b>Total</b> | <b>0.0599</b> | <b>0.4079</b> | <b>0.5042</b> | <b>2.5700e-003</b> | <b>0.1613</b> | <b>4.6700e-003</b> | <b>0.1660</b> | <b>0.0441</b>  | <b>4.4400e-003</b> | <b>0.0485</b> | <b>0.0000</b> | <b>244.5122</b> | <b>244.5122</b> | <b>7.5300e-003</b> | <b>0.0236</b> | <b>251.7367</b> |

**3.4 Building Construction - 2023**

**Unmitigated Construction On-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Category     | tons/yr       |               |               |                    |               |               |               |                |               |               | MT/yr         |                 |                 |               |               |                 |
| Off-Road     | 0.2781        | 2.6102        | 2.6818        | 5.5100e-003        |               | 0.1191        | 0.1191        |                | 0.1115        | 0.1115        | 0.0000        | 477.7726        | 477.7726        | 0.1288        | 0.0000        | 480.9912        |
| <b>Total</b> | <b>0.2781</b> | <b>2.6102</b> | <b>2.6818</b> | <b>5.5100e-003</b> |               | <b>0.1191</b> | <b>0.1191</b> |                | <b>0.1115</b> | <b>0.1115</b> | <b>0.0000</b> | <b>477.7726</b> | <b>477.7726</b> | <b>0.1288</b> | <b>0.0000</b> | <b>480.9912</b> |

ARE Science Village - San Diego County, Annual

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

**3.4 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       | 0.0189        | 0.7157        | 0.2524        | 3.3000e-003        | 0.1070        | 4.2200e-003        | 0.1113        | 0.0309         | 4.0400e-003        | 0.0349        | 0.0000        | 323.4484        | 323.4484        | 9.7800e-003   | 0.0469        | 337.6593        |
| Worker       | 0.0992        | 0.0687        | 0.8377        | 2.5400e-003        | 0.2940        | 1.6200e-003        | 0.2956        | 0.0781         | 1.4900e-003        | 0.0796        | 0.0000        | 235.5423        | 235.5423        | 6.9000e-003   | 6.4900e-003   | 237.6488        |
| <b>Total</b> | <b>0.1181</b> | <b>0.7843</b> | <b>1.0901</b> | <b>5.8400e-003</b> | <b>0.4010</b> | <b>5.8400e-003</b> | <b>0.4069</b> | <b>0.1090</b>  | <b>5.5300e-003</b> | <b>0.1146</b> | <b>0.0000</b> | <b>558.9907</b> | <b>558.9907</b> | <b>0.0167</b> | <b>0.0534</b> | <b>575.3081</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     | 0.2781        | 2.6102        | 2.6818        | 5.5100e-003        |               | 0.1191        | 0.1191        |                | 0.1115        | 0.1115        | 0.0000        | 477.7720        | 477.7720        | 0.1288        | 0.0000        | 480.9907        |
| <b>Total</b> | <b>0.2781</b> | <b>2.6102</b> | <b>2.6818</b> | <b>5.5100e-003</b> |               | <b>0.1191</b> | <b>0.1191</b> |                | <b>0.1115</b> | <b>0.1115</b> | <b>0.0000</b> | <b>477.7720</b> | <b>477.7720</b> | <b>0.1288</b> | <b>0.0000</b> | <b>480.9907</b> |

ARE Science Village - San Diego County, Annual

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

**3.4 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       | 0.0189        | 0.7157        | 0.2524        | 3.3000e-003        | 0.1025        | 4.2200e-003        | 0.1067        | 0.0298         | 4.0400e-003        | 0.0338        | 0.0000        | 323.4484        | 323.4484        | 9.7800e-003   | 0.0469        | 337.6593        |
| Worker       | 0.0992        | 0.0687        | 0.8377        | 2.5400e-003        | 0.2787        | 1.6200e-003        | 0.2803        | 0.0744         | 1.4900e-003        | 0.0759        | 0.0000        | 235.5423        | 235.5423        | 6.9000e-003   | 6.4900e-003   | 237.6488        |
| <b>Total</b> | <b>0.1181</b> | <b>0.7843</b> | <b>1.0901</b> | <b>5.8400e-003</b> | <b>0.3812</b> | <b>5.8400e-003</b> | <b>0.3871</b> | <b>0.1042</b>  | <b>5.5300e-003</b> | <b>0.1097</b> | <b>0.0000</b> | <b>558.9907</b> | <b>558.9907</b> | <b>0.0167</b> | <b>0.0534</b> | <b>575.3081</b> |

**3.4 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     | 0.1597        | 1.4783        | 1.6203        | 3.3500e-003        |               | 0.0644        | 0.0644        |                | 0.0603        | 0.0603        | 0.0000        | 290.4411        | 290.4411        | 0.0780        | 0.0000        | 292.3914        |
| <b>Total</b> | <b>0.1597</b> | <b>1.4783</b> | <b>1.6203</b> | <b>3.3500e-003</b> |               | <b>0.0644</b> | <b>0.0644</b> |                | <b>0.0603</b> | <b>0.0603</b> | <b>0.0000</b> | <b>290.4411</b> | <b>290.4411</b> | <b>0.0780</b> | <b>0.0000</b> | <b>292.3914</b> |

ARE Science Village - San Diego County, Annual

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

**3.4 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       | 0.0111        | 0.4319        | 0.1498        | 1.9700e-003        | 0.0651        | 2.5800e-003        | 0.0676        | 0.0188         | 2.4600e-003        | 0.0213        | 0.0000        | 193.1335        | 193.1335        | 6.0800e-003        | 0.0280        | 201.6239        |
| Worker       | 0.0567        | 0.0375        | 0.4764        | 1.4900e-003        | 0.1787        | 9.4000e-004        | 0.1796        | 0.0475         | 8.6000e-004        | 0.0483        | 0.0000        | 139.5501        | 139.5501        | 3.8200e-003        | 3.6800e-003   | 140.7438        |
| <b>Total</b> | <b>0.0677</b> | <b>0.4695</b> | <b>0.6263</b> | <b>3.4600e-003</b> | <b>0.2437</b> | <b>3.5200e-003</b> | <b>0.2472</b> | <b>0.0663</b>  | <b>3.3200e-003</b> | <b>0.0696</b> | <b>0.0000</b> | <b>332.6836</b> | <b>332.6836</b> | <b>9.9000e-003</b> | <b>0.0317</b> | <b>342.3677</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     | 0.1597        | 1.4782        | 1.6203        | 3.3500e-003        |               | 0.0644        | 0.0644        |                | 0.0603        | 0.0603        | 0.0000        | 290.4408        | 290.4408        | 0.0780        | 0.0000        | 292.3910        |
| <b>Total</b> | <b>0.1597</b> | <b>1.4782</b> | <b>1.6203</b> | <b>3.3500e-003</b> |               | <b>0.0644</b> | <b>0.0644</b> |                | <b>0.0603</b> | <b>0.0603</b> | <b>0.0000</b> | <b>290.4408</b> | <b>290.4408</b> | <b>0.0780</b> | <b>0.0000</b> | <b>292.3910</b> |

ARE Science Village - San Diego County, Annual

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

**3.4 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       | 0.0111        | 0.4319        | 0.1498        | 1.9700e-003        | 0.0623        | 2.5800e-003        | 0.0649        | 0.0181         | 2.4600e-003        | 0.0206        | 0.0000        | 193.1335        | 193.1335        | 6.0800e-003        | 0.0280        | 201.6239        |
| Worker       | 0.0567        | 0.0375        | 0.4764        | 1.4900e-003        | 0.1694        | 9.4000e-004        | 0.1703        | 0.0452         | 8.6000e-004        | 0.0461        | 0.0000        | 139.5501        | 139.5501        | 3.8200e-003        | 3.6800e-003   | 140.7438        |
| <b>Total</b> | <b>0.0677</b> | <b>0.4695</b> | <b>0.6263</b> | <b>3.4600e-003</b> | <b>0.2317</b> | <b>3.5200e-003</b> | <b>0.2352</b> | <b>0.0633</b>  | <b>3.3200e-003</b> | <b>0.0666</b> | <b>0.0000</b> | <b>332.6836</b> | <b>332.6836</b> | <b>9.9000e-003</b> | <b>0.0317</b> | <b>342.3677</b> |

**3.5 Architectural Coating - 2024**

**Unmitigated Construction On-Site**

|                 | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total         | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2      | Total CO2      | CH4                | N2O           | CO2e           |
|-----------------|---------------|---------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category        | tons/yr       |               |               |                    |               |                    |                    |                |                    |                    | MT/yr         |                |                |                    |               |                |
| Archit. Coating | 4.4129        |               |               |                    |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             | 0.0000        | 0.0000         | 0.0000         | 0.0000             | 0.0000        | 0.0000         |
| Off-Road        | 0.0119        | 0.0804        | 0.1195        | 2.0000e-004        |               | 4.0200e-003        | 4.0200e-003        |                | 4.0200e-003        | 4.0200e-003        | 0.0000        | 16.8515        | 16.8515        | 9.5000e-004        | 0.0000        | 16.8752        |
| <b>Total</b>    | <b>4.4248</b> | <b>0.0804</b> | <b>0.1195</b> | <b>2.0000e-004</b> |               | <b>4.0200e-003</b> | <b>4.0200e-003</b> |                | <b>4.0200e-003</b> | <b>4.0200e-003</b> | <b>0.0000</b> | <b>16.8515</b> | <b>16.8515</b> | <b>9.5000e-004</b> | <b>0.0000</b> | <b>16.8752</b> |

ARE Science Village - San Diego County, Annual

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

**3.5 Architectural Coating - 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       | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000         | 0.0000         | 0.0000             | 0.0000             | 0.0000         |
| Worker       | 9.4000e-003        | 6.2300e-003        | 0.0790        | 2.5000e-004        | 0.0296        | 1.6000e-004        | 0.0298        | 7.8800e-003        | 1.4000e-004        | 8.0200e-003        | 0.0000        | 23.1519        | 23.1519        | 6.3000e-004        | 6.1000e-004        | 23.3499        |
| <b>Total</b> | <b>9.4000e-003</b> | <b>6.2300e-003</b> | <b>0.0790</b> | <b>2.5000e-004</b> | <b>0.0296</b> | <b>1.6000e-004</b> | <b>0.0298</b> | <b>7.8800e-003</b> | <b>1.4000e-004</b> | <b>8.0200e-003</b> | <b>0.0000</b> | <b>23.1519</b> | <b>23.1519</b> | <b>6.3000e-004</b> | <b>6.1000e-004</b> | <b>23.3499</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 | 4.4129        |               |               |                    |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             | 0.0000        | 0.0000         | 0.0000         | 0.0000             | 0.0000        | 0.0000         |
| Off-Road        | 0.0119        | 0.0804        | 0.1195        | 2.0000e-004        |               | 4.0200e-003        | 4.0200e-003        |                | 4.0200e-003        | 4.0200e-003        | 0.0000        | 16.8515        | 16.8515        | 9.5000e-004        | 0.0000        | 16.8752        |
| <b>Total</b>    | <b>4.4248</b> | <b>0.0804</b> | <b>0.1195</b> | <b>2.0000e-004</b> |               | <b>4.0200e-003</b> | <b>4.0200e-003</b> |                | <b>4.0200e-003</b> | <b>4.0200e-003</b> | <b>0.0000</b> | <b>16.8515</b> | <b>16.8515</b> | <b>9.5000e-004</b> | <b>0.0000</b> | <b>16.8752</b> |

ARE Science Village - San Diego County, Annual

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

**3.5 Architectural Coating - 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       | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000         | 0.0000         | 0.0000             | 0.0000             | 0.0000         |
| Worker       | 9.4000e-003        | 6.2300e-003        | 0.0790        | 2.5000e-004        | 0.0281        | 1.6000e-004        | 0.0283        | 7.5000e-003        | 1.4000e-004        | 7.6400e-003        | 0.0000        | 23.1519        | 23.1519        | 6.3000e-004        | 6.1000e-004        | 23.3499        |
| <b>Total</b> | <b>9.4000e-003</b> | <b>6.2300e-003</b> | <b>0.0790</b> | <b>2.5000e-004</b> | <b>0.0281</b> | <b>1.6000e-004</b> | <b>0.0283</b> | <b>7.5000e-003</b> | <b>1.4000e-004</b> | <b>7.6400e-003</b> | <b>0.0000</b> | <b>23.1519</b> | <b>23.1519</b> | <b>6.3000e-004</b> | <b>6.1000e-004</b> | <b>23.3499</b> |

**3.6 Paving - 2024**

**Unmitigated Construction On-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2      | Total CO2      | CH4           | N2O           | CO2e           |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|--------------------|--------------------|---------------|----------------|----------------|---------------|---------------|----------------|
| Category     | tons/yr       |               |               |                    |               |               |               |                |                    |                    | MT/yr         |                |                |               |               |                |
| Off-Road     | 0.0217        | 0.2095        | 0.3218        | 5.0000e-004        |               | 0.0103        | 0.0103        |                | 9.4800e-003        | 9.4800e-003        | 0.0000        | 44.0584        | 44.0584        | 0.0143        | 0.0000        | 44.4146        |
| Paving       | 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>0.0217</b> | <b>0.2095</b> | <b>0.3218</b> | <b>5.0000e-004</b> |               | <b>0.0103</b> | <b>0.0103</b> |                | <b>9.4800e-003</b> | <b>9.4800e-003</b> | <b>0.0000</b> | <b>44.0584</b> | <b>44.0584</b> | <b>0.0143</b> | <b>0.0000</b> | <b>44.4146</b> |



ARE Science Village - San Diego County, Annual

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

**3.6 Paving - 2024**

**Unmitigated Construction Off-Site**

|              | ROG                | NOx                | CO                 | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O                | CO2e          |
|--------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|--------------------|---------------|
| Category     | 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       | 8.4000e-004        | 5.6000e-004        | 7.0600e-003        | 2.0000e-005        | 2.6500e-003        | 1.0000e-005        | 2.6600e-003        | 7.0000e-004        | 1.0000e-005        | 7.2000e-004        | 0.0000        | 2.0671        | 2.0671        | 6.0000e-005        | 5.0000e-005        | 2.0848        |
| <b>Total</b> | <b>8.4000e-004</b> | <b>5.6000e-004</b> | <b>7.0600e-003</b> | <b>2.0000e-005</b> | <b>2.6500e-003</b> | <b>1.0000e-005</b> | <b>2.6600e-003</b> | <b>7.0000e-004</b> | <b>1.0000e-005</b> | <b>7.2000e-004</b> | <b>0.0000</b> | <b>2.0671</b> | <b>2.0671</b> | <b>6.0000e-005</b> | <b>5.0000e-005</b> | <b>2.0848</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     | 0.0217        | 0.2095        | 0.3218        | 5.0000e-004        |               | 0.0103        | 0.0103        |                | 9.4800e-003        | 9.4800e-003        | 0.0000        | 44.0583        | 44.0583        | 0.0143        | 0.0000        | 44.4146        |
| Paving       | 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>0.0217</b> | <b>0.2095</b> | <b>0.3218</b> | <b>5.0000e-004</b> |               | <b>0.0103</b> | <b>0.0103</b> |                | <b>9.4800e-003</b> | <b>9.4800e-003</b> | <b>0.0000</b> | <b>44.0583</b> | <b>44.0583</b> | <b>0.0143</b> | <b>0.0000</b> | <b>44.4146</b> |

ARE Science Village - San Diego County, Annual

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

**3.6 Paving - 2024**

**Mitigated Construction Off-Site**

|              | ROG                | NOx                | CO                 | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O                | CO2e          |
|--------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|--------------------|---------------|
| Category     | 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       | 8.4000e-004        | 5.6000e-004        | 7.0600e-003        | 2.0000e-005        | 2.5100e-003        | 1.0000e-005        | 2.5200e-003        | 6.7000e-004        | 1.0000e-005        | 6.8000e-004        | 0.0000        | 2.0671        | 2.0671        | 6.0000e-005        | 5.0000e-005        | 2.0848        |
| <b>Total</b> | <b>8.4000e-004</b> | <b>5.6000e-004</b> | <b>7.0600e-003</b> | <b>2.0000e-005</b> | <b>2.5100e-003</b> | <b>1.0000e-005</b> | <b>2.5200e-003</b> | <b>6.7000e-004</b> | <b>1.0000e-005</b> | <b>6.8000e-004</b> | <b>0.0000</b> | <b>2.0671</b> | <b>2.0671</b> | <b>6.0000e-005</b> | <b>5.0000e-005</b> | <b>2.0848</b> |

**4.0 Operational Detail - Mobile**

---

**4.1 Mitigation Measures Mobile**

ARE Science Village - 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   | 1.3383  | 1.4614 | 12.1458 | 0.0250 | 2.6610        | 0.0197       | 2.6808     | 0.7102         | 0.0184        | 0.7286      | 0.0000   | 2,350.3173 | 2,350.3173 | 0.1718 | 0.1082 | 2,386.8658 |
| Unmitigated | 1.3383  | 1.4614 | 12.1458 | 0.0250 | 2.6610        | 0.0197       | 2.6808     | 0.7102         | 0.0184        | 0.7286      | 0.0000   | 2,350.3173 | 2,350.3173 | 0.1718 | 0.1082 | 2,386.8658 |

**4.2 Trip Summary Information**

| Land Use                            | Average Daily Trip Rate |                 |                 | Unmitigated      | Mitigated        |
|-------------------------------------|-------------------------|-----------------|-----------------|------------------|------------------|
|                                     | Weekday                 | Saturday        | Sunday          | Annual VMT       | Annual VMT       |
| City Park                           | 0.00                    | 0.00            | 0.00            |                  |                  |
| Enclosed Parking with Elevator      | 0.00                    | 0.00            | 0.00            |                  |                  |
| Fast Food Restaurant w/o Drive Thru | 0.00                    | 0.00            | 0.00            |                  |                  |
| General Office Building             | 0.00                    | 0.00            | 0.00            |                  |                  |
| Research & Development              | 2,838.36                | 2,838.36        | 2,838.36        | 7,113,643        | 7,113,643        |
| Supermarket                         | 0.00                    | 0.00            | 0.00            |                  |                  |
| <b>Total</b>                        | <b>2,838.36</b>         | <b>2,838.36</b> | <b>2,838.36</b> | <b>7,113,643</b> | <b>7,113,643</b> |

**4.3 Trip Type Information**

| Land Use                       | Miles      |            |             | Trip %     |            |             | Trip Purpose % |          |         |
|--------------------------------|------------|------------|-------------|------------|------------|-------------|----------------|----------|---------|
|                                | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary        | Diverted | Pass-by |
| City Park                      | 9.50       | 7.30       | 7.30        | 33.00      | 48.00      | 19.00       | 66             | 28       | 6       |
| Enclosed Parking with Elevator | 9.50       | 7.30       | 7.30        | 0.00       | 0.00       | 0.00        | 0              | 0        | 0       |
| Fast Food Restaurant w/o Drive | 9.50       | 7.30       | 7.30        | 1.50       | 79.50      | 19.00       | 51             | 37       | 12      |
| General Office Building        | 9.50       | 7.30       | 7.30        | 33.00      | 48.00      | 19.00       | 77             | 19       | 4       |
| Research & Development         | 9.50       | 7.30       | 7.30        | 33.00      | 48.00      | 19.00       | 82             | 15       | 3       |
| Supermarket                    | 9.50       | 7.30       | 7.30        | 6.50       | 74.50      | 19.00       | 34             | 30       | 36      |

ARE Science Village - San Diego County, Annual

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

4.4 Fleet Mix

| Land Use                            | LDA      | LDT1     | LDT2     | MDV      | LHD1     | LHD2     | MHD      | HHD      | OBUS     | UBUS     | MCY      | SBUS     | MH       |
|-------------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| City Park                           | 0.557888 | 0.062607 | 0.178921 | 0.119061 | 0.024112 | 0.006269 | 0.008734 | 0.006266 | 0.000708 | 0.000566 | 0.028949 | 0.000971 | 0.004949 |
| Enclosed Parking with Elevator      | 0.557888 | 0.062607 | 0.178921 | 0.119061 | 0.024112 | 0.006269 | 0.008734 | 0.006266 | 0.000708 | 0.000566 | 0.028949 | 0.000971 | 0.004949 |
| Fast Food Restaurant w/o Drive Thru | 0.557888 | 0.062607 | 0.178921 | 0.119061 | 0.024112 | 0.006269 | 0.008734 | 0.006266 | 0.000708 | 0.000566 | 0.028949 | 0.000971 | 0.004949 |
| General Office Building             | 0.557888 | 0.062607 | 0.178921 | 0.119061 | 0.024112 | 0.006269 | 0.008734 | 0.006266 | 0.000708 | 0.000566 | 0.028949 | 0.000971 | 0.004949 |
| Research & Development              | 0.557888 | 0.062607 | 0.178921 | 0.119061 | 0.024112 | 0.006269 | 0.008734 | 0.006266 | 0.000708 | 0.000566 | 0.028949 | 0.000971 | 0.004949 |
| Supermarket                         | 0.557888 | 0.062607 | 0.178921 | 0.119061 | 0.024112 | 0.006269 | 0.008734 | 0.006266 | 0.000708 | 0.000566 | 0.028949 | 0.000971 | 0.004949 |

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

|                         | ROG     | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2  | Total CO2  | CH4         | N2O         | CO2e       |
|-------------------------|---------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|------------|------------|-------------|-------------|------------|
| Category                | tons/yr |        |        |             |               |              |            |                |               |             | MT/yr    |            |            |             |             |            |
| Electricity Mitigated   |         |        |        |             |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      | 0.0000   | 1,292.1214 | 1,292.1214 | 0.0790      | 9.5700e-003 | 1,296.9479 |
| Electricity Unmitigated |         |        |        |             |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      | 0.0000   | 1,292.1214 | 1,292.1214 | 0.0790      | 9.5700e-003 | 1,296.9479 |
| NaturalGas Mitigated    | 0.0295  | 0.2682 | 0.2253 | 1.6100e-003 |               | 0.0204       | 0.0204     |                | 0.0204        | 0.0204      | 0.0000   | 291.9382   | 291.9382   | 5.6000e-003 | 5.3500e-003 | 293.6730   |
| NaturalGas Unmitigated  | 0.0295  | 0.2682 | 0.2253 | 1.6100e-003 |               | 0.0204       | 0.0204     |                | 0.0204        | 0.0204      | 0.0000   | 291.9382   | 291.9382   | 5.6000e-003 | 5.3500e-003 | 293.6730   |

ARE Science Village - 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**

**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         |                 |                 |                    |                    |                 |
| City Park                           | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000             |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        | 0.0000          | 0.0000          | 0.0000             | 0.0000             | 0.0000          |
| Enclosed Parking with Elevator      | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000             |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        | 0.0000          | 0.0000          | 0.0000             | 0.0000             | 0.0000          |
| Fast Food Restaurant w/o Drive Thru | 1.20613e+006   | 6.5000e-003   | 0.0591        | 0.0497        | 3.5000e-004        |               | 4.4900e-003   | 4.4900e-003   |                | 4.4900e-003   | 4.4900e-003   | 0.0000        | 64.3638         | 64.3638         | 1.2300e-003        | 1.1800e-003        | 64.7463         |
| General Office Building             | 178487         | 9.6000e-004   | 8.7500e-003   | 7.3500e-003   | 5.0000e-005        |               | 6.6000e-004   | 6.6000e-004   |                | 6.6000e-004   | 6.6000e-004   | 0.0000        | 9.5248          | 9.5248          | 1.8000e-004        | 1.7000e-004        | 9.5814          |
| Research & Development              | 4.07201e+006   | 0.0220        | 0.1996        | 0.1677        | 1.2000e-003        |               | 0.0152        | 0.0152        |                | 0.0152        | 0.0152        | 0.0000        | 217.2979        | 217.2979        | 4.1600e-003        | 3.9800e-003        | 218.5892        |
| Supermarket                         | 14086.3        | 8.0000e-005   | 6.9000e-004   | 5.8000e-004   | 0.0000             |               | 5.0000e-005   | 5.0000e-005   |                | 5.0000e-005   | 5.0000e-005   | 0.0000        | 0.7517          | 0.7517          | 1.0000e-005        | 1.0000e-005        | 0.7562          |
| <b>Total</b>                        |                | <b>0.0295</b> | <b>0.2682</b> | <b>0.2253</b> | <b>1.6000e-003</b> |               | <b>0.0204</b> | <b>0.0204</b> |                | <b>0.0204</b> | <b>0.0204</b> | <b>0.0000</b> | <b>291.9382</b> | <b>291.9382</b> | <b>5.5800e-003</b> | <b>5.3400e-003</b> | <b>293.6730</b> |

ARE Science Village - 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<br>s Use | ROG             | NOx             | CO              | SO2                     | Fugitive<br>PM10 | Exhaust<br>PM10 | PM10<br>Total   | Fugitive<br>PM2.5 | Exhaust<br>PM2.5 | PM2.5<br>Total  | Bio- CO2      | NBio- CO2       | Total CO2       | CH4                     | N2O                     | CO2e            |
|---|---------------------|-----------------|-----------------|-----------------|-------------------------|------------------|-----------------|-----------------|-------------------|------------------|-----------------|---------------|-----------------|-----------------|-------------------------|-------------------------|-----------------|
| Land Use                                  | kBTU/yr             | tons/yr         |                 |                 |                         |                  |                 |                 |                   |                  |                 | MT/yr         |                 |                 |                         |                         |                 |
| City Park                                 | 0                   | 0.0000          | 0.0000          | 0.0000          | 0.0000                  |                  | 0.0000          | 0.0000          |                   | 0.0000           | 0.0000          | 0.0000        | 0.0000          | 0.0000          | 0.0000                  | 0.0000                  | 0.0000          |
| Enclosed Parking<br>with Elevator         | 0                   | 0.0000          | 0.0000          | 0.0000          | 0.0000                  |                  | 0.0000          | 0.0000          |                   | 0.0000           | 0.0000          | 0.0000        | 0.0000          | 0.0000          | 0.0000                  | 0.0000                  | 0.0000          |
| Fast Food<br>Restaurant w/o<br>Drive Thru | 1.20613e<br>+006    | 6.5000e-<br>003 | 0.0591          | 0.0497          | 3.5000e-<br>004         |                  | 4.4900e-<br>003 | 4.4900e-<br>003 |                   | 4.4900e-<br>003  | 4.4900e-<br>003 | 0.0000        | 64.3638         | 64.3638         | 1.2300e-<br>003         | 1.1800e-<br>003         | 64.7463         |
| General Office<br>Building                | 178487              | 9.6000e-<br>004 | 8.7500e-<br>003 | 7.3500e-<br>003 | 5.0000e-<br>005         |                  | 6.6000e-<br>004 | 6.6000e-<br>004 |                   | 6.6000e-<br>004  | 6.6000e-<br>004 | 0.0000        | 9.5248          | 9.5248          | 1.8000e-<br>004         | 1.7000e-<br>004         | 9.5814          |
| Research &<br>Development                 | 4.07201e<br>+006    | 0.0220          | 0.1996          | 0.1677          | 1.2000e-<br>003         |                  | 0.0152          | 0.0152          |                   | 0.0152           | 0.0152          | 0.0000        | 217.2979        | 217.2979        | 4.1600e-<br>003         | 3.9800e-<br>003         | 218.5892        |
| Supermarket                               | 14086.3             | 8.0000e-<br>005 | 6.9000e-<br>004 | 5.8000e-<br>004 | 0.0000                  |                  | 5.0000e-<br>005 | 5.0000e-<br>005 |                   | 5.0000e-<br>005  | 5.0000e-<br>005 | 0.0000        | 0.7517          | 0.7517          | 1.0000e-<br>005         | 1.0000e-<br>005         | 0.7562          |
| <b>Total</b>                              |                     | <b>0.0295</b>   | <b>0.2682</b>   | <b>0.2253</b>   | <b>1.6000e-<br/>003</b> |                  | <b>0.0204</b>   | <b>0.0204</b>   |                   | <b>0.0204</b>    | <b>0.0204</b>   | <b>0.0000</b> | <b>291.9382</b> | <b>291.9382</b> | <b>5.5800e-<br/>003</b> | <b>5.3400e-<br/>003</b> | <b>293.6730</b> |

ARE Science Village - 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             |               |                    |                   |
| City Park                           | 0               | 0.0000            | 0.0000        | 0.0000             | 0.0000            |
| Enclosed Parking with Elevator      | 1.98669e+006    | 486.6011          | 0.0297        | 3.6000e-003        | 488.4187          |
| Fast Food Restaurant w/o Drive Thru | 262130          | 64.2038           | 3.9200e-003   | 4.8000e-004        | 64.4436           |
| General Office Building             | 115308          | 28.2426           | 1.7300e-003   | 2.1000e-004        | 28.3481           |
| Research & Development              | 2.89141e+006    | 708.1952          | 0.0433        | 5.2500e-003        | 710.8405          |
| Supermarket                         | 19918.9         | 4.8788            | 3.0000e-004   | 4.0000e-005        | 4.8970            |
| <b>Total</b>                        |                 | <b>1,292.1214</b> | <b>0.0790</b> | <b>9.5800e-003</b> | <b>1,296.9479</b> |

ARE Science Village - 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**

| Land Use                            | Electricity Use<br>kWh/yr | Total CO2<br>MT/yr | CH4<br>MT/yr  | N2O<br>MT/yr       | CO2e<br>MT/yr     |
|-------------------------------------|---------------------------|--------------------|---------------|--------------------|-------------------|
| City Park                           | 0                         | 0.0000             | 0.0000        | 0.0000             | 0.0000            |
| Enclosed Parking with Elevator      | 1.98669e+006              | 486.6011           | 0.0297        | 3.6000e-003        | 488.4187          |
| Fast Food Restaurant w/o Drive Thru | 262130                    | 64.2038            | 3.9200e-003   | 4.8000e-004        | 64.4436           |
| General Office Building             | 115308                    | 28.2426            | 1.7300e-003   | 2.1000e-004        | 28.3481           |
| Research & Development              | 2.89141e+006              | 708.1952           | 0.0433        | 5.2500e-003        | 710.8405          |
| Supermarket                         | 19918.9                   | 4.8788             | 3.0000e-004   | 4.0000e-005        | 4.8970            |
| <b>Total</b>                        |                           | <b>1,292.1214</b>  | <b>0.0790</b> | <b>9.5800e-003</b> | <b>1,296.9479</b> |

**6.0 Area Detail**

**6.1 Mitigation Measures Area**



ARE Science Village - 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   | 1.9108  | 1.1000e-004 | 0.0118 | 0.0000 |               | 4.0000e-005  | 4.0000e-005 |                | 4.0000e-005   | 4.0000e-005 | 0.0000   | 0.0229    | 0.0229    | 6.0000e-005 | 0.0000 | 0.0244 |
| Unmitigated | 1.9108  | 1.1000e-004 | 0.0118 | 0.0000 |               | 4.0000e-005  | 4.0000e-005 |                | 4.0000e-005   | 4.0000e-005 | 0.0000   | 0.0229    | 0.0229    | 6.0000e-005 | 0.0000 | 0.0244 |

**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 | 0.4413        |                    |               |               |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Consumer Products     | 1.4684        |                    |               |               |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Landscaping           | 1.0800e-003   | 1.1000e-004        | 0.0118        | 0.0000        |               | 4.0000e-005        | 4.0000e-005        |                | 4.0000e-005        | 4.0000e-005        | 0.0000        | 0.0229        | 0.0229        | 6.0000e-005        | 0.0000        | 0.0244        |
| <b>Total</b>          | <b>1.9108</b> | <b>1.1000e-004</b> | <b>0.0118</b> | <b>0.0000</b> |               | <b>4.0000e-005</b> | <b>4.0000e-005</b> |                | <b>4.0000e-005</b> | <b>4.0000e-005</b> | <b>0.0000</b> | <b>0.0229</b> | <b>0.0229</b> | <b>6.0000e-005</b> | <b>0.0000</b> | <b>0.0244</b> |

ARE Science Village - 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 | 0.4413        |                    |               |               |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Consumer Products     | 1.4684        |                    |               |               |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Landscaping           | 1.0800e-003   | 1.1000e-004        | 0.0118        | 0.0000        |               | 4.0000e-005        | 4.0000e-005        |                | 4.0000e-005        | 4.0000e-005        | 0.0000        | 0.0229        | 0.0229        | 6.0000e-005        | 0.0000        | 0.0244        |
| <b>Total</b>          | <b>1.9108</b> | <b>1.1000e-004</b> | <b>0.0118</b> | <b>0.0000</b> |               | <b>4.0000e-005</b> | <b>4.0000e-005</b> |                | <b>4.0000e-005</b> | <b>4.0000e-005</b> | <b>0.0000</b> | <b>0.0229</b> | <b>0.0229</b> | <b>6.0000e-005</b> | <b>0.0000</b> | <b>0.0244</b> |

**7.0 Water Detail**

---

**7.1 Mitigation Measures Water**

ARE Science Village - 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   | 627.3600  | 5.8205 | 0.1408 | 814.8442 |
| Unmitigated | 627.3600  | 5.8205 | 0.1408 | 814.8442 |

ARE Science Village - 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**

**Unmitigated**

|                                     | Indoor/Outdoor Use     | Total CO2       | CH4           | N2O           | CO2e            |
|-------------------------------------|------------------------|-----------------|---------------|---------------|-----------------|
| Land Use                            | Mgal                   | MT/yr           |               |               |                 |
| City Park                           | 0 / 0.6434             | 1.7508          | 1.1000e-004   | 1.0000e-005   | 1.7574          |
| Enclosed Parking with Elevator      | 0 / 0                  | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| Fast Food Restaurant w/o Drive Thru | 2.10349 / 0.134265     | 7.7412          | 0.0690        | 1.6700e-003   | 9.9635          |
| General Office Building             | 1.58361 / 0.970598     | 8.1941          | 0.0521        | 1.2800e-003   | 9.8760          |
| Research & Development              | 173.799 / 0            | 609.4260        | 5.6971        | 0.1378        | 792.9266        |
| Supermarket                         | 0.0690302 / 0.00213495 | 0.2479          | 2.2600e-003   | 5.0000e-005   | 0.3208          |
| <b>Total</b>                        |                        | <b>627.3600</b> | <b>5.8205</b> | <b>0.1408</b> | <b>814.8442</b> |

ARE Science Village - 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/Outdoor Use     | Total CO2       | CH4           | N2O           | CO2e            |
|-------------------------------------|------------------------|-----------------|---------------|---------------|-----------------|
| Land Use                            | Mgal                   | MT/yr           |               |               |                 |
| City Park                           | 0 / 0.6434             | 1.7508          | 1.1000e-004   | 1.0000e-005   | 1.7574          |
| Enclosed Parking with Elevator      | 0 / 0                  | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| Fast Food Restaurant w/o Drive Thru | 2.10349 / 0.134265     | 7.7412          | 0.0690        | 1.6700e-003   | 9.9635          |
| General Office Building             | 1.58361 / 0.970598     | 8.1941          | 0.0521        | 1.2800e-003   | 9.8760          |
| Research & Development              | 173.799 / 0            | 609.4260        | 5.6971        | 0.1378        | 792.9266        |
| Supermarket                         | 0.0690302 / 0.00213495 | 0.2479          | 2.2600e-003   | 5.0000e-005   | 0.3208          |
| <b>Total</b>                        |                        | <b>627.3600</b> | <b>5.8205</b> | <b>0.1408</b> | <b>814.8442</b> |

**8.0 Waste Detail**

---

**8.1 Mitigation Measures Waste**

ARE Science Village - 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   | 23.9915   | 1.4179 | 0.0000 | 59.4379 |
| Unmitigated | 23.9915   | 1.4179 | 0.0000 | 59.4379 |

ARE Science Village - 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**

**Unmitigated**

|                                     | Waste Disposed | Total CO2      | CH4           | N2O           | CO2e           |
|-------------------------------------|----------------|----------------|---------------|---------------|----------------|
| Land Use                            | tons           | MT/yr          |               |               |                |
| City Park                           | 0.05           | 0.0102         | 6.0000e-004   | 0.0000        | 0.0252         |
| Enclosed Parking with Elevator      | 0              | 0.0000         | 0.0000        | 0.0000        | 0.0000         |
| Fast Food Restaurant w/o Drive Thru | 79.83          | 16.2048        | 0.9577        | 0.0000        | 40.1466        |
| General Office Building             | 8.29           | 1.6828         | 0.0995        | 0.0000        | 4.1691         |
| Research & Development              | 26.86          | 5.4523         | 0.3222        | 0.0000        | 13.5079        |
| Supermarket                         | 3.16           | 0.6415         | 0.0379        | 0.0000        | 1.5892         |
| <b>Total</b>                        |                | <b>23.9915</b> | <b>1.4179</b> | <b>0.0000</b> | <b>59.4379</b> |

ARE Science Village - 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          |               |               |                |
| City Park                           | 0.05           | 0.0102         | 6.0000e-004   | 0.0000        | 0.0252         |
| Enclosed Parking with Elevator      | 0              | 0.0000         | 0.0000        | 0.0000        | 0.0000         |
| Fast Food Restaurant w/o Drive Thru | 79.83          | 16.2048        | 0.9577        | 0.0000        | 40.1466        |
| General Office Building             | 8.29           | 1.6828         | 0.0995        | 0.0000        | 4.1691         |
| Research & Development              | 26.86          | 5.4523         | 0.3222        | 0.0000        | 13.5079        |
| Supermarket                         | 3.16           | 0.6415         | 0.0379        | 0.0000        | 1.5892         |
| <b>Total</b>                        |                | <b>23.9915</b> | <b>1.4179</b> | <b>0.0000</b> | <b>59.4379</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**



ARE Science Village - San Diego County, Annual

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

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

**User Defined Equipment**

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

**11.0 Vegetation**

---

*This page intentionally left blank*

## **Appendix B: Traffic Data**

*This page intentionally left blank*

### "Science Village" Trip Generation

| Land Use   | Intensity   | Rate*                      | ADT   | AM     |      |           |      | PM  |     |        |           |      |      |
|--|-------------|----------------------------|-------|--------|------|-----------|------|-----|-----|--------|-----------|------|------|
|  |             |                            |       | Peak%* | Vol. | In %      | Out% | In  | Out | Peak%* | Vol.      | In % | Out% |
| <b>Existing Land Uses</b>  |             |                            |       |        |      |           |      |     |     |        |           |      |      |
| Scientific Research and Development  | 138.4 KSF   | 8 /KSF                     | 1,107 | 16%    | 177  | 90% : 10% | 159  | 18  | 14% | 155    | 10% : 90% | 16   | 140  |
| <u>Existing Sub-Total</u>  |             |                            | 1,107 |        | 177  |           | 159  | 18  |     | 155    |           | 16   | 140  |
| <b>Proposed Land Uses</b>  |             |                            |       |        |      |           |      |     |     |        |           |      |      |
| Scientific Research and Development  | 369.878 KSF | 8 /KSF                     | 2,959 | 16%    | 473  | 90% : 10% | 426  | 47  | 14% | 414    | 10% : 90% | 41   | 373  |
| Specialty Retail / Strip Commercial***   | 24.256 KSF  | <b>Non-Trip Generating</b> |       |        |      |           |      |     |     |        |           |      |      |
| <u>Proposed Sub-Total</u>  |             |                            | 2,959 |        | 473  |           | 426  | 47  |     | 414    |           | 41   | 373  |
| <b>Transit Reductions</b>  |             |                            |       |        |      |           |      |     |     |        |           |      |      |
| <i>Transit Reduction % (Scientific Research and Development - Industrial)**</i>              |             |                            | 4%    |        | 15%  |           | 15%  | 15% |     | 15%    |           | 15%  | 15%  |
| <i>Transit Reduction (Scientific Research and Development - Industrial) of Existing Uses</i> |             |                            | 44    |        | 27   |           | 24   | 3   |     | 23     |           | 2    | 21   |
| <i>Transit Reduction (Scientific Research and Development - Industrial) of Proposed Uses</i> |             |                            | 118   |        | 71   |           | 64   | 7   |     | 62     |           | 6    | 56   |
| <u>Existing Sub-Total With Transit Credit</u>  |             |                            | 1,063 |        | 151  |           | 136  | 15  |     | 132    |           | 13   | 119  |
| <u>Proposed Sub-Total With Transit Credit</u>  |             |                            | 2,841 |        | 402  |           | 362  | 40  |     | 352    |           | 35   | 317  |
| <b>Net Increase</b>  |             |                            | 1,778 |        | 252  |           | 227  | 25  |     | 220    |           | 22   | 198  |

**Source:**

\*Rates taken from the City of San Diego Trip Generation Manual, May 2003

**Note:**

ADT= Average Daily Trips

KSF = 1,000 Square Feet

**Michael Baker**  
INTERNATIONAL