APPENDIX B
AIR QUALITY TECHNICAL MEMORANDUM

THIS PAGE INTENTIONALLY LEFT BLANK

Michael Baker
INTERNATIONAL

Technical Memorandum:
AIR QUALITY

Marea Village Mixed Use Development Project

Michael Baker
INTERNATIONAL

We Make a Difference

Technical Memorandum

TO:	City of Encinitas	**DATE:**	May 2021 (Updated May 2022)
FROM:	Michael Baker International	**SUBJECT:**	Air Quality for the Marea Village Mixed Use Development Project

PURPOSE

The Encinitas Beach Land Venture, LLC (Applicant) is proposing the Marea Village Mixed Use Development Project (project) in the City of Encinitas (City). The project requires California Environmental Quality Act (CEQA) review and approval of a density bonus tentative map, design review permit, and coastal development permit by the City. The purpose of this technical memorandum is to evaluate potential short- and long-term air quality impacts resulting from the construction and operation of the project.

PROJECT LOCATION

The project is located at 1900 and 1950 North Coast Highway 101 in the City and the coastal portion of San Diego County (County). The proposed project is comprised of two sites; County of San Diego Assessor Parcel Numbers (APNs) 216-041-20 and 216-041-21 (Site 1), and 216-041-06 (Site 2) totaling approximately 3.8 acres.

The project site is located within the community of Leucadia, one of five designated communities in the City. The City is bordered to the south by Solana Beach and to the west by the Pacific Ocean. The City of Carlsbad borders Encinitas to the north at the Batiquitos Lagoon State Marine Conservation Area and then extends farther to the east and north, across Batiquitos Lagoon.

Regional access to the project site is via Interstate 5 (I-5) to westbound La Costa Avenue, then to southbound North Coast Highway 101. Access to the project site from the south is via northbound North Coast Highway 101 which forms the eastern boundary of the property. Moorgate Road runs along the southern boundary of the site.

PROJECT DESCRIPTION

The proposed project would demolish the existing buildings on the property and construct 94 apartments, a boutique hotel, and 18,261 square feet of commercial use. The project would also include a subterranean parking garage, a walking paseo, pedestrian plaza, and an outdoor seating area.

Vehicular access to the development would be provided via North Coast Highway 101 from a proposed roundabout to be located near the southern boundary of the project site. Pedestrian access to the site would be provided at multiple points of ingress from the public right of way along the southbound side of North Coast Highway 101. Pedestrian access to the site would also be provided from the property directly adjacent to the north which supports a recently constructed hotel.

The project site is located within the boundary of the Encinitas North 101 Corridor Specific Plan (N101SP). Site 1 is designated as Visitor Serving Commercial (VSC) by the City of Encinitas General Plan (General Plan) and zoned as Limited Visitor Serving Commercial (N-L-VSC) with a Coastal Zone Overlay, R-30 Zone Overlay, and Scenic/Visual Corridor Overlay. A portion of the northernmost parcel (Parcel 1; APN 216-041-20) is located within a Special Study Overlay Zone. Site 2 is designated as General Commercial (GC) by the General Plan and zoned as Commercial Residential Mixed 1 (N-CRM-1) with a Coastal Zone Overlay and Scenic/Visual Corridor Overlay.

Project construction would occur in one phase over approximately 16.5 months. Construction of the project would include the following phases: demolition, grading, building construction, paving, and architectural coating.

EXISTING SITE CONDITIONS

The project site is currently occupied by an operating restaurant, a small commercial center, and a vacant structure formerly operated as a restaurant, along with various supporting surface parking areas and a small area of previously undeveloped land.

The topography of the project site varies. Developed areas in the southern portion of the site are generally flat; however, approximately 15 percent of the overall site has a slope greater than 25 percent, with some on-site slopes exceeding 40 percent.

The existing Seabluffe 255-gated townhome residential community is located directly adjacent to the south and west; Moorgate Road runs along the southern boundary of the site. A recently developed hotel is located adjacent to the north; further to the north is the Batiquitos Lagoon. North Coast Highway 101 forms the eastern boundary of the project site. The North County Transit District (NCTD) railroad runs generally north-south in the vicinity of the site and is located approximately 135 feet to the east at its nearest point, running along the eastern length of North Coast Highway 101 in Leucadia. The intersection of La Costa Avenue and North Coast Highway 101 lies approximately 215 feet to the northeast.

ENVIRONMENTAL SETTING

Regional Topography

The City is located within the San Diego Air Basin (Basin). The topography in the Basin varies greatly, from beaches on the west to mountains and desert on the east. Much of the topography in between consists of mesa tops intersected by canyon areas. The region's topography influences air flow and the dispersal and movement of pollutants in the basin. The mountains to the east prevent air flow mixing and prohibit dispersal of pollutants in that direction.

Climate

The City, like the rest of San Diego County's coastal area, has a Mediterranean climate characterized by warm, dry summers and mild, wet winters. The mean annual temperature in the City is 60 degrees Fahrenheit (°F). The average annual precipitation is 11 inches, falling primarily from November to April. Winter low temperatures in the City average about 54°F, and summer high temperatures average about 71°F. The average relative humidity is 69 percent and is based on the yearly average humidity at Lindbergh Field.

The dominant meteorological feature affecting the region is the Pacific high-pressure zone, which produces the prevailing westerly to northwesterly winds. These winds tend to blow pollutants away from the coast toward the inland areas. Consequently, air quality near the coast is generally better than that

at the base of the coastal mountain range. Most of the City consists of coastal plains, which lie adjacent to the Pacific Ocean and extend approximately 6 miles east of the Pacific Ocean. Because of its locational advantage, the westerly portion of the City has a mild climate with cool summers on the coast, where fog is common.

Fluctuations in the strength and pattern of winds from the Pacific high-pressure zone interacting with the daily local cycle produce periodic temperature inversions that influence the dispersal or containment of air pollutants in the Basin. Beneath the inversion layer, pollutants become "trapped" as their ability to disperse diminishes. The prevailing westerly wind pattern is sometimes interrupted by regional Santa Ana conditions. A Santa Ana wind occurs when a strong high-pressure system develops over the Nevada-Utah area and overcomes the prevailing westerly coastal winds, sending strong, steady, hot, dry northeasterly winds over the mountains and out to sea. Strong Santa Ana winds tend to blow pollutants out over the ocean, producing clear days inland. However, at the onset or during breakdown of these conditions or if the Santa Ana winds are weak, local air quality may be adversely affected.

Criteria Air Pollutants

Carbon Monoxide (CO). 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. CO replaces oxygen in the body's red blood cells. Individuals with a deficient blood supply to the heart, patients with diseases involving heart and blood vessels, fetuses (unborn babies), and patients with chronic hypoxemia (oxygen deficiency) as seen in high altitudes are most susceptible to the adverse effects of CO exposure. People with heart disease are also more susceptible to developing chest pains when exposed to low levels of carbon monoxide.

Ozone (O_3). 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" O_3 layer) extends upward from about 10 to 30 miles and protects life on earth from the sun's harmful ultraviolet rays. "Bad" O_3 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. To reduce O_3 concentrations, it is necessary to control the emissions of these O_3 precursors. Significant O_3 formation generally requires an adequate amount of precursors in the atmosphere and a period of several hours in a stable atmosphere with strong sunlight. High O_3 concentrations can form over large regions when emissions from motor vehicles and stationary sources are carried hundreds of miles from their origins.

While O_3 in the upper atmosphere (stratosphere) protects the earth from harmful ultraviolet radiation, high concentrations of ground-level O_3 (in the troposphere) can adversely affect the human respiratory system and other tissues. O_3 is a strong irritant that can constrict the airways, forcing the respiratory system to work hard to deliver oxygen. Individuals exercising outdoors, children, and people with pre-existing lung disease such as asthma and chronic pulmonary lung disease are considered to be the most susceptible to the health effects of O_3. Short-term exposure (lasting for a few hours) to O_3 at elevated levels can result in aggravated respiratory diseases such as emphysema, bronchitis and asthma, shortness of breath, increased susceptibility to infections, inflammation of the lung tissue, increased fatigue, as well as chest pain, dry throat, headache, and nausea.

Nitrogen Dioxide (NO_2). 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 elevated 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 10 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 into lungs and can potentially damage the respiratory tract. On June 19, 2003, the California Air Resources Board (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 U.S. Environmental Protection Agency (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 United States Supreme Court reversed this decision and upheld the EPA's new standards.

On January 5, 2005, the EPA published a Final Rule in the Federal Register that designates the Basin as a nonattainment area for Federal $PM_{2.5}$ standards. On June 20, 2002, CARB adopted amendments for statewide annual ambient particulate matter air quality standards. These standards were revised/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. On July 8, 2016, EPA made a finding that the South Coast has attained the 1997 24-hour and annual $PM_{2.5}$ standards based on 2011-2013 data. However, the Basin remains in nonattainment as the EPA has not determined that California has met the Federal Clean Air Act requirements for redesignating the Basin nonattainment area to attainment.

Sulfur Dioxide (SO_2). Sulfur dioxide (SO_2) is a colorless, irritating gas with a rotten egg smell; it is formed primarily by the combustion of sulfur-containing fossil fuels. Sulfur dioxide is often used interchangeably with SO_X. Exposure of a few minutes to low levels of SO_2 can result in airway constriction in some asthmatics.

Volatile Organic Compounds (VOC). VOCs are hydrocarbon compounds (any compound containing various combinations of hydrogen and carbon atoms) that exist in the ambient air. VOCs contribute to the formation of smog through atmospheric photochemical reactions and/or may be toxic. Compounds of carbon (also known as organic compounds) have different levels of reactivity; that is, they do not react at the same speed or do not form O_3 to the same extent when exposed to photochemical processes. VOCs often have an odor, and some examples include gasoline, alcohol, and the solvents used in paints. Exceptions to the VOC designation include: carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate. VOCs are a criteria pollutant since they are a precursor to O_3, which is a criteria pollutant. The terms VOC and reactive organic gases (ROG) (see below) are often used interchangeably.

Reactive Organic Gases (ROG). Similar to VOCs, ROGs are also precursors in forming O_3 and consist of compounds containing methane, ethane, propane, butane, and longer chain hydrocarbons, which are typically the result of some type of combustion/decomposition process. Smog is formed when ROG and nitrogen oxides react in the presence of sunlight. ROGs are a criteria pollutant since they are a precursor to O_3, which is a criteria pollutant. The terms ROG and VOC are often used interchangeably.

Local Ambient Air Quality

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 San Diego-Rancho Carmel Drive Monitoring Station, which monitors NO_2, $PM_{2.5}$, and CO concentrations. The closest air monitoring station to the project site that monitors 1-hour O_3, 8-hour O_3, and PM_{10} are San Diego-Kearny Villa Road Monitoring Station. Local air quality data from 2018 to 2020 is provided in Table 1, *Summary of Air Quality Data*. This table lists the monitored maximum concentrations and number of exceedances of State/Federal air quality standards for each year.

Table 1
Summary of Air Quality Data

Pollutant	California Standard	Federal Primary Standard	Year	Maximum Concentration[3]	Days (Samples) State/Federal Std. Exceeded
Ozone (O_3)[1] (1-hour)	0.09 ppm for 1 hour	NA[6]	2018 2019 2020	0.102 ppm 0.083 0.123	1/0 0/0 2/0
Ozone (O_3)[1] (8-hour)	0.070 ppm for 8 hours	0.070 ppm for 8 hours	2018 2019 2020	0.077 ppm 0.075 0.102	5/5 1/1 12/10
Carbon Monoxide (CO)[2] (1-hour)	20 ppm for 1 hour	35 ppm for 1 hour	2018 2019 2020	1.900 ppm 4.100 3.300	0/0 0/0 0/0
Nitrogen Dioxide (NO_2)[2]	0.18 ppm for 1 hour	0.100 ppm for 1 hour	2018 2019 2020	0.055 ppm 0.054 0.054	0/0 0/0 0/0
Fine Particulate Matter ($PM_{2.5}$)[2, 5]	No Separate Standard	35 µg/m^3 for 24 hours	2018 2019 2020	* 18.9 µg/m^3 40.2	* */0 */1
Particulate Matter (PM_{10})[1, 4, 5]	50 µg/m^3 for 24 hours	150 µg/m^3 for 24 hours	2018 2019 2020	38.0 µg/m^3 * *	0/0 * *

ppm = parts per million; PM_{10} = particulate matter 10 microns in diameter or less; µg/m^3 = micrograms per cubic meter; $PM_{2.5}$ = particulate matter 2.5 microns in diameter or less; NA = not applicable; * = insufficient data available to determine the value

Notes:
1. Data collected from the San Diego-Kearny Villa Road Monitoring Station located at 6125A Kearny Villa Road, San Diego, CA 92145.
2. Data collected from the San Diego-11403 Rancho Carmel Drive Monitoring Station located at 11403 Rancho Carmel Drive, San Diego CA 92128.
3. Maximum concentration is measured over the same period as the California Standards.
4. PM_{10} exceedances are based on State thresholds established prior to amendments adopted on June 20, 2002.
5. PM_{10} and $PM_{2.5}$ exceedances are derived from the number of samples exceeded, not days.
6. The Federal standard was revoked in June 2005.

Sources:
California Air Resources Board, *ADAM Air Quality Data Statistics*, http://www.arb.ca.gov/adam/, accessed March 10, 2022.
California Air Resources Board, *AQMIS2: Air Quality Data*, https://www.arb.ca.gov/aqmis2/aqdselect.php, accessed March 10, 2022.

REGULATORY SETTING

San Diego Air Pollution Control District

San Diego County Regional Air Quality Strategy

The San Diego Air Pollution Control District (SDAPCD) is the local agency responsible for the administration and enforcement of air quality regulations in San Diego County. The air district regulates most air pollutant sources, except for motor vehicles, marine vessels, aircraft, and agricultural equipment, which are regulated by CARB or the EPA. State and local government projects, as well as projects proposed by the private sector, are subject to SDAPCD requirements if the sources are regulated by SDAPCD.

The SDAPCD and the San Diego Association of Governments (SANDAG) are responsible for developing and implementing the clean air plan for attainment and maintenance of the ambient air quality standards in the Basin; refer to Table 2, *San Diego Air Basin Attainment Status by Pollutant*.

The San Diego County Regional Air Quality Strategy (RAQS) was initially adopted in 1992 and last updated in 2016. The RAQS outlines SDAPCD's plans and control measures designed to attain the State air quality standards for O_3. The SDAPCD has also developed input to the State Implementation Plan (SIP), which is required under the federal Clean Air Act for pollutants that are designated as being in nonattainment of the National Ambient Air Quality Standards (NAAQS) for the Basin.

Table 2
San Diego Air Basin Attainment Status by Pollutant

Criteria Pollutant	Federal Designation	State Designation
Ozone (8-Hour)	Nonattainment	Nonattainment
Ozone (1-Hour)	Attainment[1]	Nonattainment
Carbon Monoxide	Attainment	Attainment
PM_{10}	Unclassifiable[2]	Nonattainment
$PM_{2.5}$	Attainment	Nonattainment
Nitrogen Dioxide	Attainment	Attainment
Sulfur Dioxide	Attainment	Attainment
Lead	Attainment	Attainment
Sulfates	No Federal Standard	Attainment
Hydrogen Sulfide	No Federal Standard	Unclassified
Visibility	No Federal Standard	Unclassified

Notes:
1. The federal 1-hour standard of 12 pphm [parts per hundred million] was in effect from 1979 through June 15, 2005. The revoked standard is referenced here because it was employed for such a long period and because this benchmark is addressed in State Implementation Plans.
2. At the time of designation, if the available data does not support a designation of attainment or nonattainment, the area is designated as unclassifiable.

Source: San Diego Air Pollution Control District, *Attainment Status*, https://www.sdapcd.org/content/sdapcd/planning/attainment-status.html, accessed March 10, 2022.

The RAQS relies on information from CARB and SANDAG, such as mobile and area source emissions, as well as information from local jurisdictions regarding projected growth, to project future emissions and establish the strategies necessary for the reduction of emissions through regulatory controls. Projects that propose development consistent with the growth anticipated by the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) would be consistent with the RAQS. In the event that a project proposes development which is less intensive than anticipated in the RAQS, the project would likewise be consistent with the strategy. If a project proposes development that is greater than that anticipated in the growth projections, the project could conflict with the RAQS and the SIP and could have a potentially significant impact on air quality.

The SIP relies on the same information from SANDAG to develop emissions inventories and emissions reduction strategies that are included in the attainment demonstration for the Basin. The SIP also includes rules and regulations that have been adopted by the SDAPCD to control emissions from stationary sources. These SIP-approved rules may be used as guidelines to determine whether a project's emissions would have the potential to conflict with the SIP and thereby hinder attainment of the NAAQS for O_3.

SDAPCD Measures to Reduce Particulate Matter in San Diego County

In 2005, the SDAPCD adopted the *Measures to Reduce Particulate Matter in San Diego County*. This document identifies fugitive dust as the major source of directly emitted particulate matter in the county, with mobile sources and residential wood combustion as minor contributors. Data on $PM_{2.5}$ source apportionment indicates that the main contributor to $PM_{2.5}$ in the county is combustion organic carbon, followed closely by ammonium sulfate and ammonium nitrate from combustion sources.

The main contributors to PM_{10} include resuspended soil and road dust from unpaved and paved roads, construction and demolition sites, and mineral extraction and processing. Based on the report's evaluation of control measures recommended by CARB to reduce particulate matter emissions, the SDAPCD adopted Rule 55, Fugitive Dust Control, in June 2009. The SDAPCD requires that construction activities implement the measures listed in Rule 55 to minimize fugitive dust emissions. Rule 55 requires the following:

1. No person shall engage in construction or demolition activity 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. Visible roadway dust as a result of active operations, spillage from transport trucks, erosion, or track-out/carry-out shall be minimized by the use of any of the equally effective track-out/carry-out and erosion control measures listed in Rule 55 that apply to the project or operation. These measures include 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; watering for dust control; and using secured tarps or cargo covering, watering, or treating of transported material for outbound transport trucks. Erosion control measures must be removed at the conclusion of each workday when active operations cease, or every 24 hours for continuous operations.

Air Quality Screening Thresholds

The SDAPCD Rule 20.2 outlines the screening criteria for the preparation of air quality impact assessments. Should emissions be found to exceed these thresholds, additional modeling is required to demonstrate that the project's total air quality impacts are below the State and federal ambient air quality standards. These daily and annual emissions screening thresholds for construction and operations are shown in Table 3, *Screening Thresholds for Criteria Pollutants*.

Table 3
Screening Thresholds for Criteria Pollutants

Emissions	Pollutant						
	ROG[1]	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$	Lead
Daily Maximum (lbs/day)	75	250	550	250	100	67	3.2
Annual (tons/year)	13.7	40	100	40	15	10	0.6

Notes: ROG = reactive organic gases; NO_X = nitrogen oxides; CO = carbon monoxide; SO_X = sulfur oxides; PM_{10} = particulate matter up to 10 microns; $PM_{2.5}$ = particulate matter up to 2.5 microns; lbs = pounds

1. SDAPCD Rule 20.2 does not establish threshold for ROG. Therefore, the threshold of significance for ROG from the South Coast Air Quality Management District is used. The ROG annual emissions threshold is calculated from 75 lbs/day multiplied by 365 days/year and divided by 2,000 lbs/ton.

Source: San Diego Air Pollution Control District, *Rule 20.2 – Rule 20.2 - New Source Review-Non-Major Stationary Sources.*

SDAPCD Rule 51 - Odor Impacts

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

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

Other SDAPCD Rules and Regulations

As discussed above under Regional Air Quality Strategy, state law dictates that local air districts such as the SDAPCD have primary responsibility for controlling emissions from non-mobile (stationary) sources. The stationary source control measures identified in the RAQS and the SIP have been developed by the air district into regulations through a formal rulemaking process. Rules are developed to set limits on the amount of emissions from various types of sources and/or by requiring specific emissions control technologies. Following rule adoption, a permit system is used to impose controls on new and modified stationary sources and to ensure compliance with regulations by prescribing specific operating conditions or equipment on a source.

SDAPCD Regulation XIV (Title V Operating Permits) contains the requirements for implementing the Title V permit program. The program requires all major sources of criteria air contaminants, all major sources of hazardous air pollutants, all sources that emit more than 100 tons per year of any regulated air contaminant, and certain other specified sources to obtain Title V permits. Permits are issued pursuant to Regulation XIV and incorporate state and local requirements that are contained in existing SDAPCD permits for these sources. Examples of operations that require permits are surface coating operations, adhesive materials application, automotive refinishing operations, dry cleaning operations, fiberglass or plastic product manufacturing, and gas stations.

The SDAPCD also implements New Source Review (NSR) in the air basin. Prior to the installation of new, modified, relocated, or replacement equipment that results in an increase of air pollution emissions, the SDAPCD requires that an Authority to Construct be obtained and that the equipment be evaluated in accordance with applicable NSR rules. A Permit to Operate from the SDAPCD would be required to authorize operation or use of the equipment. If such equipment would exceed air pollutant thresholds, it must use Best Available Control Technology (BACT) to reduce emissions. BACT definitions and requirements are outlined in SDAPCD Rule 20.1, NSR–General Provisions.

It is difficult to ensure that new or modified sources do not interfere with attainment or maintenance of the established air quality standards for ozone. Since ozone is a secondary pollutant (i.e., ozone is not directly emitted, but results from complex chemical reactions in the atmosphere from precursor pollutants), control of the precursors is required. Control of emissions of volatile organic compounds (VOCs) (also known as reactive organic gases, or ROG) and nitrogen oxides, the ozone precursors, is essential. The SDAPCD adopted Rule 67.0.1, Architectural Coatings, which establishes VOC content limits for architectural coatings, in 2015.

Additionally, SDAPCD Rule 1210, Toxic Air Contaminant Public Health Risks–Public Notification and Risk Reduction, implements the public notification and risk reduction requirements of the California Air Toxics "Hot Spots" Act (AB 2588) and requires facilities to reduce risks to acceptable levels within five years.

Adopted in 1996 and mostly recently revised in 2019, Rule 1200, Toxic Air Contaminants - New Source Review, requires evaluation of potential health risks for any new, relocated, or modified emission units that may increase emissions of one or more toxic air contaminant(s). In regard to an increase of cancer risk, Rule 1200 requires the following:

- **T-BACT Not Applied.** The increase in maximum incremental cancer risk at every receptor location is equal to or less than one in one million for any project for which new, relocated, or modified emission units that increases maximum incremental cancer risk are not equipped with T-BACT; and

- **T-BACT Applied.** Except as provided in (d)(1)(iii), the increase in maximum incremental cancer risk at every receptor location is equal to or less than 10 in one million for any project for which all new, relocated, or modified emission units that increases maximum incremental cancer risk are equipped with T-BACT (SDAPCD 2019).

Compliance with this rule does not relieve a person from having to comply with other applicable requirements in these rules and regulations, or state and federal law.

SDAPCD Rule 361.145, Standard for Demolition and Renovation, requires owner or operator of a demolition or renovation activity to provide written notice of intention to SDAPCD Control Officer that includes procedure and analytical methods to detect the presence of regulated asbestos-containing material (RACM) and Category I and Category II nonfriable Asbestos-Containing Material. Rule 361.145 also includes procedures for asbestos emission control that each owner or operator of a demolition or renovation activity shall follow.

City of Encinitas

City of Encinitas General Plan

The General Plan is the primary source of long-range planning and policy direction used to guide growth and preserve the quality of life in the City. The General Plan states that a goal of the City is to analyze proposed land uses to ensure that the designations would contribute to a proper balance of land uses within the community. The relevant goals and policies for the project include:

Circulation Element

- **Goal 3**: The City of Encinitas will promote the use of other modes of transportation to reduce the dependence on the personal automobile.
    - **Policy 3.11**: The City will strive to implement a safe, direct, and convenient circulation system for commuting and recreational bicycle traffic. The City will support the development of additional bicycle facilities in the Coastal Zone, including the following:
        - All Circulation Element roads will include provisions for bicycle lanes unless precluded by design and safety considerations in which cases, alternative routes shall be provided to form a continuous network.
        - The provision of secure bicycle storage facilities at all beaches designated for high and moderate levels of use.
        - The installation of bicycle and surfboard racks on all buses serving the Coastal Zone.

Resource Management Element

- **Goal 5**: The City will make every effort to participate in programs to improve air and water quality in the San Diego region.

  - **Policy 5.1**: The City will monitor and cooperate with the ongoing efforts of the U. S. Environmental Protection Agency, the San Diego Air Pollution Control District, and the State of California Air Resources Board in improving air quality in the regional air basin. The City will implement appropriate strategies from the San Diego County SIP which are consistent with the goals and policies of this plan.

- **Goal 13**: Create a desirable, healthful, and comfortable environment for living while preserving Encinitas, unique natural resources by encouraging land use policies that will preserve the environment.

  - **Policy 13.1**: The City shall plan for types and patterns of development which minimize water pollution, air pollution, fire hazard, soil erosion, silting, slide damage, flooding and severe hillside cutting and scarring.

- **Goal 15**: The City will make every effort to conserve energy in the City thus reducing our dependence on fossil fuels.

  - **Policy 15.1**: The City will encourage the use of alternate energy systems, including passive solar and architectural and mechanical systems, in both commercial and residential development.

  - **Policy 15.2**: The patterns of proposed subdivisions and the orientation and design of structures on lots shall be designed with the objective of maximizing the opportunities for solar energy use and energy conservation.

  - **Policy 15.3**: Energy conserving construction standards and requirements shall be enforced in the field inspection of new construction.

Encinitas North 101 Corridor Specific Plan

The project is located within the Encinitas North 101 Corridor Specific Plan (Specific Plan). Chapter 9.5, "Resource Management" of the Specific Plan identifies the goals and policies of the General Plan and Local Coastal Program that are related to air quality in the Specific Plan area and addresses the Specific Plan's consistency with these policies. The introduction of mixed-use development in the Specific Plan area will provide more opportunities for live/work situations to occur, as well as residential uses which are closer to the commercial uses. This should reduce automobile trips, therefore, improving future air quality consistent with Specific Plan requirements.

Encinitas Climate Action Plan

The City's Climate Action Plan (CAP) was most recently updated and adopted on November 18, 2020. It builds upon the goals identified in the 2018 CAP and serves as a guiding document and outlines a course of action for community and municipal operations to reduce greenhouse gas emissions and the potential impacts of climate change within the jurisdiction. The updated CAP commits to implementing specific programs and projects aimed at reducing and mitigating the impacts of GHG emitting activities by targeted dates. The CAP organizes strategies, goals, and actions tied to various emissions sources (e.g., on-road transportation, electricity, natural gas, solid waste, water, off-road transportation, and wastewater). As of this time, the City has not adopted implementing ordinances for these requirements. Of particular relevance to the project, the CAP requires all new residential and commercial buildings to be constructed with rooftop solar panels and electric vehicle charging stations.

The following strategies would help improve air quality:

- RE-2: Require New Homes to install Solar Photovoltaic Systems
- RE-3: Require Commercial Buildings to install Solar Photovoltaic Systems
- CET-4: Require Residential Electric Vehicle Charging Stations
- CET-5: Require Commercial Electric Vehicle Charging Stations

CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) THRESHOLDS

Based on Appendix G of the State CEQA Guidelines, a project may have a significant adverse impact related to noise and vibration if it would do any of the following:

- Conflict with or obstruct implementation of the applicable air quality plan;
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable Federal or State ambient air quality standard;
- Expose sensitive receptors to substantial pollutant concentrations; and
- Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

METHODOLOGY

The analysis describes and addresses the requirements set forth by the SDAPCD's *Regional Air Quality Strategy* to estimate and analyze potential air quality impacts.

Construction emissions were quantified with the California Emissions Estimator Model version 2020.4.0 (CalEEMod). Exhaust emission factors for typical diesel-powered heavy equipment are based on the program defaults of CalEEMod. Variables factored into estimating the total construction emissions include the level of activity, length of construction period, number of pieces and types of equipment in use, site characteristics, weather conditions, number of construction personnel, and the amount of materials to be transported on- or off-site. The air pollutant emissions during construction were compared to the SDAPCD regional thresholds of significance. Naturally occurring asbestos impacts were discussed qualitatively.

Operational (i.e., area, energy, and mobile source) emissions were quantified and compared to the SDAPCD regional thresholds of significance. Two CalEEMod models have been conducted to calculate the long-term emissions from the operation of the existing restaurant and small commercial center and the proposed project, respectively. The net increase of total emissions represents the project-generated emissions.

Project-generated vehicle emissions were estimated using CalEEMod. Based on the *City of Encinitas Marea Village Mixed-Use (Hotel, Residential, Commercial) 1900 N. Coast Highway 101 Draft Local Transportation Analysis* (Traffic Impact Analysis) prepared by LOS Engineering, Inc. (dated May 2022)[1], typical daily activities are forecast to generate a net increase of 1,173 average daily trips, including 85 trips during the a.m. peak hour and 125 trips during the p.m. peak hour.

[1] LOS Engineering, Inc., *City of Encinitas Marea Village Mixed-Use (Hotel, Residential, Commercial) 1900 N. Coast Highway 101 Draft Local Transportation Analysis*, dated May 2022.

The resultant human health impacts from the project's short-term construction and long-term operational air emissions were analyzed, as well as the potential for CO hotspot impacts and health impacts to sensitive receptors from exposure to Toxic Air Contaminants (TACs).

AIR QUALITY IMPACT ANALYSIS

Impact AQ-1: Would the project conflict with or obstruct implementation of the applicable air quality plan?

Less Than Significant Impact. The project site is located within the San Diego Air Basin and is regulated by the SDAPCD. As described above, the SIP and RAQS are the applicable air quality plans for the SDAPCD. Consistency with the SIP and RAQS means that a project is consistent with the goals, objectives, and assumptions set forth in the SIP and RAQS that are designed to achieve Federal and State air quality standards.

The basis for the RAQS and SIP is the growth rate in population in the region as projected by SANDAG. SANDAG's latest growth forecasts were defined in consultation with local governments and with reference to local general plans. In March 2019, the City adopted its General Plan Housing Element Update (HEU) that included updated employment and residential growth projections. The HEU Environmental Assessment (EA) determined that the HEU would result in a cumulative impact on air quality due to the increase in residential units which were not accounted for in the RAQS and SIP at that time. As part of the mitigation requirements of the HEU EA, the City provided a revised housing forecast to SANDAG to ensure that any revisions to the residential and employment growth projections used by SDAPCD are accounted for in the RAQS and the SIP.[2]

The project would be consistent with the City's General Plan, Specific Plan, and HEU land use and zoning designations. In addition, because the project site is included in the HEU and the associated residential and employment growth projections have been provided to SANDAG to be included in the RAQS and SIP, the project would not cause the SANDAG's population forecast to be exceeded and ensure that any revisions to the residential and employment growth projections used by SDAPCD are accounted for in the RAQS and the SIP. Therefore, emissions generated by the project would be addressed in the RAQS and SIP. In addition, as discussed in Impact Statement AQ-2, the project would result in emissions that would be below the SDAPCD thresholds. Therefore, the project would not conflict with or obstruct implementation of the RAQS and SIP.

The proposed project would not result in a long-term impact on the region's ability to meet State and Federal air quality standards, would be consistent with General Plan Policy 5.1 and Policy 13.1, and the impact would be less than significant.

Mitigation Measures: No mitigation is required.

Impact AQ-2: Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard?

Less Than Significant Impact With Mitigation Incorporated.

Short-Term Construction

The project involves construction activities associated with demolition, grading, building construction, paving, and architectural coating applications. The project would be constructed over approximately 16.5

[2] City of Encinitas, *2013-2021 Housing Element Update Environmental Assessment, Chapter 4.2, Air Quality*, June 2018.

months. The proposed construction schedule and equipment list are shown in Table 3, *Construction Schedule and Equipment List*.

Table 3
Construction Schedule and Equipment List

Equipment Identification	Proposed Start[1]	Proposed Complete[1]	Quantity
Demolition	1/3/2023	2/1/2023 (22 days)	
Concrete/Industrial Saws			1
Crawler Tractors			1
Crushing/Proc. Equipment			1
Excavators			1
Other Construction Equipment			2
Rubber Tired Loaders			1
Grading	1/18/2023	5/4/2023 (77 days)	
Bore/Drill Rigs			2
Cranes			1
Crawler Tractors			1
Excavators			2
Plate Compactors			2
Rollers			1
Rough Terrain Forklifts			2
Rubber Tired Loaders			1
Scrapers			1
Signal Boards			2
Skid Steer Loaders			1
Building Construction	3/6/2023	1/2/2024 (217 days)	
Cranes			1
Other Construction Equipment			3
Paving Equipment			1
Rough Terrain Forklifts			2
Rubber Tired Loaders			1
Signal Boards			2
Skid Steer Loaders			1
Tractors/Loaders/Backhoes			2
Paving	2/8/2024	5/24/2024 (77 days)	
Graders			1
Off-Highway Trucks			4
Paving Equipment			1
Rollers			1
Rubber Tired Loaders			1
Signal Boards			2
Surfacing Equipment			1
Tractors/Loaders/Backhoes			2
Architectural Coating	10/26/2023	4/26/2024 (132 days)	
Air Compressors			1

Notes:
1. Proposed start and end dates for each construction phases are estimated and do not represent the actual dates.

Source: Refer to Appendix A for detailed model input/output data.

The analysis of daily construction emissions has been prepared using CalEEMod. Refer to Appendix A, *Air Quality Emissions Data*, for the CalEEMod outputs and results. Table 4, *Short-Term Construction Emissions*, presents the anticipated daily short-term construction emissions.

Table 4
Short-Term Construction Emissions

Emissions Source	Pollutant (pounds/day)[1]					
	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Year 1						
Construction Related Emissions[2]	12.39	62.27	59.13	0.13	4.81	2.69
Year 2						
Construction Related Emissions[2]	12.26	20.59	30.01	0.05	2.48	1.28
SDAPCD Thresholds	***75***	***250***	***550***	***250***	***100***	***67***
Is Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Notes:
1. Emissions were calculated using CalEEMod, version 2020.4.0. Winter emissions represent worst-case.
2. Modeling assumptions include compliance with standard dust control measures (water exposed surfaces three times daily).

Source: Refer to Appendix A for detailed model input/output data.

Fugitive Dust Emissions

Construction activities are a source of fugitive dust emissions that may have a substantial, temporary impact on local air quality. In addition, fugitive dust may be a nuisance to those living and working in the project area. Fugitive dust emissions are associated with land clearing, ground excavation, cut-and-fill, and truck travel on unpaved roadways. Fugitive dust emissions vary substantially from day to day, depending on the level of activity, specific operations, and weather conditions. Fugitive dust from site preparation, grading, and construction is expected to be short-term and would cease upon project completion. It should be noted that most of this material is inert silicates, rather than the complex organic particulates released from combustion sources, which are more harmful to health.

Dust (larger than 10 microns) generated by such activities usually becomes more of a local nuisance than a serious health problem. Of particular health concern is the amount of PM_{10} generated as a part of fugitive dust emissions. PM_{10} poses a serious health hazard alone or in combination with other pollutants. $PM_{2.5}$ is mostly produced by mechanical processes. These include automobile tire wear, industrial processes such as cutting and grinding, and re-suspension of particles from the ground or road surfaces by wind and human activities such as construction or agriculture. $PM_{2.5}$ is mostly derived from combustion sources, such as automobiles, trucks, and other vehicle exhaust, as well as from stationary sources. These particles are either directly emitted or are formed in the atmosphere from the combustion of gases such as NO_X and SO_X combining with ammonia. $PM_{2.5}$ components from material in the earth's crust, such as dust, are also present, with the amount varying in different locations.

Construction activities would comply with SDAPCD *Rule 55 – Fugitive Dust Control* as well as standard dust control measures that excessive fugitive dust emissions be controlled by regular watering. Adherence to dust control measures would greatly reduce PM_{10} and $PM_{2.5}$ concentrations. It should be noted that these reductions were applied in CalEEMod. As depicted in Table 4, total PM_{10} and $PM_{2.5}$ emissions would not exceed the SDAPCD thresholds during construction. Thus, construction-related air quality impacts from fugitive dust emissions would be less than significant.

Construction Equipment and Worker Vehicle Exhaust

Exhaust emissions (e.g., NO_x and CO) from construction activities include emissions associated with the transport of machinery and supplies to and from the project site, emissions produced on-site as the equipment is used, and emissions from trucks transporting materials to/from the site. As presented in

Table 4, construction equipment and worker vehicle exhaust emissions would be below the established SDAPCD thresholds. Therefore, air quality impacts from equipment and vehicle exhaust emission would be less than significant.

ROG Emissions

In addition to gaseous and particulate emissions, the application of asphalt and surface coatings creates ROG emissions, which are O_3 precursors. As required, all architectural coatings for the proposed project structures would comply with SDAPCD *Rule 67.0.1 – Architectural Coating*. SDAPCD Rule 67.0.1 provides specifications on painting practices as well as regulates the ROG content of paint. ROG emissions associated with the proposed project would be less than significant; refer to Table 4.

Total Daily Construction Emissions

As indicated in Table 4, criteria pollutant emissions during construction of the proposed project would not exceed the SDAPCD significance thresholds. Thus, total construction related air emissions would be less than significant.

Asbestos

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

Naturally occurring asbestos (NAC) 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. According to the 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*[3], serpentinite and ultramafic rocks are not known to occur within the project area.

Prior to the 1980s, a variety of building construction materials commonly used asbestos for insulation and as a fire retardant. Some types of nonfriable building materials may still contain asbestos. These products include roofing felt, vinyl asbestos floor tile, ceiling tiles, transite building materials, and roofing coatings. Asbestos can also be found in utility pipes/pipelines (transite pipes or insulation on pipes). If asbestos containing material (ACM) is damaged or disturbed by construction or demolition activities, microscopic fibers become airborne and can be inhaled.

Due to the age of the buildings on the project site, there is the potential for ACM to be present and encountered during demolition. Demolition activities of structures containing ACM could result in significant air quality impacts, including issues surrounding proper handling, demolition, and disposal of ACM. Mitigation Measure MM AQ-1 would require the project to prepare a demolition plan to identify potential hazardous building materials. With implementation of Mitigation Measure MM AQ-1, impacts would be less than significant.

[3] 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, https://ww3.arb.ca.gov/toxics/asbestos/ofr_2000-019.pdf, accessed March 10, 2022.

Lead-based Paint

Lead-based paint (LBP) is recognized as a potential health risk because of its known toxics that affect the central nervous system, kidneys, and bloodstream. Lead-based paints were used in residential and commercial buildings until it was banned in 1978. Structures built in the U.S. before 1978 are likely to have some lead-based paint. Improper demolition of structures coated with lead-based paint can result in the release of lead containing particles from the project site and pose a potentially significant impact. Mitigation Measure MM AQ-1 would require the project to prepare a demolition plan to identify potential hazardous building materials. With implementation of Mitigation Measure MM AQ-1, impacts would be less than significant.

Long-Term (Operational) Emissions

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_X, SO_X, PM_{10}, and $PM_{2.5}$ are all pollutants of regional concern (NO_X and ROG react with sunlight to form O_3 [photochemical smog], and wind currents readily transport SO_X, PM_{10}, and $PM_{2.5}$); however, CO tends to be a localized pollutant, dispersing rapidly at the source.

Table 5, *Long-Term Operational Air Emissions*, presents the anticipated mobile source emissions. As shown in Table 5, emissions generated by vehicle traffic associated with the project would not exceed established SDAPCD thresholds. In addition, consistent with General Plan Policy 3.11, the project would include bicycle parking spaces on-site to encourage bicycle travel. Impacts from mobile source air emissions would be less than significant.

Area Source Emissions

Area source emissions would be generated from consumer products, architectural coating, and landscaping. As required, all architectural coatings for the proposed project structures would comply with SDAPCD *Rule 67.0.1 – Architectural Coating*. SDAPCD Rule 67.0.1 provides specifications on painting practices as well as regulates the ROG content of paint. As shown in Table 5, area source emissions from the proposed project would not exceed SDAPCD thresholds for ROG, NO_X, CO, SO_X, PM_{10}, or $PM_{2.5}$.

Energy Source Emissions

Energy source emissions would be generated as a result of electricity usage associated with the proposed project. The primary use of electricity by the project would be for space heating and cooling, water heating, ventilation, lighting, appliances, and electronics. As a design feature, the project would install high efficiency lighting fixtures. In addition, although not quantified and included in Table 5, the project would install solar panels capable of generating 250 kilowatt (kW) of solar power on-site, which would be consistent with General Plan Policy 15.1, Policy 15.2, and Policy 15.3. As shown in Table 5, energy source emissions from the proposed project would not exceed SDAPCD thresholds for ROG, NO_X, CO, SO_X, PM_{10}, or $PM_{2.5}$.

Total Operational Emissions

As shown in Table 5, the net increase of total operational emissions for both summer and winter would not exceed established SDAPCD thresholds. Therefore, impacts in this regard would be less than significant.

Table 5
Long-Term Operational Air Emissions

Emissions Source	Pollutant (lbs/day)[1]					
	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Existing Conditions Summer Emissions						
Area Source Emissions	0.10	0.00	<0.01	0.00	0.00	0.00
Energy Emissions[2]	0.01	0.06	0.05	<0.01	<0.01	<0.01
Mobile Emissions[3]	2.11	1.77	15.44	0.03	3.19	0.86
Total Emissions[4]	2.21	1.83	15.49	0.03	3.19	0.87
Proposed Project Summer Emissions						
Area Source Emissions	3.30	1.49	8.38	<0.01	0.16	0.16
Energy Emissions[2]	0.10	0.85	0.60	<0.01	0.07	0.07
Mobile Emissions[3]	5.47	5.06	44.51	0.09	9.84	2.67
Total Emissions[4]	8.86	7.40	53.50	0.11	10.06	2.89
Net Increase of Total Emissions[4]	6.65	5.57	38.01	0.08	6.87	2.02
SDAPCD Threshold	*75*	*250*	*550*	*250*	*100*	*67*
Is Threshold Exceeded?	No	No	No	No	No	No
Existing Conditions Winter Emissions						
Area Source Emissions	0.10	0.00	0.00	0.00	0.00	0.00
Energy Emissions[2]	0.01	0.06	0.05	0.00	0.00	0.00
Mobile Emissions[3]	2.04	1.92	16.27	0.03	3.19	0.86
Total Emissions[4]	2.14	1.98	16.32	0.03	3.19	0.87
Proposed Project Winter Emissions						
Area Source Emissions	3.30	1.49	8.38	<0.01	0.16	0.16
Energy Emissions[2]	0.10	0.85	0.60	<0.01	0.07	0.07
Mobile Emissions[3]	5.31	5.49	46.20	0.09	9.84	2.67
Total Emissions[4]	8.70	7.83	55.19	0.10	10.06	2.89
Net Increase of Total Emissions[4]	6.56	5.85	38.87	0.07	6.87	2.02
SDAPCD Threshold	*75*	*250*	*550*	*250*	*100*	*67*
Is Threshold Exceeded?	No	No	No	No	No	No

Notes:
1. Emissions were calculated using CalEEMod, version 2020.4.0.
2. As a design feature, the project would install high efficiency lighting fixtures.
3. The mobile source emissions were calculated using the trip generation data provided in the *City of Encinitas Marea Village Mixed-Use (Hotel, Residential, Commercial) 1900 N. Coast Highway 101 Draft Local Transportation Analysis* prepared by LOS Engineering, Inc., dated May 2022.
4. The numbers may be slightly off due to rounding.

Source: Refer to Appendix A for detailed model input/output data.

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, ozone precursors ROGs and NO_x affect air quality on a regional scale. Health effects related to ozone 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 noted in the Brief of Amicus Curiae by the South Coast Air Quality Management District (SCAQMD),[4] the SCAQMD acknowledged 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. Further, as noted in the Brief of Amicus Curiae by the San Joaquin Valley Air Pollution Control District (SJVAPCD),[5] SJVAPCD has acknowledged that 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.

The SCAQMD acknowledges that health effects quantification from ozone, as an example is correlated with the increases in ambient level of ozone in the air (concentration) that an individual person breathes. SCAQMD's Brief of Amicus Curiae states that it would take a large amount of additional emissions to cause a modeled increase in ambient ozone 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_X and a reduction of 187 tons (374,000 pounds) per day of VOCs would reduce ozone 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 ozone-related health impacts caused by NO_X or VOC emissions from relatively small projects (defined as projects with regional scope) due to photochemistry and regional model limitations. Since the project would not exceed SDAPCD thresholds for construction and operational air emissions, the project would have a less than significant impact for air quality health impacts as well.

Mitigation Measures: The following mitigation measure would be required.

MM AQ-1: Prior to demolition permit issuance, an asbestos and lead material survey shall be conducted by a qualified consultant to determine if the existing structures on-site contain lead-based paint and/or asbestos-related construction materials. If substances containing lead and/or asbestos are found on-site, an abatement work plan shall be prepared by the consultant for the proper removal and disposal of the materials in accordance with federal, state, and local laws and regulations. The asbestos and lead survey results and any necessary work plan shall be reviewed and approved by the City of Encinitas Development Services Department (Planning Division).

If on-site abatement of asbestos and/or lead materials is required, a licensed abatement contractor shall implement the approved abatement work plan prior to demolition of affected structures.

Prior to building permit issuance, an abatement close-out report shall be prepared by the abatement contractor and submitted by the project applicant to the Development Services Department for review and approval.

Timing/Implementation: Prior to and during all demolition activities.

Enforcement/Monitoring: City of Encinitas Planning Division.

---

4 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 Brief of Amicus Curiae. In the Supreme Court of California. Sierra Club, Revive the San Joaquin, and League of Women Voters of Fresno v. County of Fresno*, 2014.

5 San Joaquin Valley Air Pollution Control District, *Application for Leave to File Brief of Amicus Curiae Brief of San Joaquin Valley Unified Air Pollution Control District in Support of Defendant and Respondent, County of Fresno and Real Party In Interest and Respondent, Friant Ranch, L.P. In the Supreme Court of California. Sierra Club, Revive the San Joaquin, and League of Women Voters of Fresno v. County of Fresno*, 2014.

Impact AQ-3: Would the project expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact. Sensitive receptors are defined as facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples of these sensitive receptors are residences, schools, hospitals, and daycare centers. CARB has identified the following groups of individuals as the most likely to be affected by air pollution: the elderly over 65, children under 14, athletes, and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis. Sensitive receptors closest to the project site are multi-family residences (Seabluffe Village) located immediately adjacent to the west and south of the project site.

Localized Air Quality Health Impacts

Construction

The 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 Toxic Air Contaminant (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 mixed-use buildings in compliance 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 turning 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 project construction.

The closest sensitive receptors to the project site are multi-family residential development located adjacent to the west and south of the project site. 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 mixed-use buildings including residential use, office, retail, restaurant, and hotel and would result in very limited operational activities with potential health risks, including landscaping maintenance operations and boilers for restaurants. 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 and the impact would be less than significant.

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 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.[6] 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 1, the closest monitoring station to the project site that monitors CO concentration is the San Diego-11403 Rancho Carmel Drive Monitoring Station, and the maximum CO concentration was measured at 3.3 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.

Mitigation Measures: No mitigation is required.

Impact AQ-4: Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less Than Significant Impact. According to CARB's *Air Quality and Land Use Handbook*[7], land uses associated with odor complaints typically include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The proposed project does not include any uses identified by the CARB as being associated with odors.

Construction activities associated with the project may generate detectable odors from heavy-duty equipment exhaust and architectural coatings. However, construction-related odors would be short-term in nature and cease upon project completion. 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. The project would also comply with the SDAPCD *Rule 67.0.1 – Architectural Coating*, which would minimize odor impacts from ROG emissions during architectural coating. Any impacts to existing adjacent land uses would be short-term and are less than significant.

Mitigation Measures: No mitigation is required.

CUMULATIVE IMPACTS

Air pollution is largely a cumulative impact. The nonattainment status of regional pollutants is a result of past and present development, and the SDAPCD develops and implements plans for future attainment of ambient air quality standards. Based on these considerations, project-level thresholds of significance for criteria pollutants are relevant in the determination of whether the project's individual emissions would have a cumulatively significant impact on air quality. Cumulative air quality impacts may potentially result when the emissions from cumulative projects combine to degrade air quality conditions below attainment levels for the Basin, delay attainment of air quality standards, affect sensitive receptors, or subject surrounding areas to objectionable odors. The cumulative study area for air quality includes the Basin, which is contiguous with the County because air quality is evaluated at the air basin level. Cumulative impacts on sensitive receptors and odors are more localized and include surrounding areas close to the project site.

[6] United States Environmental Protection Agency, *Carbon Monoxide Emissions*, https://cfpub.epa.gov/roe/indicator_pdf.cfm?i=10, accessed March 10, 2022.

[7] California Air Resources Board, *Air Quality and Land Use Handbook*, April 2005.

With respect to the proposed project's construction-related air quality emissions and cumulative Basin-wide conditions, the SDAPCD has developed strategies to reduce criteria pollutant emissions outlined in the RAQS pursuant to State and Federal mandates. As such, the proposed project would comply with SDAPCD rules and regulations, and the adopted RAQS emissions control measures. Per SDAPCD rules and mandates, as well as the CEQA requirement that significant impacts be mitigated to the extent feasible, these same requirements (i.e., rules and regulations compliance, the implementation of all feasible mitigation measures, and compliance with adopted RAQS emissions control measures) would also be imposed on construction projects throughout the Basin, which would include related projects.

As discussed previously, the proposed project would not result in short- or long-term air quality impacts, as emissions would not exceed the SDAPCD adopted thresholds. Additionally, adherence to SDAPCD rules and regulations would alleviate potential impacts related to cumulative conditions on a project-by-project basis. Emission reduction technology, strategies, and plans are constantly being developed. As a result, the proposed project would not contribute a cumulatively considerable net increase of any nonattainment criteria pollutant. Therefore, the project's incremental operational impacts would be less than cumulatively considerable and impacts in this regard are less than significant.

REFERENCES

Documents

1. California Air Resources Board, *ADAM Air Quality Data Statistics*, http://www.arb.ca.gov/adam/, accessed March 10, 2022.
2. California Air Resources Board, *AQMIS2: Air Quality Data*, https://www.arb.ca.gov/aqmis2/aqdselect.php, accessed March 10, 2022.
3. California Air Resources Board, *Air Quality and Land Use Handbook*, April 2005.
4. City of Encinitas, *2013-2021 Housing Element Update Environmental Assessment, Chapter 4.2, Air Quality*, June 2018.
5. City of Encinitas, *General Plan Circulation Element*, last amended January 22, 2003.
6. City of Encinitas, *General Plan Resource Management Element*, last amended March 9, 2011.
7. City of Encinitas, *Municipal Code*, current through Ordinance 2021-25 and the January 2022 code supplement.
8. 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, https://ww3.arb.ca.gov/toxics/asbestos/ofr_2000-019.pdf, accessed March 10, 2022.
9. LOS Engineering, Inc., *City of Encinitas Marea Village Mixed-Use (Hotel, Residential, Commercial) 1900 N. Coast Highway 101 Draft Local Transportation Analysis*, May 2022.
10. 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 Brief of Amicus Curiae. In the Supreme Court of California. Sierra Club, Revive the San Joaquin, and League of Women Voters of Fresno v. County of Fresno*, 2014.
11. San Joaquin Valley Air Pollution Control District, *Application for Leave to File Brief of Amicus Curiae Brief of San Joaquin Valley Unified Air Pollution Control District in Support of Defendant and Respondent, County of Fresno and Real Party In Interest and Respondent, Friant Ranch, L.P. In the Supreme Court of California. Sierra Club, Revive the San Joaquin, and League of Women Voters of Fresno v. County of Fresno*, 2014.
12. San Diego Air Pollution Control District, *Attainment Status*, https://www.sdapcd.org/content/sdc/apcd/en/air-quality-planning/attainment-status.html, accessed March 10, 2022.
13. San Diego Air Pollution Control District, *Rule 20.2 New Source Review Non-Major Stationary Sources*, latest revision adopted April 27, 2016.
14. San Diego Air Pollution Control District, *2016 Revision of The Regional Air Quality Strategy For San Diego County*, December 2016.
15. United States Environmental Protection Agency, *Carbon Monoxide Emissions*, https://cfpub.epa.gov/roe/indicator_pdf.cfm?i=10, accessed March 10, 2022.

Websites / Programs

1. Google Earth, 2022.
2. South Coast Air Quality Management District, California Emissions Estimator Model (CalEEMod), version 2020.4.0.

Michael Baker
INTERNATIONAL

Appendix A:
Air Quality Emissions Data

Marea Village Existing Conditions - San Diego County APCD Air District, Annual

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

Marea Village Existing Conditions

San Diego County APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Fast Food Restaurant w/o Drive Thru	1.20	1000sqft	0.03	1,200.00	0
Strip Mall	2.25	1000sqft	0.05	2,250.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2024
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	539.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - No construction emissions - existing operations only.

Off-road Equipment - No construction emissions - existing operations only.

Grading -

Trips and VMT - No construction emissions - existing operations only.

Vehicle Trips - Per traffic study.

Waste Mitigation - Per AB 341.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	PhaseEndDate	12/31/2010	3/7/2022

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

tblConstructionPhase	PhaseStartDate	1/1/2011	3/7/2022
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblTripsAndVMT	WorkerTripNumber	3.00	0.00
tblVehicleTrips	PB_TP	15.00	12.00
tblVehicleTrips	PR_TP	45.00	48.00
tblVehicleTrips	ST_TR	696.00	700.60
tblVehicleTrips	ST_TR	42.04	40.02
tblVehicleTrips	SU_TR	500.00	700.60
tblVehicleTrips	SU_TR	20.43	40.02
tblVehicleTrips	WD_TR	346.23	700.60
tblVehicleTrips	WD_TR	44.32	40.02

2.0 Emissions Summary

Marea Village Existing Conditions - San Diego County APCD Air District, 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	8.0000e-005	8.4000e-004	1.1200e-003	0.0000	0.0000	5.0000e-005	5.0000e-005	0.0000	4.0000e-005	4.0000e-005	0.0000	0.1366	0.1366	4.0000e-005	0.0000	0.1377
Maximum	**8.0000e-005**	**8.4000e-004**	**1.1200e-003**	**0.0000**	**0.0000**	**5.0000e-005**	**5.0000e-005**	**0.0000**	**4.0000e-005**	**4.0000e-005**	**0.0000**	**0.1366**	**0.1366**	**4.0000e-005**	**0.0000**	**0.1377**

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	8.0000e-005	8.4000e-004	1.1200e-003	0.0000	0.0000	5.0000e-005	5.0000e-005	0.0000	4.0000e-005	4.0000e-005	0.0000	0.1366	0.1366	4.0000e-005	0.0000	0.1377
Maximum	**8.0000e-005**	**8.4000e-004**	**1.1200e-003**	**0.0000**	**0.0000**	**5.0000e-005**	**5.0000e-005**	**0.0000**	**4.0000e-005**	**4.0000e-005**	**0.0000**	**0.1366**	**0.1366**	**4.0000e-005**	**0.0000**	**0.1377**

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

Marea Village Existing Conditions - San Diego County APCD Air District, Annual

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	3-7-2022	6-6-2022	0.0007	0.0007
		Highest	0.0007	0.0007

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0175	0.0000	3.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.0000e-005	6.0000e-005	0.0000	0.0000	7.0000e-005
Energy	1.1500e-003	0.0105	8.8000e-003	6.0000e-005		8.0000e-004	8.0000e-004		8.0000e-004	8.0000e-004	0.0000	29.2605	29.2605	1.3100e-003	3.4000e-004	29.3950
Mobile	0.3629	0.3454	2.8838	5.3600e-003	0.5618	4.4000e-003	0.5662	0.1499	4.1000e-003	0.1540	0.0000	503.9631	503.9631	0.0429	0.0260	512.7868
Waste						0.0000	0.0000		0.0000	0.0000	3.2844	0.0000	3.2844	0.1941	0.0000	8.1370
Water						0.0000	0.0000		0.0000	0.0000	0.1684	2.0344	2.2028	0.0174	4.2000e-004	2.7647
Total	**0.3815**	**0.3559**	**2.8927**	**5.4200e-003**	**0.5618**	**5.2000e-003**	**0.5670**	**0.1499**	**4.9000e-003**	**0.1548**	**3.4528**	**535.2581**	**538.7109**	**0.2557**	**0.0268**	**553.0834**

Marea Village Existing Conditions - San Diego County APCD Air District, 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	0.0175	0.0000	3.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.0000e-005	6.0000e-005	0.0000	0.0000	7.0000e-005
Energy	1.1500e-003	0.0105	8.8000e-003	6.0000e-005		8.0000e-004	8.0000e-004		8.0000e-004	8.0000e-004	0.0000	29.2605	29.2605	1.3100e-003	3.4000e-004	29.3950
Mobile	0.3629	0.3454	2.8838	5.3600e-003	0.5618	4.4000e-003	0.5662	0.1499	4.1000e-003	0.1540	0.0000	503.9631	503.9631	0.0429	0.0260	512.7868
Waste						0.0000	0.0000		0.0000	0.0000	1.6422	0.0000	1.6422	0.0971	0.0000	4.0685
Water						0.0000	0.0000		0.0000	0.0000	0.1684	2.0344	2.2028	0.0174	4.2000e-004	2.7647
Total	**0.3815**	**0.3559**	**2.8927**	**5.4200e-003**	**0.5618**	**5.2000e-003**	**0.5670**	**0.1499**	**4.9000e-003**	**0.1548**	**1.8106**	**535.2581**	**537.0687**	**0.1587**	**0.0268**	**549.0149**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**47.56**	**0.00**	**0.30**	**37.95**	**0.00**	**0.74**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	3/7/2022	3/7/2022	5	1	

Acres of Grading (Site Preparation Phase): 0

Marea Village Existing Conditions - San Diego County APCD Air District, Annual

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

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	0	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	1	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Marea Village Existing Conditions - San Diego County APCD Air District, Annual

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

3.2 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.0000e-005	8.4000e-004	1.1200e-003	0.0000		5.0000e-005	5.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.1366	0.1366	4.0000e-005	0.0000	0.1377
Total	**8.0000e-005**	**8.4000e-004**	**1.1200e-003**	**0.0000**	**0.0000**	**5.0000e-005**	**5.0000e-005**	**0.0000**	**4.0000e-005**	**4.0000e-005**	**0.0000**	**0.1366**	**0.1366**	**4.0000e-005**	**0.0000**	**0.1377**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Marea Village Existing Conditions - San Diego County APCD Air District, Annual

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

3.2 Site Preparation - 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	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.0000e-005	8.4000e-004	1.1200e-003	0.0000		5.0000e-005	5.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.1366	0.1366	4.0000e-005	0.0000	0.1377
Total	**8.0000e-005**	**8.4000e-004**	**1.1200e-003**	**0.0000**	**0.0000**	**5.0000e-005**	**5.0000e-005**	**0.0000**	**4.0000e-005**	**4.0000e-005**	**0.0000**	**0.1366**	**0.1366**	**4.0000e-005**	**0.0000**	**0.1377**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	tons/yr										MT/yr					
Mitigated	0.3629	0.3454	2.8838	5.3600e-003	0.5618	4.4000e-003	0.5662	0.1499	4.1000e-003	0.1540	0.0000	503.9631	503.9631	0.0429	0.0260	512.7868
Unmitigated	0.3629	0.3454	2.8838	5.3600e-003	0.5618	4.4000e-003	0.5662	0.1499	4.1000e-003	0.1540	0.0000	503.9631	503.9631	0.0429	0.0260	512.7868

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Fast Food Restaurant w/o Drive Thru	840.72	840.72	840.72	1,355,717	1,355,717
Strip Mall	90.05	90.05	90.05	146,111	146,111
Total	930.76	930.76	930.76	1,501,828	1,501,828

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Fast Food Restaurant w/o Drive	9.50	7.30	7.30	1.50	79.50	19.00	51	37	12
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	48	40	12

4.4 Fleet Mix

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

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
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
Strip Mall	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	17.8503	17.8503	1.0900e-003	1.3000e-004	17.9170
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	17.8503	17.8503	1.0900e-003	1.3000e-004	17.9170
NaturalGas Mitigated	1.1500e-003	0.0105	8.8000e-003	6.0000e-005		8.0000e-004	8.0000e-004		8.0000e-004	8.0000e-004	0.0000	11.4102	11.4102	2.2000e-004	2.1000e-004	11.4780
NaturalGas Unmitigated	1.1500e-003	0.0105	8.8000e-003	6.0000e-005		8.0000e-004	8.0000e-004		8.0000e-004	8.0000e-004	0.0000	11.4102	11.4102	2.2000e-004	2.1000e-004	11.4780

Marea Village Existing Conditions - San Diego County APCD Air District, 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					
Fast Food Restaurant w/o Drive Thru	208824	1.1300e-003	0.0102	8.6000e-003	6.0000e-005		7.8000e-004	7.8000e-004		7.8000e-004	7.8000e-004	0.0000	11.1436	11.1436	2.1000e-004	2.0000e-004	11.2099
Strip Mall	4995	3.0000e-005	2.4000e-004	2.1000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.2666	0.2666	1.0000e-005	0.0000	0.2681
Total		**1.1600e-003**	**0.0105**	**8.8100e-003**	**6.0000e-005**		**8.0000e-004**	**8.0000e-004**		**8.0000e-004**	**8.0000e-004**	**0.0000**	**11.4102**	**11.4102**	**2.2000e-004**	**2.0000e-004**	**11.4780**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Fast Food Restaurant w/o Drive Thru	208824	1.1300e-003	0.0102	8.6000e-003	6.0000e-005		7.8000e-004	7.8000e-004		7.8000e-004	7.8000e-004	0.0000	11.1436	11.1436	2.1000e-004	2.0000e-004	11.2099
Strip Mall	4995	3.0000e-005	2.4000e-004	2.1000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.2666	0.2666	1.0000e-005	0.0000	0.2681
Total		**1.1600e-003**	**0.0105**	**8.8100e-003**	**6.0000e-005**		**8.0000e-004**	**8.0000e-004**		**8.0000e-004**	**8.0000e-004**	**0.0000**	**11.4102**	**11.4102**	**2.2000e-004**	**2.0000e-004**	**11.4780**

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			
Fast Food Restaurant w/o Drive Thru	45384	11.1159	6.8000e-004	8.0000e-005	11.1575
Strip Mall	27495	6.7344	4.1000e-004	5.0000e-005	6.7595
Total		**17.8503**	**1.0900e-003**	**1.3000e-004**	**17.9170**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Fast Food Restaurant w/o Drive Thru	45384	11.1159	6.8000e-004	8.0000e-005	11.1575
Strip Mall	27495	6.7344	4.1000e-004	5.0000e-005	6.7595
Total		**17.8503**	**1.0900e-003**	**1.3000e-004**	**17.9170**

6.0 Area Detail

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

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0175	0.0000	3.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.0000e-005	6.0000e-005	0.0000	0.0000	7.0000e-005
Unmitigated	0.0175	0.0000	3.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.0000e-005	6.0000e-005	0.0000	0.0000	7.0000e-005

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	4.0000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0135					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	3.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.0000e-005	6.0000e-005	0.0000	0.0000	7.0000e-005
Total	**0.0175**	**0.0000**	**3.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**6.0000e-005**	**6.0000e-005**	**0.0000**	**0.0000**	**7.0000e-005**

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	4.0000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0135					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	3.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.0000e-005	6.0000e-005	0.0000	0.0000	7.0000e-005
Total	**0.0175**	**0.0000**	**3.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**6.0000e-005**	**6.0000e-005**	**0.0000**	**0.0000**	**7.0000e-005**

7.0 Water Detail

7.1 Mitigation Measures Water

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	2.2028	0.0174	4.2000e-004	2.7647
Unmitigated	2.2028	0.0174	4.2000e-004	2.7647

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Fast Food Restaurant w/o Drive Thru	0.36424 / 0.0232494	1.3405	0.0119	2.9000e-004	1.7253
Strip Mall	0.166663 / 0.102148	0.8624	5.4800e-003	1.3000e-004	1.0394
Total		**2.2028**	**0.0174**	**4.2000e-004**	**2.7647**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Fast Food Restaurant w/o Drive Thru	0.36424 / 0.0232494	1.3405	0.0119	2.9000e-004	1.7253
Strip Mall	0.166663 / 0.102148	0.8624	5.4800e-003	1.3000e-004	1.0394
Total		**2.2028**	**0.0174**	**4.2000e-004**	**2.7647**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

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	1.6422	0.0971	0.0000	4.0685
Unmitigated	3.2844	0.1941	0.0000	8.1370

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Fast Food Restaurant w/o Drive Thru	13.82	2.8053	0.1658	0.0000	6.9501
Strip Mall	2.36	0.4791	0.0283	0.0000	1.1869
Total		**3.2844**	**0.1941**	**0.0000**	**8.1370**

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			
Fast Food Restaurant w/o Drive Thru	6.91	1.4027	0.0829	0.0000	3.4751
Strip Mall	1.18	0.2395	0.0142	0.0000	0.5934
Total		**1.6422**	**0.0971**	**0.0000**	**4.0685**

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

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

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

Marea Village Existing Conditions

San Diego County APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Fast Food Restaurant w/o Drive Thru	1.20	1000sqft	0.03	1,200.00	0
Strip Mall	2.25	1000sqft	0.05	2,250.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2024
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	539.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - No construction emissions - existing operations only.

Off-road Equipment - No construction emissions - existing operations only.

Grading -

Trips and VMT - No construction emissions - existing operations only.

Vehicle Trips - Per traffic study.

Waste Mitigation - Per AB 341.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	PhaseEndDate	12/31/2010	3/7/2022

Marea Village Existing Conditions - San Diego County APCD Air District, Summer

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

tblConstructionPhase	PhaseStartDate	1/1/2011	3/7/2022
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblTripsAndVMT	WorkerTripNumber	3.00	0.00
tblVehicleTrips	PB_TP	15.00	12.00
tblVehicleTrips	PR_TP	45.00	48.00
tblVehicleTrips	ST_TR	696.00	700.60
tblVehicleTrips	ST_TR	42.04	40.02
tblVehicleTrips	SU_TR	500.00	700.60
tblVehicleTrips	SU_TR	20.43	40.02
tblVehicleTrips	WD_TR	346.23	700.60
tblVehicleTrips	WD_TR	44.32	40.02

2.0 Emissions Summary

Marea Village Existing Conditions - San Diego County APCD Air District, 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	0.1647	1.6756	2.2379	3.1100e-003	0.0000	0.0901	0.0901	0.0000	0.0829	0.0829	0.0000	301.2390	301.2390	0.0974	0.0000	303.6746
Maximum	**0.1647**	**1.6756**	**2.2379**	**3.1100e-003**	**0.0000**	**0.0901**	**0.0901**	**0.0000**	**0.0829**	**0.0829**	**0.0000**	**301.2390**	**301.2390**	**0.0974**	**0.0000**	**303.6746**

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	0.1647	1.6756	2.2379	3.1100e-003	0.0000	0.0901	0.0901	0.0000	0.0829	0.0829	0.0000	301.2390	301.2390	0.0974	0.0000	303.6746
Maximum	**0.1647**	**1.6756**	**2.2379**	**3.1100e-003**	**0.0000**	**0.0901**	**0.0901**	**0.0000**	**0.0829**	**0.0829**	**0.0000**	**301.2390**	**301.2390**	**0.0974**	**0.0000**	**303.6746**

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

Marea Village Existing Conditions - San Diego County APCD Air District, 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	0.0958	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.6000e-004	7.6000e-004	0.0000		8.0000e-004
Energy	6.3200e-003	0.0574	0.0482	3.4000e-004		4.3600e-003	4.3600e-003		4.3600e-003	4.3600e-003		68.9183	68.9183	1.3200e-003	1.2600e-003	69.3278
Mobile	2.1124	1.7709	15.4401	0.0306	3.1615	0.0242	3.1857	0.8422	0.0226	0.8647		3,170.5179	3,170.5179	0.2465	0.1507	3,221.5789
Total	**2.2144**	**1.8283**	**15.4887**	**0.0310**	**3.1615**	**0.0286**	**3.1901**	**0.8422**	**0.0269**	**0.8691**		**3,239.4369**	**3,239.4369**	**0.2478**	**0.1519**	**3,290.9076**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0958	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.6000e-004	7.6000e-004	0.0000		8.0000e-004
Energy	6.3200e-003	0.0574	0.0482	3.4000e-004		4.3600e-003	4.3600e-003		4.3600e-003	4.3600e-003		68.9183	68.9183	1.3200e-003	1.2600e-003	69.3278
Mobile	2.1124	1.7709	15.4401	0.0306	3.1615	0.0242	3.1857	0.8422	0.0226	0.8647		3,170.5179	3,170.5179	0.2465	0.1507	3,221.5789
Total	**2.2144**	**1.8283**	**15.4887**	**0.0310**	**3.1615**	**0.0286**	**3.1901**	**0.8422**	**0.0269**	**0.8691**		**3,239.4369**	**3,239.4369**	**0.2478**	**0.1519**	**3,290.9076**

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

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	3/7/2022	3/7/2022	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	0	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	1	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Marea Village Existing Conditions - San Diego County APCD Air District, Summer

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

3.2 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.1647	1.6756	2.2379	3.1100e-003		0.0901	0.0901		0.0829	0.0829		301.2390	301.2390	0.0974		303.6746
Total	**0.1647**	**1.6756**	**2.2379**	**3.1100e-003**	**0.0000**	**0.0901**	**0.0901**	**0.0000**	**0.0829**	**0.0829**		**301.2390**	**301.2390**	**0.0974**		**303.6746**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Marea Village Existing Conditions - San Diego County APCD Air District, Summer

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

3.2 Site Preparation - 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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.1647	1.6756	2.2379	3.1100e-003		0.0901	0.0901		0.0829	0.0829	0.0000	301.2390	301.2390	0.0974		303.6746
Total	**0.1647**	**1.6756**	**2.2379**	**3.1100e-003**	**0.0000**	**0.0901**	**0.0901**	**0.0000**	**0.0829**	**0.0829**	**0.0000**	**301.2390**	**301.2390**	**0.0974**		**303.6746**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	2.1124	1.7709	15.4401	0.0306	3.1615	0.0242	3.1857	0.8422	0.0226	0.8647		3,170.5179	3,170.5179	0.2465	0.1507	3,221.5789
Unmitigated	2.1124	1.7709	15.4401	0.0306	3.1615	0.0242	3.1857	0.8422	0.0226	0.8647		3,170.5179	3,170.5179	0.2465	0.1507	3,221.5789

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Fast Food Restaurant w/o Drive Thru	840.72	840.72	840.72	1,355,717	1,355,717
Strip Mall	90.05	90.05	90.05	146,111	146,111
Total	930.76	930.76	930.76	1,501,828	1,501,828

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Fast Food Restaurant w/o Drive	9.50	7.30	7.30	1.50	79.50	19.00	51	37	12
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	48	40	12

4.4 Fleet Mix

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

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
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
Strip Mall	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	lb/day										lb/day					
NaturalGas Mitigated	6.3200e-003	0.0574	0.0482	3.4000e-004		4.3600e-003	4.3600e-003		4.3600e-003	4.3600e-003		68.9183	68.9183	1.3200e-003	1.2600e-003	69.3278
NaturalGas Unmitigated	6.3200e-003	0.0574	0.0482	3.4000e-004		4.3600e-003	4.3600e-003		4.3600e-003	4.3600e-003		68.9183	68.9183	1.3200e-003	1.2600e-003	69.3278

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					
Fast Food Restaurant w/o Drive Thru	572.121	6.1700e-003	0.0561	0.0471	3.4000e-004		4.2600e-003	4.2600e-003		4.2600e-003	4.2600e-003		67.3083	67.3083	1.2900e-003	1.2300e-003	67.7083
Strip Mall	13.6849	1.5000e-004	1.3400e-003	1.1300e-003	1.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		1.6100	1.6100	3.0000e-005	3.0000e-005	1.6196
Total		**6.3200e-003**	**0.0574**	**0.0483**	**3.5000e-004**		**4.3600e-003**	**4.3600e-003**		**4.3600e-003**	**4.3600e-003**		**68.9183**	**68.9183**	**1.3200e-003**	**1.2600e-003**	**69.3278**

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					
Fast Food Restaurant w/o Drive Thru	0.572121	6.1700e-003	0.0561	0.0471	3.4000e-004		4.2600e-003	4.2600e-003		4.2600e-003	4.2600e-003		67.3083	67.3083	1.2900e-003	1.2300e-003	67.7083
Strip Mall	0.0136849	1.5000e-004	1.3400e-003	1.1300e-003	1.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		1.6100	1.6100	3.0000e-005	3.0000e-005	1.6196
Total		**6.3200e-003**	**0.0574**	**0.0483**	**3.5000e-004**		**4.3600e-003**	**4.3600e-003**		**4.3600e-003**	**4.3600e-003**		**68.9183**	**68.9183**	**1.3200e-003**	**1.2600e-003**	**69.3278**

6.0 Area Detail

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

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0958	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.6000e-004	7.6000e-004	0.0000		8.0000e-004
Unmitigated	0.0958	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.6000e-004	7.6000e-004	0.0000		8.0000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0219					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0738					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.0000e-005	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.6000e-004	7.6000e-004	0.0000		8.0000e-004
Total	**0.0958**	**0.0000**	**3.5000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**7.6000e-004**	**7.6000e-004**	**0.0000**		**8.0000e-004**

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

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0219					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0738					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.0000e-005	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.6000e-004	7.6000e-004	0.0000		8.0000e-004
Total	**0.0958**	**0.0000**	**3.5000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**7.6000e-004**	**7.6000e-004**	**0.0000**		**8.0000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

Marea Village Existing Conditions - San Diego County APCD Air District, 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

Institute Recycling and Composting Services

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

Marea Village Existing Conditions - San Diego County APCD Air District, Winter

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

Marea Village Existing Conditions

San Diego County APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Fast Food Restaurant w/o Drive Thru	1.20	1000sqft	0.03	1,200.00	0
Strip Mall	2.25	1000sqft	0.05	2,250.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2024
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	539.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - No construction emissions - existing operations only.

Off-road Equipment - No construction emissions - existing operations only.

Grading -

Trips and VMT - No construction emissions - existing operations only.

Vehicle Trips - Per traffic study.

Waste Mitigation - Per AB 341.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	PhaseEndDate	12/31/2010	3/7/2022

Marea Village Existing Conditions - San Diego County APCD Air District, Winter

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

tblConstructionPhase	PhaseStartDate	1/1/2011	3/7/2022
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblTripsAndVMT	WorkerTripNumber	3.00	0.00
tblVehicleTrips	PB_TP	15.00	12.00
tblVehicleTrips	PR_TP	45.00	48.00
tblVehicleTrips	ST_TR	696.00	700.60
tblVehicleTrips	ST_TR	42.04	40.02
tblVehicleTrips	SU_TR	500.00	700.60
tblVehicleTrips	SU_TR	20.43	40.02
tblVehicleTrips	WD_TR	346.23	700.60
tblVehicleTrips	WD_TR	44.32	40.02

2.0 Emissions Summary

Marea Village Existing Conditions - San Diego County APCD Air District, 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	0.1647	1.6756	2.2379	3.1100e-003	0.0000	0.0901	0.0901	0.0000	0.0829	0.0829	0.0000	301.2390	301.2390	0.0974	0.0000	303.6746
Maximum	**0.1647**	**1.6756**	**2.2379**	**3.1100e-003**	**0.0000**	**0.0901**	**0.0901**	**0.0000**	**0.0829**	**0.0829**	**0.0000**	**301.2390**	**301.2390**	**0.0974**	**0.0000**	**303.6746**

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	0.1647	1.6756	2.2379	3.1100e-003	0.0000	0.0901	0.0901	0.0000	0.0829	0.0829	0.0000	301.2390	301.2390	0.0974	0.0000	303.6746
Maximum	**0.1647**	**1.6756**	**2.2379**	**3.1100e-003**	**0.0000**	**0.0901**	**0.0901**	**0.0000**	**0.0829**	**0.0829**	**0.0000**	**301.2390**	**301.2390**	**0.0974**	**0.0000**	**303.6746**

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

Marea Village Existing Conditions - San Diego County APCD Air District, 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	0.0958	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.6000e-004	7.6000e-004	0.0000		8.0000e-004
Energy	6.3200e-003	0.0574	0.0482	3.4000e-004		4.3600e-003	4.3600e-003		4.3600e-003	4.3600e-003		68.9183	68.9183	1.3200e-003	1.2600e-003	69.3278
Mobile	2.0363	1.9247	16.2723	0.0293	3.1615	0.0242	3.1857	0.8422	0.0226	0.8648		3,036.0046	3,036.0046	0.2662	0.1596	3,090.2054
Total	**2.1384**	**1.9822**	**16.3209**	**0.0296**	**3.1615**	**0.0286**	**3.1901**	**0.8422**	**0.0269**	**0.8691**		**3,104.9237**	**3,104.9237**	**0.2676**	**0.1608**	**3,159.5340**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0958	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.6000e-004	7.6000e-004	0.0000		8.0000e-004
Energy	6.3200e-003	0.0574	0.0482	3.4000e-004		4.3600e-003	4.3600e-003		4.3600e-003	4.3600e-003		68.9183	68.9183	1.3200e-003	1.2600e-003	69.3278
Mobile	2.0363	1.9247	16.2723	0.0293	3.1615	0.0242	3.1857	0.8422	0.0226	0.8648		3,036.0046	3,036.0046	0.2662	0.1596	3,090.2054
Total	**2.1384**	**1.9822**	**16.3209**	**0.0296**	**3.1615**	**0.0286**	**3.1901**	**0.8422**	**0.0269**	**0.8691**		**3,104.9237**	**3,104.9237**	**0.2676**	**0.1608**	**3,159.5340**

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

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	3/7/2022	3/7/2022	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	0	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	1	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Marea Village Existing Conditions - San Diego County APCD Air District, Winter

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

3.2 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.1647	1.6756	2.2379	3.1100e-003		0.0901	0.0901		0.0829	0.0829		301.2390	301.2390	0.0974		303.6746
Total	**0.1647**	**1.6756**	**2.2379**	**3.1100e-003**	**0.0000**	**0.0901**	**0.0901**	**0.0000**	**0.0829**	**0.0829**		**301.2390**	**301.2390**	**0.0974**		**303.6746**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Marea Village Existing Conditions - San Diego County APCD Air District, Winter

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

3.2 Site Preparation - 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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.1647	1.6756	2.2379	3.1100e-003		0.0901	0.0901		0.0829	0.0829	0.0000	301.2390	301.2390	0.0974		303.6746
Total	**0.1647**	**1.6756**	**2.2379**	**3.1100e-003**	**0.0000**	**0.0901**	**0.0901**	**0.0000**	**0.0829**	**0.0829**	**0.0000**	**301.2390**	**301.2390**	**0.0974**		**303.6746**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Marea Village Existing Conditions - San Diego County APCD Air District, 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	2.0363	1.9247	16.2723	0.0293	3.1615	0.0242	3.1857	0.8422	0.0226	0.8648		3,036.0046	3,036.0046	0.2662	0.1596	3,090.2054
Unmitigated	2.0363	1.9247	16.2723	0.0293	3.1615	0.0242	3.1857	0.8422	0.0226	0.8648		3,036.0046	3,036.0046	0.2662	0.1596	3,090.2054

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Fast Food Restaurant w/o Drive Thru	840.72	840.72	840.72	1,355,717	1,355,717
Strip Mall	90.05	90.05	90.05	146,111	146,111
Total	930.76	930.76	930.76	1,501,828	1,501,828

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Fast Food Restaurant w/o Drive	9.50	7.30	7.30	1.50	79.50	19.00	51	37	12
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	48	40	12

4.4 Fleet Mix

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

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
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
Strip Mall	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	lb/day										lb/day					
NaturalGas Mitigated	6.3200e-003	0.0574	0.0482	3.4000e-004		4.3600e-003	4.3600e-003		4.3600e-003	4.3600e-003		68.9183	68.9183	1.3200e-003	1.2600e-003	69.3278
NaturalGas Unmitigated	6.3200e-003	0.0574	0.0482	3.4000e-004		4.3600e-003	4.3600e-003		4.3600e-003	4.3600e-003		68.9183	68.9183	1.3200e-003	1.2600e-003	69.3278

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					
Fast Food Restaurant w/o Drive Thru	572.121	6.1700e-003	0.0561	0.0471	3.4000e-004		4.2600e-003	4.2600e-003		4.2600e-003	4.2600e-003		67.3083	67.3083	1.2900e-003	1.2300e-003	67.7083
Strip Mall	13.6849	1.5000e-004	1.3400e-003	1.1300e-003	1.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		1.6100	1.6100	3.0000e-005	3.0000e-005	1.6196
Total		**6.3200e-003**	**0.0574**	**0.0483**	**3.5000e-004**		**4.3600e-003**	**4.3600e-003**		**4.3600e-003**	**4.3600e-003**		**68.9183**	**68.9183**	**1.3200e-003**	**1.2600e-003**	**69.3278**

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					
Fast Food Restaurant w/o Drive Thru	0.572121	6.1700e-003	0.0561	0.0471	3.4000e-004		4.2600e-003	4.2600e-003		4.2600e-003	4.2600e-003		67.3083	67.3083	1.2900e-003	1.2300e-003	67.7083
Strip Mall	0.0136849	1.5000e-004	1.3400e-003	1.1300e-003	1.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		1.6100	1.6100	3.0000e-005	3.0000e-005	1.6196
Total		**6.3200e-003**	**0.0574**	**0.0483**	**3.5000e-004**		**4.3600e-003**	**4.3600e-003**		**4.3600e-003**	**4.3600e-003**		**68.9183**	**68.9183**	**1.3200e-003**	**1.2600e-003**	**69.3278**

6.0 Area Detail

Marea Village Existing Conditions - San Diego County APCD Air District, Winter

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

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0958	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.6000e-004	7.6000e-004	0.0000		8.0000e-004
Unmitigated	0.0958	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.6000e-004	7.6000e-004	0.0000		8.0000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0219					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0738					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.0000e-005	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.6000e-004	7.6000e-004	0.0000		8.0000e-004
Total	**0.0958**	**0.0000**	**3.5000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**7.6000e-004**	**7.6000e-004**	**0.0000**		**8.0000e-004**

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

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0219					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0738					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.0000e-005	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.6000e-004	7.6000e-004	0.0000		8.0000e-004
Total	**0.0958**	**0.0000**	**3.5000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**7.6000e-004**	**7.6000e-004**	**0.0000**		**8.0000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

Marea Village Existing Conditions - San Diego County APCD Air District, 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

Institute Recycling and Composting Services

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

Marea Village - San Diego County APCD Air District, Annual

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

Marea Village

San Diego County APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	3.64	1000sqft	0.08	3,638.00	0
Enclosed Parking with Elevator	216.00	Space	0.00	78,158.00	0
Parking Lot	42.00	Space	0.38	16,800.00	0
City Park	0.65	Acre	0.65	27,194.00	0
High Turnover (Sit Down Restaurant)	3.90	1000sqft	0.00	3,905.00	0
Hotel	34.00	Room	1.13	18,109.00	0
Quality Restaurant	2.13	1000sqft	0.00	2,134.00	0
Apartments Low Rise	94.00	Dwelling Unit	1.56	72,982.00	269
Strip Mall	8.58	1000sqft	0.00	8,584.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2024
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	539.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Per traffic study and site plan; total lot 3.8 acres, therefore lot acreage modified to match.

Construction Phase - Per PD, assuming utilities/infrastructure and Hwy 101 improvements would occur during Building Construction phase.

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

Off-road Equipment - Per construction questionnaire.

Off-road Equipment - Per construction questionnaire.

Off-road Equipment - Per construction questionnaire.

Off-road Equipment - Per construction questionnaire.

Off-road Equipment - Per construction questionnaire.

Off-road Equipment - No construction emissions - existing operations only.

Trips and VMT - Demolition materials would be hauled 25 miles (project site to Miramar Landfill); earthwork materials form grading activities would be hauled max. 3 miles (project site to the nearest beach).

Demolition -

Grading -

Architectural Coating - Per SDAPCD Rule 67.0.1

Vehicle Trips - Per traffic study.

Area Coating - Per SDAPCD Rule 67.0.1

Construction Off-road Equipment Mitigation - Per construction questionniare, there would be dust control implemented (water exposed area three times a day) as a project design feature.

Area Mitigation - No wood-burning associated hearth would be produced.

Energy Mitigation - Per operational questionniare, high efficiency lighting would be installed as a project design feature.

Waste Mitigation - Per AB 341.

Water Mitigation - Per operational questionniare, low-flow water fixtures would be installed as a project design feature.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaCoating	Area_EF_Parking	250	150
tblAreaCoating	Area_EF_Residential_Exterior	250	150

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

tblAreaCoating	Area_EF_Residential_Interior	250	150
tblConstructionPhase	NumDays	20.00	22.00
tblConstructionPhase	NumDays	8.00	77.00
tblConstructionPhase	NumDays	230.00	217.00
tblConstructionPhase	NumDays	18.00	132.00
tblConstructionPhase	NumDays	18.00	77.00
tblConstructionPhase	PhaseEndDate	9/28/2021	2/1/2023
tblConstructionPhase	PhaseEndDate	10/8/2021	5/4/2023
tblConstructionPhase	PhaseEndDate	8/26/2022	1/2/2024
tblConstructionPhase	PhaseEndDate	10/17/2022	4/26/2024
tblConstructionPhase	PhaseEndDate	9/21/2022	5/24/2024
tblConstructionPhase	PhaseStartDate	9/1/2021	1/3/2023
tblConstructionPhase	PhaseStartDate	9/29/2021	1/18/2023
tblConstructionPhase	PhaseStartDate	10/9/2021	3/6/2023
tblConstructionPhase	PhaseStartDate	9/22/2022	10/26/2023
tblConstructionPhase	PhaseStartDate	8/27/2022	2/8/2024
tblGrading	MaterialExported	0.00	48,400.00
tblLandUse	LandUseSquareFeet	3,640.00	3,638.00
tblLandUse	LandUseSquareFeet	86,400.00	78,158.00
tblLandUse	LandUseSquareFeet	28,314.00	27,194.00
tblLandUse	LandUseSquareFeet	3,900.00	3,905.00
tblLandUse	LandUseSquareFeet	49,368.00	18,109.00
tblLandUse	LandUseSquareFeet	2,130.00	2,134.00
tblLandUse	LandUseSquareFeet	94,000.00	72,982.00
tblLandUse	LandUseSquareFeet	8,580.00	8,584.00
tblLandUse	LotAcreage	1.94	0.00
tblLandUse	LotAcreage	0.09	0.00
tblLandUse	LotAcreage	0.05	0.00
tblLandUse	LotAcreage	5.88	1.56

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

tblLandUse	LotAcreage	0.20	0.00
tblOffRoadEquipment	HorsePower	187.00	9.00
tblOffRoadEquipment	HorsePower	221.00	158.00
tblOffRoadEquipment	HorsePower	172.00	89.00
tblOffRoadEquipment	HorsePower	132.00	84.00
tblOffRoadEquipment	HorsePower	231.00	187.00
tblOffRoadEquipment	HorsePower	402.00	130.00
tblOffRoadEquipment	HorsePower	212.00	247.00
tblOffRoadEquipment	HorsePower	100.00	97.00
tblOffRoadEquipment	HorsePower	158.00	97.00
tblOffRoadEquipment	HorsePower	203.00	97.00
tblOffRoadEquipment	HorsePower	203.00	46.00
tblOffRoadEquipment	LoadFactor	0.41	0.56
tblOffRoadEquipment	LoadFactor	0.50	0.38
tblOffRoadEquipment	LoadFactor	0.42	0.20
tblOffRoadEquipment	LoadFactor	0.36	0.74
tblOffRoadEquipment	LoadFactor	0.29	0.41
tblOffRoadEquipment	LoadFactor	0.38	0.42
tblOffRoadEquipment	LoadFactor	0.43	0.40
tblOffRoadEquipment	LoadFactor	0.40	0.37
tblOffRoadEquipment	LoadFactor	0.38	0.37
tblOffRoadEquipment	LoadFactor	0.36	0.37
tblOffRoadEquipment	LoadFactor	0.36	0.45
tblOffRoadEquipment	OffRoadEquipmentType	Cement and Mortar Mixers	Graders
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentType		Rollers
tblOffRoadEquipment	OffRoadEquipmentType	Excavators	Bore/Drill Rigs
tblOffRoadEquipment	OffRoadEquipmentType	Forklifts	Other Construction Equipment
tblOffRoadEquipment	OffRoadEquipmentType	Generator Sets	Paving Equipment

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

tblOffRoadEquipment	OffRoadEquipmentType	Graders	Cranes
tblOffRoadEquipment	OffRoadEquipmentType	Pavers	Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentType	Rubber Tired Dozers	Crawler Tractors
tblOffRoadEquipment	OffRoadEquipmentType	Tractors/Loaders/Backhoes	Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentType	Tractors/Loaders/Backhoes	Rubber Tired Loaders
tblOffRoadEquipment	OffRoadEquipmentType	Welders	Rubber Tired Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Concrete/Industrial Saws
tblOffRoadEquipment	OffRoadEquipmentType		Crawler Tractors
tblOffRoadEquipment	OffRoadEquipmentType		Crushing/Proc. Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Other Construction Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Rubber Tired Dozers
tblOffRoadEquipment	OffRoadEquipmentType		Rubber Tired Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Scrapers
tblOffRoadEquipment	OffRoadEquipmentType		Signal Boards
tblOffRoadEquipment	OffRoadEquipmentType		Skid Steer Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Signal Boards
tblOffRoadEquipment	OffRoadEquipmentType		Skid Steer Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Signal Boards
tblOffRoadEquipment	OffRoadEquipmentType		Surfacing Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Cement and Mortar Mixers
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00

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

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblTripsAndVMT	HaulingTripLength	20.00	25.00
tblTripsAndVMT	HaulingTripLength	20.00	3.00
tblVehicleTrips	PB_TP	43.00	12.00
tblVehicleTrips	PB_TP	44.00	12.00
tblVehicleTrips	PR_TP	37.00	68.00
tblVehicleTrips	PR_TP	38.00	70.00
tblVehicleTrips	ST_TR	8.14	6.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	2.21	20.07
tblVehicleTrips	ST_TR	122.40	160.05
tblVehicleTrips	ST_TR	8.19	10.00
tblVehicleTrips	ST_TR	90.04	99.81
tblVehicleTrips	ST_TR	42.04	39.96
tblVehicleTrips	SU_TR	6.28	6.00
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	0.70	20.07
tblVehicleTrips	SU_TR	142.64	160.05
tblVehicleTrips	SU_TR	5.95	10.00
tblVehicleTrips	SU_TR	71.97	99.81
tblVehicleTrips	SU_TR	20.43	39.96
tblVehicleTrips	WD_TR	7.32	6.00
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	9.74	20.07
tblVehicleTrips	WD_TR	112.18	160.05
tblVehicleTrips	WD_TR	8.36	10.00

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

tblVehicleTrips	WD_TR	83.84	99.81
tblVehicleTrips	WD_TR	44.32	39.96

2.0 Emissions Summary

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

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.6524	3.8762	4.2918	8.9200e-003	0.2379	0.1684	0.4062	0.0532	0.1557	0.2089	0.0000	795.7306	795.7306	0.1849	0.0199	806.2696
2024	0.5091	0.7344	1.1895	2.0400e-003	0.0222	0.0352	0.0575	5.9200e-003	0.0328	0.0387	0.0000	177.7982	177.7982	0.0480	5.6000e-004	179.1629
Maximum	**0.6524**	**3.8762**	**4.2918**	**8.9200e-003**	**0.2379**	**0.1684**	**0.4062**	**0.0532**	**0.1557**	**0.2089**	**0.0000**	**795.7306**	**795.7306**	**0.1849**	**0.0199**	**806.2696**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.6524	3.8762	4.2918	8.9200e-003	0.1951	0.1684	0.3635	0.0484	0.1557	0.2041	0.0000	795.7299	795.7299	0.1849	0.0199	806.2689
2024	0.5091	0.7344	1.1895	2.0400e-003	0.0222	0.0352	0.0575	5.9200e-003	0.0328	0.0387	0.0000	177.7980	177.7980	0.0480	5.6000e-004	179.1627
Maximum	**0.6524**	**3.8762**	**4.2918**	**8.9200e-003**	**0.1951**	**0.1684**	**0.3635**	**0.0484**	**0.1557**	**0.2041**	**0.0000**	**795.7299**	**795.7299**	**0.1849**	**0.0199**	**806.2689**

Marea Village - San Diego County APCD Air District, Annual

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**16.45**	**0.00**	**9.22**	**8.20**	**0.00**	**1.96**	**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)
6	**12-1-2022**	**2-28-2023**	0.9004	0.9004
7	**3-1-2023**	**5-31-2023**	1.6068	1.6068
8	**6-1-2023**	**8-31-2023**	0.7439	0.7439
9	**9-1-2023**	**11-30-2023**	0.8837	0.8837
10	**12-1-2023**	**2-29-2024**	0.7849	0.7849
11	**3-1-2024**	**5-31-2024**	0.8164	0.8164
		Highest	1.6068	1.6068

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	6.4486	0.1233	7.9811	0.0132		1.0247	1.0247		1.0247	1.0247	97.0980	41.8672	138.9652	0.0907	7.6400e-003	143.5090
Energy	0.0173	0.1546	0.1103	9.5000e-004		0.0120	0.0120		0.0120	0.0120	0.0000	518.4916	518.4916	0.0245	5.7200e-003	520.8071
Mobile	0.9469	0.9872	8.2173	0.0164	1.7359	0.0131	1.7490	0.4633	0.0122	0.4755	0.0000	1,540.3470	1,540.3470	0.1182	0.0735	1,565.2084
Waste						0.0000	0.0000		0.0000	0.0000	24.8989	0.0000	24.8989	1.4715	0.0000	61.6859
Water						0.0000	0.0000		0.0000	0.0000	3.2042	47.5424	50.7466	0.3320	8.1200e-003	61.4674
Total	**7.4129**	**1.2651**	**16.3088**	**0.0306**	**1.7359**	**1.0498**	**2.7857**	**0.4633**	**1.0489**	**1.5122**	**125.2011**	**2,148.2482**	**2,273.4492**	**2.0369**	**0.0950**	**2,352.6777**

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	0.5572	0.0656	0.7250	4.0000e-004		8.5300e-003	8.5300e-003		8.5300e-003	8.5300e-003	0.0000	67.7808	67.7808	2.3900e-003	1.2200e-003	68.2045
Energy	0.0173	0.1546	0.1103	9.5000e-004		0.0120	0.0120		0.0120	0.0120	0.0000	513.4887	513.4887	0.0242	5.6800e-003	515.7854
Mobile	0.9469	0.9872	8.2173	0.0164	1.7359	0.0131	1.7490	0.4633	0.0122	0.4755	0.0000	1,540.3470	1,540.3470	0.1182	0.0735	1,565.2084
Waste						0.0000	0.0000		0.0000	0.0000	6.2247	0.0000	6.2247	0.3679	0.0000	15.4215
Water						0.0000	0.0000		0.0000	0.0000	2.5634	41.1003	43.6636	0.2658	6.5200e-003	52.2517
Total	**1.5215**	**1.2075**	**9.0526**	**0.0177**	**1.7359**	**0.0336**	**1.7695**	**0.4633**	**0.0327**	**0.4960**	**8.7881**	**2,162.7168**	**2,171.5049**	**0.7784**	**0.0869**	**2,216.8715**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**79.48**	**4.56**	**44.49**	**41.97**	**0.00**	**96.80**	**36.48**	**0.00**	**96.88**	**67.20**	**92.98**	**-0.67**	**4.48**	**61.78**	**8.49**	**5.77**

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	1/3/2023	2/1/2023	5	22	
2	Grading	Grading	1/18/2023	5/4/2023	5	77	
3	Building Construction	Building Construction	3/6/2023	1/2/2024	5	217	

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

4	Paving	Paving	2/8/2024	5/24/2024	5	77	
5	Architectural Coating	Architectural Coating	10/26/2023	4/26/2024	5	132	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 115.5

Acres of Paving: 0.38

Residential Indoor: 147,789; Residential Outdoor: 49,263; Non-Residential Indoor: 54,555; Non-Residential Outdoor: 18,185; Striped Parking Area: 5,697 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Plate Compactors	2	8.00	8	0.43
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Crawler Tractors	1	8.00	212	0.43
Grading	Rollers	1	8.00	80	0.38
Demolition	Crushing/Proc. Equipment	1	8.00	85	0.78
Grading	Rough Terrain Forklifts	2	8.00	100	0.40
Demolition	Excavators	1	8.00	158	0.38
Demolition	Other Construction Equipment	2	8.00	172	0.42
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Rubber Tired Loaders	1	8.00	203	0.36
Grading	Scrapers	1	8.00	367	0.48
Grading	Bore/Drill Rigs	2	8.00	158	0.38
Grading	Cranes	1	8.00	187	0.41
Grading	Signal Boards	2	8.00	6	0.82
Grading	Skid Steer Loaders	1	8.00	65	0.37
Building Construction	Signal Boards	2	8.00	6	0.82
Grading	Crawler Tractors	1	8.00	247	0.40
Building Construction	Skid Steer Loaders	1	8.00	65	0.37

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

Building Construction	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Paving	Signal Boards	2	8.00	6	0.82
Paving	Surfacing Equipment	1	8.00	263	0.30
Grading	Excavators	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Other Construction Equipment	3	8.00	89	0.20
Building Construction	Paving Equipment	1	8.00	84	0.74
Paving	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Building Construction	Rough Terrain Forklifts	2	8.00	97	0.37
Building Construction	Rubber Tired Loaders	1	8.00	46	0.45
Paving	Graders	1	8.00	9	0.56
Paving	Off-Highway Trucks	4	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38
Paving	Rubber Tired Loaders	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	7	18.00	0.00	50.00	10.80	7.30	25.00	LD_Mix	HDT_Mix	HHDT
Grading	16	40.00	0.00	6,050.00	10.80	7.30	3.00	LD_Mix	HDT_Mix	HHDT
Building Construction	13	133.00	36.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	15	38.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	27.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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

Water Exposed Area

3.2 Demolition - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.4800e-003	0.0000	5.4800e-003	8.3000e-004	0.0000	8.3000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0308	0.2887	0.2706	5.2000e-004		0.0136	0.0136		0.0128	0.0128	0.0000	45.2958	45.2958	0.0113	0.0000	45.5778
Total	**0.0308**	**0.2887**	**0.2706**	**5.2000e-004**	**5.4800e-003**	**0.0136**	**0.0191**	**8.3000e-004**	**0.0128**	**0.0136**	**0.0000**	**45.2958**	**45.2958**	**0.0113**	**0.0000**	**45.5778**

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

3.2 Demolition - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.0000e-005	4.1300e-003	1.0400e-003	2.0000e-005	5.4000e-004	3.0000e-005	5.7000e-004	1.5000e-004	3.0000e-005	1.8000e-004	0.0000	1.8597	1.8597	9.0000e-005	3.0000e-004	1.9502
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	5.4000e-004	3.7000e-004	4.5200e-003	1.0000e-005	1.5900e-003	1.0000e-005	1.6000e-003	4.2000e-004	1.0000e-005	4.3000e-004	0.0000	1.2722	1.2722	4.0000e-005	4.0000e-005	1.2835
Total	**6.0000e-004**	**4.5000e-003**	**5.5600e-003**	**3.0000e-005**	**2.1300e-003**	**4.0000e-005**	**2.1700e-003**	**5.7000e-004**	**4.0000e-005**	**6.1000e-004**	**0.0000**	**3.1318**	**3.1318**	**1.3000e-004**	**3.4000e-004**	**3.2337**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.1400e-003	0.0000	2.1400e-003	3.2000e-004	0.0000	3.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0308	0.2887	0.2706	5.2000e-004		0.0136	0.0136		0.0128	0.0128	0.0000	45.2957	45.2957	0.0113	0.0000	45.5778
Total	**0.0308**	**0.2887**	**0.2706**	**5.2000e-004**	**2.1400e-003**	**0.0136**	**0.0157**	**3.2000e-004**	**0.0128**	**0.0131**	**0.0000**	**45.2957**	**45.2957**	**0.0113**	**0.0000**	**45.5778**

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

3.2 Demolition - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.0000e-005	4.1300e-003	1.0400e-003	2.0000e-005	5.4000e-004	3.0000e-005	5.7000e-004	1.5000e-004	3.0000e-005	1.8000e-004	0.0000	1.8597	1.8597	9.0000e-005	3.0000e-004	1.9502
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	5.4000e-004	3.7000e-004	4.5200e-003	1.0000e-005	1.5900e-003	1.0000e-005	1.6000e-003	4.2000e-004	1.0000e-005	4.3000e-004	0.0000	1.2722	1.2722	4.0000e-005	4.0000e-005	1.2835
Total	**6.0000e-004**	**4.5000e-003**	**5.5600e-003**	**3.0000e-005**	**2.1300e-003**	**4.0000e-005**	**2.1700e-003**	**5.7000e-004**	**4.0000e-005**	**6.1000e-004**	**0.0000**	**3.1318**	**3.1318**	**1.3000e-004**	**3.4000e-004**	**3.2337**

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0646	0.0000	0.0646	7.1300e-003	0.0000	7.1300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1202	1.2570	1.2195	2.5800e-003		0.0506	0.0506		0.0467	0.0467	0.0000	224.7212	224.7212	0.0714	0.0000	226.5061
Total	**0.1202**	**1.2570**	**1.2195**	**2.5800e-003**	**0.0646**	**0.0506**	**0.1153**	**7.1300e-003**	**0.0467**	**0.0539**	**0.0000**	**224.7212**	**224.7212**	**0.0714**	**0.0000**	**226.5061**

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

3.3 Grading - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.5700e-003	0.1092	0.0545	3.4000e-004	7.8300e-003	5.4000e-004	8.3600e-003	2.1500e-003	5.1000e-004	2.6700e-003	0.0000	33.7206	33.7206	1.5500e-003	5.3600e-003	35.3560
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.1700e-003	2.8800e-003	0.0352	1.1000e-004	0.0124	7.0000e-005	0.0124	3.2800e-003	6.0000e-005	3.3400e-003	0.0000	9.8946	9.8946	2.9000e-004	2.7000e-004	9.9831
Total	**7.7400e-003**	**0.1121**	**0.0897**	**4.5000e-004**	**0.0202**	**6.1000e-004**	**0.0208**	**5.4300e-003**	**5.7000e-004**	**6.0100e-003**	**0.0000**	**43.6152**	**43.6152**	**1.8400e-003**	**5.6300e-003**	**45.3391**

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					0.0252	0.0000	0.0252	2.7800e-003	0.0000	2.7800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1202	1.2570	1.2195	2.5800e-003		0.0506	0.0506		0.0467	0.0467	0.0000	224.7210	224.7210	0.0714	0.0000	226.5058
Total	**0.1202**	**1.2570**	**1.2195**	**2.5800e-003**	**0.0252**	**0.0506**	**0.0758**	**2.7800e-003**	**0.0467**	**0.0495**	**0.0000**	**224.7210**	**224.7210**	**0.0714**	**0.0000**	**226.5058**

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

3.3 Grading - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.5700e-003	0.1092	0.0545	3.4000e-004	7.8300e-003	5.4000e-004	8.3600e-003	2.1500e-003	5.1000e-004	2.6700e-003	0.0000	33.7206	33.7206	1.5500e-003	5.3600e-003	35.3560
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.1700e-003	2.8800e-003	0.0352	1.1000e-004	0.0124	7.0000e-005	0.0124	3.2800e-003	6.0000e-005	3.3400e-003	0.0000	9.8946	9.8946	2.9000e-004	2.7000e-004	9.9831
Total	**7.7400e-003**	**0.1121**	**0.0897**	**4.5000e-004**	**0.0202**	**6.1000e-004**	**0.0208**	**5.4300e-003**	**5.7000e-004**	**6.0100e-003**	**0.0000**	**43.6152**	**43.6152**	**1.8400e-003**	**5.6300e-003**	**45.3391**

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	0.2163	1.9835	2.2622	3.4500e-003		0.1002	0.1002		0.0924	0.0924	0.0000	299.3758	299.3758	0.0947	0.0000	301.7436
Total	**0.2163**	**1.9835**	**2.2622**	**3.4500e-003**		**0.1002**	**0.1002**		**0.0924**	**0.0924**	**0.0000**	**299.3758**	**299.3758**	**0.0947**	**0.0000**	**301.7436**

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	4.5400e-003	0.1718	0.0606	7.9000e-004	0.0257	1.0100e-003	0.0267	7.4200e-003	9.7000e-004	8.3900e-003	0.0000	77.6517	77.6517	2.3500e-003	0.0113	81.0634
Worker	0.0387	0.0268	0.3267	9.9000e-004	0.1147	6.3000e-004	0.1153	0.0305	5.8000e-004	0.0311	0.0000	91.8621	91.8621	2.6900e-003	2.5300e-003	92.6837
Total	**0.0432**	**0.1986**	**0.3873**	**1.7800e-003**	**0.1404**	**1.6400e-003**	**0.1420**	**0.0379**	**1.5500e-003**	**0.0394**	**0.0000**	**169.5138**	**169.5138**	**5.0400e-003**	**0.0138**	**173.7471**

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	0.2163	1.9835	2.2622	3.4500e-003		0.1002	0.1002		0.0924	0.0924	0.0000	299.3755	299.3755	0.0947	0.0000	301.7433
Total	**0.2163**	**1.9835**	**2.2622**	**3.4500e-003**		**0.1002**	**0.1002**		**0.0924**	**0.0924**	**0.0000**	**299.3755**	**299.3755**	**0.0947**	**0.0000**	**301.7433**

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	4.5400e-003	0.1718	0.0606	7.9000e-004	0.0257	1.0100e-003	0.0267	7.4200e-003	9.7000e-004	8.3900e-003	0.0000	77.6517	77.6517	2.3500e-003	0.0113	81.0634
Worker	0.0387	0.0268	0.3267	9.9000e-004	0.1147	6.3000e-004	0.1153	0.0305	5.8000e-004	0.0311	0.0000	91.8621	91.8621	2.6900e-003	2.5300e-003	92.6837
Total	**0.0432**	**0.1986**	**0.3873**	**1.7800e-003**	**0.1404**	**1.6400e-003**	**0.1420**	**0.0379**	**1.5500e-003**	**0.0394**	**0.0000**	**169.5138**	**169.5138**	**5.0400e-003**	**0.0138**	**173.7471**

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	1.9200e-003	0.0175	0.0210	3.0000e-005		8.5000e-004	8.5000e-004		7.8000e-004	7.8000e-004	0.0000	2.7850	2.7850	8.8000e-004	0.0000	2.8070
Total	**1.9200e-003**	**0.0175**	**0.0210**	**3.0000e-005**		**8.5000e-004**	**8.5000e-004**		**7.8000e-004**	**7.8000e-004**	**0.0000**	**2.7850**	**2.7850**	**8.8000e-004**	**0.0000**	**2.8070**

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	4.0000e-005	1.5900e-003	5.5000e-004	1.0000e-005	2.4000e-004	1.0000e-005	2.5000e-004	7.0000e-005	1.0000e-005	8.0000e-005	0.0000	0.7098	0.7098	2.0000e-005	1.0000e-004	0.7410
Worker	3.4000e-004	2.2000e-004	2.8400e-003	1.0000e-005	1.0700e-003	1.0000e-005	1.0700e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	0.8331	0.8331	2.0000e-005	2.0000e-005	0.8402
Total	**3.8000e-004**	**1.8100e-003**	**3.3900e-003**	**2.0000e-005**	**1.3100e-003**	**2.0000e-005**	**1.3200e-003**	**3.5000e-004**	**2.0000e-005**	**3.7000e-004**	**0.0000**	**1.5429**	**1.5429**	**4.0000e-005**	**1.2000e-004**	**1.5812**

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	1.9200e-003	0.0175	0.0210	3.0000e-005		8.5000e-004	8.5000e-004		7.8000e-004	7.8000e-004	0.0000	2.7850	2.7850	8.8000e-004	0.0000	2.8070
Total	**1.9200e-003**	**0.0175**	**0.0210**	**3.0000e-005**		**8.5000e-004**	**8.5000e-004**		**7.8000e-004**	**7.8000e-004**	**0.0000**	**2.7850**	**2.7850**	**8.8000e-004**	**0.0000**	**2.8070**

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	4.0000e-005	1.5900e-003	5.5000e-004	1.0000e-005	2.4000e-004	1.0000e-005	2.5000e-004	7.0000e-005	1.0000e-005	8.0000e-005	0.0000	0.7098	0.7098	2.0000e-005	1.0000e-004	0.7410
Worker	3.4000e-004	2.2000e-004	2.8400e-003	1.0000e-005	1.0700e-003	1.0000e-005	1.0700e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	0.8331	0.8331	2.0000e-005	2.0000e-005	0.8402
Total	**3.8000e-004**	**1.8100e-003**	**3.3900e-003**	**2.0000e-005**	**1.3100e-003**	**2.0000e-005**	**1.3200e-003**	**3.5000e-004**	**2.0000e-005**	**3.7000e-004**	**0.0000**	**1.5429**	**1.5429**	**4.0000e-005**	**1.2000e-004**	**1.5812**

3.5 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	0.0809	0.6589	1.0323	1.6900e-003		0.0317	0.0317		0.0293	0.0293	0.0000	146.2668	146.2668	0.0460	0.0000	147.4160
Paving	5.0000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0814**	**0.6589**	**1.0323**	**1.6900e-003**		**0.0317**	**0.0317**		**0.0293**	**0.0293**	**0.0000**	**146.2668**	**146.2668**	**0.0460**	**0.0000**	**147.4160**

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

3.5 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	3.7200e-003	2.4600e-003	0.0313	1.0000e-004	0.0117	6.0000e-005	0.0118	3.1200e-003	6.0000e-005	3.1700e-003	0.0000	9.1643	9.1643	2.5000e-004	2.4000e-004	9.2427
Total	**3.7200e-003**	**2.4600e-003**	**0.0313**	**1.0000e-004**	**0.0117**	**6.0000e-005**	**0.0118**	**3.1200e-003**	**6.0000e-005**	**3.1700e-003**	**0.0000**	**9.1643**	**9.1643**	**2.5000e-004**	**2.4000e-004**	**9.2427**

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	0.0809	0.6589	1.0323	1.6900e-003		0.0317	0.0317		0.0293	0.0293	0.0000	146.2666	146.2666	0.0460	0.0000	147.4158
Paving	5.0000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0814**	**0.6589**	**1.0323**	**1.6900e-003**		**0.0317**	**0.0317**		**0.0293**	**0.0293**	**0.0000**	**146.2666**	**146.2666**	**0.0460**	**0.0000**	**147.4158**

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

3.5 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	3.7200e-003	2.4600e-003	0.0313	1.0000e-004	0.0117	6.0000e-005	0.0118	3.1200e-003	6.0000e-005	3.1700e-003	0.0000	9.1643	9.1643	2.5000e-004	2.4000e-004	9.2427
Total	**3.7200e-003**	**2.4600e-003**	**0.0313**	**1.0000e-004**	**0.0117**	**6.0000e-005**	**0.0118**	**3.1200e-003**	**6.0000e-005**	**3.1700e-003**	**0.0000**	**9.1643**	**9.1643**	**2.5000e-004**	**2.4000e-004**	**9.2427**

3.6 Architectural Coating - 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					
Archit. Coating	0.2273					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.5000e-003	0.0306	0.0426	7.0000e-005		1.6600e-003	1.6600e-003		1.6600e-003	1.6600e-003	0.0000	6.0002	6.0002	3.6000e-004	0.0000	6.0091
Total	**0.2318**	**0.0306**	**0.0426**	**7.0000e-005**		**1.6600e-003**	**1.6600e-003**		**1.6600e-003**	**1.6600e-003**	**0.0000**	**6.0002**	**6.0002**	**3.6000e-004**	**0.0000**	**6.0091**

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

3.6 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7200e-003	1.1900e-003	0.0145	4.0000e-005	5.0900e-003	3.0000e-005	5.1200e-003	1.3500e-003	3.0000e-005	1.3800e-003	0.0000	4.0767	4.0767	1.2000e-004	1.1000e-004	4.1132
Total	**1.7200e-003**	**1.1900e-003**	**0.0145**	**4.0000e-005**	**5.0900e-003**	**3.0000e-005**	**5.1200e-003**	**1.3500e-003**	**3.0000e-005**	**1.3800e-003**	**0.0000**	**4.0767**	**4.0767**	**1.2000e-004**	**1.1000e-004**	**4.1132**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2273					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.5000e-003	0.0306	0.0426	7.0000e-005		1.6600e-003	1.6600e-003		1.6600e-003	1.6600e-003	0.0000	6.0001	6.0001	3.6000e-004	0.0000	6.0091
Total	**0.2318**	**0.0306**	**0.0426**	**7.0000e-005**		**1.6600e-003**	**1.6600e-003**		**1.6600e-003**	**1.6600e-003**	**0.0000**	**6.0001**	**6.0001**	**3.6000e-004**	**0.0000**	**6.0091**

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

3.6 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7200e-003	1.1900e-003	0.0145	4.0000e-005	5.0900e-003	3.0000e-005	5.1200e-003	1.3500e-003	3.0000e-005	1.3800e-003	0.0000	4.0767	4.0767	1.2000e-004	1.1000e-004	4.1132
Total	**1.7200e-003**	**1.1900e-003**	**0.0145**	**4.0000e-005**	**5.0900e-003**	**3.0000e-005**	**5.1200e-003**	**1.3500e-003**	**3.0000e-005**	**1.3800e-003**	**0.0000**	**4.0767**	**4.0767**	**1.2000e-004**	**1.1000e-004**	**4.1132**

3.6 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.4111					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.6800e-003	0.0518	0.0769	1.3000e-004		2.5900e-003	2.5900e-003		2.5900e-003	2.5900e-003	0.0000	10.8513	10.8513	6.1000e-004	0.0000	10.8666
Total	**0.4188**	**0.0518**	**0.0769**	**1.3000e-004**		**2.5900e-003**	**2.5900e-003**		**2.5900e-003**	**2.5900e-003**	**0.0000**	**10.8513**	**10.8513**	**6.1000e-004**	**0.0000**	**10.8666**

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

3.6 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	2.9200e-003	1.9300e-003	0.0245	8.0000e-005	9.2000e-003	5.0000e-005	9.2500e-003	2.4500e-003	4.0000e-005	2.4900e-003	0.0000	7.1880	7.1880	2.0000e-004	1.9000e-004	7.2495
Total	**2.9200e-003**	**1.9300e-003**	**0.0245**	**8.0000e-005**	**9.2000e-003**	**5.0000e-005**	**9.2500e-003**	**2.4500e-003**	**4.0000e-005**	**2.4900e-003**	**0.0000**	**7.1880**	**7.1880**	**2.0000e-004**	**1.9000e-004**	**7.2495**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.4111					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.6800e-003	0.0518	0.0769	1.3000e-004		2.5900e-003	2.5900e-003		2.5900e-003	2.5900e-003	0.0000	10.8513	10.8513	6.1000e-004	0.0000	10.8666
Total	**0.4188**	**0.0518**	**0.0769**	**1.3000e-004**		**2.5900e-003**	**2.5900e-003**		**2.5900e-003**	**2.5900e-003**	**0.0000**	**10.8513**	**10.8513**	**6.1000e-004**	**0.0000**	**10.8666**

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

3.6 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	2.9200e-003	1.9300e-003	0.0245	8.0000e-005	9.2000e-003	5.0000e-005	9.2500e-003	2.4500e-003	4.0000e-005	2.4900e-003	0.0000	7.1880	7.1880	2.0000e-004	1.9000e-004	7.2495
Total	**2.9200e-003**	**1.9300e-003**	**0.0245**	**8.0000e-005**	**9.2000e-003**	**5.0000e-005**	**9.2500e-003**	**2.4500e-003**	**4.0000e-005**	**2.4900e-003**	**0.0000**	**7.1880**	**7.1880**	**2.0000e-004**	**1.9000e-004**	**7.2495**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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	0.9469	0.9872	8.2173	0.0164	1.7359	0.0131	1.7490	0.4633	0.0122	0.4755	0.0000	1,540.3470	1,540.3470	0.1182	0.0735	1,565.2084
Unmitigated	0.9469	0.9872	8.2173	0.0164	1.7359	0.0131	1.7490	0.4633	0.0122	0.4755	0.0000	1,540.3470	1,540.3470	0.1182	0.0735	1,565.2084

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	564.00	564.00	564.00	1,610,391	1,610,391
City Park	0.00	0.00	0.00		
Enclosed Parking with Elevator	0.00	0.00	0.00		
General Office Building	73.05	73.05	73.05	174,583	174,583
High Turnover (Sit Down Restaurant)	624.20	624.20	624.20	1,244,529	1,244,529
Hotel	340.00	340.00	340.00	645,976	645,976
Parking Lot	0.00	0.00	0.00		
Quality Restaurant	212.60	212.60	212.60	437,005	437,005
Strip Mall	342.86	342.86	342.86	528,011	528,011
Total	2,156.70	2,156.70	2,156.70	4,640,495	4,640,495

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
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

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

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	9.50	7.30	7.30	8.50	72.50	19.00	68	20	12
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Quality Restaurant	9.50	7.30	7.30	12.00	69.00	19.00	70	18	12
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	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
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
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
High Turnover (Sit Down Restaurant)	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
Hotel	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
Parking Lot	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
Quality Restaurant	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
Strip Mall	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

Install High Efficiency Lighting

Marea Village - San Diego County APCD Air District, 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					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	341.9020	341.9020	0.0209	2.5300e-003	343.1791
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	346.9050	346.9050	0.0212	2.5700e-003	348.2008
NaturalGas Mitigated	0.0173	0.1546	0.1103	9.5000e-004		0.0120	0.0120		0.0120	0.0120	0.0000	171.5867	171.5867	3.2900e-003	3.1500e-003	172.6063
NaturalGas Unmitigated	0.0173	0.1546	0.1103	9.5000e-004		0.0120	0.0120		0.0120	0.0120	0.0000	171.5867	171.5867	3.2900e-003	3.1500e-003	172.6063

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

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	1.02407e+006	5.5200e-003	0.0472	0.0201	3.0000e-004		3.8200e-003	3.8200e-003		3.8200e-003	3.8200e-003	0.0000	54.6482	54.6482	1.0500e-003	1.0000e-003	54.9730
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
General Office Building	72869.1	3.9000e-004	3.5700e-003	3.0000e-003	2.0000e-005		2.7000e-004	2.7000e-004		2.7000e-004	2.7000e-004	0.0000	3.8886	3.8886	7.0000e-005	7.0000e-005	3.9117
High Turnover (Sit Down Restaurant)	679548	3.6600e-003	0.0333	0.0280	2.0000e-004		2.5300e-003	2.5300e-003		2.5300e-003	2.5300e-003	0.0000	36.2633	36.2633	7.0000e-004	6.6000e-004	36.4788
Hotel	1.04851e+006	5.6500e-003	0.0514	0.0432	3.1000e-004		3.9100e-003	3.9100e-003		3.9100e-003	3.9100e-003	0.0000	55.9526	55.9526	1.0700e-003	1.0300e-003	56.2850
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	371359	2.0000e-003	0.0182	0.0153	1.1000e-004		1.3800e-003	1.3800e-003		1.3800e-003	1.3800e-003	0.0000	19.8171	19.8171	3.8000e-004	3.6000e-004	19.9349
Strip Mall	19056.5	1.0000e-004	9.3000e-004	7.8000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	1.0169	1.0169	2.0000e-005	2.0000e-005	1.0230
Total		**0.0173**	**0.1546**	**0.1103**	**9.5000e-004**		**0.0120**	**0.0120**		**0.0120**	**0.0120**	**0.0000**	**171.5867**	**171.5867**	**3.2900e-003**	**3.1400e-003**	**172.6063**

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

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	1.02407e+006	5.5200e-003	0.0472	0.0201	3.0000e-004		3.8200e-003	3.8200e-003		3.8200e-003	3.8200e-003	0.0000	54.6482	54.6482	1.0500e-003	1.0000e-003	54.9730
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
General Office Building	72869.1	3.9000e-004	3.5700e-003	3.0000e-003	2.0000e-005		2.7000e-004	2.7000e-004		2.7000e-004	2.7000e-004	0.0000	3.8886	3.8886	7.0000e-005	7.0000e-005	3.9117
High Turnover (Sit Down Restaurant)	679548	3.6600e-003	0.0333	0.0280	2.0000e-004		2.5300e-003	2.5300e-003		2.5300e-003	2.5300e-003	0.0000	36.2633	36.2633	7.0000e-004	6.6000e-004	36.4788
Hotel	1.04851e+006	5.6500e-003	0.0514	0.0432	3.1000e-004		3.9100e-003	3.9100e-003		3.9100e-003	3.9100e-003	0.0000	55.9526	55.9526	1.0700e-003	1.0300e-003	56.2850
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	371359	2.0000e-003	0.0182	0.0153	1.1000e-004		1.3800e-003	1.3800e-003		1.3800e-003	1.3800e-003	0.0000	19.8171	19.8171	3.8000e-004	3.6000e-004	19.9349
Strip Mall	19056.5	1.0000e-004	9.3000e-004	7.8000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	1.0169	1.0169	2.0000e-005	2.0000e-005	1.0230
Total		**0.0173**	**0.1546**	**0.1103**	**9.5000e-004**		**0.0120**	**0.0120**		**0.0120**	**0.0120**	**0.0000**	**171.5867**	**171.5867**	**3.2900e-003**	**3.1400e-003**	**172.6063**

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

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	379636	92.9845	5.6800e-003	6.9000e-004	93.3319
City Park	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	425180	104.1396	6.3600e-003	7.7000e-004	104.5286
General Office Building	47075.7	11.5303	7.0000e-004	9.0000e-005	11.5734
High Turnover (Sit Down Restaurant)	147687	36.1731	2.2100e-003	2.7000e-004	36.3082
Hotel	225276	55.1770	3.3700e-003	4.1000e-004	55.3831
Parking Lot	5880	1.4402	9.0000e-005	1.0000e-005	1.4456
Quality Restaurant	80707.9	19.7679	1.2100e-003	1.5000e-004	19.8417
Strip Mall	104896	25.6924	1.5700e-003	1.9000e-004	25.7884
Total		**346.9049**	**0.0212**	**2.5800e-003**	**348.2008**

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

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	375827	92.0517	5.6300e-003	6.8000e-004	92.3955
City Park	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	418341	102.4645	6.2600e-003	7.6000e-004	102.8473
General Office Building	46382.7	11.3606	6.9000e-004	8.0000e-005	11.4030
High Turnover (Sit Down Restaurant)	146363	35.8489	2.1900e-003	2.7000e-004	35.9828
Hotel	221201	54.1791	3.3100e-003	4.0000e-004	54.3814
Parking Lot	5586	1.3682	8.0000e-005	1.0000e-005	1.3733
Quality Restaurant	79984.5	19.5907	1.2000e-003	1.5000e-004	19.6638
Strip Mall	102227	25.0385	1.5300e-003	1.9000e-004	25.1320
Total		**341.9020**	**0.0209**	**2.5400e-003**	**343.1791**

6.0 Area Detail

6.1 Mitigation Measures Area

Use only Natural Gas Hearths

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	0.5572	0.0656	0.7250	4.0000e-004		8.5300e-003	8.5300e-003		8.5300e-003	8.5300e-003	0.0000	67.7808	67.7808	2.3900e-003	1.2200e-003	68.2045
Unmitigated	6.4486	0.1233	7.9811	0.0132		1.0247	1.0247		1.0247	1.0247	97.0980	41.8672	138.9652	0.0907	7.6400e-003	143.5090

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	0.0958					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4335					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	5.8981	0.1152	7.2806	0.0132		1.0208	1.0208		1.0208	1.0208	97.0980	40.7215	137.8195	0.0896	7.6400e-003	142.3356
Landscaping	0.0212	8.0600e-003	0.7005	4.0000e-005		3.8800e-003	3.8800e-003		3.8800e-003	3.8800e-003	0.0000	1.1457	1.1457	1.1100e-003	0.0000	1.1734
Total	**6.4486**	**0.1232**	**7.9811**	**0.0132**		**1.0247**	**1.0247**		**1.0247**	**1.0247**	**97.0980**	**41.8672**	**138.9652**	**0.0907**	**7.6400e-003**	**143.5090**

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	0.0958					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4335					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	6.7300e-003	0.0575	0.0245	3.7000e-004		4.6500e-003	4.6500e-003		4.6500e-003	4.6500e-003	0.0000	66.6352	66.6352	1.2800e-003	1.2200e-003	67.0312
Landscaping	0.0212	8.0600e-003	0.7005	4.0000e-005		3.8800e-003	3.8800e-003		3.8800e-003	3.8800e-003	0.0000	1.1457	1.1457	1.1100e-003	0.0000	1.1734
Total	**0.5572**	**0.0656**	**0.7250**	**4.1000e-004**		**8.5300e-003**	**8.5300e-003**		**8.5300e-003**	**8.5300e-003**	**0.0000**	**67.7808**	**67.7808**	**2.3900e-003**	**1.2200e-003**	**68.2045**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Marea Village - San Diego County APCD Air District, 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	43.6636	0.2658	6.5200e-003	52.2517
Unmitigated	50.7466	0.3320	8.1200e-003	61.4674

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			
Apartments Low Rise	6.12448 / 3.86108	31.9822	0.2014	4.9300e-003	38.4878
City Park	0 / 0.774463	2.1075	1.3000e-004	2.0000e-005	2.1153
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
General Office Building	0.646951 / 0.396518	3.3475	0.0213	5.2000e-004	4.0346
High Turnover (Sit Down Restaurant)	1.18378 / 0.0755605	4.3565	0.0388	9.4000e-004	5.6072
Hotel	0.86247 / 0.09583	3.2850	0.0283	6.9000e-004	4.1966
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	0.646527 / 0.0412677	2.3793	0.0212	5.1000e-004	3.0624
Strip Mall	0.635542 / 0.389526	3.2885	0.0209	5.1000e-004	3.9635
Total		**50.7466**	**0.3320**	**8.1200e-003**	**61.4674**

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			
Apartments Low Rise	4.89958 / 3.86108	27.6871	0.1613	3.9600e-003	32.8994
City Park	0 / 0.774463	2.1075	1.3000e-004	2.0000e-005	2.1153
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
General Office Building	0.517561 / 0.396518	2.8938	0.0170	4.2000e-004	3.4443
High Turnover (Sit Down Restaurant)	0.947025 / 0.0755605	3.5264	0.0311	7.5000e-004	4.5270
Hotel	0.689976 / 0.09583	2.6802	0.0226	5.5000e-004	3.4096
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	0.517221 / 0.0412677	1.9259	0.0170	4.1000e-004	2.4725
Strip Mall	0.508434 / 0.389526	2.8428	0.0167	4.1000e-004	3.3836
Total		**43.6636**	**0.2658**	**6.5200e-003**	**52.2517**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Marea Village - San Diego County APCD Air District, 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	6.2247	0.3679	0.0000	15.4215
Unmitigated	24.8989	1.4715	0.0000	61.6859

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			
Apartments Low Rise	43.24	8.7773	0.5187	0.0000	21.7455
City Park	0.06	0.0122	7.2000e-004	0.0000	0.0302
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
General Office Building	3.39	0.6881	0.0407	0.0000	1.7048
High Turnover (Sit Down Restaurant)	46.41	9.4208	0.5568	0.0000	23.3397
Hotel	18.61	3.7777	0.2233	0.0000	9.3590
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	1.94	0.3938	0.0233	0.0000	0.9756
Strip Mall	9.01	1.8290	0.1081	0.0000	4.5311
Total		**24.8989**	**1.4715**	**0.0000**	**61.6859**

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

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	10.81	2.1943	0.1297	0.0000	5.4364
City Park	0.015	3.0400e-003	1.8000e-004	0.0000	7.5400e-003
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
General Office Building	0.8475	0.1720	0.0102	0.0000	0.4262
High Turnover (Sit Down Restaurant)	11.6025	2.3552	0.1392	0.0000	5.8349
Hotel	4.6525	0.9444	0.0558	0.0000	2.3398
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	0.485	0.0985	5.8200e-003	0.0000	0.2439
Strip Mall	2.2525	0.4572	0.0270	0.0000	1.1328
Total		**6.2247**	**0.3679**	**0.0000**	**15.4215**

9.0 Operational Offroad

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

10.0 Stationary Equipment

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

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

Marea Village - San Diego County APCD Air District, Summer

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

Marea Village

San Diego County APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	3.64	1000sqft	0.08	3,638.00	0
Enclosed Parking with Elevator	216.00	Space	0.00	78,158.00	0
Parking Lot	42.00	Space	0.38	16,800.00	0
City Park	0.65	Acre	0.65	27,194.00	0
High Turnover (Sit Down Restaurant)	3.90	1000sqft	0.00	3,905.00	0
Hotel	34.00	Room	1.13	18,109.00	0
Quality Restaurant	2.13	1000sqft	0.00	2,134.00	0
Apartments Low Rise	94.00	Dwelling Unit	1.56	72,982.00	269
Strip Mall	8.58	1000sqft	0.00	8,584.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2024
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	539.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Per traffic study and site plan; total lot 3.8 acres, therefore lot acreage modified to match.

Construction Phase - Per PD, assuming utilities/infrastructure and Hwy 101 improvements would occur during Building Construction phase.

Marea Village - San Diego County APCD Air District, Summer

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

Off-road Equipment - Per construction questionnaire.

Off-road Equipment - Per construction questionnaire.

Off-road Equipment - Per construction questionnaire.

Off-road Equipment - Per construction questionnaire.

Off-road Equipment - Per construction questionnaire.

Off-road Equipment - No construction emissions - existing operations only.

Trips and VMT - Demolition materials would be hauled 25 miles (project site to Miramar Landfill); earthwork materials form grading activities would be hauled max. 3 miles (project site to the nearest beach).

Demolition -

Grading -

Architectural Coating - Per SDAPCD Rule 67.0.1

Vehicle Trips - Per traffic study.

Area Coating - Per SDAPCD Rule 67.0.1

Construction Off-road Equipment Mitigation - Per construction questionniare, there would be dust control implemented (water exposed area three times a day) as a project design feature.

Area Mitigation - No wood-burning associated hearth would be produced.

Energy Mitigation - Per operational questionniare, high efficiency lighting would be installed as a project design feature.

Waste Mitigation - Per AB 341.

Water Mitigation - Per operational questionniare, low-flow water fixtures would be installed as a project design feature.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaCoating	Area_EF_Parking	250	150
tblAreaCoating	Area_EF_Residential_Exterior	250	150

Marea Village - San Diego County APCD Air District, Summer

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

tblAreaCoating	Area_EF_Residential_Interior	250	150
tblConstructionPhase	NumDays	20.00	22.00
tblConstructionPhase	NumDays	8.00	77.00
tblConstructionPhase	NumDays	230.00	217.00
tblConstructionPhase	NumDays	18.00	132.00
tblConstructionPhase	NumDays	18.00	77.00
tblConstructionPhase	PhaseEndDate	9/28/2021	2/1/2023
tblConstructionPhase	PhaseEndDate	10/8/2021	5/4/2023
tblConstructionPhase	PhaseEndDate	8/26/2022	1/2/2024
tblConstructionPhase	PhaseEndDate	10/17/2022	4/26/2024
tblConstructionPhase	PhaseEndDate	9/21/2022	5/24/2024
tblConstructionPhase	PhaseStartDate	9/1/2021	1/3/2023
tblConstructionPhase	PhaseStartDate	9/29/2021	1/18/2023
tblConstructionPhase	PhaseStartDate	10/9/2021	3/6/2023
tblConstructionPhase	PhaseStartDate	9/22/2022	10/26/2023
tblConstructionPhase	PhaseStartDate	8/27/2022	2/8/2024
tblGrading	MaterialExported	0.00	48,400.00
tblLandUse	LandUseSquareFeet	3,640.00	3,638.00
tblLandUse	LandUseSquareFeet	86,400.00	78,158.00
tblLandUse	LandUseSquareFeet	28,314.00	27,194.00
tblLandUse	LandUseSquareFeet	3,900.00	3,905.00
tblLandUse	LandUseSquareFeet	49,368.00	18,109.00
tblLandUse	LandUseSquareFeet	2,130.00	2,134.00
tblLandUse	LandUseSquareFeet	94,000.00	72,982.00
tblLandUse	LandUseSquareFeet	8,580.00	8,584.00
tblLandUse	LotAcreage	1.94	0.00
tblLandUse	LotAcreage	0.09	0.00
tblLandUse	LotAcreage	0.05	0.00
tblLandUse	LotAcreage	5.88	1.56

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

tblLandUse	LotAcreage	0.20	0.00
tblOffRoadEquipment	HorsePower	187.00	9.00
tblOffRoadEquipment	HorsePower	221.00	158.00
tblOffRoadEquipment	HorsePower	172.00	89.00
tblOffRoadEquipment	HorsePower	132.00	84.00
tblOffRoadEquipment	HorsePower	231.00	187.00
tblOffRoadEquipment	HorsePower	402.00	130.00
tblOffRoadEquipment	HorsePower	212.00	247.00
tblOffRoadEquipment	HorsePower	100.00	97.00
tblOffRoadEquipment	HorsePower	158.00	97.00
tblOffRoadEquipment	HorsePower	203.00	97.00
tblOffRoadEquipment	HorsePower	203.00	46.00
tblOffRoadEquipment	LoadFactor	0.41	0.56
tblOffRoadEquipment	LoadFactor	0.50	0.38
tblOffRoadEquipment	LoadFactor	0.42	0.20
tblOffRoadEquipment	LoadFactor	0.36	0.74
tblOffRoadEquipment	LoadFactor	0.29	0.41
tblOffRoadEquipment	LoadFactor	0.38	0.42
tblOffRoadEquipment	LoadFactor	0.43	0.40
tblOffRoadEquipment	LoadFactor	0.40	0.37
tblOffRoadEquipment	LoadFactor	0.38	0.37
tblOffRoadEquipment	LoadFactor	0.36	0.37
tblOffRoadEquipment	LoadFactor	0.36	0.45
tblOffRoadEquipment	OffRoadEquipmentType	Cement and Mortar Mixers	Graders
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentType		Rollers
tblOffRoadEquipment	OffRoadEquipmentType	Excavators	Bore/Drill Rigs
tblOffRoadEquipment	OffRoadEquipmentType	Forklifts	Other Construction Equipment
tblOffRoadEquipment	OffRoadEquipmentType	Generator Sets	Paving Equipment

Marea Village - San Diego County APCD Air District, Summer

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

tblOffRoadEquipment	OffRoadEquipmentType	Graders	Cranes
tblOffRoadEquipment	OffRoadEquipmentType	Pavers	Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentType	Rubber Tired Dozers	Crawler Tractors
tblOffRoadEquipment	OffRoadEquipmentType	Tractors/Loaders/Backhoes	Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentType	Tractors/Loaders/Backhoes	Rubber Tired Loaders
tblOffRoadEquipment	OffRoadEquipmentType	Welders	Rubber Tired Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Concrete/Industrial Saws
tblOffRoadEquipment	OffRoadEquipmentType		Crawler Tractors
tblOffRoadEquipment	OffRoadEquipmentType		Crushing/Proc. Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Other Construction Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Rubber Tired Dozers
tblOffRoadEquipment	OffRoadEquipmentType		Rubber Tired Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Scrapers
tblOffRoadEquipment	OffRoadEquipmentType		Signal Boards
tblOffRoadEquipment	OffRoadEquipmentType		Skid Steer Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Signal Boards
tblOffRoadEquipment	OffRoadEquipmentType		Skid Steer Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Signal Boards
tblOffRoadEquipment	OffRoadEquipmentType		Surfacing Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Cement and Mortar Mixers
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00

Marea Village - San Diego County APCD Air District, Summer

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

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblTripsAndVMT	HaulingTripLength	20.00	25.00
tblTripsAndVMT	HaulingTripLength	20.00	3.00
tblVehicleTrips	PB_TP	43.00	12.00
tblVehicleTrips	PB_TP	44.00	12.00
tblVehicleTrips	PR_TP	37.00	68.00
tblVehicleTrips	PR_TP	38.00	70.00
tblVehicleTrips	ST_TR	8.14	6.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	2.21	20.07
tblVehicleTrips	ST_TR	122.40	160.05
tblVehicleTrips	ST_TR	8.19	10.00
tblVehicleTrips	ST_TR	90.04	99.81
tblVehicleTrips	ST_TR	42.04	39.96
tblVehicleTrips	SU_TR	6.28	6.00
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	0.70	20.07
tblVehicleTrips	SU_TR	142.64	160.05
tblVehicleTrips	SU_TR	5.95	10.00
tblVehicleTrips	SU_TR	71.97	99.81
tblVehicleTrips	SU_TR	20.43	39.96
tblVehicleTrips	WD_TR	7.32	6.00
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	9.74	20.07
tblVehicleTrips	WD_TR	112.18	160.05
tblVehicleTrips	WD_TR	8.36	10.00

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

tblVehicleTrips	WD_TR	83.84	99.81
tblVehicleTrips	WD_TR	44.32	39.96

2.0 Emissions Summary

Marea Village - San Diego County APCD Air District, Summer

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

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	12.3580	62.0951	59.1590	0.1289	3.5516	2.5706	5.8292	0.6893	2.3920	2.8496	0.0000	12,553.6956	12,553.6956	3.2402	0.2999	12,715.5065
2024	12.2247	20.4998	30.0849	0.0535	1.5582	0.9254	2.4836	0.4188	0.8588	1.2776	0.0000	5,291.9196	5,291.9196	1.3438	0.1406	5,359.8214
Maximum	**12.3580**	**62.0951**	**59.1590**	**0.1289**	**3.5516**	**2.5706**	**5.8292**	**0.6893**	**2.3920**	**2.8496**	**0.0000**	**12,553.6956**	**12,553.6956**	**3.2402**	**0.2999**	**12,715.5065**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	12.3580	62.0951	59.1590	0.1289	2.5274	2.5706	4.8050	0.5764	2.3920	2.6906	0.0000	12,553.6956	12,553.6956	3.2402	0.2999	12,715.5065
2024	12.2247	20.4998	30.0849	0.0535	1.5582	0.9254	2.4836	0.4188	0.8588	1.2776	0.0000	5,291.9196	5,291.9196	1.3438	0.1406	5,359.8214
Maximum	**12.3580**	**62.0951**	**59.1590**	**0.1289**	**2.5274**	**2.5706**	**4.8050**	**0.5764**	**2.3920**	**2.6906**	**0.0000**	**12,553.6956**	**12,553.6956**	**3.2402**	**0.2999**	**12,715.5065**

Marea Village - San Diego County APCD Air District, Summer

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	20.04	0.00	12.32	10.19	0.00	3.85	0.00	0.00	0.00	0.00	0.00	0.00

Marea Village - San Diego County APCD Air District, 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	146.9931	2.8990	185.3596	0.3221		24.9409	24.9409		24.9409	24.9409	2,610.5427	1,108.8555	3,719.3982	2.4227	0.2053	3,841.1560
Energy	0.0950	0.8472	0.6045	5.1800e-003		0.0656	0.0656		0.0656	0.0656		1,036.3940	1,036.3940	0.0199	0.0190	1,042.5528
Mobile	5.4674	5.0618	44.5105	0.0936	9.7687	0.0720	9.8408	2.6022	0.0671	2.6694		9,695.6962	9,695.6962	0.6846	0.4264	9,839.8862
Total	**152.5554**	**8.8079**	**230.4745**	**0.4209**	**9.7687**	**25.0786**	**34.8473**	**2.6022**	**25.0737**	**27.6759**	**2,610.5427**	**11,840.9457**	**14,451.4884**	**3.1271**	**0.6508**	**14,723.5950**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.3002	1.4930	8.3807	9.3700e-003		0.1565	0.1565		0.1565	0.1565	0.0000	1,805.5614	1,805.5614	0.0479	0.0328	1,816.5469
Energy	0.0950	0.8472	0.6045	5.1800e-003		0.0656	0.0656		0.0656	0.0656		1,036.3940	1,036.3940	0.0199	0.0190	1,042.5528
Mobile	5.4674	5.0618	44.5105	0.0936	9.7687	0.0720	9.8408	2.6022	0.0671	2.6694		9,695.6962	9,695.6962	0.6846	0.4264	9,839.8862
Total	**8.8625**	**7.4019**	**53.4957**	**0.1081**	**9.7687**	**0.2942**	**10.0629**	**2.6022**	**0.2893**	**2.8915**	**0.0000**	**12,537.6516**	**12,537.6516**	**0.7523**	**0.4783**	**12,698.9859**

Marea Village - San Diego County APCD Air District, Summer

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**94.19**	**15.96**	**76.79**	**74.31**	**0.00**	**98.83**	**71.12**	**0.00**	**98.85**	**89.55**	**100.00**	**-5.88**	**13.24**	**75.94**	**26.51**	**13.75**

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	1/3/2023	2/1/2023	5	22	
2	Grading	Grading	1/18/2023	5/4/2023	5	77	
3	Building Construction	Building Construction	3/6/2023	1/2/2024	5	217	
4	Paving	Paving	2/8/2024	5/24/2024	5	77	
5	Architectural Coating	Architectural Coating	10/26/2023	4/26/2024	5	132	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 115.5

Acres of Paving: 0.38

Residential Indoor: 147,789; Residential Outdoor: 49,263; Non-Residential Indoor: 54,555; Non-Residential Outdoor: 18,185; Striped Parking Area: 5,697 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Plate Compactors	2	8.00	8	0.43
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Crawler Tractors	1	8.00	212	0.43
Grading	Rollers	1	8.00	80	0.38
Demolition	Crushing/Proc. Equipment	1	8.00	85	0.78
Grading	Rough Terrain Forklifts	2	8.00	100	0.40

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

Demolition	Excavators	1	8.00	158	0.38
Demolition	Other Construction Equipment	2	8.00	172	0.42
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Rubber Tired Loaders	1	8.00	203	0.36
Grading	Scrapers	1	8.00	367	0.48
Grading	Bore/Drill Rigs	2	8.00	158	0.38
Grading	Cranes	1	8.00	187	0.41
Grading	Signal Boards	2	8.00	6	0.82
Grading	Skid Steer Loaders	1	8.00	65	0.37
Building Construction	Signal Boards	2	8.00	6	0.82
Grading	Crawler Tractors	1	8.00	247	0.40
Building Construction	Skid Steer Loaders	1	8.00	65	0.37
Building Construction	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Paving	Signal Boards	2	8.00	6	0.82
Paving	Surfacing Equipment	1	8.00	263	0.30
Grading	Excavators	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Other Construction Equipment	3	8.00	89	0.20
Building Construction	Paving Equipment	1	8.00	84	0.74
Paving	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Building Construction	Rough Terrain Forklifts	2	8.00	97	0.37
Building Construction	Rubber Tired Loaders	1	8.00	46	0.45
Paving	Graders	1	8.00	9	0.56
Paving	Off-Highway Trucks	4	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38
Paving	Rubber Tired Loaders	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

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	7	18.00	0.00	50.00	10.80	7.30	25.00	LD_Mix	HDT_Mix	HHDT
Grading	16	40.00	0.00	6,050.00	10.80	7.30	3.00	LD_Mix	HDT_Mix	HHDT
Building Construction	13	133.00	36.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	15	38.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	27.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.4983	0.0000	0.4983	0.0755	0.0000	0.0755			0.0000			0.0000
Off-Road	2.7983	26.2443	24.5969	0.0472		1.2360	1.2360		1.1598	1.1598		4,539.0972	4,539.0972	1.1304		4,567.3570
Total	**2.7983**	**26.2443**	**24.5969**	**0.0472**	**0.4983**	**1.2360**	**1.7343**	**0.0755**	**1.1598**	**1.2352**		**4,539.0972**	**4,539.0972**	**1.1304**		**4,567.3570**

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

3.2 Demolition - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	5.8300e-003	0.3614	0.0938	1.6900e-003	0.0497	3.1500e-003	0.0528	0.0136	3.0100e-003	0.0166		186.2976	186.2976	9.4200e-003	0.0296	195.3621
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	0.0492	0.0306	0.4332	1.3100e-003	0.1479	8.0000e-004	0.1487	0.0392	7.3000e-004	0.0400		133.7136	133.7136	3.5800e-003	3.2900e-003	134.7841
Total	**0.0551**	**0.3920**	**0.5269**	**3.0000e-003**	**0.1976**	**3.9500e-003**	**0.2015**	**0.0528**	**3.7400e-003**	**0.0566**		**320.0113**	**320.0113**	**0.0130**	**0.0329**	**330.1462**

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					0.1943	0.0000	0.1943	0.0294	0.0000	0.0294			0.0000			0.0000
Off-Road	2.7983	26.2443	24.5969	0.0472		1.2360	1.2360		1.1598	1.1598	0.0000	4,539.0972	4,539.0972	1.1304		4,567.3570
Total	**2.7983**	**26.2443**	**24.5969**	**0.0472**	**0.1943**	**1.2360**	**1.4304**	**0.0294**	**1.1598**	**1.1892**	**0.0000**	**4,539.0972**	**4,539.0972**	**1.1304**		**4,567.3570**

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

3.2 Demolition - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	5.8300e-003	0.3614	0.0938	1.6900e-003	0.0497	3.1500e-003	0.0528	0.0136	3.0100e-003	0.0166		186.2976	186.2976	9.4200e-003	0.0296	195.3621
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	0.0492	0.0306	0.4332	1.3100e-003	0.1479	8.0000e-004	0.1487	0.0392	7.3000e-004	0.0400		133.7136	133.7136	3.5800e-003	3.2900e-003	134.7841
Total	**0.0551**	**0.3920**	**0.5269**	**3.0000e-003**	**0.1976**	**3.9500e-003**	**0.2015**	**0.0528**	**3.7400e-003**	**0.0566**		**320.0113**	**320.0113**	**0.0130**	**0.0329**	**330.1462**

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.6791	0.0000	1.6791	0.1851	0.0000	0.1851			0.0000			0.0000
Off-Road	3.1227	32.6504	31.6740	0.0671		1.3150	1.3150		1.2136	1.2136		6,434.0978	6,434.0978	2.0441		6,485.2007
Total	**3.1227**	**32.6504**	**31.6740**	**0.0671**	**1.6791**	**1.3150**	**2.9941**	**0.1851**	**1.2136**	**1.3988**		**6,434.0978**	**6,434.0978**	**2.0441**		**6,485.2007**

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

3.3 Grading - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0971	2.7406	1.3987	8.7500e-003	0.2076	0.0139	0.2214	0.0570	0.0133	0.0703		963.3479	963.3479	0.0448	0.1531	1,010.0758
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	0.1094	0.0679	0.9626	2.9000e-003	0.3286	1.7700e-003	0.3304	0.0872	1.6300e-003	0.0888		297.1414	297.1414	7.9500e-003	7.3200e-003	299.5203
Total	**0.2065**	**2.8085**	**2.3613**	**0.0117**	**0.5361**	**0.0156**	**0.5518**	**0.1442**	**0.0149**	**0.1591**		**1,260.4893**	**1,260.4893**	**0.0527**	**0.1604**	**1,309.5961**

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					0.6548	0.0000	0.6548	0.0722	0.0000	0.0722			0.0000			0.0000
Off-Road	3.1227	32.6504	31.6740	0.0671		1.3150	1.3150		1.2136	1.2136	0.0000	6,434.0978	6,434.0978	2.0441		6,485.2007
Total	**3.1227**	**32.6504**	**31.6740**	**0.0671**	**0.6548**	**1.3150**	**1.9699**	**0.0722**	**1.2136**	**1.2858**	**0.0000**	**6,434.0978**	**6,434.0978**	**2.0441**		**6,485.2007**

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

3.3 Grading - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0971	2.7406	1.3987	8.7500e-003	0.2076	0.0139	0.2214	0.0570	0.0133	0.0703		963.3479	963.3479	0.0448	0.1531	1,010.0758
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	0.1094	0.0679	0.9626	2.9000e-003	0.3286	1.7700e-003	0.3304	0.0872	1.6300e-003	0.0888		297.1414	297.1414	7.9500e-003	7.3200e-003	299.5203
Total	**0.2065**	**2.8085**	**2.3613**	**0.0117**	**0.5361**	**0.0156**	**0.5518**	**0.1442**	**0.0149**	**0.1591**		**1,260.4893**	**1,260.4893**	**0.0527**	**0.1604**	**1,309.5961**

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	2.0124	18.4514	21.0436	0.0321		0.9317	0.9317		0.8594	0.8594		3,069.8172	3,069.8172	0.9712		3,094.0968
Total	**2.0124**	**18.4514**	**21.0436**	**0.0321**		**0.9317**	**0.9317**		**0.8594**	**0.8594**		**3,069.8172**	**3,069.8172**	**0.9712**		**3,094.0968**

Marea Village - San Diego County APCD Air District, 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 Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive 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	0.0430	1.5432	0.5561	7.3700e-003	0.2438	9.4000e-003	0.2532	0.0702	8.9900e-003	0.0792		795.7690	795.7690	0.0241	0.1152	830.7079
Worker	0.3637	0.2259	3.2005	9.6500e-003	1.0926	5.8800e-003	1.0984	0.2898	5.4100e-003	0.2952		987.9952	987.9952	0.0265	0.0243	995.9050
Total	**0.4067**	**1.7691**	**3.7566**	**0.0170**	**1.3364**	**0.0153**	**1.3517**	**0.3600**	**0.0144**	**0.3744**		**1,783.7642**	**1,783.7642**	**0.0506**	**0.1395**	**1,826.6129**

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	2.0124	18.4514	21.0436	0.0321		0.9317	0.9317		0.8594	0.8594	0.0000	3,069.8172	3,069.8172	0.9712		3,094.0968
Total	**2.0124**	**18.4514**	**21.0436**	**0.0321**		**0.9317**	**0.9317**		**0.8594**	**0.8594**	**0.0000**	**3,069.8172**	**3,069.8172**	**0.9712**		**3,094.0968**

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	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	0.0430	1.5432	0.5561	7.3700e-003	0.2438	9.4000e-003	0.2532	0.0702	8.9900e-003	0.0792		795.7690	795.7690	0.0241	0.1152	830.7079
Worker	0.3637	0.2259	3.2005	9.6500e-003	1.0926	5.8800e-003	1.0984	0.2898	5.4100e-003	0.2952		987.9952	987.9952	0.0265	0.0243	995.9050
Total	**0.4067**	**1.7691**	**3.7566**	**0.0170**	**1.3364**	**0.0153**	**1.3517**	**0.3600**	**0.0144**	**0.3744**		**1,783.7642**	**1,783.7642**	**0.0506**	**0.1395**	**1,826.6129**

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	1.9181	17.5039	20.9944	0.0321		0.8483	0.8483		0.7826	0.7826		3,069.9241	3,069.9241	0.9712		3,094.2045
Total	**1.9181**	**17.5039**	**20.9944**	**0.0321**		**0.8483**	**0.8483**		**0.7826**	**0.7826**		**3,069.9241**	**3,069.9241**	**0.9712**		**3,094.2045**

Marea Village - San Diego County APCD Air District, 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 Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive 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	0.0414	1.5327	0.5431	7.2300e-003	0.2438	9.4500e-003	0.2533	0.0702	9.0400e-003	0.0792		781.8950	781.8950	0.0247	0.1132	816.2471
Worker	0.3416	0.2032	2.9908	9.3400e-003	1.0926	5.6000e-003	1.0982	0.2898	5.1600e-003	0.2950		963.1299	963.1299	0.0241	0.0227	970.5057
Total	**0.3830**	**1.7359**	**3.5340**	**0.0166**	**1.3364**	**0.0151**	**1.3514**	**0.3600**	**0.0142**	**0.3742**		**1,745.0249**	**1,745.0249**	**0.0487**	**0.1359**	**1,786.7527**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9181	17.5039	20.9944	0.0321		0.8483	0.8483		0.7826	0.7826	0.0000	3,069.9241	3,069.9241	0.9712		3,094.2045
Total	**1.9181**	**17.5039**	**20.9944**	**0.0321**		**0.8483**	**0.8483**		**0.7826**	**0.7826**	**0.0000**	**3,069.9241**	**3,069.9241**	**0.9712**		**3,094.2045**

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	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	0.0414	1.5327	0.5431	7.2300e-003	0.2438	9.4500e-003	0.2533	0.0702	9.0400e-003	0.0792		781.8950	781.8950	0.0247	0.1132	816.2471
Worker	0.3416	0.2032	2.9908	9.3400e-003	1.0926	5.6000e-003	1.0982	0.2898	5.1600e-003	0.2950		963.1299	963.1299	0.0241	0.0227	970.5057
Total	**0.3830**	**1.7359**	**3.5340**	**0.0166**	**1.3364**	**0.0151**	**1.3514**	**0.3600**	**0.0142**	**0.3742**		**1,745.0249**	**1,745.0249**	**0.0487**	**0.1359**	**1,786.7527**

3.5 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	2.1012	17.1140	26.8131	0.0439		0.8220	0.8220		0.7602	0.7602		4,187.8320	4,187.8320	1.3161		4,220.7353
Paving	0.0129					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.1141**	**17.1140**	**26.8131**	**0.0439**		**0.8220**	**0.8220**		**0.7602**	**0.7602**		**4,187.8320**	**4,187.8320**	**1.3161**		**4,220.7353**

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

3.5 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0976	0.0581	0.8545	2.6700e-003	0.3122	1.6000e-003	0.3138	0.0828	1.4700e-003	0.0843		275.1800	275.1800	6.8800e-003	6.4900e-003	277.2873
Total	**0.0976**	**0.0581**	**0.8545**	**2.6700e-003**	**0.3122**	**1.6000e-003**	**0.3138**	**0.0828**	**1.4700e-003**	**0.0843**		**275.1800**	**275.1800**	**6.8800e-003**	**6.4900e-003**	**277.2873**

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	2.1012	17.1140	26.8131	0.0439		0.8220	0.8220		0.7602	0.7602	0.0000	4,187.8320	4,187.8320	1.3161		4,220.7353
Paving	0.0129					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.1141**	**17.1140**	**26.8131**	**0.0439**		**0.8220**	**0.8220**		**0.7602**	**0.7602**	**0.0000**	**4,187.8320**	**4,187.8320**	**1.3161**		**4,220.7353**

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

3.5 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0976	0.0581	0.8545	2.6700e-003	0.3122	1.6000e-003	0.3138	0.0828	1.4700e-003	0.0843		275.1800	275.1800	6.8800e-003	6.4900e-003	277.2873
Total	**0.0976**	**0.0581**	**0.8545**	**2.6700e-003**	**0.3122**	**1.6000e-003**	**0.3138**	**0.0828**	**1.4700e-003**	**0.0843**		**275.1800**	**275.1800**	**6.8800e-003**	**6.4900e-003**	**277.2873**

3.6 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	9.6734					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	**9.8651**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8690**

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

3.6 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0738	0.0459	0.6497	1.9600e-003	0.2218	1.1900e-003	0.2230	0.0588	1.1000e-003	0.0599		200.5705	200.5705	5.3700e-003	4.9400e-003	202.1762
Total	**0.0738**	**0.0459**	**0.6497**	**1.9600e-003**	**0.2218**	**1.1900e-003**	**0.2230**	**0.0588**	**1.1000e-003**	**0.0599**		**200.5705**	**200.5705**	**5.3700e-003**	**4.9400e-003**	**202.1762**

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	9.6734					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	**9.8651**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8690**

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

3.6 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0738	0.0459	0.6497	1.9600e-003	0.2218	1.1900e-003	0.2230	0.0588	1.1000e-003	0.0599		200.5705	200.5705	5.3700e-003	4.9400e-003	202.1762
Total	**0.0738**	**0.0459**	**0.6497**	**1.9600e-003**	**0.2218**	**1.1900e-003**	**0.2230**	**0.0588**	**1.1000e-003**	**0.0599**		**200.5705**	**200.5705**	**5.3700e-003**	**4.9400e-003**	**202.1762**

3.6 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	9.6734					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
Total	**9.8542**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

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

3.6 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	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	0.0694	0.0413	0.6072	1.9000e-003	0.2218	1.1400e-003	0.2229	0.0588	1.0500e-003	0.0599		195.5226	195.5226	4.8900e-003	4.6100e-003	197.0199
Total	**0.0694**	**0.0413**	**0.6072**	**1.9000e-003**	**0.2218**	**1.1400e-003**	**0.2229**	**0.0588**	**1.0500e-003**	**0.0599**		**195.5226**	**195.5226**	**4.8900e-003**	**4.6100e-003**	**197.0199**

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	9.6734					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
Total	**9.8542**	**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**

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

3.6 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	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	0.0694	0.0413	0.6072	1.9000e-003	0.2218	1.1400e-003	0.2229	0.0588	1.0500e-003	0.0599		195.5226	195.5226	4.8900e-003	4.6100e-003	197.0199
Total	**0.0694**	**0.0413**	**0.6072**	**1.9000e-003**	**0.2218**	**1.1400e-003**	**0.2229**	**0.0588**	**1.0500e-003**	**0.0599**		**195.5226**	**195.5226**	**4.8900e-003**	**4.6100e-003**	**197.0199**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.4674	5.0618	44.5105	0.0936	9.7687	0.0720	9.8408	2.6022	0.0671	2.6694		9,695.6962	9,695.6962	0.6846	0.4264	9,839.8862
Unmitigated	5.4674	5.0618	44.5105	0.0936	9.7687	0.0720	9.8408	2.6022	0.0671	2.6694		9,695.6962	9,695.6962	0.6846	0.4264	9,839.8862

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	564.00	564.00	564.00	1,610,391	1,610,391
City Park	0.00	0.00	0.00		
Enclosed Parking with Elevator	0.00	0.00	0.00		
General Office Building	73.05	73.05	73.05	174,583	174,583
High Turnover (Sit Down Restaurant)	624.20	624.20	624.20	1,244,529	1,244,529
Hotel	340.00	340.00	340.00	645,976	645,976
Parking Lot	0.00	0.00	0.00		
Quality Restaurant	212.60	212.60	212.60	437,005	437,005
Strip Mall	342.86	342.86	342.86	528,011	528,011
Total	2,156.70	2,156.70	2,156.70	4,640,495	4,640,495

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
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

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

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	9.50	7.30	7.30	8.50	72.50	19.00	68	20	12
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Quality Restaurant	9.50	7.30	7.30	12.00	69.00	19.00	70	18	12
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	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
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
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
High Turnover (Sit Down Restaurant)	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
Hotel	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
Parking Lot	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
Quality Restaurant	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
Strip Mall	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

Install High Efficiency Lighting

Marea Village - San Diego County APCD Air District, 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	0.0950	0.8472	0.6045	5.1800e-003		0.0656	0.0656		0.0656	0.0656		1,036.3940	1,036.3940	0.0199	0.0190	1,042.5528
NaturalGas Unmitigated	0.0950	0.8472	0.6045	5.1800e-003		0.0656	0.0656		0.0656	0.0656		1,036.3940	1,036.3940	0.0199	0.0190	1,042.5528

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

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	2805.67	0.0303	0.2586	0.1100	1.6500e-003		0.0209	0.0209		0.0209	0.0209		330.0786	330.0786	6.3300e-003	6.0500e-003	332.0401
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	199.641	2.1500e-003	0.0196	0.0164	1.2000e-004		1.4900e-003	1.4900e-003		1.4900e-003	1.4900e-003		23.4872	23.4872	4.5000e-004	4.3000e-004	23.6268
High Turnover (Sit Down Restaurant)	1861.78	0.0201	0.1825	0.1533	1.1000e-003		0.0139	0.0139		0.0139	0.0139		219.0324	219.0324	4.2000e-003	4.0200e-003	220.3340
Hotel	2872.63	0.0310	0.2816	0.2366	1.6900e-003		0.0214	0.0214		0.0214	0.0214		337.9568	337.9568	6.4800e-003	6.2000e-003	339.9652
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	1017.42	0.0110	0.0998	0.0838	6.0000e-004		7.5800e-003	7.5800e-003		7.5800e-003	7.5800e-003		119.6966	119.6966	2.2900e-003	2.1900e-003	120.4079
Strip Mall	52.2095	5.6000e-004	5.1200e-003	4.3000e-003	3.0000e-005		3.9000e-004	3.9000e-004		3.9000e-004	3.9000e-004		6.1423	6.1423	1.2000e-004	1.1000e-004	6.1788
Total		**0.0950**	**0.8472**	**0.6045**	**5.1900e-003**		**0.0656**	**0.0656**		**0.0656**	**0.0656**		**1,036.3940**	**1,036.3940**	**0.0199**	**0.0190**	**1,042.5528**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	2.80567	0.0303	0.2586	0.1100	1.6500e-003		0.0209	0.0209		0.0209	0.0209		330.0786	330.0786	6.3300e-003	6.0500e-003	332.0401
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	0.199641	2.1500e-003	0.0196	0.0164	1.2000e-004		1.4900e-003	1.4900e-003		1.4900e-003	1.4900e-003		23.4872	23.4872	4.5000e-004	4.3000e-004	23.6268
High Turnover (Sit Down Restaurant)	1.86178	0.0201	0.1825	0.1533	1.1000e-003		0.0139	0.0139		0.0139	0.0139		219.0324	219.0324	4.2000e-003	4.0200e-003	220.3340
Hotel	2.87263	0.0310	0.2816	0.2366	1.6900e-003		0.0214	0.0214		0.0214	0.0214		337.9568	337.9568	6.4800e-003	6.2000e-003	339.9652
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	1.01742	0.0110	0.0998	0.0838	6.0000e-004		7.5800e-003	7.5800e-003		7.5800e-003	7.5800e-003		119.6966	119.6966	2.2900e-003	2.1900e-003	120.4079
Strip Mall	0.0522095	5.6000e-004	5.1200e-003	4.3000e-003	3.0000e-005		3.9000e-004	3.9000e-004		3.9000e-004	3.9000e-004		6.1423	6.1423	1.2000e-004	1.1000e-004	6.1788
Total		**0.0950**	**0.8472**	**0.6045**	**5.1900e-003**		**0.0656**	**0.0656**		**0.0656**	**0.0656**		**1,036.3940**	**1,036.3940**	**0.0199**	**0.0190**	**1,042.5528**

6.0 Area Detail

6.1 Mitigation Measures Area

Use only Natural Gas Hearths

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	3.3002	1.4930	8.3807	9.3700e-003		0.1565	0.1565		0.1565	0.1565	0.0000	1,805.5614	1,805.5614	0.0479	0.0328	1,816.5469
Unmitigated	146.9931	2.8990	185.3596	0.3221		24.9409	24.9409		24.9409	24.9409	2,610.5427	1,108.8555	3,719.3982	2.4227	0.2053	3,841.1560

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.5248					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.3752					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	143.8571	2.8094	177.5760	0.3217		24.8979	24.8979		24.8979	24.8979	2,610.5427	1,094.8235	3,705.3662	2.4091	0.2053	3,826.7847
Landscaping	0.2360	0.0896	7.7836	4.1000e-004		0.0431	0.0431		0.0431	0.0431		14.0320	14.0320	0.0136		14.3714
Total	**146.9931**	**2.8990**	**185.3596**	**0.3221**		**24.9409**	**24.9409**		**24.9409**	**24.9409**	**2,610.5427**	**1,108.8555**	**3,719.3982**	**2.4227**	**0.2053**	**3,841.1560**

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

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.5248					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.3752					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.1642	1.4034	0.5972	8.9600e-003		0.1135	0.1135		0.1135	0.1135	0.0000	1,791.5294	1,791.5294	0.0343	0.0328	1,802.1756
Landscaping	0.2360	0.0896	7.7836	4.1000e-004		0.0431	0.0431		0.0431	0.0431		14.0320	14.0320	0.0136		14.3714
Total	**3.3002**	**1.4930**	**8.3807**	**9.3700e-003**		**0.1565**	**0.1565**		**0.1565**	**0.1565**	**0.0000**	**1,805.5614**	**1,805.5614**	**0.0479**	**0.0328**	**1,816.5469**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

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

Institute Recycling and Composting Services

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

Marea Village - San Diego County APCD Air District, Winter

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

Marea Village

San Diego County APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	3.64	1000sqft	0.08	3,638.00	0
Enclosed Parking with Elevator	216.00	Space	0.00	78,158.00	0
Parking Lot	42.00	Space	0.38	16,800.00	0
City Park	0.65	Acre	0.65	27,194.00	0
High Turnover (Sit Down Restaurant)	3.90	1000sqft	0.00	3,905.00	0
Hotel	34.00	Room	1.13	18,109.00	0
Quality Restaurant	2.13	1000sqft	0.00	2,134.00	0
Apartments Low Rise	94.00	Dwelling Unit	1.56	72,982.00	269
Strip Mall	8.58	1000sqft	0.00	8,584.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2024
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	539.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Per traffic study and site plan; total lot 3.8 acres, therefore lot acreage modified to match.

Construction Phase - Per PD, assuming utilities/infrastructure and Hwy 101 improvements would occur during Building Construction phase.

Marea Village - San Diego County APCD Air District, Winter

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

Off-road Equipment - Per construction questionnaire.

Off-road Equipment - Per construction questionnaire.

Off-road Equipment - Per construction questionnaire.

Off-road Equipment - Per construction questionnaire.

Off-road Equipment - Per construction questionnaire.

Off-road Equipment - No construction emissions - existing operations only.

Trips and VMT - Demolition materials would be hauled 25 miles (project site to Miramar Landfill); earthwork materials form grading activities would be hauled max. 3 miles (project site to the nearest beach).

Demolition -

Grading -

Architectural Coating - Per SDAPCD Rule 67.0.1

Vehicle Trips - Per traffic study.

Area Coating - Per SDAPCD Rule 67.0.1

Construction Off-road Equipment Mitigation - Per construction questionniare, there would be dust control implemented (water exposed area three times a day) as a project design feature.

Area Mitigation - No wood-burning associated hearth would be produced.

Energy Mitigation - Per operational questionniare, high efficiency lighting would be installed as a project design feature.

Waste Mitigation - Per AB 341.

Water Mitigation - Per operational questionniare, low-flow water fixtures would be installed as a project design feature.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaCoating	Area_EF_Parking	250	150
tblAreaCoating	Area_EF_Residential_Exterior	250	150

Marea Village - San Diego County APCD Air District, Winter

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

tblAreaCoating	Area_EF_Residential_Interior	250	150
tblConstructionPhase	NumDays	20.00	22.00
tblConstructionPhase	NumDays	8.00	77.00
tblConstructionPhase	NumDays	230.00	217.00
tblConstructionPhase	NumDays	18.00	132.00
tblConstructionPhase	NumDays	18.00	77.00
tblConstructionPhase	PhaseEndDate	9/28/2021	2/1/2023
tblConstructionPhase	PhaseEndDate	10/8/2021	5/4/2023
tblConstructionPhase	PhaseEndDate	8/26/2022	1/2/2024
tblConstructionPhase	PhaseEndDate	10/17/2022	4/26/2024
tblConstructionPhase	PhaseEndDate	9/21/2022	5/24/2024
tblConstructionPhase	PhaseStartDate	9/1/2021	1/3/2023
tblConstructionPhase	PhaseStartDate	9/29/2021	1/18/2023
tblConstructionPhase	PhaseStartDate	10/9/2021	3/6/2023
tblConstructionPhase	PhaseStartDate	9/22/2022	10/26/2023
tblConstructionPhase	PhaseStartDate	8/27/2022	2/8/2024
tblGrading	MaterialExported	0.00	48,400.00
tblLandUse	LandUseSquareFeet	3,640.00	3,638.00
tblLandUse	LandUseSquareFeet	86,400.00	78,158.00
tblLandUse	LandUseSquareFeet	28,314.00	27,194.00
tblLandUse	LandUseSquareFeet	3,900.00	3,905.00
tblLandUse	LandUseSquareFeet	49,368.00	18,109.00
tblLandUse	LandUseSquareFeet	2,130.00	2,134.00
tblLandUse	LandUseSquareFeet	94,000.00	72,982.00
tblLandUse	LandUseSquareFeet	8,580.00	8,584.00
tblLandUse	LotAcreage	1.94	0.00
tblLandUse	LotAcreage	0.09	0.00
tblLandUse	LotAcreage	0.05	0.00
tblLandUse	LotAcreage	5.88	1.56

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

tblLandUse	LotAcreage	0.20	0.00
tblOffRoadEquipment	HorsePower	187.00	9.00
tblOffRoadEquipment	HorsePower	221.00	158.00
tblOffRoadEquipment	HorsePower	172.00	89.00
tblOffRoadEquipment	HorsePower	132.00	84.00
tblOffRoadEquipment	HorsePower	231.00	187.00
tblOffRoadEquipment	HorsePower	402.00	130.00
tblOffRoadEquipment	HorsePower	212.00	247.00
tblOffRoadEquipment	HorsePower	100.00	97.00
tblOffRoadEquipment	HorsePower	158.00	97.00
tblOffRoadEquipment	HorsePower	203.00	97.00
tblOffRoadEquipment	HorsePower	203.00	46.00
tblOffRoadEquipment	LoadFactor	0.41	0.56
tblOffRoadEquipment	LoadFactor	0.50	0.38
tblOffRoadEquipment	LoadFactor	0.42	0.20
tblOffRoadEquipment	LoadFactor	0.36	0.74
tblOffRoadEquipment	LoadFactor	0.29	0.41
tblOffRoadEquipment	LoadFactor	0.38	0.42
tblOffRoadEquipment	LoadFactor	0.43	0.40
tblOffRoadEquipment	LoadFactor	0.40	0.37
tblOffRoadEquipment	LoadFactor	0.38	0.37
tblOffRoadEquipment	LoadFactor	0.36	0.37
tblOffRoadEquipment	LoadFactor	0.36	0.45
tblOffRoadEquipment	OffRoadEquipmentType	Cement and Mortar Mixers	Graders
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentType		Rollers
tblOffRoadEquipment	OffRoadEquipmentType	Excavators	Bore/Drill Rigs
tblOffRoadEquipment	OffRoadEquipmentType	Forklifts	Other Construction Equipment
tblOffRoadEquipment	OffRoadEquipmentType	Generator Sets	Paving Equipment

Marea Village - San Diego County APCD Air District, Winter

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

tblOffRoadEquipment	OffRoadEquipmentType	Graders	Cranes
tblOffRoadEquipment	OffRoadEquipmentType	Pavers	Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentType	Rubber Tired Dozers	Crawler Tractors
tblOffRoadEquipment	OffRoadEquipmentType	Tractors/Loaders/Backhoes	Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentType	Tractors/Loaders/Backhoes	Rubber Tired Loaders
tblOffRoadEquipment	OffRoadEquipmentType	Welders	Rubber Tired Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Concrete/Industrial Saws
tblOffRoadEquipment	OffRoadEquipmentType		Crawler Tractors
tblOffRoadEquipment	OffRoadEquipmentType		Crushing/Proc. Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Other Construction Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Rubber Tired Dozers
tblOffRoadEquipment	OffRoadEquipmentType		Rubber Tired Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Scrapers
tblOffRoadEquipment	OffRoadEquipmentType		Signal Boards
tblOffRoadEquipment	OffRoadEquipmentType		Skid Steer Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Signal Boards
tblOffRoadEquipment	OffRoadEquipmentType		Skid Steer Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Signal Boards
tblOffRoadEquipment	OffRoadEquipmentType		Surfacing Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Cement and Mortar Mixers
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00

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

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblTripsAndVMT	HaulingTripLength	20.00	25.00
tblTripsAndVMT	HaulingTripLength	20.00	3.00
tblVehicleTrips	PB_TP	43.00	12.00
tblVehicleTrips	PB_TP	44.00	12.00
tblVehicleTrips	PR_TP	37.00	68.00
tblVehicleTrips	PR_TP	38.00	70.00
tblVehicleTrips	ST_TR	8.14	6.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	2.21	20.07
tblVehicleTrips	ST_TR	122.40	160.05
tblVehicleTrips	ST_TR	8.19	10.00
tblVehicleTrips	ST_TR	90.04	99.81
tblVehicleTrips	ST_TR	42.04	39.96
tblVehicleTrips	SU_TR	6.28	6.00
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	0.70	20.07
tblVehicleTrips	SU_TR	142.64	160.05
tblVehicleTrips	SU_TR	5.95	10.00
tblVehicleTrips	SU_TR	71.97	99.81
tblVehicleTrips	SU_TR	20.43	39.96
tblVehicleTrips	WD_TR	7.32	6.00
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	9.74	20.07
tblVehicleTrips	WD_TR	112.18	160.05
tblVehicleTrips	WD_TR	8.36	10.00

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

tblVehicleTrips	WD_TR	83.84	99.81
tblVehicleTrips	WD_TR	44.32	39.96

2.0 Emissions Summary

Marea Village - San Diego County APCD Air District, Winter

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

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	12.3937	62.2719	59.1302	0.1287	3.5516	2.5708	5.8295	0.6893	2.3922	2.8498	0.0000	12,535.2146	12,535.2146	3.2403	0.3036	12,674.3263
2024	12.2592	20.5949	30.0149	0.0529	1.5582	0.9254	2.4836	0.4188	0.8588	1.2777	0.0000	5,229.5159	5,229.5159	1.3445	0.1430	5,298.2042
Maximum	**12.3937**	**62.2719**	**59.1302**	**0.1287**	**3.5516**	**2.5708**	**5.8295**	**0.6893**	**2.3922**	**2.8498**	**0.0000**	**12,535.2146**	**12,535.2146**	**3.2403**	**0.3036**	**12,674.3263**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	12.3937	62.2719	59.1302	0.1287	2.5274	2.5708	4.8052	0.5764	2.3922	2.6908	0.0000	12,535.2145	12,535.2145	3.2403	0.3036	12,674.3263
2024	12.2592	20.5949	30.0149	0.0529	1.5582	0.9254	2.4836	0.4188	0.8588	1.2777	0.0000	5,229.5159	5,229.5159	1.3445	0.1430	5,298.2042
Maximum	**12.3937**	**62.2719**	**59.1302**	**0.1287**	**2.5274**	**2.5708**	**4.8052**	**0.5764**	**2.3922**	**2.6908**	**0.0000**	**12,535.2145**	**12,535.2145**	**3.2403**	**0.3036**	**12,674.3263**

Marea Village - San Diego County APCD Air District, Winter

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	20.04	0.00	12.32	10.19	0.00	3.85	0.00	0.00	0.00	0.00	0.00	0.00

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	146.9931	2.8990	185.3596	0.3221		24.9409	24.9409		24.9409	24.9409	2,610.5427	1,108.8555	3,719.3982	2.4227	0.2053	3,841.1560
Energy	0.0950	0.8472	0.6045	5.1800e-003		0.0656	0.0656		0.0656	0.0656		1,036.3940	1,036.3940	0.0199	0.0190	1,042.5528
Mobile	5.3079	5.4929	46.1999	0.0895	9.7687	0.0721	9.8408	2.6022	0.0672	2.6694		9,278.1414	9,278.1414	0.7312	0.4503	9,430.6192
Total	**152.3959**	**9.2391**	**232.1639**	**0.4169**	**9.7687**	**25.0786**	**34.8474**	**2.6022**	**25.0738**	**27.6760**	**2,610.5427**	**11,423.3909**	**14,033.9336**	**3.1737**	**0.6747**	**14,314.3279**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.3002	1.4930	8.3807	9.3700e-003		0.1565	0.1565		0.1565	0.1565	0.0000	1,805.5614	1,805.5614	0.0479	0.0328	1,816.5469
Energy	0.0950	0.8472	0.6045	5.1800e-003		0.0656	0.0656		0.0656	0.0656		1,036.3940	1,036.3940	0.0199	0.0190	1,042.5528
Mobile	5.3079	5.4929	46.1999	0.0895	9.7687	0.0721	9.8408	2.6022	0.0672	2.6694		9,278.1414	9,278.1414	0.7312	0.4503	9,430.6192
Total	**8.7030**	**7.8331**	**55.1851**	**0.1041**	**9.7687**	**0.2942**	**10.0630**	**2.6022**	**0.2894**	**2.8916**	**0.0000**	**12,120.0968**	**12,120.0968**	**0.7990**	**0.5022**	**12,289.7189**

Marea Village - San Diego County APCD Air District, Winter

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**94.29**	**15.22**	**76.23**	**75.03**	**0.00**	**98.83**	**71.12**	**0.00**	**98.85**	**89.55**	**100.00**	**-6.10**	**13.64**	**74.83**	**25.57**	**14.14**

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	1/3/2023	2/1/2023	5	22	
2	Grading	Grading	1/18/2023	5/4/2023	5	77	
3	Building Construction	Building Construction	3/6/2023	1/2/2024	5	217	
4	Paving	Paving	2/8/2024	5/24/2024	5	77	
5	Architectural Coating	Architectural Coating	10/26/2023	4/26/2024	5	132	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 115.5

Acres of Paving: 0.38

Residential Indoor: 147,789; Residential Outdoor: 49,263; Non-Residential Indoor: 54,555; Non-Residential Outdoor: 18,185; Striped Parking Area: 5,697 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Plate Compactors	2	8.00	8	0.43
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Crawler Tractors	1	8.00	212	0.43
Grading	Rollers	1	8.00	80	0.38
Demolition	Crushing/Proc. Equipment	1	8.00	85	0.78
Grading	Rough Terrain Forklifts	2	8.00	100	0.40

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

Demolition	Excavators	1	8.00	158	0.38
Demolition	Other Construction Equipment	2	8.00	172	0.42
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Rubber Tired Loaders	1	8.00	203	0.36
Grading	Scrapers	1	8.00	367	0.48
Grading	Bore/Drill Rigs	2	8.00	158	0.38
Grading	Cranes	1	8.00	187	0.41
Grading	Signal Boards	2	8.00	6	0.82
Grading	Skid Steer Loaders	1	8.00	65	0.37
Building Construction	Signal Boards	2	8.00	6	0.82
Grading	Crawler Tractors	1	8.00	247	0.40
Building Construction	Skid Steer Loaders	1	8.00	65	0.37
Building Construction	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Paving	Signal Boards	2	8.00	6	0.82
Paving	Surfacing Equipment	1	8.00	263	0.30
Grading	Excavators	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Other Construction Equipment	3	8.00	89	0.20
Building Construction	Paving Equipment	1	8.00	84	0.74
Paving	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Building Construction	Rough Terrain Forklifts	2	8.00	97	0.37
Building Construction	Rubber Tired Loaders	1	8.00	46	0.45
Paving	Graders	1	8.00	9	0.56
Paving	Off-Highway Trucks	4	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38
Paving	Rubber Tired Loaders	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

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	7	18.00	0.00	50.00	10.80	7.30	25.00	LD_Mix	HDT_Mix	HHDT
Grading	16	40.00	0.00	6,050.00	10.80	7.30	3.00	LD_Mix	HDT_Mix	HHDT
Building Construction	13	133.00	36.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	15	38.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	27.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.4983	0.0000	0.4983	0.0755	0.0000	0.0755			0.0000			0.0000
Off-Road	2.7983	26.2443	24.5969	0.0472		1.2360	1.2360		1.1598	1.1598		4,539.0972	4,539.0972	1.1304		4,567.3570
Total	**2.7983**	**26.2443**	**24.5969**	**0.0472**	**0.4983**	**1.2360**	**1.7343**	**0.0755**	**1.1598**	**1.2352**		**4,539.0972**	**4,539.0972**	**1.1304**		**4,567.3570**

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

3.2 Demolition - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	5.5300e-003	0.3757	0.0948	1.6900e-003	0.0497	3.1500e-003	0.0528	0.0136	3.0200e-003	0.0166		186.4436	186.4436	9.4000e-003	0.0297	195.5149
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	0.0534	0.0344	0.4116	1.2300e-003	0.1479	8.0000e-004	0.1487	0.0392	7.3000e-004	0.0400		126.3637	126.3637	3.8100e-003	3.5600e-003	127.5200
Total	**0.0589**	**0.4101**	**0.5064**	**2.9200e-003**	**0.1976**	**3.9500e-003**	**0.2015**	**0.0528**	**3.7500e-003**	**0.0566**		**312.8073**	**312.8073**	**0.0132**	**0.0332**	**323.0349**

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					0.1943	0.0000	0.1943	0.0294	0.0000	0.0294			0.0000			0.0000
Off-Road	2.7983	26.2443	24.5969	0.0472		1.2360	1.2360		1.1598	1.1598	0.0000	4,539.0972	4,539.0972	1.1304		4,567.3570
Total	**2.7983**	**26.2443**	**24.5969**	**0.0472**	**0.1943**	**1.2360**	**1.4304**	**0.0294**	**1.1598**	**1.1892**	**0.0000**	**4,539.0972**	**4,539.0972**	**1.1304**		**4,567.3570**

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

3.2 Demolition - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	5.5300e-003	0.3757	0.0948	1.6900e-003	0.0497	3.1500e-003	0.0528	0.0136	3.0200e-003	0.0166		186.4436	186.4436	9.4000e-003	0.0297	195.5149
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	0.0534	0.0344	0.4116	1.2300e-003	0.1479	8.0000e-004	0.1487	0.0392	7.3000e-004	0.0400		126.3637	126.3637	3.8100e-003	3.5600e-003	127.5200
Total	**0.0589**	**0.4101**	**0.5064**	**2.9200e-003**	**0.1976**	**3.9500e-003**	**0.2015**	**0.0528**	**3.7500e-003**	**0.0566**		**312.8073**	**312.8073**	**0.0132**	**0.0332**	**323.0349**

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.6791	0.0000	1.6791	0.1851	0.0000	0.1851			0.0000			0.0000
Off-Road	3.1227	32.6504	31.6740	0.0671		1.3150	1.3150		1.2136	1.2136		6,434.0978	6,434.0978	2.0441		6,485.2007
Total	**3.1227**	**32.6504**	**31.6740**	**0.0671**	**1.6791**	**1.3150**	**2.9941**	**0.1851**	**1.2136**	**1.3988**		**6,434.0978**	**6,434.0978**	**2.0441**		**6,485.2007**

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

3.3 Grading - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0865	2.8908	1.4383	8.8000e-003	0.2076	0.0140	0.2216	0.0570	0.0134	0.0704		968.4041	968.4041	0.0441	0.1539	1,015.3561
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	0.1186	0.0764	0.9147	2.7400e-003	0.3286	1.7700e-003	0.3304	0.0872	1.6300e-003	0.0888		280.8081	280.8081	8.4700e-003	7.9100e-003	283.3777
Total	**0.2051**	**2.9672**	**2.3530**	**0.0115**	**0.5361**	**0.0158**	**0.5519**	**0.1442**	**0.0151**	**0.1592**		**1,249.2123**	**1,249.2123**	**0.0526**	**0.1618**	**1,298.7338**

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					0.6548	0.0000	0.6548	0.0722	0.0000	0.0722			0.0000			0.0000
Off-Road	3.1227	32.6504	31.6740	0.0671		1.3150	1.3150		1.2136	1.2136	0.0000	6,434.0978	6,434.0978	2.0441		6,485.2007
Total	**3.1227**	**32.6504**	**31.6740**	**0.0671**	**0.6548**	**1.3150**	**1.9699**	**0.0722**	**1.2136**	**1.2858**	**0.0000**	**6,434.0978**	**6,434.0978**	**2.0441**		**6,485.2007**

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

3.3 Grading - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0865	2.8908	1.4383	8.8000e-003	0.2076	0.0140	0.2216	0.0570	0.0134	0.0704		968.4041	968.4041	0.0441	0.1539	1,015.3561
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	0.1186	0.0764	0.9147	2.7400e-003	0.3286	1.7700e-003	0.3304	0.0872	1.6300e-003	0.0888		280.8081	280.8081	8.4700e-003	7.9100e-003	283.3777
Total	**0.2051**	**2.9672**	**2.3530**	**0.0115**	**0.5361**	**0.0158**	**0.5519**	**0.1442**	**0.0151**	**0.1592**		**1,249.2123**	**1,249.2123**	**0.0526**	**0.1618**	**1,298.7338**

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	2.0124	18.4514	21.0436	0.0321		0.9317	0.9317		0.8594	0.8594		3,069.8172	3,069.8172	0.9712		3,094.0968
Total	**2.0124**	**18.4514**	**21.0436**	**0.0321**		**0.9317**	**0.9317**		**0.8594**	**0.8594**		**3,069.8172**	**3,069.8172**	**0.9712**		**3,094.0968**

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	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	0.0418	1.6082	0.5729	7.3800e-003	0.2438	9.4500e-003	0.2533	0.0702	9.0400e-003	0.0792		796.9004	796.9004	0.0240	0.1155	831.9167
Worker	0.3944	0.2540	3.0412	9.1200e-003	1.0926	5.8800e-003	1.0984	0.2898	5.4100e-003	0.2952		933.6870	933.6870	0.0282	0.0263	942.2308
Total	**0.4362**	**1.8622**	**3.6141**	**0.0165**	**1.3364**	**0.0153**	**1.3517**	**0.3600**	**0.0145**	**0.3744**		**1,730.5874**	**1,730.5874**	**0.0522**	**0.1418**	**1,774.1475**

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	2.0124	18.4514	21.0436	0.0321		0.9317	0.9317		0.8594	0.8594	0.0000	3,069.8172	3,069.8172	0.9712		3,094.0968
Total	**2.0124**	**18.4514**	**21.0436**	**0.0321**		**0.9317**	**0.9317**		**0.8594**	**0.8594**	**0.0000**	**3,069.8172**	**3,069.8172**	**0.9712**		**3,094.0968**

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	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	0.0418	1.6082	0.5729	7.3800e-003	0.2438	9.4500e-003	0.2533	0.0702	9.0400e-003	0.0792		796.9004	796.9004	0.0240	0.1155	831.9167
Worker	0.3944	0.2540	3.0412	9.1200e-003	1.0926	5.8800e-003	1.0984	0.2898	5.4100e-003	0.2952		933.6870	933.6870	0.0282	0.0263	942.2308
Total	**0.4362**	**1.8622**	**3.6141**	**0.0165**	**1.3364**	**0.0153**	**1.3517**	**0.3600**	**0.0145**	**0.3744**		**1,730.5874**	**1,730.5874**	**0.0522**	**0.1418**	**1,774.1475**

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	1.9181	17.5039	20.9944	0.0321		0.8483	0.8483		0.7826	0.7826		3,069.9241	3,069.9241	0.9712		3,094.2045
Total	**1.9181**	**17.5039**	**20.9944**	**0.0321**		**0.8483**	**0.8483**		**0.7826**	**0.7826**		**3,069.9241**	**3,069.9241**	**0.9712**		**3,094.2045**

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	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	0.0401	1.5974	0.5599	7.2400e-003	0.2438	9.4900e-003	0.2533	0.0702	9.0800e-003	0.0793		783.0385	783.0385	0.0246	0.1135	817.4658
Worker	0.3714	0.2285	2.8476	8.8200e-003	1.0926	5.6000e-003	1.0982	0.2898	5.1600e-003	0.2950		910.3063	910.3063	0.0257	0.0246	918.2733
Total	**0.4115**	**1.8258**	**3.4074**	**0.0161**	**1.3364**	**0.0151**	**1.3515**	**0.3600**	**0.0142**	**0.3742**		**1,693.3447**	**1,693.3447**	**0.0502**	**0.1381**	**1,735.7391**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9181	17.5039	20.9944	0.0321		0.8483	0.8483		0.7826	0.7826	0.0000	3,069.9241	3,069.9241	0.9712		3,094.2045
Total	**1.9181**	**17.5039**	**20.9944**	**0.0321**		**0.8483**	**0.8483**		**0.7826**	**0.7826**	**0.0000**	**3,069.9241**	**3,069.9241**	**0.9712**		**3,094.2045**

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	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	0.0401	1.5974	0.5599	7.2400e-003	0.2438	9.4900e-003	0.2533	0.0702	9.0800e-003	0.0793		783.0385	783.0385	0.0246	0.1135	817.4658
Worker	0.3714	0.2285	2.8476	8.8200e-003	1.0926	5.6000e-003	1.0982	0.2898	5.1600e-003	0.2950		910.3063	910.3063	0.0257	0.0246	918.2733
Total	**0.4115**	**1.8258**	**3.4074**	**0.0161**	**1.3364**	**0.0151**	**1.3515**	**0.3600**	**0.0142**	**0.3742**		**1,693.3447**	**1,693.3447**	**0.0502**	**0.1381**	**1,735.7391**

3.5 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	2.1012	17.1140	26.8131	0.0439		0.8220	0.8220		0.7602	0.7602		4,187.8320	4,187.8320	1.3161		4,220.7353
Paving	0.0129					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.1141**	**17.1140**	**26.8131**	**0.0439**		**0.8220**	**0.8220**		**0.7602**	**0.7602**		**4,187.8320**	**4,187.8320**	**1.3161**		**4,220.7353**

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

3.5 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1061	0.0653	0.8136	2.5200e-003	0.3122	1.6000e-003	0.3138	0.0828	1.4700e-003	0.0843		260.0875	260.0875	7.3400e-003	7.0200e-003	262.3638
Total	**0.1061**	**0.0653**	**0.8136**	**2.5200e-003**	**0.3122**	**1.6000e-003**	**0.3138**	**0.0828**	**1.4700e-003**	**0.0843**		**260.0875**	**260.0875**	**7.3400e-003**	**7.0200e-003**	**262.3638**

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	2.1012	17.1140	26.8131	0.0439		0.8220	0.8220		0.7602	0.7602	0.0000	4,187.8320	4,187.8320	1.3161		4,220.7353
Paving	0.0129					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.1141**	**17.1140**	**26.8131**	**0.0439**		**0.8220**	**0.8220**		**0.7602**	**0.7602**	**0.0000**	**4,187.8320**	**4,187.8320**	**1.3161**		**4,220.7353**

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

3.5 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1061	0.0653	0.8136	2.5200e-003	0.3122	1.6000e-003	0.3138	0.0828	1.4700e-003	0.0843		260.0875	260.0875	7.3400e-003	7.0200e-003	262.3638
Total	**0.1061**	**0.0653**	**0.8136**	**2.5200e-003**	**0.3122**	**1.6000e-003**	**0.3138**	**0.0828**	**1.4700e-003**	**0.0843**		**260.0875**	**260.0875**	**7.3400e-003**	**7.0200e-003**	**262.3638**

3.6 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	9.6734					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	**9.8651**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8690**

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

3.6 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0801	0.0516	0.6174	1.8500e-003	0.2218	1.1900e-003	0.2230	0.0588	1.1000e-003	0.0599		189.5455	189.5455	5.7200e-003	5.3400e-003	191.2800
Total	**0.0801**	**0.0516**	**0.6174**	**1.8500e-003**	**0.2218**	**1.1900e-003**	**0.2230**	**0.0588**	**1.1000e-003**	**0.0599**		**189.5455**	**189.5455**	**5.7200e-003**	**5.3400e-003**	**191.2800**

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	9.6734					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	**9.8651**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8690**

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

3.6 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0801	0.0516	0.6174	1.8500e-003	0.2218	1.1900e-003	0.2230	0.0588	1.1000e-003	0.0599		189.5455	189.5455	5.7200e-003	5.3400e-003	191.2800
Total	**0.0801**	**0.0516**	**0.6174**	**1.8500e-003**	**0.2218**	**1.1900e-003**	**0.2230**	**0.0588**	**1.1000e-003**	**0.0599**		**189.5455**	**189.5455**	**5.7200e-003**	**5.3400e-003**	**191.2800**

3.6 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	9.6734					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
Total	**9.8542**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

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

3.6 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	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	0.0754	0.0464	0.5781	1.7900e-003	0.2218	1.1400e-003	0.2229	0.0588	1.0500e-003	0.0599		184.7990	184.7990	5.2200e-003	4.9900e-003	186.4164
Total	**0.0754**	**0.0464**	**0.5781**	**1.7900e-003**	**0.2218**	**1.1400e-003**	**0.2229**	**0.0588**	**1.0500e-003**	**0.0599**		**184.7990**	**184.7990**	**5.2200e-003**	**4.9900e-003**	**186.4164**

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	9.6734					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
Total	**9.8542**	**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**

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

3.6 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	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	0.0754	0.0464	0.5781	1.7900e-003	0.2218	1.1400e-003	0.2229	0.0588	1.0500e-003	0.0599		184.7990	184.7990	5.2200e-003	4.9900e-003	186.4164
Total	**0.0754**	**0.0464**	**0.5781**	**1.7900e-003**	**0.2218**	**1.1400e-003**	**0.2229**	**0.0588**	**1.0500e-003**	**0.0599**		**184.7990**	**184.7990**	**5.2200e-003**	**4.9900e-003**	**186.4164**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.3079	5.4929	46.1999	0.0895	9.7687	0.0721	9.8408	2.6022	0.0672	2.6694		9,278.1414	9,278.1414	0.7312	0.4503	9,430.6192
Unmitigated	5.3079	5.4929	46.1999	0.0895	9.7687	0.0721	9.8408	2.6022	0.0672	2.6694		9,278.1414	9,278.1414	0.7312	0.4503	9,430.6192

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	564.00	564.00	564.00	1,610,391	1,610,391
City Park	0.00	0.00	0.00		
Enclosed Parking with Elevator	0.00	0.00	0.00		
General Office Building	73.05	73.05	73.05	174,583	174,583
High Turnover (Sit Down Restaurant)	624.20	624.20	624.20	1,244,529	1,244,529
Hotel	340.00	340.00	340.00	645,976	645,976
Parking Lot	0.00	0.00	0.00		
Quality Restaurant	212.60	212.60	212.60	437,005	437,005
Strip Mall	342.86	342.86	342.86	528,011	528,011
Total	2,156.70	2,156.70	2,156.70	4,640,495	4,640,495

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
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

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

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	9.50	7.30	7.30	8.50	72.50	19.00	68	20	12
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Quality Restaurant	9.50	7.30	7.30	12.00	69.00	19.00	70	18	12
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	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
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
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
High Turnover (Sit Down Restaurant)	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
Hotel	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
Parking Lot	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
Quality Restaurant	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
Strip Mall	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

Install High Efficiency Lighting

Marea Village - San Diego County APCD Air District, 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	0.0950	0.8472	0.6045	5.1800e-003		0.0656	0.0656		0.0656	0.0656		1,036.3940	1,036.3940	0.0199	0.0190	1,042.5528
NaturalGas Unmitigated	0.0950	0.8472	0.6045	5.1800e-003		0.0656	0.0656		0.0656	0.0656		1,036.3940	1,036.3940	0.0199	0.0190	1,042.5528

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

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	2805.67	0.0303	0.2586	0.1100	1.6500e-003		0.0209	0.0209		0.0209	0.0209		330.0786	330.0786	6.3300e-003	6.0500e-003	332.0401
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	199.641	2.1500e-003	0.0196	0.0164	1.2000e-004		1.4900e-003	1.4900e-003		1.4900e-003	1.4900e-003		23.4872	23.4872	4.5000e-004	4.3000e-004	23.6268
High Turnover (Sit Down Restaurant)	1861.78	0.0201	0.1825	0.1533	1.1000e-003		0.0139	0.0139		0.0139	0.0139		219.0324	219.0324	4.2000e-003	4.0200e-003	220.3340
Hotel	2872.63	0.0310	0.2816	0.2366	1.6900e-003		0.0214	0.0214		0.0214	0.0214		337.9568	337.9568	6.4800e-003	6.2000e-003	339.9652
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	1017.42	0.0110	0.0998	0.0838	6.0000e-004		7.5800e-003	7.5800e-003		7.5800e-003	7.5800e-003		119.6966	119.6966	2.2900e-003	2.1900e-003	120.4079
Strip Mall	52.2095	5.6000e-004	5.1200e-003	4.3000e-003	3.0000e-005		3.9000e-004	3.9000e-004		3.9000e-004	3.9000e-004		6.1423	6.1423	1.2000e-004	1.1000e-004	6.1788
Total		**0.0950**	**0.8472**	**0.6045**	**5.1900e-003**		**0.0656**	**0.0656**		**0.0656**	**0.0656**		**1,036.3940**	**1,036.3940**	**0.0199**	**0.0190**	**1,042.5528**

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

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	2.80567	0.0303	0.2586	0.1100	1.6500e-003		0.0209	0.0209		0.0209	0.0209		330.0786	330.0786	6.3300e-003	6.0500e-003	332.0401
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	0.199641	2.1500e-003	0.0196	0.0164	1.2000e-004		1.4900e-003	1.4900e-003		1.4900e-003	1.4900e-003		23.4872	23.4872	4.5000e-004	4.3000e-004	23.6268
High Turnover (Sit Down Restaurant)	1.86178	0.0201	0.1825	0.1533	1.1000e-003		0.0139	0.0139		0.0139	0.0139		219.0324	219.0324	4.2000e-003	4.0200e-003	220.3340
Hotel	2.87263	0.0310	0.2816	0.2366	1.6900e-003		0.0214	0.0214		0.0214	0.0214		337.9568	337.9568	6.4800e-003	6.2000e-003	339.9652
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	1.01742	0.0110	0.0998	0.0838	6.0000e-004		7.5800e-003	7.5800e-003		7.5800e-003	7.5800e-003		119.6966	119.6966	2.2900e-003	2.1900e-003	120.4079
Strip Mall	0.0522095	5.6000e-004	5.1200e-003	4.3000e-003	3.0000e-005		3.9000e-004	3.9000e-004		3.9000e-004	3.9000e-004		6.1423	6.1423	1.2000e-004	1.1000e-004	6.1788
Total		**0.0950**	**0.8472**	**0.6045**	**5.1900e-003**		**0.0656**	**0.0656**		**0.0656**	**0.0656**		**1,036.3940**	**1,036.3940**	**0.0199**	**0.0190**	**1,042.5528**

6.0 Area Detail

6.1 Mitigation Measures Area

Use only Natural Gas Hearths

Marea Village - San Diego County APCD Air District, 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	3.3002	1.4930	8.3807	9.3700e-003		0.1565	0.1565		0.1565	0.1565	0.0000	1,805.5614	1,805.5614	0.0479	0.0328	1,816.5469
Unmitigated	146.9931	2.8990	185.3596	0.3221		24.9409	24.9409		24.9409	24.9409	2,610.5427	1,108.8555	3,719.3982	2.4227	0.2053	3,841.1560

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.5248					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.3752					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	143.8571	2.8094	177.5760	0.3217		24.8979	24.8979		24.8979	24.8979	2,610.5427	1,094.8235	3,705.3662	2.4091	0.2053	3,826.7847
Landscaping	0.2360	0.0896	7.7836	4.1000e-004		0.0431	0.0431		0.0431	0.0431		14.0320	14.0320	0.0136		14.3714
Total	**146.9931**	**2.8990**	**185.3596**	**0.3221**		**24.9409**	**24.9409**		**24.9409**	**24.9409**	**2,610.5427**	**1,108.8555**	**3,719.3982**	**2.4227**	**0.2053**	**3,841.1560**

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

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.5248					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.3752					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.1642	1.4034	0.5972	8.9600e-003		0.1135	0.1135		0.1135	0.1135	0.0000	1,791.5294	1,791.5294	0.0343	0.0328	1,802.1756
Landscaping	0.2360	0.0896	7.7836	4.1000e-004		0.0431	0.0431		0.0431	0.0431		14.0320	14.0320	0.0136		14.3714
Total	**3.3002**	**1.4930**	**8.3807**	**9.3700e-003**		**0.1565**	**0.1565**		**0.1565**	**0.1565**	**0.0000**	**1,805.5614**	**1,805.5614**	**0.0479**	**0.0328**	**1,816.5469**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

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

Institute Recycling and Composting Services

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