APPENDIX C – AIR QUALITY, GLOBAL CLIMATE CHANGE, AND ENERGY IMPACT ANALYSIS

COACHILLIN' INDUSTRIAL PARK PARCELS 30 & 31 AIR QUALITY, GLOBAL CLIMATE CHANGE, AND ENERGY IMPACT ANALYSIS

City of Desert Hot Springs

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EXECUTIVE SUMMARY

The purpose of this air quality, global climate change, and energy impact analysis is to provide an assessment of the impacts resulting from development of the proposed Coachillin' Industrial Park Parcels 30 & 31 project and to identify measures that may be necessary to reduce potentially significant impacts.

CONSTRUCTION-SOURCE EMISSIONS

Project construction-source emissions would not exceed applicable regional thresholds of significance established by the South Coast Air Quality Management District (SCAQMD). For localized emissions, the project will not exceed applicable Localized Significance Thresholds (LSTs) established by the SCAQMD.

Project construction-source emissions would not conflict with the Basin Air Quality Management Plan (AQMP). As discussed herein, the project will comply with all applicable SCAQMD construction-source emission reduction rules and guidelines. Project construction source emissions would not cause or substantively contribute to violation of the California Ambient Air Quality Standards (CAAQS) or National Ambient Air Quality Standards (NAAQS).

Established requirements addressing construction equipment operations, and construction material use, storage, and disposal requirements act to minimize odor impacts that may result from construction activities. Moreover, construction-source odor emissions would be temporary, short-term, and intermittent in nature and would not result in persistent impacts that would affect substantial numbers of people. Potential construction-source odor impacts are therefore considered less than significant.

OPERATIONAL-SOURCE EMISSIONS

The project operational-sourced emissions would not exceed applicable regional thresholds of significance established by the SCAQMD. Project operational-source emissions would not result in or cause a significant localized air quality impact as discussed in the Operations-Related Local Air Quality Impacts section of this report. Additionally, project-related trips will not cause or result in CO concentrations exceeding applicable state and/or federal standards (CO "hotspots). The project will not be a significant source of toxic air contaminants. Project operational-source emissions would therefore not adversely affect sensitive receptors within the vicinity of the project.

Project operational-source emissions would not conflict with the Basin Air Quality Management Plan (AQMP). The project's emissions would meet SCAQMD regional thresholds and would not result in a significant cumulative impact. As shown in Table 25, with the inclusion of the cumulative mitigation measure AQ-3 (provides a shuttle from hotel uses in the Downtown Palm Springs area to the project's Amphitheater during events), when the emissions for the substitution of the hotel and amphitheater uses for Parcels 30 and 31 are added to the balance of the emissions from the approved Specific Plan (SP), the none of the operational emissions will exceed the SCAQMD operational threshold. Therefore, the cumulative emissions for the entire SP with the hotel and amphitheater are considered to be less than significant with mitigation. The project does not propose any such uses or activities that would result in potentially significant operational-source odor impacts. Potential operational-source odor impacts are therefore considered less than significant.

GREENHOUSE GASES

Project-related GHG emissions for Parcels 30 and 31 do not exceed the SCAQMD draft threshold of 3,000 MTCO2e per year for all land uses' therefore, GHG emissions are considered to be less than significant. However, as shown in Table 25, when the emissions for the substitution of the hotel and amphitheater uses for Parcels 30 and 31 are added to the balance of the emissions from the SP, even with the incorporation of cumulative mitigation measure AQ-3, the GHG emissions will exceed the SCAQMD draft emissions threshold of 3,000 MTCO2e/year. Therefore, the GHG emissions for the entire SP with the hotel and amphitheater uses would be considered to be cumulatively considerable.

The project would not conflict with the goals of the City of Desert Hot Springs Climate Action Plan; therefore, the project would not conflict with an applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases and impacts are considered to be less than significant.

ENERGY

For new (or revised) development such as that proposed by the Coachillin' Industrial Park Parcels 30 & 31 Project, compliance with California Building Standards Code Title 24 energy efficiency requirements (CalGreen), are considered demonstrable evidence of efficient use of energy. As discussed below, the project would provide for, and promote, energy efficiencies required under other applicable federal and State of California standards and regulations, and in so doing would meet or exceed all California Building Standards Code Title 24 standards. Moreover, energy consumed by the project's operation is calculated to be comparable to, or less than, energy consumed by other hotel and amphitheater uses of similar scale and intensity that are constructed and operating in California. On this basis, the project would not result in the inefficient, wasteful, or unnecessary consumption of energy. Further, the project would not cause or result in the need for additional energy producing facilities or energy delivery systems.

1. INTRODUCTION

This section describes the purpose of this air quality, global climate change, and energy impact analysis, project location, proposed development, and study area. Figure 1 shows the project location map and Figure 2 illustrates the project site plan.

PURPOSE AND OBJECTIVES

This study was performed to address the possibility of regional/local air quality impacts and global climate change impacts, from project related air emissions, as well as energy impacts. The objectives of the study include:

- documentation of the atmospheric setting
- discussion of criteria pollutants and greenhouse gases
- discussion of the air quality and global climate change regulatory framework
- discussion of the air quality and greenhouse gases thresholds of significance
- analysis of the construction-related air quality and greenhouse gas emissions
- analysis of the operations-related air quality and greenhouse gas emissions
- analysis of the construction and operations-related energy use
- analysis of the conformity of the proposed project with the SCAQMD AQMP
- recommendations for mitigation measures

The City of Desert Hot Springs is the lead agency for this air quality, greenhouse gas, and energy analysis, in accordance with the California Environmental Quality Act authorizing legislation. Although this is a technical report, effort has been made to write the report clearly and concisely. A definition of terms is provided in Appendix A to assist the reader with terms related to air quality and global climate change.

PROJECT LOCATION

The project site is located east of Indian Canyon Drive between 18th Avenue and 19th Avenue in the City of Desert Hot Springs. The project site is currently vacant. A vicinity map showing the project location is provided on Figure 1.

PROJECT DESCRIPTION

The Coachillin' Industrial Park Specific Plan was approved in 2017. The approved Coachillin' Industrial Park Specific Plan consisted of developing the previously vacant project site with approximately 2,800,000 square feet of building envelope grow site for cannabis cultivation, processing, and distribution uses. The approved Specific Plan project will be operated by various lot owners with a total of 1,510 employees using 3 different work shifts throughout the day.

For the currently proposed Specific Plan Amendment, submitted to the City in 2021, the applicant is proposing to modify the allowed land uses for a small portion of the previously-approved Coachillin' Industrial Park Specific Plan within Parcel 30, Parcel 31, and Parcel 25. Parcel 30 will include a 175-room hotel, and Parcel 31 will include a 5,000-seat amphitheater ("project"). Per the applicant, the amphitheater would hold a maximum of four events per month. An unmanned Southern California Edison (SCE) substation was analyzed for Parcel 25 in the Coachillin' Industrial Park Specific Plan; however, SCE determined that Parcel 25 is no longer needed for a substation. Parcel 25 is to be modified to a 420-space parking lot with solar covered parking.[1] Figure 2 illustrates the proposed site plan.

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[1] The emissions associated with Parcel 25 were already accounted for in the emissions calculations for the entire SP shown in the *Coachillin' Industrial Park Air Quality and Global Climate Change Impact Analysis* conducted by Kunzman Associates in 2017. Therefore, analysis of Parcel 25 is not included in this analysis.

PHASING AND TIMING

The project is anticipated to be built in one phase. Project construction is anticipated to begin in 2022 and take approximately 12 months to complete. The proposed project is anticipated to be operational in 2023.

SENSITIVE RECEPTORS IN PROJECT VICINITY

Those who are sensitive to air pollution include children, the elderly, and persons with preexisting respiratory or cardiovascular illness. For purposes of CEQA, the SCAQMD considers a sensitive receptor to be a location where a sensitive individual could remain for 24 hours, such as residences, hospitals, or convalescent facilities (South Coast Air Quality Management District 2008). Commercial and industrial facilities are not included in the definition because employees do not typically remain on-site for 24 hours.

The nearest sensitive receptors to Parcel 30 and Parcel 31 are the single-family detached residential dwelling units located approximately 0.39 miles (~627 meters) northeast of the project site.

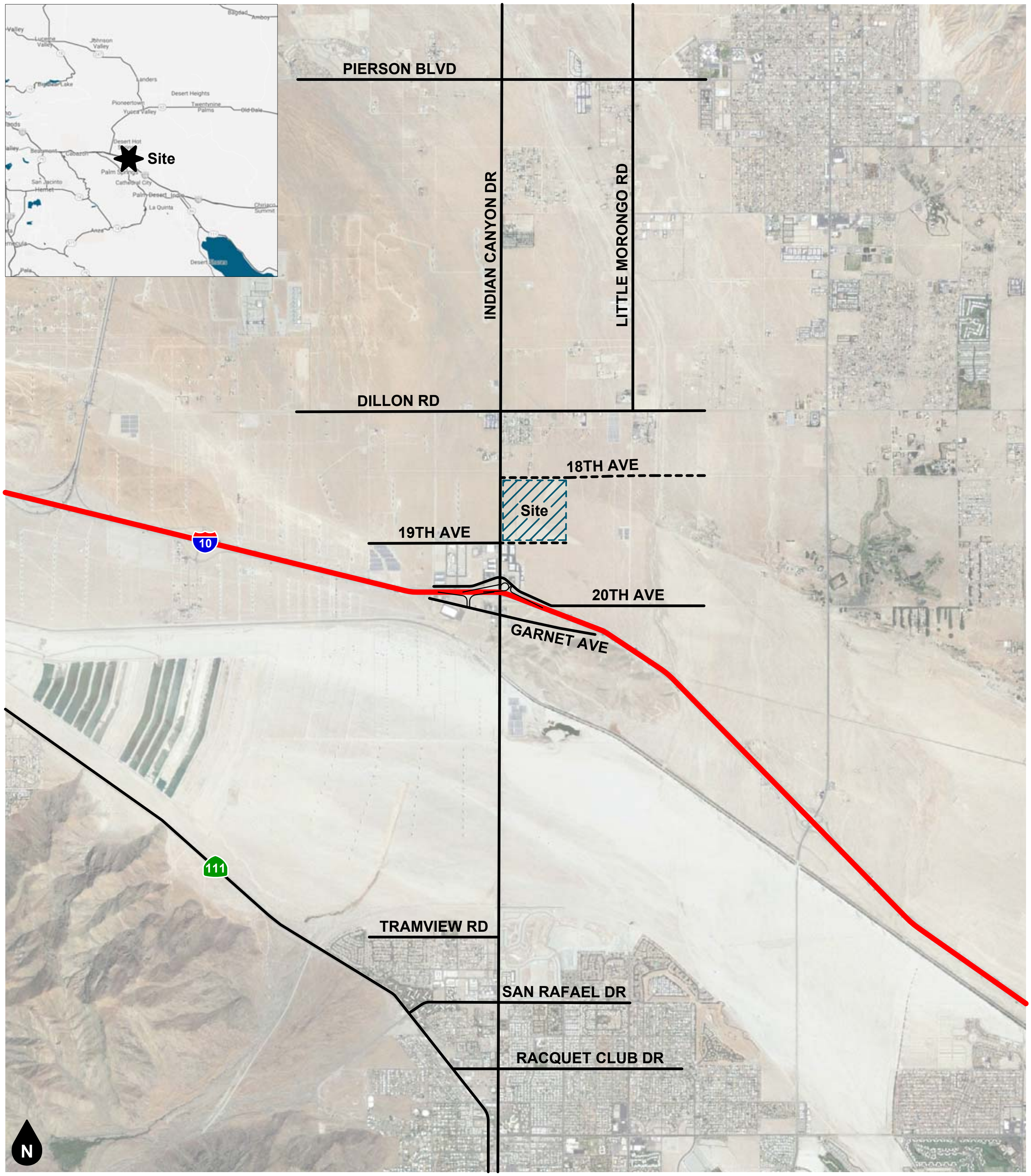

Figure 1
Project Location Map

Legend

🟩 Right Turns In/Out Only Access Driveway

🟥 Full Access Driveway

Figure 2
Site Plan

2. AIR QUALITY ANALYSIS

EXISTING AIR QUALITY CONDITIONS

Local Air Quality

The project is located within the City of Desert Hot Springs and is within the Salton Sea Air Basin (SSAB). The middle part of Riverside County (between San Gorgonio Pass and Joshua Tree National Monument), belongs in the Salton Sea Air Basin (SSAB), along with Imperial County. Air quality conditions in this portion of the County, although in the SSAB, are also administered by the SCAQMD. The SCAQMD is responsible for the development of the regional Air Quality Management Plan and efforts to regulate pollutant emissions from a variety of sources.

The SSAB portion of Riverside County is separated from the South Coast Air Basin region by the San Jacinto Mountains and from the Mojave Desert Air Basin to the east by the Little San Bernardino Mountains. During the summer, the SSAB is generally influenced by a Pacific Subtropical High Cell that sits off the coast, inhibiting cloud formation and encouraging daytime solar heating. The SSAB is rarely influenced by cold air masses moving south from Canada and Alaska, as these systems are weak and diffuse by the time they reach the desert. Most desert moisture arrives from infrequent warm, moist and unstable air masses from the south. The SSAB averages between three and seven inches of precipitation per year.

The Coachella Valley is a geographically and meteorologically unique area wholly contained within the Salton Sea Air Basin. The region is currently impacted by significant air pollution levels caused by the transport of pollutants from coastal air basins to the west, primarily ozone, and locally generated PM10. The mountains surrounding the region isolate the Valley from coastal influences and create a hot and dry low-lying desert (see Table 1). As the desert heats up it draws cooler coastal air through the narrow San Gorgonio Pass, generating strong and sustained winds that cross the fluvial (water caused) and aeolian (wind) erosion zones in the Valley. These strong winds suspend and transport large quantities of sand and dust, reducing visibility, damaging property, and constituting a significant health threat.

The City of Desert Hot Springs, in relation to other areas in Southern California, has good air quality. In the past few decades, however, noticeable deterioration of air quality has occurred due to increased development and population growth, traffic, construction activity, and various site disturbances. It is apparent that although air pollution is emitted from various sources in the Coachella Valley, substantial degradation of air quality may be attributed primarily to sources outside of the Valley.

Table 1
Local Monthly Climate Data[1]

Descriptor	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Avg. Max. Temperature	70.6	74.0	80.6	87.7	95.6	103.4	108.0	107.0	101.5	91.1	76.0	69.8
Avg. Min. Temperature	45.3	48.0	52.3	57.5	64.4	71.0	77.3	77.4	71.5	62.4	50.3	44.8
Avg. Total Precipitation (in.)	1.17	1.04	0.52	0.08	0.02	0.03	0.13	0.29	0.21	0.26	0.32	0.92

Notes:

(1) Source: https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca6635.

Data taken from the Palm Springs, CA station (046635).

Pollutants

Pollutants are generally classified as either criteria pollutants or non-criteria pollutants. Federal ambient air quality standards have been established for criteria pollutants, whereas no ambient standards have been established for non-criteria pollutants. For some criteria pollutants, separate standards have been set for different periods. Most standards have been set to protect public health. For some pollutants, standards have been based on other values (such as protection of crops, protection of materials, or avoidance of nuisance conditions). A summary of federal and state ambient air quality standards is provided in the Regulatory Framework section.

Criteria Pollutants

The criteria pollutants consist of: ozone, nitrogen dioxide, carbon monoxide, sulfur dioxide, lead, and particulate matter. These pollutants can harm your health and the environment, and cause property damage. The Environmental Protection Agency (EPA) calls these pollutants “criteria” air pollutants because it regulates them by developing human health-based and/or environmentally-based criteria for setting permissible levels. The following provides descriptions of each of the criteria pollutants.

Nitrogen Dioxides

Nitrogen Oxides (NOx) is the generic term for a group of highly reactive gases which contain nitrogen and oxygen. While most NOx are colorless and odorless, concentrations of nitrogen dioxide (NO_2) can often be seen as a reddish-brown layer over many urban areas. NOx form when fuel is burned at high temperatures, as in a combustion process. The primary manmade sources of NOx are motor vehicles, electric utilities, and other industrial, commercial, and residential sources that burn fuel. NOx reacts with other pollutants to form, ground-level ozone, nitrate particles, acid aerosols, as well as NO_2, which cause respiratory problems. NOx and the pollutants formed from NOx can be transported over long distances, following the patterns of prevailing winds. Therefore, controlling NOx is often most effective if done from a regional perspective, rather than focusing on the nearest sources.

Ozone

Ozone (O_3) is not usually emitted directly into the air but at ground-level is created by a chemical reaction between NOx and volatile organic compounds (VOC) in the presence of sunlight. Motor vehicle exhaust, industrial emissions, gasoline vapors, chemical solvents as well as natural sources emit NOx and VOC that help form ozone. Ground-level ozone is the primary constituent of smog. Sunlight and hot weather cause ground-level ozone to form with the greatest concentrations usually occurring downwind from urban areas. Ozone is subsequently considered a regional pollutant. Ground-level ozone is a respiratory irritant and an oxidant that increases susceptibility to respiratory infections and can cause substantial damage to vegetation and other materials. Because NOx and VOC are ozone precursors, the health effects associated with ozone are also indirect health effects associated with significant levels of NOx and VOC emissions.

Carbon Monoxide

Carbon monoxide (CO) is a colorless, odorless gas that is formed when carbon in fuel is not burned completely. It is a component of motor vehicle exhaust, which contributes about 56 percent of all CO emissions nationwide. In cities, 85 to 95 percent of all CO emissions may come from motor vehicle exhaust. Other sources of CO emissions include industrial processes (such as metals processing and chemical manufacturing), residential wood burning, and natural sources such as forest fires. Woodstoves, gas stoves, cigarette smoke, and unvented gas and kerosene space heaters are indoor sources of CO. The highest levels of CO in the outside air typically occur during the colder months of the year when inversion conditions are more frequent. The air pollution becomes trapped near the ground beneath a layer of warm air. CO is described as having only a local influence because it dissipates quickly. Since CO concentrations are strongly associated with motor vehicle emissions, high CO concentrations generally occur in the immediate vicinity of roadways with high traffic volumes and traffic congestion, active parking lots, and in automobile tunnels. Areas adjacent to heavily traveled and congested intersections are particularly susceptible to high CO concentrations.

CO is a public health concern because it combines readily with hemoglobin and thus reduces the amount of oxygen transported in the bloodstream. The health threat from lower levels of CO is most serious for those who suffer from heart disease such as angina, clogged arteries, or congestive heart failure. For a person with heart disease, a single exposure to CO at low levels may cause chest pain and reduce that person's ability to exercise; repeated exposures may contribute to other cardiovascular effects. High levels of CO can affect even healthy people. People who breathe high levels of CO can develop vision problems, reduced ability to work or learn, reduced manual dexterity, and difficulty performing complex tasks. At extremely high levels, CO is poisonous and can cause death.

Sulfur Dioxide

Sulfur Oxide (SOx) gases (including sulfur dioxide [SO2]) are formed when fuel containing sulfur, such as coal and oil is burned, and from the refining of gasoline. SOx dissolves easily in water vapor to form acid and interacts with other gases and particles in the air to form sulfates and other products that can be harmful to people and the environment.

Lead

Lead (Pb) is a metal found naturally in the environment as well as manufactured products. The major sources of lead emissions have historically been motor vehicles and industrial sources. Due to the phase out of leaded gasoline, metal processing is now the primary source of lead emissions to the air. High levels of lead in the air are typically only found near lead smelters, waste incinerators, utilities, and lead-acid battery manufacturers. Exposure of fetuses, infants and children to low levels of lead can adversely affect the development and function of the central nervous system, leading to learning disorders, distractibility, inability to follow simple commands, and lower intelligence quotient. In adults, increased lead levels are associated with increased blood pressure.

Particulate Matter

Particulate matter (PM) is the term for a mixture of solid particles and liquid droplets found in the air. Particulate matter is made up of a number of components including acids (such as nitrates and sulfates), organic chemicals, metals, and soil or dust particles. The size of particles is directly linked to their potential for causing health problems. Particles that are less than 10 micrometers in diameter (PM10) are the particles that generally pass through the throat and nose and enter the lungs. Once inhaled, these particles can affect the heart and lungs and cause serious health effects. Particles that are less than 2.5 micrometers in diameter (PM2.5) have been designated as a subset of PM10 due to their increased negative health impacts and its ability to remain suspended in the air longer and travel further.

Reactive Organic Gases (ROG)

Although not a criteria pollutant, reactive organic gases (ROGs), or VOCs, are defined as any compound of carbon—excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate—that participates in atmospheric photochemical reactions. Although there are slight differences in the definition of ROGs and VOCs, the two terms are often used interchangeably. Indoor sources of VOCs include paints, solvents, aerosol sprays, cleansers, tobacco smoke, etc. Outdoor sources of VOCs are from combustion and fuel evaporation. A reduction in VOC emissions reduces certain chemical reactions that contribute to the formulation of ozone. VOCs are transformed into organic aerosols in the atmosphere, which contribute to higher PM10 and lower visibility.

Other Pollutants of Concern

Toxic Air Contaminants

In addition to the above-listed criteria pollutants, toxic air contaminants (TACs) are another group of pollutants of concern. Sources of toxic air contaminants include industrial processes such as petroleum refining and chrome plating operations, commercial operations such as gasoline stations and dry cleaners, and motor vehicle exhaust. Cars and trucks release at least forty different toxic air contaminants. The most important of these toxic air contaminants, in terms of health risk, are diesel particulates, benzene, formaldehyde, 1,3-butadiene, and acetaldehyde. Public exposure to toxic air contaminants can result from emissions from normal operations as well as from accidental releases. Health effects of toxic air contaminants include cancer, birth defects, neurological damage, and death.

Toxic air contaminants are less pervasive in the urban atmosphere than criteria air pollutants, however they are linked to short-term (acute) or long-term (chronic or carcinogenic) adverse human health effects. There are hundreds of different types of toxic air contaminants with varying degrees of toxicity. Sources of toxic air contaminants include industrial processes, commercial operations (e.g., gasoline stations and dry cleaners), and motor vehicle exhaust.

According to the 2013 California Almanac of Emissions and Air Quality, the majority of the estimated health risk from toxic air contaminants can be attributed to relatively few compounds, the most important of which is diesel particulate matter (DPM). Diesel particulate matter is a subset of PM2.5 because the size of diesel particles are typically 2.5 microns and smaller. The identification of diesel particulate matter as a toxic air contaminant in 1998 led the California Air Resources Board (CARB) to adopt the Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-fueled Engines and Vehicles in September 2000. The plan's goals are a 75-percent reduction in diesel particulate matter by 2010 and an 85-percent reduction by 2020 from the 2000 baseline. Diesel engines emit a complex mixture of air pollutants, composed of gaseous and solid material. The visible emissions in diesel exhaust are known as particulate matter or PM, which includes carbon particles or "soot". Diesel exhaust also contains a variety of harmful gases and over 40 other cancer-causing substances. California's identification of diesel particulate matter as a toxic air contaminant was based on its potential to cause cancer, premature deaths, and other health problems. Exposure to diesel particulate matter is a health hazard, particularly to children whose lungs are still developing and the elderly who may have other serious health problems. Overall, diesel engine emissions are responsible for the majority of California's potential airborne cancer risk from combustion sources.

Asbestos

Asbestos is listed as a TAC by the ARB and as a Hazardous Air Pollutant by the EPA. Asbestos occurs naturally in mineral formations and crushing or breaking these rocks, through construction or other means, can release asbestiform fibers into the air. Asbestos emissions can result from the sale or use of asbestos-containing materials, road surfacing with such materials, grading activities, and surface mining. The risk of disease is dependent upon the intensity and duration of exposure. When inhaled, asbestos fibers may remain in the lungs and with time may be linked to such diseases as asbestosis, lung cancer, and mesothelioma. Naturally occurring asbestos is not present in Riverside County. The nearest likely locations of naturally occurring asbestos, as identified in the General Location Guide for Ultramafic Rocks in California prepared by the California Division of Mines and Geology, is located at Asbestos Mountain in the San Jacinto Valley; approximately 20 miles southeast of the site. Due to the distance to the nearest natural occurrences of asbestos, the project site is not likely to contain asbestos.

REGULATORY SETTING

The proposed project is addressed through the efforts of various international, federal, state, regional, and local government agencies. These agencies work jointly, as well as individually, to improve air quality through legislation, regulations, planning, policy-making, education, and a variety of programs. The agencies responsible for improving the air quality are discussed below.

Federal – United States Environmental Protection Agency

The United States Environmental Protection Agency (EPA) is responsible for setting and enforcing the National Ambient Air Quality Standards (NAAQS) for atmospheric pollutants. It regulates emission sources that are under the exclusive authority of the federal government, such as aircraft, ships, and certain locomotives. The National Ambient Air Quality Standards (NAAQS) pollutants were identified using medical evidence and are shown below in Table 2.

The EPA and the CARB designate air basins where ambient air quality standards are exceeded as "nonattainment" areas. If standards are met, the area is designated as an "attainment" area. If there is inadequate or inconclusive data to make a definitive attainment designation, they are considered "unclassified." National nonattainment areas are further designated as marginal, moderate, serious, severe, or extreme as a function of deviation from standards. Each standard has a different definition, or 'form' of what constitutes attainment, based on specific air quality statistics. For example, the Federal 8-hour CO standard is not to be exceeded more than once per year; therefore, an area is in attainment of the CO standard if no more than one 8-hour ambient air monitoring values exceeds the threshold per year. In contrast, the Federal annual PM2.5 standard is met if the three-year average of the annual average PM2.5 concentration is less than or equal to the standard. Attainment status is shown in Table 3.

As part of its enforcement responsibilities, the EPA requires each state with federal nonattainment areas to prepare and submit a State Implementation Plan (SIP) that demonstrates the means to attain the national standards. The State Implementation Plan (SIP) must integrate federal, state, and local components and regulations to identify specific measures to reduce pollution, using a combination of performance standards and market-based programs within the timeframe identified in the State Implementation Plan (SIP).

As indicated below in Table 3, the Basin has been designated by the EPA as a non-attainment area for ozone (O_3) and suspended particulates (PM10 and PM2.5). Currently, the Basin is in attainment with the ambient air quality standards for carbon monoxide (CO), lead, sulfur dioxide (SO_2), suspended particulate matter (PM-2.5), and nitrogen dioxide (NO_2).

State – California Air Resources Board

The CARB, which is a part of the California Environmental Protection Agency, is responsible for the coordination and administration of both federal and state air pollution control programs within California. In this capacity, the CARB conducts research, sets the California Ambient Air Quality Standards (CAAQS), compiles emission inventories, develops suggested control measures, provides oversight of local programs, and prepares the State Implementation Plan (SIP). The California Ambient Air Quality Standards (CAAQS) for criteria pollutants are shown in Table 3. In addition, the CARB establishes emission standards for motor vehicles sold in California, consumer products (e.g., hairspray, aerosol paints, and barbeque lighter fluid), and various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions.

The Salton Sea Air Basin has been designated by the CARB as a nonattainment area for ozone and PM-10. Currently, the Salton Sea Air Basin is in attainment with the ambient air quality standards for CO, lead, SO_2, NO_2, and sulfates and is unclassified for visibility reducing particles (PM-2.5) and Hydrogen Sulfide.

On June 20, 2002, the CARB revised the PM10 annual average standard to 20 µg/m3 and established an annual average standard for PM2.5 of 12 µg/m3. These standards were approved by the Office of Administrative Law in June 2003 and are now effective. On September 27, 2007 the CARB approved the South Coast Air Basin and the Coachella Valley 2007 Air Quality Management Plan for Attaining the Federal 8-hour Ozone and PM2.5 Standards. The plan projects attainment for the 8-hour Ozone standard by 2024 and the PM2.5 standard by 2015.

On December 12, 2008 the CARB adopted Resolution 08-43, which limits NOx, PM10 and PM2.5 emissions from on-road diesel truck fleets that operate in California. On October 12, 2009 Executive Order R-09-010 was adopted that codified Resolution 08-43 into Section 2025, Title 13 of the California Code of Regulations. This regulation requires that by the year 2023 all commercial diesel trucks that operate in California shall meet model year 2010 (Tier 4) or latter emission standards. In the interim period, this regulation provides annual interim targets for fleet owners to meet. This regulation also provides a few exemptions including a onetime per year 3-day pass for trucks registered outside of California.

The CARB is also responsible for regulations pertaining to toxic air contaminants. The Air Toxics "Hot Spots" Information and Assessment Act (AB 2588, 1987, Connelly) was enacted in 1987 as a means to establish a formal air toxics emission inventory risk quantification program. AB 2588, as amended, establishes a process that requires stationary sources to report the type and quantities of certain substances their facilities routinely release into the South Coast Air Basin. The data is ranked by high, intermediate, and low categories, which are determined by: the potency, toxicity, quantity, volume, and proximity of the facility to nearby receptors.

AB 617 Nonvehicular air pollution: criteria air pollutants and toxic air contaminants

This bill requires the CARB to develop a uniform statewide system of annual reporting of emissions of criteria air pollutants and toxic air contaminants for use by certain categories of stationary sources. The bill requires those stationary sources to report their annual emissions of criteria air pollutants and toxic air contaminants, as specified. This bill required the CARB, by October 1, 2018, to prepare a monitoring plan regarding technologies for monitoring criteria air pollutants and toxic air contaminants and the need for and benefits of additional community air monitoring systems, as defined. The bill requires the CARB to select, based on the monitoring plan, the highest priority locations in the state for the deployment of community air monitoring systems. The bill requires an air district containing a selected location, by July 1, 2019, to deploy a system in the selected location. The bill would authorize the air district to require a stationary source that emits air pollutants in, or that materially affect, the selected location to deploy a fence-line monitoring system, as defined, or other specified real-time, on-site monitoring. The bill authorizes the CARB, by January 1, 2020, and annually thereafter, to select additional locations for the deployment of the systems. The bill would require air districts that have deployed a system to provide to the state board air quality data produced by the system. By increasing the duties of air districts, this bill would impose a state-mandated local program. The bill requires the CARB to publish the data on its Internet Web site.

Regional

The SCAQMD is the agency principally responsible for comprehensive air pollution control in the Salton Sea Air Basin. To that end, as a regional agency, the SCAQMD works directly with the Southern California Association of Governments (SCAG), county transportation commissions, and local governments and cooperates actively with all federal and state agencies.

South Coast Air Quality Management District

The SCAQMD develops rules and regulations, establishes permitting requirements for stationary sources, inspects emission sources, and enforces such measures through educational programs or fines, when necessary. The SCAQMD is directly responsible for reducing emissions from stationary, mobile, and indirect sources. It has responded to this requirement by preparing a sequence of AQMPs. On June 30, 2016, the SCAQMD released its Draft 2016 AQMP. The 2016 AQMP is a regional blueprint for achieving the federal air quality standards and healthful air.

Air Quality Management Plan

The 2016 AQMP includes both stationary and mobile source strategies to ensure that rapidly approaching attainment deadlines are met, that public health is protected to the maximum extent feasible, and that the region is not faced with burdensome sanctions if the Plan is not approved or if the NAAQS are not met on time. As with every AQMP, a comprehensive analysis of emissions, meteorology, atmospheric chemistry, regional growth projections, and the impact of existing control measures is updated with the latest data and methods. The most significant air quality challenge in the Basin is to reduce nitrogen oxide (NOx) emissions sufficiently to meet the upcoming ozone standard deadlines. On March 23, 2017 the CARB approved the 2016 AQMP. The primary goal of this Air Quality Management Plan is to meet clean air standards and protect public health, including ensuring benefits to environmental justice and disadvantaged communities. Now that the Plan has been approved by the CARB, it has been forwarded to the U.S. EPA for its review. The Plan was approved by the EPA on June 15, 2017.

On June 21, 2002, the SCAQMD adopted the 2002 Coachella Valley PM10 State Implementation Plan (CVSIP). The 2002 CVSIP, which included a request for extension of the PM10 deadline and met all applicable federal Clean Air Act requirements, including a Most Stringent Measures analysis, control measures, and attainment demonstration. U.S. EPA approved the 2002 CVSIP on April 18, 2003. At the time of adoption, the AQMD committed to revising with the 2002 CVSIP with the latest approved mobile source emissions estimates, planning assumptions and fugitive dust source emission estimates, when they became available.

The 2003 CVSIP updates those elements of the 2002 CVSIP; the control strategies and control measure commitments have not been revised and remain the same as in the 2002 CVSIP. The 2003 CVSIP contains updated emissions inventories, emission budgets, and attainment modeling. It requests that U.S. EPA replace the approved transportation conformity budgets in the 2002 CVSIP with those in the 2003 CVSIP. U.S. EPA approved these budgets on March 25, 2004 with an effective date of April 9, 2004.

South Coast AQMD has initiated the development of the 2022 AQMP to address the attainment of the 2015 8-hour ozone standard (70 ppb) for South Coast Air Basin and Coachella Valley. To support the development of mobile source strategies for the 2022 AQMP, South Coast AQMD, in conjunction with California Air Resources Board, has established Mobile Source Working Groups which are open to all interested parties.

SCAQMD Rules and Regulations

During construction and operation, the project must comply with applicable rules and regulations. The following are rules that the project may be required to comply with, either directly, or indirectly:

SCAQMD Rule 402

Prohibits a person from discharging from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.

SCAQMD Rule 403

Governs emissions of fugitive dust during construction and operation activities. Compliance with this rule is achieved through application of standard Best Management Practices, such as application of water or chemical stabilizers to disturbed soils, covering haul vehicles, restricting vehicle speeds on unpaved roads to 15 miles per hour, sweeping loose dirt from paved site access roadways, cessation of construction activity when winds exceed 25 mph, and establishing a permanent ground cover on finished sites.

Rule 403 requires that fugitive dust be controlled with best available control measures so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. In addition, SCAQMD Rule 403 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off-site. Applicable dust suppression techniques from Rule 403 are summarized below. Implementation of these dust suppression techniques can reduce the fugitive dust generation (and thus the PM_{10} component). Compliance with these rules would reduce impacts on nearby sensitive receptors. Rule 403 measures may include but are not limited to the following:

- Apply nontoxic chemical soil stabilizers according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for 10 days or more).
- Water active sites at least three times daily. (Locations where grading is to occur will be thoroughly watered prior to earthmoving.)
- Cover all trucks hauling dirt, sand, soil, or other loose materials, or maintain at least 0.6 meters (2 feet) of freeboard (vertical space between the top of the load and top of the trailer) in accordance with the requirements of California Vehicle Code section 23114.
- Reduce traffic speeds on all unpaved roads to 15 miles per hour (mph) or less.
- Suspension of all grading activities when wind speeds (including instantaneous wind gusts) exceed 25 mph.
- Bumper strips or similar best management practices shall be provided where vehicles enter and exit the construction site onto paved roads or wash off trucks and any equipment leaving the site each trip.
- Replanting disturbed areas as soon as practical.
- During all construction activities, construction contractors shall sweep on-site and off-site streets if silt is carried to adjacent public thoroughfares, to reduce the amount of particulate matter on public streets. All sweepers shall be compliant with SCAQMD Rule 1186.1, Less Polluting Sweepers.

SCAQMD Rule 403.1 is supplemental to Rule 403 requirements and shall apply only to fugitive dust sources in the Coachella Valley.

(d) General Requirements of 403.1

(1) Any person who is responsible for any active operation, open storage pile, or disturbed surface area, and who seeks an exemption pursuant to Rule 403, paragraph (g)(2) shall be required to determine when wind speed conditions exceed 25 miles per hour. The wind speed determination shall be based on either District forecasts or through use of an on-site anemometer as described in subdivision (g).

(2) Any person involved in active operations in the Coachella Valley Blowsand Zone shall stabilize new man-made deposits of bulk material within 24 hours of making such bulk material deposits. Stabilization procedures shall include one or more of the following: (A) Application of water to at least 70 percent of the surface area of any bulk material deposits at least 3 times for each day that there is evidence of wind driven fugitive dust; or (B) Application of chemical stabilizers in sufficient concentration so as to maintain a stabilized surface for a period of at least 6 months; or

(3) Installation of wind breaks of such design so as to reduce maximum wind gusts to less than 25 miles per hour in the area of the bulk material deposits. (3) Any person involved in active operations in the Coachella Valley Blowsand Zone shall stabilize new deposits of bulk material originating from off-site undisturbed natural desert areas within 72 hours.

Stabilization procedures shall include one or more of the following: (A) Application of water to at least 70 percent of the surface area of any bulk material deposits at least 3 times for each day that there is evidence of wind driven fugitive dust; or (B) Application of chemical stabilizers in sufficient concentration so as to maintain a stabilized surface for a period of at least six months.

(4) A person who conducts or authorizes the conducting of an active operation shall implement at least one of the control actions specified in Rule 403, Table 2 for the source category "Inactive Disturbed Surface Areas" to minimize wind driven fugitive dust from disturbed surface areas at such time when active operations have ceased for a period of at least 20 days.

(5) Any person involved in agricultural tilling or soil mulching activities shall cease such activities when wind speeds exceed 25 miles per hour. The wind speed determination shall be based on either District forecasts or through use of an on-site anemometer as described in subdivision (g).

(e) Fugitive Dust Control Plan and Other Requirements for Construction Projects/Earth-Moving Activities

(1) Any person who conducts or authorizes the conducting of an active operation with a disturbed surface area of more than 5,000 square feet shall not initiate any earth-moving activities unless a fugitive dust control plan is prepared and approved by the Executive Officer in accordance with the requirements of subdivision (f) and the Rule 403.1 Implementation Handbook. These provisions shall not apply to active operations exempted by paragraph (i)(4).

(2) Any operator required to submit a fugitive dust control plan under paragraph (e)(1) shall maintain a complete copy of the approved fugitive dust control plan on-site in a conspicuous place at all times and the fugitive dust control plan must be provided upon request.

(3) Any operator required to submit a fugitive dust control plan under paragraph (e)(1) shall install and maintain signage with project contact information that meets the minimum standards of the Rule 403.1 Implementation Handbook prior to initiating any type of earth-moving activities.

(4) Any operator required to submit a fugitive dust control plan under paragraph (e)(1) for a project with a disturbed surface area of 50 or more acres shall have an Dust Control Supervisor that: (A) is employed by or contracted with the property owner or developer; and (B) is on-site or is available to be on-site within 30 minutes of initial contact; and (C) has the authority to expeditiously employ sufficient dust mitigation measures to ensure compliance with all Rule 403 and 403.1 requirements; and (D) has completed the AQMD Coachella Valley Fugitive Dust Control Class and has been issued a valid Certificate of Completion for the class.

(5) Failure to comply with any of the provisions of an approved fugitive dust control plan shall be a violation of this rule.

SCAQMD Rule 445

Prohibits permanently installed wood burning devices into any new development. A wood burning device means any fireplace, wood burning heater, or pellet-fueled wood heater, or any similarly enclosed, permanently installed, indoor or outdoor device burning any solid fuel for aesthetic or space-heating purposes, which has a heat input of less than one million British thermal units per hour.

SCAQMD Rule 481

Applies to all spray painting and spray coating operations and equipment. The rule states that a person shall not use or operate any spray painting or spray coating equipment unless one of the following conditions is met:

(1) The spray coating equipment is operated inside a control enclosure, which is approved by the Executive Officer. Any control enclosure for which an application for permit for new construction, alteration, or change of ownership or location is submitted after the date of adoption of this rule shall be exhausted only through filters at a design face velocity not less than 100 feet per minute nor greater than 300 feet per minute, or through a water wash system designed to be equally effective for the purpose of air pollution control.
(2) Coatings are applied with high-volume low-pressure, electrostatic and/or airless spray equipment.
(3) An alternative method of coating application or control is used which has effectiveness equal to or greater than the equipment specified in the rule.

SCAQMD Rule 1108

Governs the sale, use, and manufacturing of asphalt and limits the volatile organic compound (VOC) content in asphalt used in the Air Basin. This rule would regulate the VOC content of asphalt used during construction. Therefore, all asphalt used during construction of the project must comply with SCAQMD Rule 1108.

SCAQMD Rule 1113

Governs the sale, use, and manufacturing of architectural coating and limits the VOC content in paints and paint solvents. This rule regulates the VOC content of paints available during construction. Therefore, all paints and solvents used during construction and operation of the project must comply with SCAQMD Rule 1113.

SCAQMD Rule 1143

Governs the manufacture, sale, and use of paint thinners and solvents used in thinning of coating materials, cleaning of coating application equipment, and other solvent cleaning operations by limiting their VOC content. This rule regulates the VOC content of solvents used during construction. Solvents used during the construction phase must comply with this rule.

SCAQMD Rule 1186

Limits the presence of fugitive dust on paved and unpaved roads and sets certification protocols and requirements for street sweepers that are under contract to provide sweeping services to any federal, state, county, agency or special district such as water, air, sanitation, transit, or school district.

SCAQMD Rule 1303

Governs the permitting of re-located or new major emission sources, requiring Best Available Control Measures and setting significance limits for PM_{10} among other pollutants.

SCAQMD Rule 1401

New Source Review of Toxic Air Contaminants, specifies limits for maximum individual cancer risk, cancer burden, and non-cancer acute and chronic hazard index from new permit units, relocations, or modifications to existing permit units, which emit toxic air contaminants.

SCAQMD Rule 1403

Asbestos Emissions from Demolition/Renovation Activities, specifies work practice requirements to limit asbestos emissions from building demolition and renovation activities, including the removal and associated disturbance of asbestos-containing materials (ACM).

SCAQMD Rule 2202

On-Road Motor Vehicle Mitigation Options, is to provide employers with a menu of options to reduce mobile source emissions generated from employee commutes, to comply with federal and state Clean Air Act requirements, Health & Safety Code Section 40458, and Section 182(d)(1)(B) of the federal Clean Air Act. It applies to any employer who employs 250 or more employees on a full or part-time basis at a worksite for a consecutive six-month period calculated as a monthly average.

SCAQMD Rule 2305

The Warehouse Actions and Investments to Reduce Emissions (WAIRE) Program aims to reduce nitrogen oxide and diesel emissions associated with warehouses, help meet federal standards and improve public health. The WAIRE Program is an indirect source rule that regulates warehouse facilities to reduce emissions from the goods movement industry. Owners and operators of warehouses that have 100,000 square feet or more of indoor floor space in a single building must comply with the WAIRE Program. WAIRE is a menu-based point system in which warehouse operators are required to earn a specific number of points every year. The yearly number of points required is based on the number of trucks trips made to and from the warehouse each year, with larger trucks such as tractors or tractor-trailers multiplied by 2.5. Warehouse operators may be exempt from parts of the rule if they operate less than 50,000 square feet of warehousing activities, if the number of points required is less than 10, or if the WAIRE menu action chosen under performs due to circumstances beyond the operator's control, such as a manufacturer defect. SCAQMD Rule 316 establishes fees to fund Rule 2305 compliance activities.

In order to assist local agencies with direction on GHG emissions, the SCAQMD organized a working group and adopted Rules 2700, 2701, 2702, and 3002 which are described below.

SCAQMD Rules 2700 and 2701

The SCAQMD adopted Rules 2700 and 2701 on December 5, 2008, which establishes the administrative structure for a voluntary program designed to quantify GHG emission reductions. Rule 2700 establishes definitions for the various terms used in Regulation XXVII – Global Climate Change. Rule 2701 provides specific protocols for private parties to follow to generate certified GHG emission reductions for projects within the district. Approved protocols include forest projects, urban tree planting, and manure management. The SCAQMD is currently developing additional protocols for other reduction measures. For a GHG emission reduction project to qualify, it must be verified and certified by the SCAQMD Executive Officer, who has 60 days to approve or deny the Plan to reduce GHG emissions. Upon approval of the Plan, the Executive Officer issues required to issue a certified receipt of the GHG emission reductions within 90 days.

SCAQMD Rule 2702

The SCAQMD adopted Rule 2702 on February 6, 2009, which establishes a voluntary air quality investment program from which SCAQMD can collect funds from parties that desire certified GHG emission reductions, pool those funds, and use them to purchase or fund GHG emission reduction projects within two years, unless extended by the Governing Board. Priority will be given to projects that result in co-benefit emission reductions of GHG emissions and criteria or toxic air pollutants within environmental justice areas. Further, this voluntary program may compete with the cap-and-trade program identified for implementation in the CARB's Scoping Plan, or a federal cap and trade program.

SCAQMD Rule 3002

The SCAQMD amended Rule 3002 on November 5, 2010 to include facilities that emit greater than 100,000 tons per year of CO_2e are required to apply for a Title V permit by July 1, 2011. A Title V permit is for facilities that are considered major sources of emissions.

Although the SCAQMD is responsible for regional air quality planning efforts, it does not have the authority to directly regulate air quality issues associated with plans and new development projects throughout the Salton Sea portion of the South Coast Air Basin. Instead, this is controlled through local jurisdictions in accordance with the California Environmental Quality Act (CEQA). In order to assist local jurisdictions with air quality compliance issues the CEQA Air Quality Handbook (SCAQMD CEQA Handbook) prepared by the SCAQMD (1993) with the most current updates found at http://www.aqmd.gov/ceqa/hdbk.html, was developed in accordance with the projections and programs of the AQMP. The purpose of the SCAQMD CEQA Handbook is to assist Lead Agencies, as well as consultants, project proponents, and other interested parties in evaluating a proposed project's potential air quality impacts. Specifically, the SCAQMD CEQA Handbook explains the procedures that the SCAQMD recommends be followed for the environmental review process required by CEQA. The SCAQMD CEQA Handbook provides direction on how to evaluate potential air quality impacts, how to determine whether these impacts are significant, and how to mitigate these impacts. SCAQMD is in the process of developing an "Air Quality Analysis Guidance Handbook" to replace the CEQA Air Quality Handbook approved by the AQMD Governing Board in 1993. The 1993 CEQA Air Quality Handbook is still available but not online. In addition, there are sections of the 1993 Handbook that are obsolete. In order to assist the CEQA practitioner in conducting an air quality analysis while the new Handbook is being prepared, supplemental information regarding: significance thresholds and analysis, emissions factors, cumulative impacts emissions analysis, and other useful subjects, are available at the SCAQMD website[2].

Air Quality Guidance Documents

SCAQMD CEQA Handbook

Although the SCAQMD is responsible for regional air quality planning efforts, it does not have the authority to directly regulate air quality issues associated with plans and new development projects throughout the Salton Sea portion of the South Coast Air Basin. Instead, this is controlled through local jurisdictions in accordance with the California Environmental Quality Act (CEQA). In order to assist local jurisdictions with air quality compliance issues the CEQA Air Quality Handbook (SCAQMD CEQA Handbook) prepared by the SCAQMD (1993) with the most current updates found at http://www.aqmd.gov/ceqa/hdbk.html, was developed in accordance with the projections and programs of the AQMP. The purpose of the SCAQMD CEQA Handbook is to assist Lead Agencies, as well as consultants, project proponents, and other interested parties in evaluating a proposed project's potential air quality impacts. Specifically, the SCAQMD CEQA Handbook explains the procedures that the SCAQMD recommends be followed for the environmental review process required by CEQA. The SCAQMD CEQA Handbook provides direction on how to evaluate potential air quality impacts, how to determine whether these impacts are significant, and how to mitigate these impacts. SCAQMD is in the process of developing an "Air Quality Analysis Guidance Handbook" to replace the CEQA Air Quality Handbook approved by the AQMD Governing Board in 1993. The 1993 CEQA Air Quality Handbook is still available but not online. In addition, there are sections of the 1993 Handbook that are obsolete. In order to assist the CEQA practitioner in conducting an air quality analysis while the new Handbook is being prepared, supplemental information regarding: significance thresholds and analysis, emissions factors, cumulative impacts emissions analysis, and other useful subjects, are available at the SCAQMD website[3]. The SCAQMD CEQA Handbook and supplemental information is used in this analysis.

Southern California Association of Governments

The SCAG is the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino and Imperial Counties and addresses regional issues relating to transportation, the economy, community development and the environment. SCAG is the Federally designated MPO for the majority of the southern California region and is the largest MPO in the nation. With respect to air quality planning, SCAG has prepared the Regional Transportation Plan and Regional Transportation Improvement Plan (RTIP), which addresses regional development and growth forecasts. These plans form the basis for the land use and transportation components of the AQMP, which are utilized in the preparation of air quality forecasts and in the consistency analysis included in the AQMP. The Regional Transportation Plan, Regional Transportation Improvement Plan, and AQMP are based on projections originating within the City and County General Plans.

On April 7, 2016, SCAG's Regional Council adopted the 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (2016 RTP/SCS or Plan). The Plan is a long-range visioning plan that balances future mobility and housing needs with economic, environmental and public health goals. The Plan charts a course for closely integrating land use and transportation – so that the region can grow smartly and sustainably. It

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[2] http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook.

[3] http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook.

outlines more than $556.5 billion in transportation system investments through 2040. The Plan was prepared through a collaborative, continuous, and comprehensive process with input from local governments, county transportation commissions, tribal governments, non-profit organizations, businesses and local stakeholders within the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino and Ventura. In June 2016, SCAG received its conformity determination from the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) indicating that all air quality conformity requirements for the 2016 RTP/SCS and associated 2015 FTIP Consistency Amendment through Amendment 15-12 have been met.

On May 7, 2020, SCAG's Regional Council adopted Connect SoCal (2020 - 2045 Regional Transportation Plan/Sustainable Communities Strategy) for federal transportation conformity purposes only. In light of the COVID-19 pandemic, the Regional Council will consider approval of Connect SoCal in its entirety and for all other purposes within 120 days from May 7, 2020. Connect SoCal is a long-range visioning plan that builds upon and expands land use and transportation strategies established over several planning cycles to increase mobility options and achieve a more sustainable growth pattern. Connect SoCal outlines more than $638 billion in transportation system investments through 2045. It was prepared through a collaborative, continuous, and comprehensive process with input from local governments, county transportation commissions, tribal governments, non-profit organizations, businesses and local stakeholders within the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino and Ventura.

Coachella Valley Model Dust Control Ordinance (see also SCAQMD Rule 403.1)

The Coachella Valley Dust Control Ordinance was designed to establish minimum requirements for construction and demolition activities and other specified sources in order to reduce man-made fugitive dust and the corresponding PM10 emissions. The Ordinance establishes following rules associated with reducing the fugitive dust emissions associated with the project:

Section 400 Control Requirements

<u>410. Work Practices – All Fugitive Dust Sources</u>

1. No operator shall conduct any potential dust-generating activity on a site unless the operator utilizes one or more Coachella Valley Best Available Control Measures, as identified in the Coachella Valley Fugitive Dust Control Handbook for each fugitive dust source such that the applicable performance standards are met.

2. Any operator involved in any potential dust-generating activity on a site with a disturbed surface area greater than one acre shall, at a minimum, operate a water application system as identified in the Coachella Valley Fugitive Dust Control Handbook, if watering is the selected control measure.

<u>Performance Standards and Test Methods</u>

3. No person subject to the requirements contained in Section 410.1 shall cause or allow visible fugitive dust emissions to exceed 20 percent opacity, or extend more than 100 feet either horizontally or vertically from the origin of a source, or cross any property line.

<u>420. Construction and Demolition Activities</u>

1. Any operator applying for a grading permit, or a building permit for an activity with a disturbed surface area of more than 5,000 square feet, shall not initiate any earth-moving operations unless a Fugitive Dust Control Plan has been prepared pursuant to the provisions of the Coachella Valley Fugitive Dust Control Handbook and approved by the City (County).

2. A complete copy of the approved Fugitive Dust Control Plan must be kept on-site in a conspicuous place at all times and provided to the City (County) and AQMD upon request.

4. Any operator involved in earth-moving operations shall implement at least one of the following short-term stabilization methods during non-working hours:

   A. maintaining soils in a damp condition as determined by sight or touch; or
   B. establishment of a stabilized surface through watering; or
   C. application of a chemical dust suppressant in sufficient quantities and concentrations to maintain a stabilized surface.

5. Within 10 days of ceasing activity, an operator shall implement at least one of the following long-term stabilization techniques for any disturbed surface area where construction activities are not scheduled to occur for at least 30 days:

   A. revegetation that results in 75 percent ground coverage provided that an active watering system is in place at all times; or
   B. establishment of a stabilized surface through watering with physical access restriction surrounding the area; or
   C. use of chemical stabilizers to establish a stabilized surface with physical access restriction surrounding the area.

6. Any operator shall remove all bulk material track-out from any site access point onto any paved road open to through traffic:

   A. within one hour if such material extends for a cumulative distance of greater than 25 feet from any site access point; and
   B. at the conclusion of each workday.

7. Any operator of a project with a disturbed surface area of five or more acres or of any project that involves the import or export of at least 100 cubic yards of bulk material per day shall install and maintain at least one of the following control measures at the intersection of each site entrance and any paved road open to through traffic with all vehicles exiting the site routed over the selected device(s):

   A. pad consisting of minimum one-inch washed gravel maintained in a clean condition to a depth of at least six inches and extending at least 30 feet wide and at least 50 feet long; or
   B. paved surface extending at least 100 feet and at least 20 feet wide; or
   C. wheel shaker / wheel spreading device consisting of raised dividers (rails, pipe, or grates) at least three inches tall and at least six inches apart and 20 feet long; or

8. Any operator required to submit a Fugitive Dust Control Plan under Section 420.1 shall install and maintain project contact signage that meets the minimum standards of the Coachella Valley Fugitive Dust Control Handbook, including a 24-hour manned toll-free or local phone number, prior to initiating any type of earth-moving operations.

9. Any operator of a project with a disturbed surface area of 50 or more acres shall have an Environmental Observer on the site or available on-site within 30 minutes of initial contact that:

   A. is hired by the property owner or developer; and
   B. has dust control as the sole or primary responsibility; and
   C. has successfully completed the AQMD Coachella Valley Fugitive Dust Control Class and has been issued a Certificate of Completion for the class; and
   D. is identified in the approved Fugitive Dust Control Plan as having the authority to immediately employ sufficient dust mitigation 24-hours per day, seven days a week and to ensure

compliance with this ordinance, the approved Fugitive Dust Control Plan, and AQMD regulations.

Performance Standards and Test Methods

10. No operator required to submit a Fugitive Dust Control Plan under Section 420.1 shall cause or allow visible fugitive dust emissions to exceed 20 percent opacity, or extend more than 100 feet either horizontally or vertically from the origin of a source, or cross any property line.

11. Exceedance of the visible emissions prohibition in Section 420.10 occurring due to a high-wind episode shall constitute a violation of Section 420.10, unless the operator demonstrates to City (County) all the following conditions:

    A. all Fugitive Dust Control Plan measures or applicable Coachella Valley Best Available Control Measures were implemented and maintained on-site; and
    B. the exceedance could not have been prevented by better application, implementation, operation, or maintenance of control measures; and
    C. appropriate recordkeeping was compiled and retained in accordance with the requirements in Section 420.12 through 420.15; and
    D. documentation of the high-wind episode on the day(s) in question is provided by appropriate records.

Reporting / Recordkeeping

Before Construction

12. The operator of a project with ten acres or more of earth-moving operations shall:

    A. forward two copies of a Site-Specific, Stand Alone [8½ by 11 inch] Fugitive Dust Control Plan to the AQMD within ten days after approval by the City (County). [Note: A separate AQMD approval will not be issued]; and
    B. notify the City (County) and the AQMD at least 24-hours prior to initiating earth-moving operations.

During Construction

13. Any operator involved in earth-moving operations shall compile, and maintain for a period of not less than three years, daily self-inspection recordkeeping forms in accordance with the guidelines contained in the Coachella Valley Fugitive Dust Control Handbook.

14. Any operator involved in earth-moving operations that utilizes chemical dust suppressants for dust control on a site shall compile records indicating the type of product applied, vendor name, and the method, frequency, concentration, quantity and date(s) of application and shall retain such records for a period of not less than three years.

After Construction

15. Any operator subject to the provisions of Section 420.12 shall notify the City (County) and the AQMD within ten days of the establishment of the finish grade or at the conclusion of the finished grading inspection.

430. Disturbed Vacant Lands / Weed Abatement Activities

1. Owners of property with a disturbed surface area greater than 5,000 square feet shall within 30 days of receiving official notice by the City (County) prevent trespass through physical access restriction as permitted by the City (County).

2. In the event that implementation of Section 430.1 is not effective in establishing a stabilized surface within 45 days of restricting access, the owner shall implement at least one of the following long term stabilization techniques within an additional 15 days, unless the City (County) has determined that the land has been restabilized:

   A. uniformly apply and maintain surface gravel or chemical dust suppressants such that a stabilized surface is formed; or
   B. begin restoring disturbed surfaces such that the vegetative cover and soil characteristics are similar to adjacent or nearby undisturbed native conditions. Such restoration control measure(s) must be maintained and reapplied, if necessary, such that a stabilized surface is formed within 8 months of the initial application.

3. Any operator conducting weed abatement activities on a site that results in a disturbed surface area of 5,000 or more square feet shall:

   A. apply sufficient water before and during weed abatement activities such that the applicable performance standards are met.
   B. ensure that the affected area is a stabilized surface once weed abatement activities have ceased.

Performance Standards and Test Methods

4. No person subject to the provisions of Sections 430.1 through 430.3 shall cause or allow visible fugitive dust emissions to exceed 20 percent opacity, or extend more than 100 feet either horizontally or vertically from a source, or cross any property line, and shall either:

   A. maintain a stabilized surface; or
   B. maintain a threshold friction velocity for disturbed surface areas corrected for non-erodible elements of 100 centimeters per second or higher.

Reporting / Recordkeeping

5. Within 90 days of ordinance adoption, operators of property with disturbed surface area of 5,000 or more square feet shall notify the City (County) of the location of such lands and provide owner contact information.

6. Any person subject to the provisions of Sections 430.1 through 403.3 shall compile, and retain for a period of not less than three years, records indicating the name and contact person of all firms contracted with for dust mitigation, listing of dust control implements used on-site, and invoices from dust suppressant contractors/vendors.

460. Public or Private Paved Roads

1. Any owner of paved roads shall construct, or require to be constructed all new or widened paved roads in accordance with the following standards:

A. curbing in accordance with the American Association of State Highway and Transportation Officials guidelines or as an alternative, road shoulders paved or treated with chemical dust suppressants or washed gravel in accordance with the performance standards included in Section 440.4 with the following minimum widths:

Average Daily Trips	Minimum Shoulder Width
500 - 3,000	4 feet
3,000 or greater	8 feet

Section 500 Administrative Requirements

1. Any operator preparing a Fugitive Dust Control Plan shall complete the AQMD Coachella Valley Fugitive Dust Control Class and maintain a current valid Certificate of Completion.

2. At least one representative of each construction or demolition general contractor and subcontractor responsible for earth-movement operations shall complete the AQMD Coachella Valley Fugitive Dust Control Class and maintain a current valid Certificate of Completion.

3. All reporting / recordkeeping required by Section 420 shall be provided to the City (County) and AQMD representatives immediately upon request.

4. All reporting / recordkeeping required by Section 430 through Section 460 shall be provided to the City (County) and AQMD representatives within 24-hours of a written request.

Local – City of Desert Hot Springs

Local jurisdictions, such as the City of Desert Hot Springs, have the authority and responsibility to reduce air pollution through its police power and decision-making authority. It is the responsibility of the District, CVAG, and the City of Desert Hot Springs to monitor pollutant levels and regulate air pollution sources. With the installation of additional monitoring devices in the Whitewater River, the District is collecting data to establish a "naturally occurring" or "background" level for PM10 in the Coachella Valley. This data will allow a more meaningful estimate of manmade PM10 emissions. The General Plan Open Space and Natural Resources Element contains the following goals, policies and programs aimed at reducing air pollution:

Goal OS-2
Air Quality that is healthy for residents and the environment.

> *Policy OS-2.1*
> Air Pollution Reduction. Seek to reduce air pollution through the implementation of existing regulations and the creation of new regulations where needed.
>
> *Policy OS-2.2*
> Climate Change Laws. Find creative means to comply with State laws addressing climate change.
>
> *Policy OS-2.3*
> Minimize Air Quality Impacts. Minimize the air quality impacts of new development projects on established uses.
>
> *Policy OS-2.4*
> Air Quality Goals. Ensure that land use and transportation plans support regional air quality goals, with new development projects reducing vehicle miles traveled and vehicle trips.

Policy OS-2.6
Alternative Fuels. Prioritize alternative fuel vehicles for City use. Incorporate alternative fuel charging stations into public and private development projects.

Policy OS-2.8
Air Quality and Climate Change Analyses. Require detailed air quality and climate change analyses and mitigation plans for all applications that have the potential to adversely affect air quality.

City of Desert Hot Springs Municipal Code

Section 5.50.150 Odor Control of the City's Municipal Code requires that facilities shall provide a sufficient odor absorbing ventilation and exhaust system so that odor generated inside the facility that is distinctive to its operation is not detected outside the facility, anywhere on adjacent property or public rights-of-way, on or about any exterior or interior common area walkways, hallways, breezeways, foyers, lobby areas, or any other areas available for common use by tenants or the visiting public, or within any other unit located within the same building as the facility.

Table 2
State and Federal Criteria Pollutant Standards[1]

Air Pollutant	Concentration / Averaging Time		Most Relevant Effects
	California Standards	Federal Primary Standards	
Ozone (O$_3$)	0.09 ppm/1-hour 0.07 ppm/8-hour	0.070 ppm/8-hour	(a) Decline in pulmonary function and localized lung edema in humans and animals; (b) Risk to public health implied by alterations in pulmonary morphology and host defense in animals; (c) Increased mortality risk; (d) Risk to public health implied by altered connective tissue metabolism and altered pulmonary morphology in animals after long-term exposures and pulmonary function decrements in chronically exposed humans; (e) Vegetation damage; and (f) Property damage.
Carbon Monoxide (CO)	20.0 ppm/1-hour 9.0 ppm/8-hour	35.0 ppm/1-hour 9.0 ppm/8-hour	(a) Aggravation of angina pectoris and other aspects of coronary heart disease; (b) Decreased exercise tolerance in persons with peripheral vascular disease and lung disease; (c) Impairment of central nervous system functions; and (d) Possible increased risk to fetuses.
Nitrogen Dioxide (NO$_2$)	0.18 ppm/1-hour 0.03 ppm/annual	100 ppb/1-hour 0.053 ppm/annual	(a) Potential to aggravate chronic respiratory disease and respiratory symptoms in sensitive groups; (b) Risk to public health implied by pulmonary and extra-pulmonary biochemical and cellular changes and pulmonary structural changes; and (c) Contribution to atmospheric discoloration.
Sulfur Dioxide (SO$_2$)	0.25 ppm/1-hour 0.04 ppm/24-hour	75 ppb/1-hour 0.14 ppm/annual	(a) Bronchoconstriction accompanied by symptoms which may include wheezing, shortness of breath and chest tightness, during exercise or physical activity in persons with asthma.
Suspended Particulate Matter (PM$_{10}$)	50 µg/m^3/24-hour 20 µg/m^3/annual	150 µg/m^3/24-hour	(a) Exacerbation of symptoms in sensitive patients with respiratory or cardiovascular disease; (b) Declines in pulmonary function growth in children; (c) Increased risk of premature death from heart or lung diseases in elderly.
Suspended Particulate Matter (PM$_{2.5}$)	12 µg/m^3 / annual	35 µg/m^3/24-hour 12 µg/m^3/annual	
Sulfates	25 µg/m^3/24-hour	No Federal Standards	(a) Decrease in ventilatory function; (b) Aggravation of asthmatic symptoms; (c) Aggravation of cardio-pulmonary disease; (d) Vegetation damage; (e) Degradation of visibility; (f) property damage.
Lead	1.5 µg/m^3/30-day	0.15 µg/m^3/3-month rolling	(a) Learning disabilities; (b) Impairment of blood formation and nerve conduction.
Visibility Reducing Particles	Extinction coefficient of 0.23 per kilometer-visibility of 10 miles or more due to particles when humidity is less than 70 percent.	No Federal Standards	Visibility impairment on days when relative humidity is less than 70 percent.

Notes:
(1) Source: https://ww2.arb.ca.gov/sites/default/files/2020-07/aaqs2.pdf

Table 3
Salton Sea Air Basin Attainment Status[1]

Pollutant	State Status	National Status
Ozone	Nonattainment	Nonattainment
Carbon monoxide	Attainment	Unclassified/Attainment
Nitrogen dioxide	Attainment	Unclassified/Attainment
Sulfur dioxide	Attainment	Unclassified/Attainment
PM10	Nonattainment	Nonattainment
PM2.5	Attainment	Unclassified/Attainment

Notes:
(1) Source : California Air Resources Board December 2018, October 2020.

MONITORED AIR QUALITY

The air quality at any site is dependent on the regional air quality and local pollutant sources. Regional air quality is determined by the release of pollutants throughout the air basin. Estimates of the existing emissions in the Basin provided in the Final 2016 Air Quality Management Plan prepared by SCAQMD (March 2017) indicate that collectively, mobile sources account for 60 percent of the VOC, 90 percent of the NOx emissions, 95 percent of the CO emissions and 34 percent of directly emitted PM2.5, with another 13 percent of PM2.5 from road dust.

The EPA and the ARB designate air basins where ambient air quality standards are exceeded as "nonattainment" areas. If standards are met, the area is designated as an "attainment" area. If there is inadequate or inconclusive data to make a definitive attainment designation, they are considered "unclassified". National nonattainment areas are further designated as marginal, moderate, serious, severe, or extreme as a function of deviation from standards. Each standard has a different definition, or 'form' of what constitutes attainment, based on specific air quality statistics. For example, the Federal 8-hour CO standard is not to be exceeded more than once per year; therefore, an area is in attainment of the CO standard if no more than one 8-hour ambient air monitoring values exceeds the threshold per year. In contrast, the Federal annual PM2.5 standard is met if the three-year average of the annual average PM2.5 concentration is less than or equal to the standard. Attainment status is shown in Table 3.

The SCAQMD has 38 air-monitoring areas with a designated ambient air monitoring station representative of each area. The project is within Source Receptor Area 30, Coachella Valley. SCAQMD operates two air monitoring stations in SRA 30, one in Indio, California, approximately 3.99 miles south of the project site and the other in Palm Springs, California, approximately 23.2 miles southeast of the project site. The Palm Springs monitoring station was used to collect monitoring data.

Table 4 summarizes 2018 through 2020 published monitoring data, which is the most recent 3-year period available. The data shows that during the past few years, the project area has exceeded the ozone and Particulate Matter (PM10) standards.

Ozone

During the 2018 to 2020 monitoring period, monitoring period, the State 1-hour concentration standard for ozone was exceeded between five and 11 days each year at the Palm Springs Station. The State 8-hour ozone standard has been exceeded between 39 and 58 days each year over the past three years at the Palm Springs Station. The Federal 8-hour ozone standard was exceeded between 34 and 56 days each year over the past three years at the Palm Springs Station.

Ozone is a secondary pollutant as it is not directly emitted. Ozone is the result of chemical reactions between other pollutants, most importantly hydrocarbons and NO_2, which occur only in the presence of bright sunlight. Pollutants emitted from upwind cities react during transport downwind to produce the oxidant concentrations experienced in the area. Many areas of the SCAQMD contribute to the ozone levels experienced at the monitoring station, with the more significant areas being those directly upwind.

Carbon Monoxide

CO is another important pollutant that is due mainly to motor vehicles. The Palm Springs Station did not record an exceedance of the state or federal 8-hour CO standard for the last three years.

Nitrogen Dioxide

The Palm Springs Station did not record an exceedance of the State or Federal NO_2 standards for the last three years.

Particulate Matter

During the 2018 to 2020 monitoring period, the State 24-hour concentration standards for PM10 were exceeded for only one day in 2019 at the Palm Springs Station. The Federal 24-hour concentration standards were exceeded for only two days in 2018 over the past three years at the Palm Springs Station.

During the 2018 to 2020 monitoring period, the Federal 24-hour standards for PM2.5 were not exceeded at the Palm Springs Station.

According to the EPA, some people are much more sensitive than others to breathing fine particles (PM10 and PM2.5). People with influenza, chronic respiratory and cardiovascular diseases, and the elderly may suffer worsening illness and premature death due to breathing these fine particles. People with bronchitis can expect aggravated symptoms from breathing in fine particles. Children may experience decline in lung function due to breathing in PM10 and PM2.5. Other groups considered sensitive are smokers and people who cannot breathe well through their noses. Exercising athletes are also considered sensitive, because many breathe through their mouths during exercise.

Table 4
Air Quality Monitoring Summary[1]

Pollutant (Standard)[2]		Year		
		2018	2019	2020
Ozone:	Maximum 1-Hour Concentration (ppm)	0.111	0.100	0.119
	Days > CAAQS (0.09 ppm)	11	5	9
	Maximum 8-Hour Concentration (ppm)	0.099	0.085	0.094
	Days > NAAQS (0.070 ppm)	56	34	49
	Days > CAAQS (0.070 ppm)	58	39	53
Carbon Monoxide:	Maximum 8-Hour Concentration (ppm)	*	*	*
	Days > CAAQS (9 ppm)	0	0	0
	Days > NAAQS (9 ppm)	0	0	0
Nitrogen Dioxide:	Maximum 1-Hour Concentration (ppm)	0.041	0.043	0.047
	Days > CAAQS (0.18 ppm)	0	0	0
Inhalable Particulates (PM10):	Maximum 24-Hour Concentration (µg/m^3)	422.3	75.6	129.8
	Days > NAAQS (150 µg/m3)	2	0	0
	Days > CAAQS (50 µg/m3)	0	1	0
	Annual Average (µg/m3)	22.9	20.7	23.2
Ultra-Fine Particulates (PM2.5):	Maximum 24-Hour Concentration (µg/m3)	30.2	15.5	23.9
	Days > NAAQS (35 µg/m3)	0	0	0
	Annual Average (µg/m3)	6	6	6.4

Notes:

(1) Source: http://www.arb.ca.gov/adam/topfour/topfour1.php

Data from the Palm Springs Monitoring Station unless otherwise noted.

(2) CAAQS = California Ambient Air Quality Standard; NAAQS = National Ambient Air Quality Standard; ppm = parts per million

* Means there was insufficient data available to determine value.

AIR QUALITY STANDARDS

Regional Air Quality

Many air quality impacts that derive from dispersed mobile sources, which are the dominate pollution generators in the basin, often occurs hours later and miles away after photochemical processes have converted primary exhaust pollutants into secondary contaminants such as ozone. The incremental regional air quality impact of an individual project is generally very small and difficult to measure. Therefore, the SCAQMD has developed significance thresholds based on the volume of pollution emitted rather than on actual ambient air quality because the direct air quality impact of a project is not quantifiable on a regional scale. The SCAQMD CEQA Handbook states that any project in the South Coast Air Basin with daily emissions that exceed any of the identified significance thresholds should be considered as having an individually and cumulatively significant air quality impact. For the purposes to this air quality impact analysis, a regional air quality impact would be considered significant if emissions exceed the SCAQMD significance thresholds identified in Table 5.

Local Air Quality

Project-related construction air emissions may have the potential to exceed the State and Federal air quality standards in the project vicinity, even though these pollutant emissions may not be significant enough to create a regional impact to the South Coast Air Basin. In order to assess local air quality impacts the SCAQMD has developed Localized Significant Thresholds (LSTs) to assess the project-related air emissions in the project vicinity. The SCAQMD has also provided Final Localized Significant Threshold Methodology (LST Methodology), June 2003, which details the methodology to analyze local air emission impacts. The Localized Significant Threshold Methodology found that the primary emissions of concern are NO_2, CO, PM10, and PM2.5.

The significance thresholds for the local emissions of NO_2 and CO are determined by subtracting the highest background concentration from the last three years of these pollutants from Table 4 above, from the most restrictive ambient air quality standards for these pollutants that are outlined in the Localized Significant Thresholds. Table 5 shows the ambient air quality standards for NO_2, CO, and PM10 and PM2.5.

Toxic Air Contaminants

Construction

Temporary TAC emissions associated with DPM emissions from heavy construction equipment would occur during the construction phase of the Project. According to the Office of Environmental Health Hazard Assessment (OEHHA)[4] and the SCAQMD *Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis* (August 2003),[5] health effects from TACs are described in terms of individual cancer risk. “Individual Cancer Risk” is the likelihood that a person exposed to concentrations of TACs over a 30-year lifetime will contract cancer based on the use of standard risk-assessment methodology. Additionally, the SCAQMD CEQA guidance does not require a HRA for short-term construction emissions. Construction activities associated with the project would be sporadic, transitory, and short-term in nature (approximately 12 months). Thus, construction of the project would not result in a substantial, long-term (i.e., 30-year) source of TAC emissions. Nonetheless, a qualitative assessment of TAC emissions associated with short-term construction TAC emissions is provided in the analysis section below.

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[4] Office of Environmental Health Hazard Assessment, Air Toxic Hot Spots Program Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessment, February 2015, https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf.

[5] South Coast Air Quality Management District, Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis, August 2003. ,http://www.aqmd.gov/docs/default-source/ceqa/handbook/mobile-source-toxics-analysis.doc?sfvrsn=2.

Operation

CARB published the *Air Quality and Land Use Handbook* in April 2005 to serve as a general guide for considering impacts to sensitive receptors from facilities that emit TAC emissions. The recommendations provided therein are voluntary and do not constitute a requirement or mandate for either land use agencies or local air districts. The goal of the guidance document is to protect sensitive receptors, such as children, the elderly, acutely ill, and chronically ill persons, from exposure to TAC emissions. Some examples of CARB's siting recommendations include the following: (1) avoid siting sensitive receptors within 500 feet of a freeway, urban road with 100,000 vehicles per day, or rural roads with 50,000 vehicles per day; (2) avoid siting sensitive receptors within 1,000 feet of a distribution center (that accommodates more than 100 trucks per day, more than 40 trucks with operating transport refrigeration units per day, or where transport refrigeration unit operations exceed 300 hours per week); (3) avoid siting sensitive receptors within 300 feet of any dry cleaning operation using perchloroethylene and within 500 feet of operations with two or more machines; and (4) avoid siting sensitive receptors within 300 feet of a large gasoline dispensing facility (3.6 million gallons per year or more) or 50 feet of a typical gasoline dispensing facility (less than 3.6 million gallons per year)

The project proposes to develop Parcels 30 and 31 of the site with a 175-room hotel and an amphitheater. Therefore, as the project itself is not a source of TAC pollutants and is not located within proximity any of the aforementioned TAC sources, existing and proposed sensitive receptors would not be exposed to toxic sources of air pollution and no further analysis is required.

Odor Impacts

The SCAQMD CEQA Handbook states that an odor impact would occur if the proposed project creates an odor nuisance pursuant to SCAQMD Rule 402, which states:

A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.

The provisions of this rule shall not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.

If the proposed project results in a violation of Rule 402 with regards to odor impacts, then the proposed project would create a significant odor impact.

Table 5
SCAQMD Air Quality Significance Thresholds for Coachella Valley[1,2]

Mass Daily Thresholds		
Pollutant	Construction (lbs/day)	Operation (lbs/day)
NOx	100	100
VOC	75	75
PM10	150	150
PM2.5	55	55
SOx	150	150
CO	550	550
Lead	3	3

Toxic Air Contaminants, Odor and GHG Thresholds	
TACs	Maximum Incremental Cancer Risk ≥ 10 in 1 million Cancer Burden > 0.5 excess cancer cases (in areas ≥ 1 in 1 million) Chronic & Acute Hazard Index > 1.0 (project increment)
Odor	Project creates an odor nuisance pursuant to SCAQMD Rule 402
GHG	10,000 MT/yr CO2e for industrial projects

Ambient Air Quality Standards	
Pollutant	SCAQMD Standards
NO2 -1-hour average	0.18 ppm (338 μg/m^3)
PM10 -24-hour average Construction Operations	 10.4 μg/m^3 2.5 ug/m^3
PM2.5 -24-hour average Construction Operations	 10.4 μg/m^3 2.5 μg/m^3
SO2 1-hour average 24-hour average	 0.25 ppm 0.04 ppm
CO 1-hour average 8-hour average	 20 ppm (23,000 μg/m^3) 9 ppm (10,000 μg/m^3)
Lead 30-day average Rolling 3-month average Quarterly average	 1.5 μg/m^3 0.15 μg/m^3 1.5 μg/m^3

Notes:

(1) Source: http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf

(2) Construction thresholds apply to both the South Coast Air Basin and Coachella Valley. For Coachella Valley, the mass daily thresholds for operation are the same as the construction thresholds.

SHORT-TERM CONSTRUCTION EMISSIONS

Construction activities associated with the proposed project would have the potential to generate air emissions, toxic air contaminant emissions, and odor impacts. Assumptions for the phasing, duration, and required equipment for the construction of the proposed project were obtained from the project applicant. Construction activities for the proposed project are anticipated to include: for Parcel 30: fine grading of approximately 5.88 acres; construction of a 150,000 square foot 175-room hotel (with a 46,216 square foot building footprint), an approximately 4,000 square foot pool, and landscaping of approximately 1.79 acres; paving of approximately 50 percent of the parcel area (~2.94 acres) for the parking lot; and application of architectural coatings. For Parcel 31 (includes Basin 101 site): fine grading of approximately 6.78 acres; construction of a 56,005 square foot amphitheater with a 5,660 square foot restaurant building and a 460 square foot restroom building, approximately 4.15 acres of hardscape and temporary parking [34,564 square feet of hardscape and approximately 3.36 acres (former Basin 101 site) of temporary parking], and approximately 1.11 acres of landscaping; paving of a parking lot with 10 parking spaces; and application of architectural coatings.

The proposed project is anticipated to start construction in 2022 and take approximately 12 months to complete.

Methodology

The following provides a discussion of the methodology used to calculate regional construction air emissions and an analysis of the proposed project's short-term construction emissions for the criteria pollutants. The construction-related regional air quality impacts have been analyzed for both criteria pollutants and GHGs.

Emissions are estimated using the CalEEMod (Version 2020.4.0) software, which is a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and GHG emissions from a variety of land use projects. CalEEMod was developed in collaboration with the air districts of California. Regional data (e.g., emission factors, trip lengths, meteorology, source inventory, etc.) have been provided by the various California air districts to account for local requirements and conditions. The model is considered to be an accurate and comprehensive tool for quantifying air quality and GHG impacts from land use projects throughout California and is recommended by the SCAQMD.[6]

Daily regional emissions during construction are forecasted by assuming a conservative estimate of construction activities (i.e., assuming all construction occurs at the earliest feasible date) and applying the mobile source and fugitive dust emissions factors. The input values used in this analysis were adjusted to be project-specific for the construction schedule and the equipment used was based on CalEEMod defaults. The CalEEMod program uses the EMFAC2017 computer program to calculate the emission rates specific for the eastern portion of Riverside County for construction-related employee vehicle trips and the OFFROAD2011 computer program to calculate emission rates for heavy truck operations. EMFAC2017 and OFFROAD2011 are computer programs generated by CARB that calculates composite emission rates for vehicles. Emission rates are reported by the program in grams per trip and grams per mile or grams per running hour. Daily truck trips and CalEEMod default trip length data were used to assess roadway emissions from truck exhaust. The maximum daily emissions are estimated values for the worst-case day and do not represent the emissions that would occur for every day of project construction. The maximum daily emissions are compared to the SCAQMD daily regional numeric indicators. Detailed construction equipment lists, construction scheduling, and emission calculations are provided in Appendix B.

The project will be required to comply with existing SCAQMD rules for the reduction of fugitive dust emissions. SCAQMD Rules 403 and 403.1 establish these procedures. Compliance with these rules is achieved through application of standard best management practices in construction and operation activities,

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[6] South Coast Air Quality Management District, California Emissions Estimator Model, http://www.aqmd.gov/ caleemod/.

such as application of water or chemical stabilizers to disturbed soils, managing haul road dust by application of water, covering haul vehicles, restricting vehicle speeds on unpaved roads to 15 mph, sweeping loose dirt from paved site access roadways, cessation of construction activity when winds exceed 25 mph and establishing a permanent and stabilizing ground cover on finished sites.

In addition, any operator applying for a grading permit, or a building permit for an activity with a disturbed surface area of more than 5,000 square feet, shall not initiate any earth-moving operations unless a Fugitive Dust Control Plan has been prepared pursuant to the provisions of the Coachella Valley Fugitive Dust Control Handbook and approved by the City. It is anticipated that this project will obtain and prepare the required Fugitive Dust Control Plan.

SCAQMD's Rule 403 and 403.1 minimum requirements require that the application of the best available dust control measures are used for all grading operations and include the application of water or other soil stabilizers in sufficient quantity to prevent the generation of visible dust plumes. Compliance with Rules 403 and 403.1 would require the use of water trucks during all phases where earth moving operations would occur. Compliance with Rule 403 has been included in the CalEEMod modeling for the proposed project.

Per SCAQMD Rule 1113 as amended on June 3, 2011, the architectural coatings that would be applied after January 1, 2014 will be limited to an average of 50 grams per liter or less. CalEEMod defaults have been adjusted accordingly.

The phases of the construction activities which have been analyzed below for each phase are: (1) grading, (2) building construction, (3) paving, and (4) application of architectural coatings. Building construction, paving and painting phases may overlap during construction. Details pertaining to the project's construction timing and the type of equipment modeled for each construction phase are available in the CalEEMod output in Appendix B.

Construction-Related Regional Impacts

The unmitigated construction-related criteria pollutant emissions for each phase are shown below in Table 6. Table 6 shows that none of the project's unmitigated emissions will exceed regional thresholds. However, since the proposed project is an amendment to the previously-approved project, the project is required to adhere to all of the conditions of the previously-approved project. The previously-approved project included mitigation measures requiring the use of Tier 3 level construction equipment as well as adherence to SCAQMD Rule 1113 requiring all architectural coatings to be limited to 50 grams per liter VOC for buildings and 100 grams per liter VOC for parking lot striping. The construction emissions with incorporation of these measures have been calculated and are shown in Table 7. See Section 6 of this report for further details regarding mitigation measures. Therefore, a less than significant regional air quality impact would occur from construction of the proposed project.

Construction-Related Local Impacts

Construction-related air emissions may have the potential to exceed the State and Federal air quality standards in the project vicinity, even though these pollutant emissions may not be significant enough to create a regional impact to the Salton Sea portion of the South Coast Air Basin. The proposed project has been analyzed for the potential local air quality impacts created from: construction-related fugitive dust and diesel emissions; from toxic air contaminants; and from construction-related odor impacts.

Local Air Quality Impacts from Construction

The SCAQMD has published a "Fact Sheet for Applying CalEEMod to Localized Significance Thresholds" (South Coast Air Quality Management District 2011b). CalEEMod calculates construction emissions based on the number of equipment hours and the maximum daily disturbance activity possible for each piece of equipment. In order to compare CalEEMod reported emissions against the localized significance threshold lookup tables, the CEQA document should contain the following parameters:

(1) The off-road equipment list (including type of equipment, horsepower, and hours of operation) assumed for the day of construction activity with maximum emissions.
(2) The maximum number of acres disturbed on the peak day.
(3) Any emission control devices added onto off-road equipment.
(4) Specific dust suppression techniques used on the day of construction activity with maximum emissions.

The CalEEMod output in Appendix B show the equipment used for this analysis.

As shown in Table 8, the maximum number of acres disturbed in a day would be 4 acres during grading. The local air quality emissions from construction were analyzed using the SCAQMD's Mass Rate Localized Significant Threshold Look-up Tables and the methodology described in Localized Significance Threshold Methodology prepared by SCAQMD (revised July 2008). The Look-up Tables were developed by the SCAQMD in order to readily determine if the daily emissions of CO, NOx, PM10, and PM2.5 from the proposed project could result in a significant impact to the local air quality. The emission thresholds were calculated based on the Coachella Valley source receptor area (SRA) 30 and a disturbance value of two acres per day, to be conservative. According to LST Methodology, any receptor located closer than 25 meters (82 feet) shall be based on the 25-meter thresholds. The nearest sensitive receptors are the single-family detached residential dwelling units located approximately 0.39 miles (~627 meters) northeast of the project site; therefore, the SCAQMD Look-up Tables for 500 meters was used. Table 9 shows the on-site emissions from the CalEEMod model for the different construction phases and the LST emissions thresholds.

The data provided in Table 9 shows that none of the analyzed criteria pollutants would exceed the local emissions thresholds at the nearest sensitive receptors. As stated previously, as the previously-approved project needed to use Tier 3 level construction equipment, it is anticipated that the proposed, revised project would also use Tier 3 level construction equipment. The construction-related emissions mitigated via use of Tier 3 equipment have been shown in Table 10. A less than significant local air quality impact would occur from construction of the proposed project.

Construction-Related Toxic Air Contaminant Impacts

The greatest potential for toxic air contaminant emissions would be related to diesel particulate emissions associated with heavy equipment operations during construction of the proposed project. According to the Office of Environmental Health Hazard Assessment (OEHHA)[7] and the SCAQMD *Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis* (August 2003),[8] health effects from TACs are described in terms of individual cancer risk based on a lifetime (i.e., 30-year) resident exposure duration. Given the temporary and short-term construction schedule (approximately 12 months), the Project would not result in a long-term (i.e., lifetime or 30-year) exposure as a result of project construction.

The project would comply with the CARB Air Toxics Control Measure that limits diesel powered equipment and vehicle idling to no more than 5 minutes at a location, and the CARB In-Use Off-Road Diesel Vehicle Regulation; compliance with these would minimize emissions of TACs during construction. Furthermore, construction-based particulate matter (PM) emissions (including diesel exhaust emissions) do not exceed any local or regional thresholds. Therefore, impacts from TACs during construction would be less than significant.

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[7] Office of Environmental Health Hazard Assessment, Air Toxic Hot Spots Program Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessment, February 2015, https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf.

[8] South Coast Air Quality Management District, Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis, August 2003. ,http://www.aqmd.gov/docs/default-source/ceqa/handbook/mobile-source-toxics-analysis.doc?sfvrsn=2.

Construction-Related Odor Impacts

Potential sources that may emit odors during construction activities include the application of materials such as asphalt pavement. The objectionable odors that may be produced during the construction process are of short-term in nature and the odor emissions are expected cease upon the drying or hardening of the odor producing materials. Due to the short-term nature and limited amounts of odor producing materials being utilized, no significant impact related to odors would occur during construction of the proposed project. Diesel exhaust and VOCs would be emitted during construction of the project, which are objectionable to some; however, emissions would disperse rapidly from the project site and therefore should not reach an objectionable level at the nearest sensitive receptors.

Table 6
Unmitigated Construction-Related Regional Pollutant Emissions[1]

Activity		Pollutant Emissions (pounds/day)					
		ROG	NOx	CO	SO_2	PM10	PM2.5
Grading	On-Site[2]	3.62	38.84	29.04	0.06	5.22	2.93
	Off-Site[3]	0.07	0.04	0.62	0.00	0.17	0.05
	Subtotal	3.69	38.89	29.66	0.06	5.39	2.97
Building Construction	On-Site[2]	2.11	19.60	21.43	0.03	1.04	0.97
	Off-Site[3]	1.09	4.63	9.99	0.04	2.90	0.83
	Subtotal	3.19	24.23	31.43	0.07	3.94	1.80
Paving	On-Site[2]	1.50	11.12	14.58	0.02	0.57	0.52
	Off-Site[3]	0.05	0.03	0.47	0.00	0.13	0.03
	Subtotal	1.55	11.16	15.05	0.02	0.69	0.56
Architectural Coating	On-Site[2]	41.00	1.41	1.81	0.03	0.08	0.08
	Off-Site[3]	0.19	0.12	1.71	0.00	0.46	0.12
	Subtotal	41.19	1.52	3.52	0.03	0.54	0.21
Total for overlapping phases[4]		45.93	36.91	49.99	0.13	5.18	2.56
SCAQMD Thresholds		75	100	550	150	150	55
Exceeds Thresholds?		No	No	No	No	No	No

Notes:

(1) Source: CalEEMod Version 2020.4.0

(2) On-site emissions from equipment operated on-site that is not operated on public roads. On-site grading PM-10 and PM-2.5 emissions show mitigated values for fugitive dust for compliance with SCAQMD Rule 403.

(3) Off-site emissions from equipment operated on public roads.

(4) Construction, paving, and painting phases may overlap.

Table 7
Mitigated Construction-Related Regional Pollutant Emissions[1]

Activity		Pollutant Emissions (pounds/day)					
		ROG	NOx	CO	SO_2	PM10	PM2.5
Grading	On-Site[2]	1.52	29.98	36.72	0.06	4.89	2.72
	Off-Site[3]	0.07	0.04	0.62	0.00	0.17	0.05
	Subtotal	1.59	30.02	37.34	0.06	5.06	2.77
Building Construction	On-Site[2]	0.84	18.12	23.13	0.03	1.18	1.18
	Off-Site[3]	1.09	4.63	9.99	0.04	2.90	0.83
	Subtotal	1.93	22.75	33.13	0.07	4.08	2.00
Paving	On-Site[2]	0.96	11.30	17.30	0.02	0.61	0.61
	Off-Site[3]	0.05	0.03	0.47	0.00	0.13	0.03
	Subtotal	1.01	11.33	17.76	0.02	0.74	0.64
Architectural Coating	On-Site[2]	40.86	1.36	1.83	0.00	0.10	0.10
	Off-Site[3]	0.19	0.12	1.71	0.00	0.46	0.12
	Subtotal	41.04	1.47	3.54	0.01	0.56	0.22
Total for overlapping phases[4]		43.98	35.55	54.42	0.10	5.37	2.86
SCAQMD Thresholds		75	100	550	150	150	55
Exceeds Thresholds?		No	No	No	No	No	No

Notes:

(1) Source: CalEEMod Version 2020.4.0. Incorporates the use of Tier 3 equipment.

(2) On-site emissions from equipment operated on-site that is not operated on public roads. On-site grading PM-10 and PM-2.5 emissions show compliance with SCAQMD Rule 403.

(3) Off-site emissions from equipment operated on public roads.

(4) Construction, paving, and painting phases may overlap.

Table 8
Maximum Number of Acres Disturbed Per Day[1]

Activity	Equipment	Number	Acres/8hr-day	Total Acres
Grading	Scrapers	2	1	2
	Rubber Tired Dozers	1	0.5	0.5
	Graders	1	0.5	0.5
	Crawler Tractors[1]	2	0.5	1
Total for phase		-	-	4

Notes:

(1) Source: South Coast AQMD, Fact Sheet for Applying CalEEMod to Localized Significance Thresholds, 2011b.

(2) Tractor/loader/backhoe is a suitable surrogate for a crawler tractor per SCAQMD staff.

Table 9
Unmitigated Local Construction Emissions at the Nearest Receptors[1]

Activity	On-Site Pollutant Emissions (pounds/day)			
	NOx	CO	PM10	PM2.5
Grading	38.84	29.04	5.22	2.93
Building Construction	19.60	21.43	1.04	0.97
Paving	11.12	14.58	0.57	0.52
Architectural Coating	1.41	1.81	0.08	0.08
SCAQMD Thresholds[2]	769	26,212	223	112
Exceeds Threshold?	No	No	No	No

Notes:

(1) Source: Calculated from CalEEMod and SCAQMD's Mass Rate Look-up Tables for 2 acres, to be conservative, at a distance of 500 m in SRA 30 Coachella Valley.

(2) The nearest sensitive receptors to the project are the single-family detached residential dwelling units located approximately 0.39 miles (~627 meters) northeast of the project site; therefore, the 500 meter threshold was used.

General Note: The proposed project will disturb up to a maximum of 4 acre per day (see Table 7).

Table 10
Mitigated Local Construction Emissions at the Nearest Receptors[1]

Activity	On-Site Pollutant Emissions (pounds/day)			
	NOx	CO	PM10	PM2.5
Grading	29.98	36.72	4.89	2.72
Building Construction	18.12	23.13	1.18	1.18
Paving	11.30	17.30	0.61	0.61
Architectural Coating	1.36	1.83	0.10	0.10
SCAQMD Thresholds[2]	769	26,212	223	112
Exceeds Threshold?	No	No	No	No

Notes:

(1) Source: Calculated from CalEEMod and SCAQMD's Mass Rate Look-up Tables for 2 acres, to be conservative, at a distance of 500 m in SRA 30 Coachella Valley. Incorporates the use of Tier 3 equipment.

(2) The nearest sensitive receptors to the project are the single-family detached residential dwelling units located approximately 0.39 miles (~627 meters) northeast of the project site; therefore, the 500 meter threshold was used.

General Note: The proposed project will disturb up to a maximum of 4 acre per day (see Table 7).

LONG-TERM OPERATIONAL EMISSIONS

The on-going operation of the proposed project would result in a long-term increase in air quality emissions. This increase would be due to emissions from the project-generated vehicle trips and through operational emissions from the on-going use of the proposed project. The following section provides an analysis of potential long-term air quality impacts due to: regional air quality and local air quality impacts with the on-going operations of the proposed project.

Operations-Related Regional Air Quality Impacts

The potential operations-related air emissions have been analyzed below for the criteria pollutants and cumulative impacts.

Operations-Related Criteria Pollutants Analysis

The operations-related criteria air quality impacts created by the proposed project have been analyzed through the use of the CalEEMod model. The operating emissions were based on the year 2023, which is the anticipated opening year for the proposed project. The operations daily emissions printouts from the CalEEMod model are provided in Appendix B. The CalEEMod analyzes operational emissions from area sources, energy usage, and mobile sources, which are discussed below.

Mobile Sources

Mobile sources include emissions from the additional vehicle miles generated from the proposed project. The vehicle trips associated with the proposed project have been analyzed by inputting the project-generated vehicular trips from the Coachillin' Industrial Park Traffic Impact Analysis (Traffic Impact Analysis) prepared by Ganddini Group, Inc. (October 2021) for the proposed project into the CalEEMod Model. The Traffic Impact Analysis included trip generation rates for the proposed project both with and without an amphitheater event, in order to show a worst-case scenario, this analysis show this analysis uses the with amphitheater event scenario. Per the applicant, the amphitheater is anticipated to hold a maximum of four events per month. Therefore, to analyze the traffic impacts from the amphitheater at the correct frequency, those trips were modeled as occurring on Saturdays. The Traffic Impact Analysis found that the hotel portion of the proposed project will generate approximately 1,463 daily weekday vehicle trips and 1,433 daily Saturday vehicle trips and amphitheater event would generate 2,500 vehicle trips. Trip generation rates included 8.36 trips per room per weekday and 8.19 trips per room on Saturday for the hotel and 40.24 trips per thousand square foot per event for the amphitheater. The program then applies the emission factors for each trip which is provided by the EMFAC2017 model to determine the vehicular traffic pollutant emissions.

Area Sources

Per the CAPCOA Appendix A Calculation Details for CalEEMod, area sources include emissions from consumer products, landscape equipment and architectural coatings. Landscape maintenance includes fuel combustion emissions from equipment such as lawn mowers, rototillers, shredders/grinders, blowers, trimmers, chain saws, and hedge trimmers, as well as air compressors, generators, and pumps. As specifics were not known about the landscaping equipment fleet, CalEEMod defaults were used to estimate emissions from landscaping equipment. No changes were made to the default area source parameters.

Per SCAQMD Rule 1113 as amended on June 3, 2011, the architectural coatings that would be applied after January 1, 2014 will be limited to an average of 50 grams per liter or less. The VOC content was adjusted to 50 g/L VOC for buildings and 100 g/L VOC for traffic striping.

Energy Usage

Energy usage includes emissions from the generation of electricity and natural gas used on-site. Per the applicant, on-site wind and solar sources are to provide approximately 40 percent of the project's total annual energy needs for the revised project for Parcels 30 and 31. No other changes were made to the default energy usage parameters.

Project Impacts

The worst-case summer or winter criteria pollutant emissions created from the proposed project's long-term operations have been calculated and are shown below in Table 11. Table 11 shows that none of the analyzed criteria pollutants would exceed the regional emissions thresholds. Therefore, a less than significant regional air quality impact would occur from operation of the proposed project.

Operations-Related Local Air Quality Impacts

Project-related air emissions may have the potential to exceed the State and Federal air quality standards in the project vicinity, even though these pollutant emissions may not be significant enough to create a regional impact to the Salton Sea Air Basin. The proposed project has been analyzed for the potential local CO emission impacts from the project-generated vehicular trips and from the potential local air quality impacts from on-site operations. The following analysis analyzes the vehicular CO emissions, local impacts from on-site operations per SCAQMD LST methodology, and odor impacts.

Local CO Emission Impacts from Project-Generated Vehicular Trips

CO is the pollutant of major concern along roadways because the most notable source of CO is motor vehicles. For this reason, CO concentrations are usually indicative of the local air quality generated by a roadway network and are used as an indicator of potential local air quality impacts. Local air quality impacts can be assessed by comparing future without and with project CO levels to the State and Federal CO standards which were presented above in Section 2.

To determine if the proposed project could cause emission levels in excess of the CO standards discussed above in Section 2, a sensitivity analysis is typically conducted to determine the potential for CO "hot spots" at a number of intersections in the general project vicinity. Because of reduced speeds and vehicle queuing, "hot spots" potentially can occur at high traffic volume intersections with a Level of Service E or worse.

The analysis prepared for CO attainment in the South Coast Air Basin by the SCAQMD can be used to assist in evaluating the potential for CO exceedances in the South Coast Air Basin. CO attainment was thoroughly analyzed as part of the SCAQMD's 2003 Air Quality Management Plan (2003 AQMP) and the 1992 Federal Attainment Plan for Carbon Monoxide (1992 CO Plan). As discussed in the 1992 CO Plan, peak carbon monoxide concentrations in the South Coast Air Basin are due to unusual meteorological and topographical conditions, and not due to the impact of particular intersections. Considering the region's unique meteorological conditions and the increasingly stringent CO emissions standards, CO modeling was performed as part of 1992 CO Plan and subsequent plan updates and air quality management plans. In the 1992 CO Plan, a CO hot spot analysis was conducted for four busy intersections in Los Angeles at the peak morning and afternoon time periods. The intersections evaluated included: South Long Beach Boulevard and Imperial Highway (Lynwood); Wilshire Boulevard and Veteran Avenue (Westwood); Sunset Boulevard and Highland Avenue (Hollywood); and La Cienega Boulevard and Century Boulevard (Inglewood). These analyses did not predict a violation of CO standards. The busiest intersection evaluated was that at Wilshire Boulevard and Veteran Avenue, which has a daily traffic volume of approximately 100,000 vehicles per day. The Los Angeles County Metropolitan Transportation Authority evaluated the Level of Service in the vicinity of the Wilshire Boulevard/Veteran Avenue intersection and found it to be Level of Service E during the morning peak hour and Level of Service F during the afternoon peak hour.

The Traffic Impact Analysis showed that the proposed project would generate a maximum of approximately 3,963 daily weekday vehicle trips and 3,933 daily Saturday vehicle trips. The intersection with the highest traffic volume is located at Indian Canyon Drive and 20th Avenue and has an Opening Year (2023) With Project With Amphitheater Event Saturday Mid-Day peak hour volume of 1,621 vehicles. The 1992 Federal Attainment Plan for Carbon Monoxide (1992 CO Plan) showed that an intersection which has a daily traffic volume of approximately 100,000 vehicles per day would not violate the CO standard. Therefore, as both the intersection and ADT volumes fall far short of 100,000 vehicles per day, no CO "hot spot" modeling was performed and no significant long-term air quality impact is anticipated to local air quality due to the on-going use of the proposed project.

Local Air Quality Impacts from On-Site Operations

Project-related air emissions from on-site sources such as architectural coatings, landscaping equipment, on-site usage of natural gas appliances as well as the operation of vehicles on-site may have the potential to exceed the State and Federal air quality standards in the project vicinity, even though these pollutant emissions may not be significant enough to create a regional impact to the Salton Sea portion of the South Coast Air Basin. The nearest sensitive receptors to Parcel 30 and Parcel 31 that may be impacted by the proposed project are the single-family detached residential dwelling units located approximately 0.39 miles (~627 meters) northeast of the project site.

According to SCAQMD LST methodology, LSTs would apply to the operational phase of a project, if the project includes stationary sources, or attracts mobile sources (such as heavy-duty trucks) that may spend long periods queuing and idling at the site; such as industrial warehouse/transfer facilities. The proposed project is composed of a 175-room hotel and an amphitheater; and does not include such uses. Therefore, due the lack of stationary source emissions, no long-term localized significance threshold analysis is warranted.

Operations-Related Odor Impacts

Potential sources that may emit odors during the on-going operations of the proposed project would include odor emissions from diesel vehicle emissions and trash storage areas. The project consists of a hotel and amphitheater and will not attract a significant amount of heavy-duty truck traffic. Due to the distance of the nearest receptors from the project site and through compliance with SCAQMD's Rule 402 no significant impact related to odors would occur during the on-going operations of the proposed project.

Table 11
Regional Operational Pollutant Emissions[1]

Activity	Pollutant Emissions (pounds/day)					
	ROG	NOx	CO	SO2	PM10	PM2.5
Area Sources[2]	4.76	0.00	0.03	0.00	0.00	0.00
Energy Usage[3]	0.32	2.94	2.47	0.02	0.22	0.22
Mobile Sources[4]	8.10	7.81	51.26	0.10	9.34	2.55
Total Emissions	13.19	10.74	53.75	0.12	9.57	2.77
SCAQMD Thresholds	75	100	550	150	150	55
Exceeds Threshold?	No	No	No	No	No	No

Notes:

(1) Source: CalEEMod Version 2020.4.0; the higher of either summer or winter emissions.

(2) Area sources consist of emissions from consumer products, architectural coatings, and landscaping equipment.

(3) Energy usage consists of emissions from generation of electricity and on-site natural gas usage.

(4) Mobile sources consist of emissions from vehicles and road dust. Includes shuttle service for ~25% amphitheater patrons.

CUMULATIVE AIR QUALITY IMPACTS

There are a number of cumulative projects in the project area that have not yet been built or are currently under construction. Since the timing or sequencing of the cumulative projects is unknown, any quantitative analysis to ascertain daily construction emissions that assumes multiple, concurrent construction projects would be speculative. Further, cumulative projects include local development as well as general growth within the project area. However, as with most development, the greatest source of emissions is from mobile sources, which travel well out of the local area. Therefore, from an air quality standpoint, the cumulative analysis would extend beyond any local projects and when wind patterns are considered would cover an even larger area. The SCAQMD recommends using two different methodologies: (1) that project-specific air quality impacts be used to determine the potential cumulative impacts to regional air quality;[9] and (2) that a project's consistency with the current AQMP be used to determine its potential cumulative impacts.

Project Specific Impacts

The project area is out of attainment for ozone and in 2018 was out of attainment for PM10. Construction and operation of cumulative projects will further degrade the local air quality, as well as the air quality of the Salton Sea portion of the South Coast Air Basin. The greatest cumulative impact on the quality of regional air cell will be the incremental addition of pollutants mainly from increased traffic volumes from residential, commercial, and industrial development and the use of heavy equipment and trucks associated with the construction of these projects. Air quality will be temporarily degraded during construction activities that occur separately or simultaneously. However, in accordance with the SCAQMD methodology, projects that do not exceed the SCAQMD criteria or can be mitigated to less than criteria levels are not significant and do not add to the overall cumulative impact. A significant impact may occur if a project would add a cumulatively considerable contribution of a federal or state non-attainment pollutant.

Project operations would generate emissions of NOx, ROG, CO, PM10, and PM2.5, which would not exceed the SCAQMD regional or local thresholds and would not be expected to result in ground level concentrations that exceed the NAAQS or CAAQS. Since the project would not introduce any substantial stationary sources of emissions, CO is the benchmark pollutant for assessing local area air quality impacts from post-construction motor vehicle operations. As indicated earlier, no violations of the state and federal CO standards are projected to occur for the project, based on the magnitude of traffic the project is anticipated to create. Therefore, operation of the project would not result in a cumulatively considerable net increase for non-attainment of criteria pollutants or ozone precursors. As a result, the project would result in a less than significant cumulative impact for operational emissions.

Air Quality Compliance

The California Environmental Quality Act (CEQA) requires a discussion of any inconsistencies between a proposed project and applicable General Plans and Regional Plans (CEQA Guidelines Section 15125). The regional plan that applies to the proposed project includes the SCAQMD Air Quality Management Plan (AQMP). Therefore, this section discusses any potential inconsistencies of the proposed project with the AQMP.

The purpose of this discussion is to set forth the issues regarding consistency with the assumptions and objectives of the AQMP and discuss whether the proposed project would interfere with the region's ability to comply with Federal and State air quality standards. If the decision-makers determine that the proposed project is inconsistent, the lead agency may consider project modifications or inclusion of mitigation to eliminate the inconsistency.

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[9] South Coast Air Quality Management District, Potential Control Strategies to Address Cumulative Impacts from Air Pollution White Paper, 1993, http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook.

The SCAQMD CEQA Handbook states that "New or amended General Plan Elements (including land use zoning and density amendments), Specific Plans, and significant projects must be analyzed for consistency with the AQMP". Strict consistency with all aspects of the plan is usually not required. A proposed project should be considered to be consistent with the AQMP if it furthers one or more policies and does not obstruct other policies. The SCAQMD CEQA Handbook identifies two key indicators of consistency:

(1) Whether the project will result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP.
(2) Whether the project will exceed the assumptions in the AQMP in 2016 or increments based on the year of project buildout and phase.

Both of these criteria are evaluated in the following sections.

Criteria 1 – Increase in the Frequency or Severity of Violations

Based on the air quality modeling analysis contained in this Air Analysis, short-term construction impacts will not result in significant impacts based on the SCAQMD regional and local thresholds of significance. This Air Analysis also found that long-term operations impacts will not result in significant impacts based on the SCAQMD local and regional thresholds of significance.

Therefore, the proposed project is not projected to contribute to the exceedance of any air pollutant concentration standards and is found to be consistent with the AQMP for the first criterion.

Criteria 2 – Exceed Assumptions in the AQMP?

Consistency with the AQMP assumptions is determined by performing an analysis of the proposed project with the assumptions in the AQMP. The emphasis of this criterion is to ensure that the analyses conducted for the proposed project are based on the same forecasts as the AQMP. The 2020-2045 Regional Transportation/Sustainable Communities Strategy prepared by SCAG (2020) includes chapters on: the challenges in a changing region, creating a plan for our future, and the road to greater mobility and sustainable growth. These chapters currently respond directly to federal and state requirements placed on SCAG. Local governments are required to use these as the basis of their plans for purposes of consistency with applicable regional plans under CEQA. For this project, the City Land Use Plan defines the assumptions that are represented in the AQMP.

The project site is currently designated as Industrial with an Industrial Cannabis Overlay on the City of Desert Hot Springs 2020 General Plan Land Use Map. The previously approved project included a general plan amendment to change the project's light industrial designation to that of mixed-use specific plan. Therefore, as the general plan amendment was approved per the previous project, the proposed project would not result in an inconsistency with the current land use designation in the City's General Plan. Therefore, the proposed project is not anticipated to exceed the AQMP assumptions for the project site and is found to be consistent with the AQMP for the second criterion.

Based on the above, the proposed project will not result in an inconsistency with the SCAQMD AQMP. Therefore, a less than significant impact will occur.

3. GLOBAL CLIMATE CHANGE ANALYSIS

EXISTING GREENHOUSE GAS ENVIRONMENT

Constituent gases of the Earth's atmosphere, called atmospheric greenhouse gases (GHG), play a critical role in the Earth's radiation amount by trapping infrared radiation emitted from the Earth's surface, which otherwise would have escaped to space. Prominent greenhouse gases contributing to this process include carbon dioxide (CO_2), methane (CH_4), ozone, water vapor, nitrous oxide (N_2O), and chlorofluorocarbons (CFCs). This phenomenon, known as the Greenhouse Effect, is responsible for maintaining a habitable climate. Anthropogenic (caused or produced by humans) emissions of these greenhouse gases in excess of natural ambient concentrations are responsible for the enhancement of the Greenhouse Effect and have led to a trend of unnatural warming of the Earth's natural climate, known as global warming or climate change. Emissions of gases that induce global warming are attributable to human activities associated with industrial/manufacturing, agriculture, utilities, transportation, and residential land uses. Transportation is responsible for 41 percent of the State's greenhouse gas emissions, followed by electricity generation. Emissions of CO_2 and nitrous oxide (NOx) are byproducts of fossil fuel combustion. Methane, a potent greenhouse gas, results from off-gassing associated with agricultural practices and landfills. Sinks of CO_2, where CO_2 is stored outside of the atmosphere, include uptake by vegetation and dissolution into the ocean. The following provides a description of each of the greenhouse gases and their global warming potential.

Water Vapor

Water vapor is the most abundant, important, and variable GHG in the atmosphere. Water vapor is not considered a pollutant; in the atmosphere it maintains a climate necessary for life. Changes in its concentration are primarily considered a result of climate feedbacks related to the warming of the atmosphere rather than a direct result of industrialization. The feedback loop in which water is involved is critically important to projecting future climate change. As the temperature of the atmosphere rises, more water is evaporated from ground storage (rivers, oceans, reservoirs, soil). Because the air is warmer, the relative humidity can be higher (in essence, the air is able to "hold" more water when it is warmer), leading to more water vapor in the atmosphere. As a GHG, the higher concentration of water vapor is then able to absorb more thermal indirect energy radiated from the Earth, thus further warming the atmosphere. The warmer atmosphere can then hold more water vapor and so on and so on. This is referred to as a "positive feedback loop". The extent to which this positive feedback loop will continue is unknown as there is also dynamics that put the positive feedback loop in check. As an example, when water vapor increases in the atmosphere, more of it will eventually also condense into clouds, which are more able to reflect incoming solar radiation (thus allowing less energy to reach the Earth's surface and heat it up).

Carbon Dioxide (CO_2)

The natural production and absorption of CO_2 is achieved through the terrestrial biosphere and the ocean. However, humankind has altered the natural carbon cycle by burning coal, oil, natural gas, and wood. Since the industrial revolution began in the mid-1700s. Each of these activities has increased in scale and distribution. CO_2 was the first GHG demonstrated to be increasing in atmospheric concentration with the first conclusive measurements being made in the last half of the 20th century. Prior to the industrial revolution, concentrations were fairly stable at 280 parts per million (ppm). The International Panel on Climate Change (IPCC Fifth Assessment Report, 2014) Emissions of CO_2 from fossil fuel combustion and industrial processes contributed about 78% of the total GHG emissions increase from 1970 to 2010, with a similar percentage contribution for the increase during the period 2000 to 2010. Globally, economic and population growth continued to be the most important drivers of increases in CO_2 emissions from fossil fuel combustion. The contribution of population growth between 2000 and 2010 remained roughly identical to the previous three decades, while the contribution of economic growth has risen sharply.

Methane (CH_4)

CH_4 is an extremely effective absorber of radiation, although its atmospheric concentration is less than that of CO_2. Its lifetime in the atmosphere is brief (10 to 12 years), compared to some other GHGs (such as CO_2, N_2O, and Chlorofluorocarbons (CFCs). CH_4 has both natural and anthropogenic sources. It is released as part of the biological processes in low oxygen environments, such as in swamplands or in rice production (at the roots of the plants). Over the last 50 years, human activities such as growing rice, raising cattle, using natural gas, and mining coal have added to the atmospheric concentration of methane. Other anthropocentric sources include fossil-fuel combustion and biomass burning.

Nitrous Oxide (N_2O)

Concentrations of N_2O also began to rise at the beginning of the industrial revolution. In 1998, the global concentration of this GHG was documented at 314 parts per billion (ppb). N_2O is produced by microbial processes in soil and water, including those reactions which occur in fertilizer containing nitrogen. In addition to agricultural sources, some industrial processes (fossil fuel-fired power plants, nylon production, nitric acid production, and vehicle emissions) also contribute to its atmospheric load. It is also commonly used as an aerosol spray propellant, (i.e., in whipped cream bottles, in potato chip bags to keep chips fresh, and in rocket engines and in race cars).

Chlorofluorocarbons (CFC)

CFCs are gases formed synthetically by replacing all hydrogen atoms in methane or ethane (C_2H_6) with chlorine and/or fluorine atoms. CFCs are nontoxic, nonflammable, insoluble, and chemically unreactive in the troposphere (the level of air at the Earth's surface). CFCs have no natural source, but were first synthesized in 1928. It was used for refrigerants, aerosol propellants, and cleaning solvents. Due to the discovery that they are able to destroy stratospheric ozone, a global effort to halt their production was undertaken and in 1989 the European Community agreed to ban CFCs by 2000 and subsequent treaties banned CFCs worldwide by 2010. This effort was extremely successful, and the levels of the major CFCs are now remaining level or declining. However, their long atmospheric lifetimes mean that some of the CFCs will remain in the atmosphere for over 100 years.

Hydrofluorocarbons (HFC)

HFCs are synthetic man-made chemicals that are used as a substitute for CFCs. Out of all the GHGs, they are one of three groups with the highest global warming potential. The HFCs with the largest measured atmospheric abundances are (in order), HFC-23 (CHF_3), HFC-134a (CF_3CH_2F), and HFC-152a (CH_3CHF_2). Prior to 1990, the only significant emissions were HFC-23. HFC-134a use is increasing due to its use as a refrigerant. Concentrations of HFC-23 and HFC-134a in the atmosphere are now about 10 parts per trillion (ppt) each. Concentrations of HFC-152a are about 1 ppt. HFCs are manmade for applications such as automobile air conditioners and refrigerants.

Perfluorocarbons (PFC)

PFCs have stable molecular structures and do not break down through the chemical processes in the lower atmosphere. High-energy ultraviolet rays about 60 kilometers above Earth's surface are able to destroy the compounds. Because of this, PFCs have very long lifetimes, between 10,000 and 50,000 years. Two common PFCs are tetrafluoromethane (CF_4) and hexafluoroethane (C_2F_6). Concentrations of CF_4 in the atmosphere are over 70 ppt. The two main sources of PFCs are primary aluminum production and semiconductor manufacturing.

Sulfur Hexafluoride (SF6)

SF_6 is an inorganic, odorless, colorless, nontoxic, nonflammable gas. SF_6 has the highest global warming potential of any gas evaluated; 23,900 times that of CO_2. Concentrations of SF_6 in the 1990s were about 4 ppt. Sulfur hexafluoride is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas for leak detection.

Aerosols

Aerosols are particles emitted into the air through burning biomass (plant material) and fossil fuels. Aerosols can warm the atmosphere by absorbing and emitting heat and can cool the atmosphere by reflecting light. Cloud formation can also be affected by aerosols. Sulfate aerosols are emitted when fuel containing sulfur is burned. Black carbon (or soot) is emitted during biomass burning due to the incomplete combustion of fossil fuels. Particulate matter regulation has been lowering aerosol concentrations in the United States; however, global concentrations are likely increasing.

Global Warming Potential

The Global Warming Potential (GWP) was developed to allow comparisons of the global warming impacts of different gases. Specifically, it is a measure of how much energy the emissions of 1 ton of a gas will absorb over a given period of time, relative to the emissions of 1 ton of carbon dioxide (CO_2). The larger the GWP, the more that a given gas warms the Earth compared to CO_2 over that time period. The time period usually used for GWPs is 100 years. GWPs provide a common unit of measure, which allows analysts to add up emissions estimates of different gases (e.g., to compile a national GHG inventory), and allows policymakers to compare emissions reduction opportunities across sectors and gases. A summary of the atmospheric lifetime and the global warming potential of selected gases are summarized in Table 12. As shown in Table 12, the global warming potential of GHGs ranges from 1 to 22,800.

Table 12
Global Warming Potentials and Atmospheric Lifetimes[1]

Gas	Atmospheric Lifetime	Global Warming Potential[2] (100 Year Horizon)
Carbon Dioxide (CO_2)	--[3]	1
Methane (CH_4)	12	28-36
Nitrous Oxide (NO)	114	298
Hydrofluorocarbons (HFCs)	1-270	12-14,800
Perfluorocarbons (PFCs)	2,600-50,000	7,390-12,200
Nitrogen trifluoride (NF_3)	740	17,200
Sulfur Hexafluoride (SF_6)	3,200	22,800

Notes:

(1) Source: http://www3.epa.gov/climatechange/ghgemissions/gases.html

(2) Compared to the same quantity of CO_2 emissions.

(3) Carbon dioxide's lifetime is poorly defined because the gas is not destroyed over time, but instead moves among different parts of the ocean–atmosphere–land system. Some of the excess carbon dioxide will be absorbed quickly (for example, by the ocean surface), but some will remain in the atmosphere for thousands of years, due in part to the very slow process by which carbon is transferred to ocean sediments.

GREENHOUSE GAS STANDARDS

International

Montreal Protocol

In 1988, the United Nations established the Intergovernmental Panel on Climate Change (IPCC) to evaluate the impacts of global climate change and to develop strategies that nations could implement to curtail global climate change. In 1992, the United States joined other countries around the world in signing the United Nations' Framework Convention on Climate Change (UNFCCC) agreement with the goal of controlling GHG emissions. As a result, the Climate Change Action Plan was developed to address the reduction of GHGs in the United States. The plan consists of more than 50 voluntary programs.

Additionally, the Montreal Protocol was originally signed in 1987 and substantially amended in 1990 and 1992. The Montreal Protocol stipulates that the production and consumption of compounds that deplete ozone in the stratosphere—CFCs, halons, carbon tetrachloride, and methyl chloroform—were to be phased out, with the first three by the year 2000 and methyl chloroform by 2005.

The Paris Agreement

The Paris Agreement became effective on November 4, 2016. Thirty days after this date at least 55 Parties to the United Nations Framework Convention on Climate Change (Convention), accounting in total for at least an estimated 55 % of the total global greenhouse gas emissions, had deposited their instruments of ratification, acceptance, approval or accession with the Depositary.

The Paris Agreement built upon the Convention and – for the first time – attempted to bring all nations into a common cause to undertake ambitious efforts to combat climate change and adapt to its effects, with enhanced support to assist developing countries to do so. As such, it charts a new course in the global climate effort.

The Paris Agreement's central aim is to strengthen the global response to the threat of climate change by keeping a global temperature rise this century well below 2 degrees Celsius above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius. Additionally, the agreement aims to strengthen the ability of countries to deal with the impacts of climate change. To reach these ambitious goals, appropriate financial flows, a new technology framework and an enhanced capacity building framework will be put in place, thus supporting action by developing countries and the most vulnerable countries, in line with their own national objectives. The Agreement also provides for enhanced transparency of action and support through a more robust transparency framework.

Federal

The United States Environmental Protection Agency (USEPA) is responsible for implementing federal policy to address GHGs. The federal government administers a wide array of public-private partnerships to reduce the GHG intensity generated in the United States. These programs focus on energy efficiency, renewable energy, methane and other non-CO2 gases, agricultural practices, and implementation of technologies to achieve GHG reductions. The USEPA implements numerous voluntary programs that contribute to the reduction of GHG emissions. These programs (e.g., the ENERGY STAR labeling system for energy-efficient products) play a significant role in encouraging voluntary reductions from large corporations, consumers, industrial and commercial buildings, and many major industrial sectors.

In Massachusetts v. Environmental Protection Agency (Docket No. 05–1120), argued November 29, 2006 and decided April 2, 2007, the U.S. Supreme Court held that not only did the EPA have authority to regulate greenhouse gases, but the EPA's reasons for not regulating this area did not fit the statutory requirements. As such, the U.S. Supreme Court ruled that the EPA should be required to regulate CO_2 and other greenhouse gases as pollutants under the federal Clean Air Act (CAA).

In response to the FY2008 Consolidations Appropriations Act (H.R. 2764; Public Law 110-161), EPA proposed a rule on March 10, 2009 that requires mandatory reporting of GHG emissions from large sources in the United States. On September 22, 2009, the Final Mandatory Reporting of GHG Rule was signed and published in the Federal Register on October 30, 2009. The rule became effective on December 29, 2009. This rule requires suppliers of fossil fuels or industrial GHGs, manufacturers of vehicles and engines, and facilities that emit 25,000 metric tons or more per year of GHG emissions to submit annual reports to EPA.

On December 7, 2009, the EPA Administrator signed two distinct findings under section 202(a) of the Clean Air Act. One is an endangerment finding that finds concentrations of the six GHGs in the atmosphere threaten the public health and welfare of current and future generations. The other is a cause or contribute finding, that finds emissions from new motor vehicles and new motor vehicle engines contribute to the GHG pollution which threatens public health and welfare. These actions will not themselves impose any requirements on industry or other entities. However, it is a prerequisite to finalizing the EPA's proposed GHG emission standards for light-duty vehicles, which were jointly proposed by the EPA and Department of Transportation on September 15, 2009.

Clean Air Act

In Massachusetts v. Environmental Protection Agency (Docket No. 05–1120), the U.S. Supreme Court held in April of 2007 that the USEPA has statutory authority under Section 202 of the federal Clean Air Act (CAA) to regulate GHGs. The court did not hold that the USEPA was required to regulate GHG emissions; however, it indicated that the agency must decide whether GHGs cause or contribute to air pollution that is reasonably anticipated to endanger public health or welfare. On December 7, 2009, the USEPA Administrator signed two distinct findings regarding GHGs under Section 202(a) of the CAA. The USEPA adopted a Final Endangerment Finding for the six defined GHGs (CO2, CH4, N2O, HFCs, PFCs, and SF6) on December 7, 2009. The Endangerment Finding is required before USEPA can regulate GHG emissions under Section 202(a)(1) of the CAA consistently with the United States Supreme Court decision. The USEPA also adopted a Cause or Contribute Finding in which the USEPA Administrator found that GHG emissions from new motor vehicle and motor vehicle engines are contributing to air pollution, which is endangering public health and welfare. These findings do not, by themselves, impose any requirements on industry or other entities. However, these actions were a prerequisite for implementing GHG emissions standards for vehicles.

Energy Independence Security Act

The Energy Independence and Security Act of 2007 (EISA) facilitates the reduction of national GHG emissions by requiring the following:

- Increasing the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard (RFS) that requires fuel producers to use at least 36 billion gallons of biofuel in 2022;
- Prescribing or revising standards affecting regional efficiency for heating and cooling products, procedures for new or amended standards, energy conservation, energy efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances;
- Requiring approximately 25 percent greater efficiency for light bulbs by phasing out incandescent light bulbs between 2012 and 2014; requiring approximately 200 percent greater efficiency for light bulbs, or similar energy savings, by 2020; and
- While superseded by the USEPA and NHTSA actions described above, (i) establishing miles per gallon targets for cars and light trucks and (ii) directing the NHTSA to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for trucks.

Additional provisions of EISA address energy savings in government and public institutions, promote research for alternative energy, additional research in carbon capture, international energy programs, and the creation of green jobs.[10]

Executive Order 13432

In response to the Massachusetts v. Environmental Protection Agency ruling, the President signed Executive Order 13432 on May 14, 2007, directing the USEPA, along with the Departments of Transportation, Energy, and Agriculture, to initiate a regulatory process that responds to the Supreme Court's decision. Executive Order 13432 was codified into law by the 2009 Omnibus Appropriations Law signed on February 17, 2009. The order sets goals in the areas of energy efficiency, acquisition, renewable energy, toxics reductions, recycling, sustainable buildings, electronics stewardship, fleets, and water conservation. Light-Duty Vehicle Greenhouse Gas and Corporate Average Fuel Economy Standards.

On May 19, 2009, President Obama announced a national policy for fuel efficiency and emissions standards in the United States auto industry. The adopted federal standard applies to passenger cars and light-duty trucks for model years 2012 through 2016. The rule surpasses the prior Corporate Average Fuel Economy standards (CAFE)[11] and requires an average fuel economy standard of 35.5 miles per gallon (mpg) and 250 grams of CO2 per mile by model year 2016, based on USEPA calculation methods. These standards were formally adopted on April 1, 2010. In August 2012, standards were adopted for model year 2017 through 2025 for passenger cars and light-duty trucks. By 2025, vehicles are required to achieve 54.5 mpg (if GHG reductions are achieved exclusively through fuel economy improvements) and 163 grams of CO2 per mile. According to the USEPA, a model year 2025 vehicle would emit one-half of the GHG emissions from a model year 2010 vehicle.[12] In 2017, the USEPA recommended no change to the GHG standards for light-duty vehicles for model years 2022-2025.

In August 2018, the USEPA and NHTSA proposed the Safer Affordable Fuel-Efficient Vehicles Rule that would, if adopted, maintain the CAFE and CO2 standards applicable in model year 2020 for model years 2021 through 2026. The estimated CAFE and CO2 standards for model year 2020 are 43.7 mpg and 204 grams of CO2 per mile for passenger cars and 31.3 mpg and 284 grams of CO2 per mile for light trucks, projecting an overall industry average of 37 mpg, as compared to 46.7 mpg under the standards issued in 2012. The proposal, if adopted, would also exclude CO2- equivalent emission improvements associated with air conditioning refrigerants and leakage (and, optionally, offsets for nitrous oxide and methane emissions) after model year 2020.[13]

On May 12, 2021, the National Highway Traffic Safety Administration (NHTSA) published a notice of proposed rulemaking in the Federal Register, proposing to repeal "The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program," published Sept. 27, 2019 (SAFE I Rule), in which NHTSA codified regulatory text and made additional pronouncements regarding the preemption of state and local laws related to fuel economy standards. Specifically, this document proposes to fully repeal the regulatory text and appendices promulgated in the SAFE I Rule. In addition, this document proposes to repeal and withdraw the interpretative statements made by the Agency in the SAFE I Rule preamble, including those regarding the preemption of particular state Greenhouse Gas (GHG) Emissions standards or Zero Emissions

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[10] A green job, as defined by the United States Department of Labor, is a job in business that produces goods or provides services that benefit the environment or conserve natural resources.

[11] The Corporate Average Fuel Economy standards are regulations in the United States, first enacted by Congress in 1975, to improve the average fuel economy of cars and light trucks. The U.S Department of Transportation has delegated the National Highway Traffic Safety Administration as the regulatory agency for the Corporate Average Fuel Economy standards.

[12] United States Environmental Protection Agency, EPA and NHTSA Set Standards to Reduce Greenhouse Gases and Improve Fuel Economy for Model Years 2017-2025 Cars and Light Trucks, August 2012, https://nepis.epa.gov/Exe/ZyPDF.cgi/P100EZ7C.PDF?Dockey=P100EZ7C.PDF.

[13] National Highway Traffic Safety Administration (NHTSA) and U.S. Environmental Protection Agency (USEPA), 2018. Federal Register / Vol. 83, No. 165 / Friday, August 24, 2018 / Proposed Rules, The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021–2026 Passenger Cars and Light Trucks 2018. Available at: https://www.gpo.gov/fdsys/pkg/FR-2018-08-24/pdf/2018-16820.pdf.

Vehicle (ZEV) mandates. As such, this document proposes to establish a clean slate with respect to NHTSA's regulations and interpretations concerning preemption under the Energy Policy and Conservation Act (EPCA).[14]

State of California

California Air Resources Board

CARB, a part of the California Environmental Protection Agency (CalEPA), is responsible for the coordination and administration of both federal and state air pollution control programs within California. In this capacity, CARB conducts research, sets state ambient air quality standards (California Ambient Air Quality Standards [CAAQS]), compiles emission inventories, develops suggested control measures, and provides oversight of local programs. CARB establishes emissions standards for motor vehicles sold in California, consumer products (such as hairspray, aerosol paints, and barbecue lighter fluid), and various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions.

In 2004, the California Air Resources Board (CARB) adopted an Airborne Toxic Control Measure to limit heavy-duty diesel motor vehicle idling in order to reduce public exposure to diesel particulate matter and other toxic air contaminants (Title 13 California Code of Regulations [CCR], Section 2485). The measure applies to diesel-fueled commercial vehicles with gross vehicle weight ratings greater than 10,000 pounds that are licensed to operate on highways, regardless of where they are registered. This measure generally does not allow diesel-fueled commercial vehicles to idle for more than 5 minutes at any given location with certain exemptions for equipment in which idling is a necessary function such as concrete trucks. While this measure primarily targets diesel particulate matter emissions, it has co-benefits of minimizing GHG emissions from unnecessary truck idling.

In 2008, CARB approved the Truck and Bus regulation to reduce particulate matter and nitrogen oxide emissions from existing diesel vehicles operating in California (13 CCR, Section 2025, subsection (h)). CARB has also promulgated emission standards for off-road diesel construction equipment of greater than 25 horsepower such as bulldozers, loaders, backhoes and forklifts, as well as many other self-propelled off-road diesel vehicles. The regulation, adopted by the CARB on July 26, 2007, aims to reduce emissions by installation of diesel soot filters and encouraging the retirement, replacement, or repower of older, dirtier engines with newer emission-controlled models. While these regulations primarily target reductions in criteria air pollutant emission, they have co-benefits of minimizing GHG emissions due to improved engine efficiencies.

The State currently has no regulations that establish ambient air quality standards for GHGs. However, the State has passed laws directing CARB to develop actions to reduce GHG emissions, which are listed below.

Assembly Bill 1493

California Assembly Bill 1493 enacted on July 22, 2002, required the CARB to develop and adopt regulations that reduce GHGs emitted by passenger vehicles and light duty trucks. In 2005, the CARB submitted a "waiver" request to the EPA from a portion of the federal Clean Air Act in order to allow the State to set more stringent tailpipe emission standards for CO_2 and other GHG emissions from passenger vehicles and light duty trucks. On December 19, 2007 the EPA announced that it denied the "waiver" request. On January 21, 2009, CARB submitted a letter to the EPA administrator regarding the State's request to reconsider the waiver denial. The EPA approved the waiver on June 30, 2009.

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[14] https://www.federalregister.gov/documents/2021/05/12/2021-08758/corporate-average-fuel-economy-cafe-preemption

Executive Order S-3-05

The California Governor issued Executive Order S-3-05, GHG Emission, in June 2005, which established the following reduction targets:

- 2010: Reduce greenhouse gas emissions to 2000 levels
- 2020: Reduce greenhouse gas emissions to 1990 levels
- 2050: Reduce greenhouse gas emissions to 80 percent below 1990 levels.

The Executive Order directed the secretary of the California Environmental Protection Agency (CalEPA) to coordinate a multi-agency effort to reduce GHG emissions to the target levels. To comply with the Executive Order, the secretary of CalEPA created the California Climate Action Team (CAT), made up of members from various state agencies and commissions. The team released its first report in March 2006. The report proposed to achieve the targets by building on the voluntary actions of businesses, local governments, and communities and through State incentive and regulatory programs.

Assembly Bill 32 (California Health and Safety Code, Division 25.5 – California Global Warming Solutions Act of 2006)

In 2006, the California State Legislature adopted Assembly Bill (AB) 32 (codified in the California Health and Safety Code [HSC], Division 25.5 – California Global Warming Solutions Act of 2006), which focuses on reducing GHG emissions in California to 1990 levels by 2020. HSC Division 25.5 defines GHGs as CO2, CH4, N2O, HFCs, PFCs, and SF6 and represents the first enforceable statewide program to limit emissions of these GHGs from all major industries with penalties for noncompliance. The law further requires that reduction measures be technologically feasible and cost effective. Under HSC Division 25.5, CARB has the primary responsibility for reducing GHG emissions. CARB is required to adopt rules and regulations directing state actions that would achieve GHG emissions reductions equivalent to 1990 statewide levels by 2020.

Senate Bill 32 and Assembly Bill 197

In 2016, the California State Legislature adopted Senate Bill (SB) 32 and its companion bill AB 197, and both were signed by Governor Brown. SB 32 and AB 197 amends HSC Division 25.5 and establishes a new climate pollution reduction target of 40 percent below 1990 levels by 2030 and includes provisions to ensure the benefits of state climate policies reach into disadvantaged communities.

Climate Change Scoping Plan (2008)

A specific requirement of AB 32 was to prepare a Climate Change Scoping Plan for achieving the maximum technologically feasible and cost-effective GHG emission reduction by 2020 (Health and Safety Code section 38561 (h)). CARB developed an AB 32 Scoping Plan that contains strategies to achieve the 2020 emissions cap. The initial Scoping Plan was approved in 2008, and contains a mix of recommended strategies that combined direct regulations, market-based approaches, voluntary measures, policies, and other emission reduction programs calculated to meet the 2020 statewide GHG emission limit and initiate the transformations needed to achieve the State's long-range climate objectives.

As required by HSC Division 25.5, CARB approved the 1990 GHG emissions inventory, thereby establishing the emissions limit for 2020. The 2020 emissions limit was originally set at 427 MMTCO2e using the GWP values from the IPCC SAR. CARB also projected the state's 2020 GHG emissions under no-action-taken (NAT) conditions – that is, emissions that would occur without any plans, policies, or regulations to reduce GHG emissions. CARB originally used an average of the state's GHG emissions from 2002 through 2004 and projected the 2020 levels at approximately 596 MMTCO2e (using GWP values from the IPCC SAR).

Therefore, under the original projections, the state must reduce its 2020 NAT emissions by 28.4 percent in order to meet the 1990 target of 427 MMTCO2e.

First Update to the Climate Change Scoping Plan (2014)

The First Update to the Scoping Plan was approved by CARB in May 2014 and builds upon the initial Scoping Plan with new strategies and recommendations. In 2014, CARB revised the target using the GWP values from the IPCC AR4 and determined that the 1990 GHG emissions inventory and 2020 GHG emissions limit is 431 MMTCO2e. CARB also updated the State's 2020 NAT emissions estimate to account for the effect of the 2007–2009 economic recession, new estimates for future fuel and energy demand, and the reductions required by regulation that were recently adopted for motor vehicles and renewable energy. CARB's projected statewide 2020 emissions estimate using the GWP values from the IPCC AR4 is 509.4 MMTCO2e.

2017 Climate Change Scoping Plan

In response to the 2030 GHG reduction target, CARB adopted the 2017 Climate Change Scoping Plan at a public meeting held in December 2017. The 2017 Scoping Plan outlines the strategies the State will implement to achieve the 2030 GHG reduction target of 40 percent below 1990 levels. The 2017 Scoping Plan also addresses GHG emissions from natural and working lands of California, including the agriculture and forestry sectors. The 2017 Scoping Plan considered the Scoping Plan Scenario and four alternatives for achieving the required GHG reductions but ultimately selected the Scoping Plan Scenario.

CARB states that the Scoping Plan Scenario "is the best choice to achieve the State's climate and clean air goals."[15] Under the Scoping Plan Scenario, the majority of the reductions would result from the continuation of the Cap-and-Trade regulation. Additional reductions are achieved from electricity sector standards (i.e., utility providers to supply at least 50 percent renewable electricity by 2030), doubling the energy efficiency savings at end uses, additional reductions from the LCFS, implementing the short-lived GHG strategy (e.g., hydrofluorocarbons), and implementing the mobile source strategy and sustainable freight action plan. The alternatives were designed to consider various combinations of these programs, as well as consideration of a carbon tax in the event the Cap-and-Trade regulation is not continued. However, in July 2017, the California Legislature voted to extend the Cap-and-Trade regulation to 2030. Implementing this Scoping Plan will ensure that California's climate actions continue to promote innovation, drive the generation of new jobs, and achieve continued reductions of smog and air toxics. The ambitious approach draws on a decade of successful programs that address the major sources of climate-changing gases in every sector of the economy:

- More Clean Cars and Trucks: The plan sets out far-reaching programs to incentivize the sale of millions of zero-emission vehicles, drive the deployment of zero-emission trucks, and shift to a cleaner system of handling freight statewide.
- Increased Renewable Energy: California's electric utilities are ahead of schedule meeting the requirement that 33 percent of electricity come from renewable sources by 2020. The Scoping Plan guides utilities to 50 percent renewables, as required under SB 350.
- Slashing Super-Pollutants: The plan calls for a significant cut in super-pollutants such as methane and HFC refrigerants, which are responsible for as much as 40 percent of global warming.
- Cleaner Industry and Electricity: California's renewed cap-and-trade program extends the declining cap on emissions from utilities and industries and the carbon allowance auctions. The auctions will continue to fund investments in clean energy and efficiency, particularly in disadvantaged communities.
- Cleaner Fuels: The Low Carbon Fuel Standard will drive further development of cleaner, renewable transportation fuels to replace fossil fuels.
- Smart Community Planning: Local communities will continue developing plans which will further link transportation and housing policies to create sustainable communities.

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[15] California Air Resources Board, California's 2017 Climate Change Scoping Plan, November 2017, https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf

- Improved Agriculture and Forests: The Scoping Plan also outlines innovative programs to account for and reduce emissions from agriculture, as well as forests and other natural lands.

The 2017 Scoping Plan also evaluates reductions of smog-causing pollutants through California's climate programs.

SB 32, Pavley. California Global Warming Solutions Act of 2006

(1) The California Global Warming Solutions Act of 2006 designates the State Air Resources Board as the state agency charged with monitoring and regulating sources of emissions of greenhouse gases. The state board is required to approve a statewide greenhouse gas emissions limit equivalent to the statewide greenhouse gas emissions level in 1990 to be achieved by 2020 and to adopt rules and regulations in an open public process to achieve the maximum, technologically feasible, and cost-effective greenhouse gas emissions reductions. This bill would require the state board to ensure that statewide greenhouse gas emissions are reduced to 40% below the 1990 level by 2030.
(2) This bill would become operative only if AB 197 of the 2015–16 Regular Session is enacted and becomes effective on or before January 1, 2017. AB 197 requires that the California Air Resources Board, which directs implementation of emission-reduction programs, should target direct reductions at both stationary and mobile sources. AB 197 of the 2015-2016 Regular Session was approved on September 8, 2016.

Senate Bill 1368

Senate Bill 1368 (SB 1368) is the companion Bill of AB 32 and was adopted September, 2006. SB 1368 requires the California Public Utilities Commission (CPUC) to establish a performance standard for baseload generation of GHG emissions by investor-owned utilities by February 1, 2007, and for local publicly owned utilities by June 30, 2007. These standards could not exceed the GHG emissions rate from a baseload combined-cycle, natural gas-fired plant. Furthermore, the legislation states that all electricity provided to the State, including imported electricity, must be generated by plants that meet the standards set by California Public Utilities Commission (CPUC) and California Energy Commission (CEC).

Executive Order S-1-07

Executive Order S-1-07 was issued in 2007 and proclaims that the transportation sector is the main source of GHG emissions in the State, since it generates more than 40 percent of the State's GHG emissions. It establishes a goal to reduce the carbon intensity of transportation fuels sold in the State by at least ten percent by 2020. This Order also directs the CARB to determine whether this Low Carbon Fuel Standard (LCFS) could be adopted as a discrete early-action measure as part of the effort to meet the mandates in AB 32.

On April 23, 2009 CARB approved the proposed regulation to implement the low carbon fuel standard and began implementation on January 1, 2011. The low carbon fuel standard is anticipated to reduce GHG emissions by about 16 MMT per year by 2020. CARB approved some amendments to the LCFS in December 2011, which were implemented on January 1, 2013. In September 2015, the Board approved the re-adoption of the LCFS, which became effective on January 1, 2016, to address procedural deficiencies in the way the original regulation was adopted. In 2018, the Board approved amendments to the regulation, which included strengthening and smoothing the carbon intensity benchmarks through 2030 in-line with California's 2030 GHG emission reduction target enacted through SB 32, adding new crediting opportunities to promote zero emission vehicle adoption, alternative jet fuel, carbon capture and sequestration, and advanced technologies to achieve deep decarbonization in the transportation sector.

The LCFS is designed to encourage the use of cleaner low-carbon transportation fuels in California, encourage the production of those fuels, and therefore, reduce GHG emissions and decrease petroleum dependence in the transportation sector. Separate standards are established for gasoline and diesel fuels and the alternative fuels that can replace each. The standards are "back-loaded", with more reductions required in the last five years, than during the first five years. This schedule allows for the development of advanced fuels that are lower in carbon than today's fuels and the market penetration of plug-in hybrid electric vehicles, battery electric vehicles, fuel cell vehicles, and flexible fuel vehicles. It is anticipated that compliance with the low carbon fuel standard will be based on a combination of both lower carbon fuels and more efficient vehicles.

Reformulated gasoline mixed with corn-derived ethanol at ten percent by volume and low sulfur diesel fuel represent the baseline fuels. Lower carbon fuels may be ethanol, biodiesel, renewable diesel, or blends of these fuels with gasoline or diesel as appropriate. Compressed natural gas and liquefied natural gas also may be low carbon fuels. Hydrogen and electricity, when used in fuel cells or electric vehicles are also considered as low carbon fuels for the low carbon fuel standard.

Senate Bill 97

Senate Bill 97 (SB 97) was adopted August 2007 and acknowledges that climate change is a prominent environmental issue that requires analysis under CEQA. SB 97 directed the Governor's Office of Planning and Research (OPR), which is part of the State Natural Resources Agency, to prepare, develop, and transmit to the CARB guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions, as required by CEQA, by July 1, 2009. The Natural Resources Agency was required to certify and adopt those guidelines by January 1, 2010.

Pursuant to the requirements of SB 97 as stated above, on December 30, 2009, the Natural Resources Agency adopted amendments to the state CEQA guidelines that address GHG emissions. The CEQA Guidelines Amendments changed 14 sections of the CEQA Guidelines and incorporate GHG language throughout the Guidelines. However, no GHG emissions thresholds of significance were provided and no specific mitigation measures were identified. The GHG emission reduction amendments went into effect on March 18, 2010, and are summarized below:

- Climate action plans and other greenhouse gas reduction plans can be used to determine whether a project has significant impacts, based upon its compliance with the plan.
- Local governments are encouraged to quantify the greenhouse gas emissions of proposed projects, noting that they have the freedom to select the models and methodologies that best meet their needs and circumstances. The section also recommends consideration of several qualitative factors that may be used in the determination of significance, such as the extent to which the given project complies with state, regional, or local GHG reduction plans and policies. OPR does not set or dictate specific thresholds of significance. Consistent with existing CEQA Guidelines, OPR encourages local governments to develop and publish their own thresholds of significance for GHG impacts assessment.
- When creating their own thresholds of significance, local governments may consider the thresholds of significance adopted or recommended by other public agencies, or recommended by experts.
- New amendments include guidelines for determining methods to mitigate the effects of greenhouse gas emissions in Appendix F of the CEQA Guidelines.
- OPR is clear to state that "to qualify as mitigation, specific measures from an existing plan must be identified and incorporated into the project; general compliance with a plan, by itself, is not mitigation".
- OPR's emphasizes the advantages of analyzing GHG impacts on an institutional, programmatic level. OPR therefore approves tiering of environmental analyses and highlights some benefits of such an approach.
- Environmental impact reports (EIRs) must specifically consider a project's energy use and energy efficiency potential.

Senate Bill 100

Senate Bill 100 (SB 100) requires 100 percent of total retail sales of electricity in California to come from eligible renewable energy resources and zero-carbon resources by December 31, 2045. SB 100 was adopted September 2018.

The interim thresholds from prior Senate Bills and Executive Orders would also remain in effect. These include Senate Bill 1078 (SB 1078), which requires retail sellers of electricity, including investor-owned utilities and community choice aggregators, to provide at least 20 percent of their supply from renewable sources by 2017. Senate Bill 107 (SB 107) which changed the target date to 2010. Executive Order S-14-08, which was signed on November 2008 and expanded the State's Renewable Energy Standard to 33 percent renewable energy by 2020. Executive Order S-21-09 directed the CARB to adopt regulations by July 31, 2010 to enforce S-14-08. Senate Bill X1-2 codifies the 33 percent renewable energy requirement by 2020.

Senate Bill 375

Senate Bill 375 (SB 375) was adopted September 2008 and aligns regional transportation planning efforts, regional GHG emission reduction targets, and land use and housing allocation. SB 375 requires Metropolitan Planning Organizations (MPO) to adopt a sustainable communities strategy (SCS) or alternate planning strategy (APS) that will prescribe land use allocation in that MPOs Regional Transportation Plan (RTP). The CARB, in consultation with each MPO, will provide each affected region with reduction targets for GHGs emitted by passenger cars and light trucks in the region for the years 2020 and 2035. These reduction targets will be updated every eight years but can be updated every four years if advancements in emissions technologies affect the reduction strategies to achieve the targets. The CARB is also charged with reviewing each MPO's sustainable communities strategy or alternate planning strategy for consistency with its assigned targets.

The proposed project is located within the Southern California Association of Governments (SCAG) jurisdiction, which has authority to develop the SCS or APS. For the SCAG region, the targets set by the CARB are at eight percent below 2005 per capita GHG emissions levels by 2020 and 19 percent below 2005 per capita GHG emissions levels by 2035. These reduction targets became effective October 2018.

Senate Bill X7-7

Senate Bill X7-7 (SB X7-7), enacted on November 9, 2009, mandates water conservation targets and efficiency improvements for urban and agricultural water suppliers. SB X7-7 requires the Department of Water Resources (DWR) to develop a task force and technical panel to develop alternative best management practices for the water sector. In addition, SB X7-7 required the DWR to develop criteria for baseline uses for residential, commercial, and industrial uses for both indoor and landscaped area uses. The DWR was also required to develop targets and regulations that achieve a statewide 20 percent reduction in water usage.

Assembly Bill 939 and Senate Bill 1374

Assembly Bill 939 (AB 939) requires that each jurisdiction in California to divert at least 50 percent of its waste away from landfills, whether through waste reduction, recycling or other means. Senate Bill 1374 (SB 1374) requires the California Integrated Waste Management Board to adopt a model ordinance by March 1, 2004, suitable for adoption by any local agency to require 50 to 75 percent diversion of construction and demolition of waste materials from landfills.

California Code of Regulations (CCR) Title 24, Part 6

CCR Title 24, Part 6: California's Energy Efficiency Standards for Residential and Nonresidential Buildings (Title 24) were first established in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. Although it was not originally intended to reduce GHG emissions, electricity production by fossil fuels results in GHG emissions and energy efficient buildings require less electricity. Therefore, increased energy efficiency results in decreased GHG emissions.

The Energy Commission adopted 2008 Standards on April 23, 2008, and Building Standards Commission approved them for publication on September 11, 2008. These updates became effective on August 1, 2009.

2013 Standards were approved and have been effective since July 1, 2014. 2019 standards were published July 1, 2019 and became effective January 1, 2020. The newest version of CalEEMod (Version 2020.4.0) utilizes the 2019 standards.

California Code of Regulations (CCR) Title 24, Part 11

CCR Title 24, Part 6: California's Energy Efficiency Standards for Residential and Nonresidential Buildings (Title 24) were first established in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. Although it was not originally intended to reduce GHG emissions, electricity production by fossil fuels results in GHG emissions and energy efficient buildings require less electricity. Therefore, increased energy efficiency results in decreased GHG emissions.

The Energy Commission adopted 2008 Standards on April 23, 2008, and Building Standards Commission approved them for publication on September 11, 2008. These updates became effective on August 1, 2009. 2013 Standards were approved and were effective July 1, 2014. 2016 Standards were adopted January 1, 2017. 2019 standards were published July 1, 2019 and became effective January 1, 2020. All buildings for which an application for a building permit is submitted on or after January 1, 2020 must follow the 2019 standards. Single-family homes built with the 2019 standards will use about 7 percent less energy due to energy efficiency measures versus those built under the 2016 standards. Once rooftop solar electricity generation is factored in, homes built under the 2019 standards will use about 53 percent less energy than those under the 2016 standards. This will reduce greenhouse gas emissions by 700,000 metric tons over three years, equivalent to taking 115,000 fossil fuel cars off the road. Nonresidential buildings will use about 30 percent less energy due mainly to lighting upgrades[16].

On January 12, 2010, the State Building Standards Commission unanimously adopted updates to the California Green Building Standards Code, which went into effect on January 1, 2011. 2016 CALGreen Code: During the 2016-2017 fiscal year, the Department of Housing and Community Development (HCD) updated CALGreen through the 2015 Triennial Code Adoption Cycle.

HCD adopted three new definitions related to electric vehicle charging regulations. These definitions provided clarity to the code user as to the differences between an electric vehicle charging space and an electric vehicle charging station. HCD replaced the term "electric vehicle charging stations" with "electric vehicle charging spaces" since the term "electric vehicle charging space" better describes a space available for future installation of electric vehicle supply equipment, but with no electric vehicle charger installed.

HCD also increased the required construction waste reduction from 50 percent to 65 percent of the total building site waste. This increase aids in meeting CalRecycle's statewide solid waste recycling goal of 75 percent for 2020 as stated in Chapter 476, Statutes of 2011 (AB 341). HCD adopted new regulations requiring recycling areas for multifamily projects of five or more dwelling units. This regulation requires developers to provide readily accessible areas adequate in size to accommodate containers for depositing, storage and collection of non-hazardous materials (including organic waste) for recycling. This requirement assists businesses that were required as of April 1, 2016, to meet the requirements of Chapter 727, Statutes of 2014 (AB 1826).

HCD adopted new regulations to require information on photovoltaic systems and electric vehicle chargers to be included in operation and maintenance manuals. Currently, CALGreen section 4.410.1 Item 2(a) requires operation and maintenance instructions for equipment and appliances. Photovoltaic systems and electric vehicle chargers are systems that play an important role in many households in California, and their importance is increasing every day. HCD incorporated these two terms in the existing language in order to provide clarity to code users as to additional systems requiring operation and maintenance instructions.

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[16] https://ww2.energy.ca.gov/title24/2019standards/documents/2018_Title_24_2019_Building_Standards_FAQ.pdf

HCD updated the reference to Clean Air Standards of the United States Environmental Protection Agency applicable to woodstoves and pellet stoves. HCD also adopted a new requirement for woodstoves and pellet stoves to have a permanent label indicating they are certified to meet the emission limits. This requirement provides clarity to the code user and is consistent with the United States Environmental Protection Agency's New Source Performance Standards. HCD updated the list of standards which can be used for verification of compliance for exterior grade composite wood products. This list now includes four standards from the Canadian Standards Association (CSA): CSA O121, CSA O151, CSA O153 and CSA O325. HCD updated heating and air-conditioning system design references to the ANSI/ACCA 2 Manual J, ANSI/ACCA 1 Manual D, and ANSI/ACCA 3 Manual S to the most recent versions approved by ANSI. HCD adopted a new elective measure for hot water recirculation systems for water conservation. The United States Department of Energy estimates that 3,600 to 12,000 gallons of water per year can be saved by the typical household (with four points of hot water use) if a hot water recirculation system is installed.

2019 CALGReen Code: During the 2019-2020 fiscal year, the Department of Housing and Community Development (HCD) updated CALGreen through the 2019 Triennial Code Adoption Cycle.

HCD modified the best management practices for stormwater pollution prevention adding Section 5.106.2 for projects that disturb one or more acres of land. This section requires projects that disturb one acre or more of land or less than one acre of land but are part of a larger common plan of development or sale must comply with the postconstruction requirement detailed in the applicable National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities issued by the State Water Resources Control Board. The NPDES permits require postconstruction runoff (post-project hydrology) to match the preconstruction runoff pre-project hydrology) with installation of postconstruction stormwater management measures.

HCD added sections 5.106.4.1.3 and 5.106.4.1.5 in regards to bicycle parking. Section 5.106.4.1.3 requires new buildings with tenant spaces that have 10 or more tenant-occupants, provide secure bicycle parking for 5 percent of the tenant-occupant vehicular parking spaces with a minimum of one bicycle parking facility. In addition, Section 5.106.4.1.5 states that acceptable bicycle parking facility for Sections 5.106.4.1.2 through 5.106.4.1.4 shall be convenient from the street and shall meeting one of the following: (1) covered, lockable enclosures with permanently anchored racks for bicycles; (2) lockable bicycle rooms with permanently anchored racks; or (3) lockable, permanently anchored bicycle lockers.

HCD amended section 5.106.5.3.5 allowing future charging spaces to qualify as designated parking for clean air vehicles.

HCD updated section 5.303.3.3 in regards to showerhead flow rates. This update reduced the flow rate to 1.8 GPM.

HCD amended section 5.304.1 for outdoor potable water use in landscape areas and repealed sections 5.304.2 and 5.304.3. The update requires nonresidential developments to comply with a local water efficient landscape ordinance or the current California Department of Water Resource's' Model Water Efficient Landscape Ordinance (MWELO), whichever is more stringent. Some updates were also made in regards to the outdoor potable water use in landscape areas for public schools and community colleges.

HCD updated Section 5.504.5.3 in regards to the use of MERV filters in mechanically ventilated buildings. This update changed the filter use from MERV 8 to MERV 13. MERV 13 filters are to be installed prior to occupancy, and recommendations for maintenance with filters of the same value shall be included in the operation and maintenance manual.

Executive Order B-30-15

On April 29, 2015, Governor Brown issued Executive Order B-30-15. Therein, the Governor directed the following:

- Established a new interim statewide reduction target to reduce GHG emissions to 40 percent below 1990 levels by 2030.
- Ordered all state agencies with jurisdiction over sources of GHG emissions to implement measures to achieve reductions of GHG emissions to meet the 2030 and 2050 reduction targets.
- Directed CARB to update the Climate Change Scoping Plan to express the 2030 target in terms of million metric tons of carbon dioxide equivalent.

Executive Order B-29-15

Executive Order B-29-15, mandates a statewide 25 percent reduction in potable water usage. EO B-29-15 signed into law on April 1, 2015.

Executive Order B-37-16

Executive Order B-37-16, continuing the State's adopted water reductions, was signed into law on May 9, 2016. The water reductions build off the mandatory 25 percent reduction called for in EO B-29-15.

Executive Order N-79-20

Executive Order N-79-20 Signed in September 2020, Executive Order N-79-20 establishes as a goal that where feasible, all new passenger cars and trucks, as well as all drayage/cargo trucks and off-road vehicles and equipment, sold in California, will be zero-emission by 2035. The executive order sets a similar goal requiring that all medium and heavy-duty vehicles will be zero-emission by 2045 where feasible. It also directs CARB to develop and propose rulemaking for passenger vehicles and trucks, medium-and heavy-duty fleets where feasible, drayage trucks, and off-road vehicles and equipment "requiring increasing volumes" of new zero emission vehicles (ZEVs) "towards the target of 100 percent." The executive order directs the California Environmental Protection Agency, the California Geologic Energy Management Division (CalGEM), and the California Natural Resources Agency to transition and repurpose oil production facilities with a goal toward meeting carbon neutrality by 2045. Executive Order N-79-20 builds upon the CARB Advanced Clean Trucks regulation, which was adopted by CARB in July 2020.

SBX1 2

Signed into law in April 2011, SBX1 2, requires one-third of the State's electricity to come from renewable sources. The legislation increases California's current 20 percent renewables portfolio standard target in 2010 to a 33 percent renewables portfolio standard by December 31, 2020.

Senate Bill 350

Signed into law October 7, 2015, SB 350 increases California's renewable electricity procurement goal from 33 percent by 2020 to 50 percent by 2030. This will increase the use of Renewables Portfolio Standard (RPS) eligible resources, including solar, wind, biomass, geothermal, and others. In addition, SB 350 requires the state to double statewide energy efficiency savings in electricity and natural gas end uses by 2030. To help ensure these goals are met and the greenhouse gas emission reductions are realized, large utilities will be required to develop and submit Integrated Resource Plans (IRPs). These IRPs will detail how each entity will meet their customers resource needs, reduce greenhouse gas emissions and ramp up the deployment of clean energy resources.

Energy Sector and CEQA Guidelines Appendix F

The CEC first adopted Energy Efficiency Standards for Residential and Nonresidential Buildings (CCR, Title 24, Part 6) in 1978 in response to a legislative mandate to reduce energy consumption in the state. Although not originally intended to reduce GHG emissions, increased energy efficiency and reduced consumption of electricity, natural gas, and other fuels would result in fewer GHG emissions from residential and nonresidential buildings subject to the standard. The standards are updated periodically (typically every three years) to allow for the consideration and inclusion of new energy efficiency technologies and methods. The 2016 update to the Energy Efficiency Standards for Residential and Nonresidential Buildings focuses on several key areas to improve the energy efficiency of renovations and addition to existing buildings as well as newly constructed buildings and renovations and additions to existing buildings. The major efficiency improvements to the residential Standards involve improvements for attics, walls, water heating, and lighting, whereas the major efficiency improvements to the nonresidential Standards include alignment with the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) 90.1-2013 national standards. Furthermore, the 2016 update requires that enforcement agencies determine compliance with CCR, Title 24, Part 6 before issuing building permits for any construction.[17]

Part 11 of the Title 24 Building Energy Efficiency Standards is referred to as the California Green Building Standards (CALGreen) Code. The purpose of the CALGreen Code is to "improve public health, safety and general welfare by enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact or positive environmental impact and encouraging sustainable construction practices in the following categories: (1) Planning and design; (2) Energy efficiency; (3) Water efficiency and conservation; (4) Material conservation and resource efficiency; and (5) Environmental air quality."18 As of January 1, 2011, the CALGreen Code is mandatory for all new buildings constructed in the state. The CALGreen Code establishes mandatory measures for new residential and non-residential buildings. Such mandatory measures include energy efficiency, water conservation, material conservation, planning and design, and overall environmental quality. The CALGreen Code was most recently updated in 2016 to include new mandatory measures for residential and nonresidential uses; the new measures took effect on January 1, 2017.

Regional – South Coast Air Quality Management District

The project is within the Salton Sea portion of the South Coast Air Basin, which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD).

SCAQMD Regulation XXVII, Climate Change

SCAQMD Regulation XXVII currently includes three rules:

- The purpose of Rule 2700 is to define terms and post global warming potentials.
- The purpose of Rule 2701, SoCal Climate Solutions Exchange, is to establish a voluntary program to encourage, quantify, and certify voluntary, high quality certified greenhouse gas emission reductions in the SCAQMD.
- Rule 2702, Greenhouse Gas Reduction Program, was adopted on February 6, 2009. The purpose of this rule is to create a Greenhouse Gas Reduction Program for greenhouse gas emission reductions in the SCAQMD. The SCAQMD will fund projects through contracts in response to requests for proposals or purchase reductions from other parties.

A variety of agencies have developed greenhouse gas emission thresholds and/or have made recommendations for how to identify a threshold. However, the thresholds for projects in the jurisdiction of

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[17] California Energy Commission, 2016 Building Energy Efficiency Standards, June 2015, http://www.energy.ca.gov/2015publications/CEC-400-2015-037/CEC-400-2015-037-CMF.pdf

[18] California Building Standards Commission, 2010 California Green Building Standards Code, (2010).

the SCAQMD remain in flux. The California Air Pollution Control Officers Association explored a variety of threshold approaches, but did not recommend one approach (2008). The ARB recommended approaches for setting interim significance thresholds (California Air Resources Board 2008b), in which a draft industrial project threshold suggests that non-transportation related emissions under 7,000 MTCO2e per year would be less than significant; however, the ARB has not approved those thresholds and has not published anything since then. The SCAQMD is in the process of developing thresholds, as discussed below.

SCAQMD Threshold Development

On December 5, 2008, the SCAQMD Governing Board adopted an interim greenhouse gas significance threshold for stationary sources, rules, and plans where the SCAQMD is lead agency (SCAQMD permit threshold). The SCAQMD permit threshold consists of five tiers. However, the SCAQMD is not the lead agency for this project. Therefore, the five permit threshold tiers do not apply to the proposed project.

The SCAQMD is in the process of preparing recommended significance thresholds for greenhouse gases for local lead agency consideration ("SCAQMD draft local agency threshold"); however, the SCAQMD Board has not approved the thresholds as of the date of the Notice of Preparation. The current draft thresholds consist of the following tiered approach:

- Tier 1 consists of evaluating whether or not the project qualifies for any applicable exemption under CEQA.
- Tier 2 consists of determining whether the project is consistent with a greenhouse gas reduction plan. If a project is consistent with a qualifying local greenhouse gas reduction plan, it does not have significant greenhouse gas emissions.
- Tier 3 consists of screening values, which the lead agency can choose, but must be consistent with all projects within its jurisdiction. A project's construction emissions are averaged over 30 years and are added to a project's operational emissions. If a project's emissions are under one of the following screening thresholds, then the project is less than significant:
    - All land use types: 3,000 MTCO2e per year
    - Based on land use type: residential: 3,500 MTCO2e per year; commercial: 1,400 MTCO2e per year; or mixed use: 3,000 MTCO2e per year.
    - Based on land type: Industrial (where SCAQMD is the lead agency), 10,000 MTCO2e per year.
- Tier 4 has the following options:
    - Option 1: Reduce emissions from business as usual (BAU) by a certain percentage; this percentage is currently undefined.
    - Option 2: Early implementation of applicable AB 32 Scoping Plan measures.
    - Option 3, 2020 target for service populations (SP), which includes residents and employees: 4.8 MTCO2e/SP/year for projects and 6.6 MTCO2e/SP/year for plans;
    - Option 3, 2035 target: 3.0 MTCO2e/SP/year for projects and 4.1 MTCO2e/SP/year for plans.
- Tier 5 involves mitigation offsets to achieve target significance threshold.

The SCAQMD's draft threshold uses the Executive Order S-3-05 goal as the basis for the Tier 3 screening level. Achieving the Executive Order's objective would contribute to worldwide efforts to cap carbon dioxide concentrations at 450 ppm, thus stabilizing global climate. Specifically, the Tier 3 screening level for stationary sources is based on an emission capture rate of 90 percent for all new or modified projects. A 90 percent emission capture rate means that 90 percent of total emissions from all new or modified stationary source projects would be subject to a CEQA analysis, including a negative declaration, a mitigated negative declaration, or an environmental impact report, which includes analyzing feasible alternatives and imposing feasible mitigation measures. A GHG significance threshold based on a 90 percent emission capture rate may be more appropriate to address the long-term adverse impacts associated with global climate change because most projects will be required to implement GHG reduction measures. Further, a 90 percent emission capture rate sets the emission threshold low enough to capture a substantial fraction of future stationary source projects that will be constructed to accommodate future statewide population and economic growth, while setting the emission threshold high enough to exclude small projects that will in aggregate contribute a relatively small fraction of the cumulative statewide GHG emissions. This assertion is based on the fact that staff estimates that these GHG emissions would account for slightly less than one percent of future 2050 statewide GHG emissions target (85 MMTCO2eq/year). In addition, these small projects may be subject to future applicable GHG control regulations that would further reduce their overall future contribution to the statewide GHG inventory. Finally, these small sources are already subject to BACT for criteria pollutants and are more likely to be single-permit facilities, so they are more likely to have few opportunities readily available to reduce GHG emissions from other parts of their facility.

SCAQMD Working Group

Since neither the CARB nor the OPR has developed GHG emissions threshold, the SCAQMD formed a Working Group to develop significance thresholds related to GHG emissions. At the September 28, 2010 Working Group meeting, the SCAQMD released its most current version of the draft GHG emissions thresholds, which recommends a tiered approach that provides a quantitative annual threshold of 10,000 MTCO2e for industrial uses.

Local – City of Desert Hot Springs

City of Desert Hot Springs Climate Action Plan

A Climate Action Plan (CAP) was adopted by the City of Desert Hot Springs in June of 2013. The City of Desert Hot Springs Climate Action Plan was set in place to guide the City in decisions that lead to the largest and most cost-effective emissions reductions. This plan sets forth goals to reduce emissions to achieve the targets of AB 32. The Climate Action Plan identifies that the community will have to reach a 36.4% reduction from Year 2010 baseline emissions or a 43.2% reduction from Year 2020 business-as-usual emissions by the year 2020 in order to obtain the AB 32 target emissions. These CAP targets are based on a predicted population growth rate of 83% between 2010 and 2020. However, according to the Census Bureau[19], the population of Desert Hot Springs was estimated to be 27,049 in April 2010 and 28,164 in July 2014; which shows a growth rate of 4.1%; therefore, the City of Desert Hot Springs would have to increase its population by 78.9% by 2020 to validate the reduction target percentage.

The City of Desert Hot Springs has identified 80 measures to be implemented over the course of an eight-year period, beginning in 2013, in order to achieve their emission reduction goals. The City promotes energy efficiency and conservation in all areas of community development, including transportation, development planning, and public and private sector construction and operation, as well as in the full range of residential and non-residential projects. The City supports public and private efforts to develop and operate alternative systems of solar and electric production that take advantage of local renewable resources. In addition, the Climate Action Plan discusses the ability to develop and implement a solar ready ordinance that would require all new buildings and homes to be prepared for solar install. The Climate Action Plan also promotes the use of drought tolerate desert landscaping for parks, recreational facilities and golf courses.

City of Desert Hot Springs General Plan

The City of Desert Hot Springs General Plan includes the following goals and policies related to greenhouse gas reduction.

Goal MI-5
Reduction in total vehicle miles traveled to help improve local air quality ad reduce greenhouse gas emissions.

Policy MI-5.1 Reduce Vehicle Miles Traveled. Implement development and transportation improvements that help reduce greenhouse gas emissions by reducing per capita Vehicle Miles Traveled

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[19] http://quickfacts.census.gov/qfd/states/06/0618996.html

(VMT), reducing impacts on the City's transportation network, and maintaining the desired service levels for all modes of transportation.

Policy MI-5.2 Sustainable Transportation and Land Use Strategies. Implement sustainable transportation and land use strategies that can effectively reduce vehicle miles traveled. Consider using vehicle daily trips as the benchmark demand for determining potential levels of parking and vehicular congestion.

Policy MI-5.3 Clean Vehicles. Support the development of a network of public and private clean and/or carbon-neutral fuel vehicle charging and fueling stations.

Policy MI-5.4 Traffic Mitigation. Consider a locally collected and administered traffic mitigation fee program to guarantee that new development pays for its fair share toward improvements resulting in reductions in air pollutant and GHG emissions and traffic impacts generated by the development.

Policy MI-5.5 Green Streets. Encourage "green street" strategies to improve stormwater quality and protect the environment, including local washes and drainages.

Policy MI-5.6 Repaving and Repairing. Consider the use of sustainable and carbon-neutral material when repaving, repairing, or constructing streets and other transportation facilities.

SIGNIFICANCE THRESHOLDS

Appendix G of State CEQA Guidelines

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

- The extent to which the project may increase (or reduce) GHG emissions as compared to the existing environmental setting;
- Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project;
- The extent to which the project complies with regulations or requirements adopted to implement an adopted statewide, regional, or local plan for the reduction or mitigation of GHG emissions[20].

Thresholds of Significance for this Project

To determine whether the project's GHG emissions are significant, this analysis uses the draft SCAQMD screening threshold of 3,000 MTCO2e per year for all land uses.

METHODOLOGY

The CalEEMod Version 2020.4.0 was used to calculate the GHG emissions from the proposed project. The project's emissions were compared to the SCAQMD draft threshold of 3,000 $MTCO_2e$ per year. As discussed previously, the City of Desert Hot Spring's Climate Action Plan was adopted in 2013; therefore, the project's GHG emissions have also been compared to the emissions-reducing measures, goals and policies provided in the CAP.

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

The CalEEMod Annual Output for year 2023 is available in Appendix C. Each source of GHG emissions is described in greater detail below.

Area Sources

Area sources include emissions from consumer products, landscape equipment and architectural coatings. No changes were made to the default area source emissions.

Per SCAQMD Rule 1113 as amended on June 3, 2011, the architectural coatings that would be applied after January 1, 2014 will be limited to an average of 50 grams per liter or less. As the project design includes use of low VOC paints, the VOC content was adjusted to 50g/L VOC for buildings and 100g/L VOC for traffic striping.

Energy Usage

Energy usage includes emissions from the generation of electricity and natural gas used on-site. Per the applicant, on-site wind and solar sources are to provide approximately 40 percent of the project's total annual energy needs. No other changes were made to the default energy usage parameters.

Mobile Sources

Mobile sources include emissions from the additional vehicle miles generated from the proposed project. The vehicle trips associated with the proposed project have been analyzed by inputting the project-generated vehicular trips from the Traffic Impact Analysis into the CalEEMod Model. The program then applies the emission factors for each trip which is provided by the EMFAC2017 model to determine the vehicular traffic pollutant emissions. The CalEEMod default trip lengths were used in this analysis. See Section 2 for details.

Waste

Waste includes the GHG emissions generated from the processing of waste from the proposed project as well as the GHG emissions from the waste once it is interred into a landfill. AB 341 requires that 75 percent of waste be diverted from landfills by 2020. No other changes were made to the default waste parameters.

Water

Water includes the water used for the interior of the building as well as for landscaping and is based on the GHG emissions associated with the energy used to transport and filter the water. As stated in the footnote on Table 14, 86 percent of the site's water will be provided by an on-site well, which reduced the GHG emissions associated with water transport. Low-flow fixtures are to be utilized and grey water will provide 100 percent of landscape irrigation water. No other changes were made to CalEEMod default values for waste generated.

Construction

The construction-related GHG emissions were also included in the analysis and were based on a 30-year amortization rate as recommended in the SCAQMD GHG Working Group meeting on November 19, 2009. The construction-related GHG emissions were calculated by CalEEMod and in the manner detailed above in Section 2.

Sequestration

The analysis includes reduction of GHG emissions from the planting of approximately 85 new trees. The total number of trees to be planted was based on the acreage of Parcels 30 and 31 and Basin Parcel 101 being approximately 8.8 percent of the total acreage of the previously approved project. Therefore, approximately

8.8 percent of the trees estimated to be planted in the previously approved project were assumed to be planted in this area. The California Air Pollution Control Officers Association (CAPCOA) states that trees sequester carbon dioxide over 20 years of their life, after that, sequestration is nominal and outweighed by tree maintenance-related emissions. The total sequestration value given in the Annual CalEEMod output (see Appendix C) was divided by 20 years to yield an annual value, which was then subtracted from the project's emissions.

PROJECT GREENHOUSE GAS EMISSIONS

The GHG emissions have been calculated based on the parameters described above. A summary of the results is shown below in Table 13 and the CalEEMod Model run for the proposed project is provided in Appendix C. Table 13 shows that the total for the proposed project's emissions would be 2,284.6 MTCO2e per year. According to the thresholds of significance established above, a cumulative global climate change impact would occur if the GHG emissions created from the on-going operations of the proposed project would not exceed the SCAQMD draft threshold of 3,000 $MTCO_2e$ per year. Therefore, as the emissions from the proposed project would not exceed the SCAQMD draft threshold of 3,000 MTCO2e per year for all land uses, operation of the proposed project would not create a significant cumulative impact to global climate change. No mitigation is required.

However, the proposed project includes design features that would further reduce GHG emissions and mitigation consisting of a charter shuttle bus that can be provided at a pick-up location within the Downtown Palm Springs Area has also been included to reduce cumulative impacts (see Section 6, Mitigation Measures/Design Features for details). The data provided in Table 14 shows that the proposed project's total emissions with incorporation of design features (incorporation of design features and compliance with regulation is shown as "mitigation" in the CalEEMod output) would be reduced to 1,529.86 $MTCO_2e$ per year. The reduction comes from the aforementioned shuttle mitigation and incorporation of the following project design features and regulatory compliance:

Regulatory Compliance:

- Utilizing low-flow fixtures that would reduce indoor water demand by 20% per CalGreen Standards.
- Using water-efficient irrigation systems on-site.
- Recycling programs that reduce waste to landfills by a minimum of 75 percent (per AB 341).
- Re-application of architectural coatings to project buildings will be limited to 50 grams per liter VOC and traffic paints shall be limited to 100 g/L VOC content per SCAQMD Rule 1113.

Project Design Features:

- Grey water will provide 100 percent of landscape irrigation water.
- Use of Energy Star® appliances on-site.
- Installation of energy efficient lighting that is at least 34% more efficient than standard.
- On-site wind and solar sources are to provide approximately 40 percent of the project's total annual energy needs.
- Incorporation of the CAPCOA-based land use and site enhancement reduction measures: LUT-1 Increased Density, LUT-4 Improve Destination Accessibility, LUT-5 Increase Transit Accessibility, LUT-9 Improve Walkability Design Intersections/Square Miles, and SDT-1 Improve Pedestrian Network.

The project also intends to incorporate an urban algae canopy[21] into the project that would provide shade to the site, generate oxygen, and sequester carbon dioxide from the ambient air; however, as specifics regarding the extent and exact location of the urban algae canopy are unknown at the time of this analysis, no reductions have been taken.

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[21] https://www.theplaidzebra.com/new-urban-algae-canopy-produces-as-much-oxygen-as-four-hectares-of-woodland?sfns=mo&fbclid=IwAR3pvnpuuM9UJyjsilhSAocUPNyxB6Ghk2kZeUR5xcjfXqno9tUkAt66v6I

As shown in Table 13, even without the benefit of emissions reductions from compliance with regulation and project design features, the project's GHG emissions would not exceed the SCAQMD draft threshold of 3,000 MTCO2e per year for all land uses. As shown in Table 14, with implementation of the above listed regulatory compliance and project design features measures, the proposed project's GHG emission would be even further reduced. Therefore, project-related GHG emissions are considered to have a less than significant cumulative impact to global climate change.

Table 13
Project-Related Greenhouse Gas Emissions[1]

Category	Greenhouse Gas Emissions (Metric Tons/Year)					
	Bio-CO2	NonBio-CO_2	CO_2	CH_4	N_2O	CO_2e
Area Sources[2]	0.00	0.00	0.00	0.00	0.00	0.00
Energy Usage[3]	0.00	1,164.83	1,164.83	0.06	0.02	1,171.29
Mobile Sources[4]	0.00	887.71	887.71	0.07	0.05	905.35
Waste[5]	24.42	0.00	24.42	1.44	0.00	60.51
Water[6]	9.97	77.22	87.20	1.03	0.03	120.42
Construction[7]	0.00	26.62	26.62	0.00	0.00	27.03
Total Emissions	34.40	2,156.39	2,190.79	2.60	0.10	2,284.60
SCAQMD Draft Threshold						3,000
Exceeds Threshold?						No

Notes:

(1) Source: CalEEMod Version 2020.4.0 for Opening Year 2023.

(2) Area sources consist of GHG emissions from consumer products, architectural coatings, and landscape equipment.

(3) Energy usage consist of GHG emissions from electricity and natural gas usage.

(4) Mobile sources consist of GHG emissions from vehicles.

(5) Solid waste includes the CO_2 and CH_4 emissions created from the solid waste placed in landfills.

(6) Water includes GHG emissions from electricity used for transport of water and processing of wastewater.

(7) Construction GHG emissions CO2e based on a 30 year amortization rate.

Table 14
Project-Related Greenhouse Gas Emissions
With Project Design Features That Reduce Greenhouse Gas Emissions[1]

Category	Greenhouse Gas Emissions (Metric Tons/Year)					
	Bio-CO2	NonBio-CO_2	CO_2	CH_4	N_2O	CO_2e
Area Sources[2]	0.00	0.00	0.00	0.00	0.00	0.00
Energy Usage[3]	0.00	890.64	890.64	0.04	0.01	895.69
Mobile Sources[4]	0.00	546.54	546.54	0.05	0.04	559.36
Waste[5]	6.11	0.00	6.11	0.36	0.00	15.13
Water[6]	8.30	60.43	68.74	0.86	0.02	35.66
Construction[7]	0.00	26.62	26.62	0.00	0.00	27.03
Sequestration[8]						-3.01
Total Emissions	14.41	1,524.24	1,538.64	1.31	0.07	**1,529.86**
SCAQMD Draft Threshold						3,000
Exceeds Threshold?						No

Notes:

(1) Source: CalEEMod Version 2020.4.0 for Opening Year 2023.

(2) Area sources consist of GHG emissions from consumer products, architectural coatings, and landscape equipment.

(3) Energy usage consist of GHG emissions from electricity and natural gas usage.

(4) Mobile sources consist of GHG emissions from vehicles. Includes shuttle service for ~25% amphitheater patrons.

(5) Solid waste includes the CO_2 and CH_4 emissions created from the solid waste placed in landfills.

(6) Water includes GHG emissions from electricity used for transport of water and processing of wastewater.Per developer, 86% of the site's potable water is sourced from on-site well; therefore the CAPCOA WSW-3 reduction measure was used to calcuate a reduction of 63% in CO2e, resulting in 35.6556 MTCO2e instead of the 96.3664 total MTCO2e reported in Appendix C.

(7) Construction GHG emissions CO2e based on a 30 year amortization rate.

(8) CO2 sequestration from the planting of ~85 trees (60.18/20 years [trees' lifetime])

CONSISTENCY WITH APPLICABLE GREENHOUSE GAS REDUCTION PLANS AND POLICIES

As stated previously, the City of Desert Hot Springs CAP was adopted in May of 2013. The City of Desert Hot Springs CAP was set in place to guide the City in decisions that lead to the largest and most cost-effective emissions reductions. This plan sets forth goals to reduce emissions to achieve the targets of AB 32. In order to achieve these targets, the CAP presents a number of GHG emissions-reducing programs and policies that are to be implemented by the City. These emissions-reducing measures have been provided for different sectors of the community including transportation, residential buildings, commercial buildings, government incentives, renewable energy, cross-cutting initiatives, solid waste, and water. As specified in the CAP, these measures are to be implemented in a series of three phases over a course of eight years beginning in 2013. The proposed project would be expected to comply with all applicable emissions-reducing measures identified within the CAP.

Project consistency with applicable measures in the CAP has been assessed. As shown in Table 15, the project is consistent with the applicable measures and the project would not conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases. Impacts are considered to be less than significant.

Table 15
City of Desert Hot Springs CAP Applicable Measures Project Comparison[1]

Sector	CAP Measures to Reduce Greenhouse Gas Emissions	Project Compliance with Measure
Sphere - "Where We Live"		
Solid Waste	Solid Waste Diversion: Increase solid waste diversion rate by 5% to 68.1% by 2015 potentially through use of tiered rate structure.	Consistent. The project will be required to comply with AB 341 which includes recycling programs that reduces waste to landfills by up to 75% by 2020. The previously-approved cultivation use includes 90% of solid (plant) waste to be recycled on-site (goes to vermiculture).
Solid Waste	Solid Waste Diversion: Increase solid waste diversion rate by an additional 10% to 78.1% by 2020 potentially through awareness programs, recognition, tiered rate structures, and other financial instruments.	Consistent. The project will be required to comply with AB 341 which includes recycling programs that reduces waste to landfills by up to 75% by 2020. The previously-approved cultivation use includes 90% of solid (plant) waste to be recycled on-site (goes to vermiculture).
Sphere - "Where We Work"		
Commercial Buildings	Peak Demand Reduction: Collaborate with SCE and encourage 100 businesses to enroll in Energy Efficiency and Demand Response programs such as the Summer Discount Program.	Consistent. This is a city-based measure. If the project or the previoulsy-approved cultivation use are mandated by the City to be one of the 100 businesses that are to enroll in an Energy Efficiency and Demand Response program then the project will comply as needed.
Commercial Buildings	Energy-Efficient, Commercial-Sector Lighting: Promote and leverage existing incentives for efficient lighting and educate and locally incent building owners to eliminate any remaining T-12 lamps in commercial/industrial buildings.	Consistent. The project will comply with current Title 24 requirements for installation of energy-efficient lighting. The previously-approved cultivation use is to include features that exceed the Title 24 requirements by approximatley 32 percent.
Commercial Buildings	"The Temperature Club": Promote community partnership through policies to adjust indoor temperatures to save/degree reaching out to 100 businesses.	Consistent. This is a city-based measure. If the project is mandated by the City to be one of the 100 businesses in the "Temperature Club," the project will comply as needed.
Commercial Buildings	Integrated Lighting Systems: Promote SCE's Energy Management Solutions' energy- efficient lighting linked to building controls and occupancy sensors in minimum of 1 million square feet of commercial/industrial space.	Consistent. This is a city-based measure. If the If the project or the previously-approved cultivation use are mandated by the City to be part of the 1 million square feet of commercial/industrial space that is to have energy-efficient lighting linked to building controls and occupancy sensors, then the project will comply as needed.
Government Initiatives	Water Efficient Landscaping Ordinance: Build on and exceed current Water Efficient Landscaping Ordinance in the commercial/industrial sector by 15% community-wide by 2020.	Consistent. The project's and previously-approved cultivation use's landscape design complies with the City's landscaping standards and accommodates the surrounding desert landscape. In additon, they are both to icnlude 100% landcape irrigation from grey water and water-efficeint irrigation.
Sphere - " How We Build"		
Commercial Buildings	Sustainable Parking Lots: Program to reduce the heat island effect through the promotion of parking lot coverings and coatings and semi permeable surfaces for new construction to achieve 20% of existing parking lots, and 80% of new parking lots.	Consistent. The project and previously-approved cultivation use include the planting of trees in the parking lot that would provide shade and reduce the heat island effect and semi-permeable paving will be used as required by the City.
Commercial Buildings	"Cool Roofs": Promote the installation of reflective roofing on commercial/industrial properties in the community with recognition for first ten early adopters.	Consistent. The project will comply with current Title 24 prescriptive cool roof requirements to meet energy compliance.
Government Initiatives	Green Building Program: Promote the voluntary Green Building Program to prepare for enhanced Title 24 requirements and green building standards.	Consistent. The California Green Building Standards Code (proposed Part 11, Title 24) was adopted as part of the California Building Standards Code in the CCR. Part 11 establishes voluntary standards, that became mandatory in the 2019 edition of the Code, on planning and design for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants. The project will be subject to these mandatory standards. Further, the projet is to include wind and solar that is to supply approximately 40% of the project's energy needs, while the previously-approved cultivation use to include wind, solar, etc. that provide approximately 66% of site's energy needs.
Water	Stormwater Capture: Promote storm water capture and retention for exterior landscape use (cisterns, rain barrels) to demonstrate 10 new systems by 2020.	Consistent. The project includes temporary parking areas that are not to be paved, while the previously-approved cultivation use includes retention basins. These areas will reduce the runoff from the project site to its pre-developed rate and meet water quality requirements.

Notes:

(1) Source: City of Desert Hot Springs Climate Action Plan (2013).

CUMULATIVE GREENHOUSE GAS IMPACTS

Although the project is expected to emit GHGs, the emission of GHGs by a single project into the atmosphere is not itself necessarily an adverse environmental effect. Rather, it is the increased accumulation of GHG from more than one project and many sources in the atmosphere that may result in global climate change. Therefore, in the case of global climate change, the proximity of the project to other GHG emission generating activities is not directly relevant to the determination of a cumulative impact because climate change is a global condition. According to CAPCOA, “GHG impacts are exclusively cumulative impacts; there are no non-cumulative GHG emission impacts from a climate change perspective.”[22] The resultant consequences of that climate change can cause adverse environmental effects. A project’s GHG emissions typically would be very small in comparison to state or global GHG emissions and, consequently, they would, in isolation, have no significant direct impact on climate change.

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[22] Source: California Air Pollution Control Officers Association, CEQA & Climate change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act, (2008).

4. PREVIOUSLY-APPROVED CULTIVATION USE IMPACT ANALYSIS FOR PARCELS 30 AND 31

As discussed previously, the overall project site for the approved Coachillin' Industrial Park consisted of developing the vacant project site with approximately 2,800,000 square feet of building envelope grow site for cannabis cultivation, processing, and distribution uses. The proposed industrial park project would be operated by various lot owners with a total of 1,510 employees using 3 different work shifts throughout the day. The proposed project being analyzed and discussed within this report is the modification of Parcels 30 and 31 to include a 175-room hotel and a 5,000-seat amphitheater rather than the previously approved cultivation use.

As the original Air Quality and Global Climate Change Impact Analysis prepared for the Coachillin' Industrial Park (Kunzman Associates, Inc. 2017) analyzed the entire approximately 2,800,000 square foot building envelope, this analysis quantifies the emissions anticipated from only Parcels 30 and 31 (if they were to remain as the existing planned cultivation use) to show a more accurate, side-by-side comparison to the proposed, revised version of the project. The site plan for the previously-analyzed and approved planned cultivation use is illustrated on Figure 3.

AIR QUALITY IMPACTS

Short-Term Construction Impacts

An analysis of the potential short-term air quality impacts due to regional air quality and local air quality impacts with the construction of the cultivation uses for Parcels 30 and 31 is provided. Like the proposed project, the cultivation use was modeled as being constructed in one phase taking approximately 12 months to complete. To compare the potential impacts, construction was also anticipated to begin in 2022 and take approximately 12 months to complete. The anticipated opening year for the previously-approved cultivation use was also modeled as 2023. CalEEMod output is shown in Appendix B.

Construction-Related Regional Air Quality Impacts

The construction-related criteria pollutant emissions for the construction of the previously-approved cultivation use are shown below in Table 16. Table 16 shows that for construction of just Parcels 31 and 31 as a cultivation use, none of the analyzed criteria pollutants would exceed the regional emissions thresholds. However, per the previous analysis, in order to avoid significant impacts during construction of the entire Coachillin' Industrial Park, the construction of the cultivation uses needed to use Tier 3 level construction equipment or better. Therefore, the emissions with the incorporation of this mitigation measure have also been shown in Table 17. As shown by the results in both Tables 16 and 17, a less than significant regional air quality impact would occur from construction of the planned cultivation use.

Construction-Related Local Air Quality Impacts

Construction-related air emissions may have the potential to exceed the State and Federal air quality standards in the project vicinity, even though these pollutant emissions may not be significant enough to create a regional impact to the Salton Sea portion of the South Coast Air Basin. The previously-approved cultivation use has been analyzed for Parcels 30 and 31 for the potential local air quality impacts created from: construction-related fugitive dust and diesel emissions; from toxic air contaminants; and from construction-related odor impacts.

The emission thresholds were calculated based on the Coachella Valley source receptor area (SRA) 30 and a disturbance value of four acres per day, to be conservative (see Table 18). According to LST Methodology, any receptor located closer than 25 meters (82 feet) shall be based on the 25-meter thresholds. The nearest sensitive receptors to Parcel 30 and Parcel 31 are the single-family detached residential dwelling units located approximately 0.39 miles (~627 meters) northeast of the planned cultivation use; therefore, the SCAQMD Look-up Tables for 500 meters was used. As shown in Table 19, none of the analyzed criteria pollutants would exceed the calculated local emissions thresholds at the nearest sensitive receptors. However, as stated above, per the previous approval, the construction of the cultivation use is to use Tier 3 level construction equipment or better. Therefore, the emissions with the incorporation of this mitigation measure are shown in Table 20. Therefore, the local construction emissions from the previously-approved cultivation use for Parcels 30 and 31 would be less than significant.

Long-Term Air Quality Operational Impacts

An analysis of the potential long-term air quality impacts due to operations of the previously-approved cultivation use for Parcels 30 and 31 only has been completed. The operations-related criteria air quality impacts created by the previously-approved cultivation use have been analyzed through use of the CalEEMod model. The operating emissions were based on the year 2023, which would be the anticipated opening year of the previously-approved cultivation use. CalEEMod output for the previously-approved cultivation use is shown in Appendix B. The CalEEMod analyzes operational emissions from area sources, energy usage, and mobile sources, which are discussed below.

Methodology

Mobile Sources

Mobile sources include emissions from the additional vehicle miles generated from the proposed project. The vehicle trips associated with the previously-approved cultivation use for Parcels 30 and 31 have been analyzed by inputting the project-generated vehicular trips from the Coachillin' Industrial Park Traffic Impact Analysis (Traffic Impact Analysis), prepared Ganddini Group, 2021, into the CalEEMod Model. The Traffic Impact Analysis found that the entire previously approved project would create 3,456 vehicle trips per day sourced from 1,510 employees. The acreage of Parcels 30 and 31 and Basin 101 equal to approximately 8.8 percent of the previous project's total acreage (~143.79 acres). Therefore, the total vehicle trips associated with this portion of the project is estimated to be approximately 304 vehicle trips per day, which equates to approximately 0.87 trips per thousand square foot per day. The program then applies the emission factors for each trip which is provided by the EMFAC2017 model to determine the vehicular traffic pollutant emissions. The CalEEMod default trip lengths were used in this analysis.

Area Sources

Area sources include emissions from hearths, consumer products, landscape equipment and architectural coatings. No changes were made to the default area source parameters.

Per SCAQMD Rule 1113 as amended on June 3, 2011, the architectural coatings that would be applied after January 1, 2014 will be limited to an average of 50 grams per liter or less. The VOC content was adjusted to 50g/L VOC for buildings and 100g/L VOC for traffic striping.

Energy Usage

Energy usage includes emissions from the generation of electricity and natural gas used on-site. The previously-approved project included sustainability features such as a solar farm, combined heat power (CHP), parabolic solar, solar tubes for daylight harvesting vermiculture, and a wind farm. These features were also incorporated into this analysis for Parcels 30 and 31. These features are expected to generate approximately 66 percent of the project's electricity. No other changes were made to the default energy usage parameters.

Operational-Related Regional Air Quality Impacts

The worst-case summer or winter VOC, NOx, CO, SO_2, PM10, and PM2.5 emissions generated by Parcel 30 and 31 of the previously-approved cultivation use's long-term operations have been calculated and are summarized below in Table 21. Table 21 shows that none of the analyzed criteria pollutants would exceed the regional emissions thresholds. Therefore, a less than significant regional air quality impact would occur from operation of the previously-approved cultivation use.

Local Air Quality Impacts from On-Site Operations

Project-related air emissions from on-site sources such as architectural coatings, landscaping equipment, on-site usage of natural gas appliances as well as the operation of vehicles on-site may have the potential to exceed the State and Federal air quality standards in the project vicinity, even though these pollutant emissions may not be significant enough to create a regional impact to the Air Basin. Single-family detached residential dwelling units are located approximately 0.39 miles (~627 meters) northeast of Parcel 30 and 31 of the previously-approved cultivation use.

According to SCAQMD LST methodology, LSTs would apply to the operational phase of a project, if the project includes stationary sources, or attracts mobile sources (such as heavy-duty trucks) that may spend long periods queuing and idling at the site; such as industrial warehouse/transfer facilities. The previously-approved project included the development of Parcels 30 and 31 with uses which could include such activities as botanical cultivation facilities, botanical cultivation manufacturing/processing facilities, and/or a botanical cultivation compliance lab testing facility; and does not include such uses. Deliveries would typically be made with cargo vans or small box truck type delivery vehicles that would not idle on-site. Therefore, due the lack of stationary source emissions, no long-term localized significance threshold analysis is warranted.

GLOBAL CLIMATE CHANGE IMPACTS

The previously-approved cultivation use for Parcels 30 and 31 is anticipated to generate GHG emissions from operational and construction activities. The following provides the methodology used to calculate the GHG emissions and discusses the impacts.

Methodology

The CalEEMod Version 2020.4.0 was used to calculate the GHG emissions from the previously-approved cultivation use. In order to more make a more exact comparison to the proposed project's emissions, the planned cultivation use's emissions were also compared to the tier 3 SCAQMD draft screening threshold of 3,000 metric tons CO2e per year for all land uses.

The CalEEMod Annual Output for year 2023 is available in Appendix C. Each source of GHG emissions is described in greater detail below.

Area Sources

Area sources include emissions from hearths, consumer products, landscape equipment and architectural coatings. No changes were made to the default area source parameters.

Per SCAQMD Rule 1113 as amended on June 3, 2011, the architectural coatings that would be applied after January 1, 2014 will be limited to an average of 50 grams per liter or less. The VOC content was adjusted to 50g/L VOC for buildings and 100g/L VOC for traffic striping.

Energy Usage

Energy usage includes emissions from the generation of electricity and natural gas used on-site. The previously-approved project included sustainability features such as a solar farm, combined heat power (CHP), parabolic solar, solar tubes for daylight harvesting vermiculture, and a wind farm. These features were also incorporated into this analysis for Parcels 30 and 31. These features are expected to generate approximately 66 percent of the project's electricity. No other changes were made to the default energy usage parameters.

Mobile Sources

Mobile sources include emissions from the additional vehicle miles generated from the previously-approved project. The vehicle trips associated with the previously-approved project have been analyzed based on the project trip generation calculated in the Traffic Impact Analysis as detailed above.

Waste

Waste includes the GHG emissions generated from the processing of waste from the proposed project as well as the GHG emissions from the waste once it is interred into a landfill. AB 341 requires that 75 percent of waste be diverted from landfills by 2020. However, the developer stated that the majority of waste on-site for the previously-approved project will be from plant matter, and 90 percent of the site's waste will be recycled. No other changes were made to the CalEEMod default value for waste generated.

Water

Water includes the water used for the interior of the building as well as for landscaping and is based on the GHG emissions associated with the energy used to transport and filter the water. As Parcels 30 and 31 add up to approximately 12.5 percent of the total previously approved square footage, the default value in CalEEMod was changed to reflect approximately 12.5 percent of the project-specific water source assessment (WSA) value of 574 AFY (187,038,719 gallons/year). Furthermore, as stated in the footnote on Table 23, 86 percent of the site's water will be provided by an on-site well, which reduced the GHG emissions associated with water transport. Low-flow fixtures, per the previously-approved project, are to be utilized and grey water will provide 100 percent of landscape irrigation water. No other changes were made to CalEEMod default values for waste generated.

Construction

The construction-related GHG emissions were also included in the analysis and were based on a 30-year amortization rate as recommended in the SCAQMD GHG Working Group meeting on November 19, 2009. The construction-related GHG emissions were calculated by CalEEMod as detailed above.

Sequestration

The analysis includes reduction of GHG emissions from the planting of approximately 85 new trees. The total number of trees to be planted was based on the acreage of Parcels 30 and 31 and Basin Parcel 101 being approximately 8.8 percent of the total acreage of the previously-approved project. Therefore, approximately 8.8 percent of the trees estimated to be planted in the previously approved project were assumed to be planted in this area. The California Air Pollution Control Officers Association (CAPCOA) states that trees sequester carbon dioxide over 20 years of their life, after that, sequestration is nominal and outweighed by tree maintenance-related emissions. The total sequestration value given in the Annual CalEEMod output (see Appendix C) was divided by 20 years to yield an annual value, which was then subtracted from the project's emissions.

Greenhouse Gas Emissions

The GHG emissions from the previously-approved cultivation use for Parcels 30 and 31 have been calculated with the CalEEMod model based on the parameters detailed above. A summary of the results is shown below in Table 22 and CalEEMod model run for the previously-approved cultivation use is provided in Appendix C.

The data provided in Table 22 shows that at a level of 1,887.01 MTCO2e per year the previously-approved cultivation use's emissions do not exceed the SCAQMD draft GHG emissions threshold of 3,000 MTCO$_2$e per year for all land uses. However, per the previous approval, the construction of the previously-approved cultivation use within Parcels 31 and 31 was to include project design features that would reduce greenhouse gas emissions.

As shown in Table 23, the previously-approved cultivation use would generate 1,051.57 MTCO2e per year with incorporation of these required project design features (detailed above and below). Therefore, the previously-approved cultivation use's GHG emissions for Parcels 30 and 31 are considered to be less than significant.

The data provided in Table 23 shows that the previously-approved project's total mitigated emissions for Parcels 30 and 31 (incorporation of design features and compliance with regulation is shown as "mitigation" in the CalEEMod output) would be reduced to 1,051.57 MTCO$_2$e per year. The reduction comes from incorporation of the following previously-approved project design features and regulatory compliance: utilizing low-flow fixtures that would reduce indoor water demand by 20% per CalGreen Standards, using water-efficient irrigation systems on-site, grey water will provide 100 percent of landscape irrigation water, recycling programs that reduces waste to landfills by a minimum of 90 percent; use of Energy Star® appliances on-site, installation of energy efficient lighting, and solar farm, combined heat power (CHP), parabolic solar, solar tubes for daylight harvesting vermiculture, and a wind farm that are to generate approximately 66 percent of the project's energy needs, and incorporation of the CAPCOA-based land use and site enhancement reduction measures: LUT-1 Increased Density, LUT-4 Improve Destination Accessibility, LUT-5 Increase Transit Accessibility, LUT-9 Improve Walkability Design Intersections/Square Miles, and SDT-1 Improve Pedestrian Network.

Therefore, with incorporation of these design features (see Section 6 for details), the previously-approved cultivation use's GHG emissions for Parcels 30 and 31 are considered to be less than significant.

Greenhouse Gas Plan Consistency

As stated previously, the City of Desert Hot Springs CAP was adopted in May of 2013. The City of Desert Hot Springs CAP was set in place to guide the City in decisions that lead to the largest and most cost-effective emissions reductions. This plan sets forth goals to reduce emissions to achieve the targets of AB 32. In order to achieve these targets, the CAP presents a number of GHG emissions-reducing programs and policies that are to be implemented by the City. These emissions-reducing measures have been provided for different sectors of the community including transportation, residential buildings, commercial buildings, government incentives, renewable energy, cross-cutting initiatives, solid waste, and water. As specified in the CAP, these measures are to be implemented in a series of three phases over a course of eight years beginning in 2013. The previously-approved project would be expected to comply with all applicable emissions-reducing measures identified within the CAP.

The previously-approved cultivation use for Parcels 30 and 31's consistency with applicable measures in the CAP has been assessed. As shown in Table 14 above, the previously-approved cultivation use is consistent with the applicable measures and the previously-approved cultivation use for Parcels 30 and 31 would not conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases.

COMPARISON OF THE PREVIOUSLY-APPROVED CULTIVATION USE AND THE PROPOSED PROJECT

As shown in Table 24, the previously-approved cultivation uses for Parcels 30 and 31 (including the incorporation of mitigation measures from the previously-approved project; see Section 6 for details) would not create any significant impacts. The applicant is proposing to modify a small portion of the previously-approved Coachillin' Industrial Park Specific Plan (SP) within Parcel 30 and Parcel 31 to include a 175-room hotel, and a 5,000-seat amphitheater. With incorporation of project design features, the increase in emissions associated with these land use changes for Parcels 30 and 31 would also not create any significant impacts.

Furthermore, as shown in Table 25, when the emissions for the hotel and amphitheater uses for Parcels 30 and 31 are substituted in the place of the emissions for the previously-approved cultivation uses for Parcels 30 and 31, the overall SP's emissions would increase over those disclosed in the 2017 SP Addendum. As shown in Table 25, the largest area of emissions increase for the regional daily operational criteria pollutants would be for PM-10 and CO, with an increase of 7.3 lbs per day and 42.07 lbs per day respectively over the emissions from the previously-approved SP. This is due to the increase in vehicles over the original project, generated mainly by the proposed amphitheater. To avoid a cumulative impact for VOCs when the emissions for the substitution of the hotel and amphitheater uses for Parcels 30 and 31 are added to the balance of the emissions from the approved Specific Plan (SP), the project includes a mitigation measure AQ-3 where during an event at the proposed amphitheater, a charter shuttle bus service can be provided with a pick-up location within the Downtown Palm Springs area. By providing a shuttle pick up location within the Downtown area, the amphitheater patrons do not need to drive the approximate 6-mile distance between the event venue and the Downtown area, where they could park their vehicles at their hotels or at nearby parking lots. Since the events would typically conclude in the late evenings, the shuttle bus service would also be a safe transportation alternative. The charter shuttle bus service may be a reservation-based optional purchase item provided by the event organizer so that the ridership demand could be determined. The ridership capacity could be adjusted based on the actual demand from the sales. It is estimated that approximately 25% the event patrons may utilize the optional charter shuttle bus service, which is a reasonable estimate based on the convenience and safety factors of the shuttle service. With a 25% trip reduction potential by the charter shuttle bus service, it would be a reduction of approximately 625 daily trips for a 5,000-person event in the amphitheater.

As shown in Table 25, which includes a reduction in mobile source emissions from the implementation of AQ-3, emissions of criteria pollutants would not exceed any SCAQMD thresholds and the VOC emissions for the entire SP with the hotel and amphitheater uses would be considered to be cumulatively less than significant. As construction would occur over the same area, the construction impacts would be similar for both the previously-approved cultivation uses for Parcels 30 and 31 and the proposed hotel/amphitheater project, that would be constructed on Parcels 30 and 31 instead.

For the comparison of GHG emissions between the previously-approved Coachillin' Industrial Park SP with cultivation uses for Parcels 30 and 31 versus the SP with hotel and amphitheater uses on Parcels 30 and 31 instead, the proposed hotel/amphitheater project would increase the SP's GHG emissions by 478.29 MTCO2e/year. Again, this increase is mainly due to the increase in GHG emissions from traffic generated by the amphitheater use. However, as shown in Table 25, when the emissions for the substitution of the hotel and amphitheater uses for Parcels 30 and 31 are added to the balance of the emissions from the SP, the GHG emissions will exceed the SCAQMD draft emissions threshold of 3,000 MTCO2e/year (as the 3,000 MTCO2e/year is now the threshold to be used as the project is no longer classified as an industrial project, but now classified as a mixed-use project). Therefore, even with incorporation of the Amphitheater shuttle bus mitigation to reduce vehicle trips (AQ-3), the GHG emissions for the entire SP with the hotel and amphitheater uses would still be considered to be cumulatively considerable.

Table 16
Unmitigated Construction-Related Regional Pollutant Emissions for Previously-Approved Cultivation Uses for Parcels 30 and 31[1]

Activity		Pollutant Emissions (pounds/day)					
		ROG	NOx	CO	SO_2	PM10	PM2.5
Grading	On-Site[2]	3.62	38.84	29.04	0.06	5.22	2.93
	Off-Site[3]	0.07	0.04	0.62	0.00	0.17	0.05
	Subtotal	3.69	38.89	29.66	0.06	5.39	2.97
Building Construction	On-Site[2]	2.11	19.60	21.43	0.03	1.04	0.97
	Off-Site[3]	0.92	3.89	8.43	0.03	2.45	0.70
	Subtotal	3.02	23.50	29.86	0.06	3.48	1.67
Paving	On-Site[2]	1.27	11.12	14.58	0.02	0.57	0.52
	Off-Site[3]	0.05	0.03	0.47	0.00	0.13	0.03
	Subtotal	1.32	11.16	15.05	0.02	0.69	0.56
Architectural Coating	On-Site[2]	64.56	1.41	1.81	0.00	0.08	0.08
	Off-Site[3]	0.16	0.10	1.43	0.00	0.39	0.10
	Subtotal	64.72	1.51	3.24	0.01	0.47	0.19
Total for overlapping phases[4]		69.06	36.16	48.14	0.10	4.65	2.41
SCAQMD Thresholds		75	100	550	150	150	55
Exceeds Thresholds?		No	No	No	No	No	No

Notes:

(1) Source: CalEEMod Version 2020.4.0

(2) On-site emissions from equipment operated on-site that is not operated on public roads. On-site grading PM-10 and PM-2.5 emissions show mitigated values for fugitive dust for compliance with SCAQMD Rule 403.

(3) Off-site emissions from equipment operated on public roads.

(4) Construction, paving, and painting phases may overlap.

Table 17
Mitigated Construction-Related Regional Pollutant Emissions for Previously-Approved Cultivation Uses for Parcels 30 and 31[1]

Activity		Pollutant Emissions (pounds/day)					
		ROG	NOx	CO	SO_2	PM10	PM2.5
Grading	On-Site[2]	1.52	29.98	36.72	0.06	4.89	2.72
	Off-Site[3]	0.07	0.04	0.62	0.00	0.17	0.05
	Subtotal	1.59	30.02	37.34	0.06	5.06	2.77
Building Construction	On-Site[2]	0.84	18.12	23.13	0.03	1.18	1.18
	Off-Site[3]	0.92	3.89	8.43	0.03	2.45	0.70
	Subtotal	1.76	22.01	31.56	0.06	3.62	1.87
Paving	On-Site[2]	0.73	11.30	17.30	0.02	0.61	0.61
	Off-Site[3]	0.05	0.03	0.47	0.00	0.13	0.03
	Subtotal	0.78	11.33	17.76	0.02	0.74	0.64
Architectural Coating	On-Site[2]	64.42	1.36	1.83	0.00	0.10	0.10
	Off-Site[3]	0.16	0.10	1.43	0.00	0.39	0.10
	Subtotal	64.57	1.45	3.26	0.01	0.48	0.20
Total for overlapping phases[4]		67.11	34.79	52.58	0.10	4.84	2.71
SCAQMD Thresholds		75	100	550	150	150	55
Exceeds Thresholds?		No	No	No	No	No	No

Notes:

(1) Source: CalEEMod Version 2020.4.0. Incorporates the use of Tier 3 equipment.

(2) On-site emissions from equipment operated on-site that is not operated on public roads. On-site grading PM-10 and PM-2.5 emissions show compliance with SCAQMD Rule 403.

(3) Off-site emissions from equipment operated on public roads.

(4) Construction, paving, and painting phases may overlap.

Table 18
Maximum Number of Acres Disturbed Per Day for Previously-Approved Cultivation Uses for Parcels 30 and 31[1]

Activity	Equipment	Number	Acres/8hr-day	Total Acres
Grading	Scrapers	2	1	2
	Rubber Tired Dozers	1	0.5	0.5
	Graders	1	0.5	0.5
	Crawler Tractors[1]	2	0.5	1
Total for phase		-	-	4

Notes:

(1) Source: South Coast AQMD, Fact Sheet for Applying CalEEMod to Localized Significance Thresholds, 2011b.

(2) Tractor/loader/backhoe is a suitable surrogate for a crawler tractor per SCAQMD staff.

Table 19
Unmitigated Local Construction Emissions at the Nearest Receptors for the Previously-Approved Cultivation Uses for Parcels 30 and 31[1]

Activity	On-Site Pollutant Emissions (pounds/day)			
	NOx	CO	PM10	PM2.5
Grading	38.84	29.04	5.22	2.93
Building Construction	19.60	21.43	1.04	0.97
Paving	11.12	14.58	0.57	0.52
Architectural Coating	1.41	1.81	0.08	0.08
SCAQMD Thresholds[2]	769	26,212	223	112
Exceeds Threshold?	No	No	No	No

Notes:

(1) Source: Calculated from CalEEMod and SCAQMD's Mass Rate Look-up Tables for 2 acres, to be conservative, at a distance of 500 m in SRA 30 Coachella Valley.

(2) The nearest sensitive receptors to the project are the single-family detached residential dwelling units located approximately 0.39 miles (~627 meters) northeast of the project site; therefore, the 500 meter threshold was used.

General Note: The planned cultivation use will disturb up to a maximum of 4 acres per day (see Table 23).

Table 20
Mitigated Local Construction Emissions at the Nearest Receptors for Previously-Approved Cultivation Uses for Parcels 30 and 31[1]

Activity	On-Site Pollutant Emissions (pounds/day)			
	NOx	CO	PM10	PM2.5
Grading	29.98	36.72	4.89	2.72
Building Construction	18.12	23.13	1.18	1.18
Paving	11.30	17.30	0.61	0.61
Architectural Coating	1.36	1.83	0.10	0.10
SCAQMD Thresholds[2]	769	26,212	223	112
Exceeds Threshold?	No	No	No	No

Notes:

(1) Source: Calculated from CalEEMod and SCAQMD's Mass Rate Look-up Tables for 2 acres, to be conservative, at a distance of 500 m in SRA 30 Coachella Valley. Incorporates the use of Tier 3 equipment.

(2) The nearest sensitive receptors to the project are the single-family detached residential dwelling units located approximately 0.39 miles (~627 meters) northeast of the project site; therefore, the 500 meter threshold was used.

General Note: The planned cultivation use will disturb up to a maximum of 4 acre per day (see Table 18).

Table 21
Regional Operational Pollutant Emissions for Previously-Approved Cultivation Uses for Parcels 30 and 31[1]

Activity	Pollutant Emissions (pounds/day)					
	ROG	NOx	CO	SO2	PM10	PM2.5
Area Sources[2]	7.56	0.00	0.04	0.00	0.00	0.00
Energy Usage[3]	0.33	3.03	2.55	0.02	0.23	0.23
Mobile Sources[4]	0.96	1.31	9.09	0.02	2.03	0.55
Total Emissions	8.85	4.34	11.68	0.04	2.26	0.78
SCAQMD Thresholds	75	100	550	150	150	55
Exceeds Threshold?	No	No	No	No	No	No

Notes:

(1) Source: CalEEMod Version 2020.4.0; the higher of either summer or winter emissions.

(2) Area sources consist of emissions from consumer products, architectural coatings, and landscaping equipment.

(3) Energy usage consists of emissions from generation of electricity and on-site natural gas usage.

(4) Mobile sources consist of emissions from vehicles and road dust.

Table 22
Project-Related Greenhouse Gas Emissions for Previously-Approved Cultivation Uses for Parcels 30 and 31[1]

Category	Greenhouse Gas Emissions (Metric Tons/Year)					
	Bio-CO2	NonBio-CO_2	CO_2	CH_4	N_2O	CO_2e
Area Sources[2]	0.00	0.01	0.01	0.00	0.00	0.01
Energy Usage[3]	0.00	1,217.65	1,217.65	0.06	0.02	1,224.41
Mobile Sources[4]	0.00	328.23	328.23	0.02	0.02	333.59
Waste[5]	87.96	0.00	87.96	5.20	0.00	217.92
Water[6]	7.42	53.99	61.41	0.77	0.02	86.09
Construction[7]	0.00	24.64	24.64	0.00	0.00	25.00
Total Emissions	95.38	1,624.51	1,719.89	6.05	0.05	1,887.01
SCAQMD Draft Threshold						3,000
Exceeds Threshold?						No

Notes:

(1) Source: CalEEMod Version 2020.4.0 for Opening Year 2023.

(2) Area sources consist of GHG emissions from consumer products, architectural coatings, and landscape equipment.

(3) Energy usage consist of GHG emissions from electricity and natural gas usage.

(4) Mobile sources consist of GHG emissions from vehicles.

(5) Solid waste includes the CO_2 and CH_4 emissions created from the solid waste placed in landfills.

(6) Water includes GHG emissions from electricity used for transport of water and processing of wastewater.

(7) Construction GHG emissions CO2e based on a 30 year amortization rate.

Table 23
Project-Related Greenhouse Gas Emissions for Previously-Approved Cultivation Uses for Parcels 30 and 31 With Project Design Features That Reduce Greenhouse Gas Emissions[1]

Category	Greenhouse Gas Emissions (Metric Tons/Year)					
	Bio-CO2	NonBio-CO_2	CO_2	CH_4	N_2O	CO_2e
Area Sources[2]	0.00	0.01	0.01	0.00	0.00	0.01
Energy Usage[3]	0.00	685.40	685.40	0.02	0.01	689.35
Mobile Sources[4]	0.00	287.10	287.10	0.02	0.01	291.92
Waste[5]	8.80	0.00	8.80	0.52	0.00	21.79
Water[6]	6.17	44.94	51.11	0.64	0.02	26.52
Construction[7]	0.00	24.64	24.64	0.00	0.00	25.00
Sequestration[8]						-3.01
Total Emissions	14.97	1,042.09	1,057.06	1.20	0.04	1,051.57
SCAQMD Draft Threshold						3,000
Exceeds Threshold?						No

Notes:

(1) Source: CalEEMod Version 2020.4.0 for Opening Year 2023.

(2) Area sources consist of GHG emissions from consumer products, architectural coatings, and landscape equipment.

(3) Energy usage consist of GHG emissions from electricity and natural gas usage.

(4) Mobile sources consist of GHG emissions from vehicles.

(5) Solid waste includes the CO_2 and CH_4 emissions created from the solid waste placed in landfills.

(6) Water includes GHG emissions from electricity used for transport of water and processing of wastewater. Per developer, 86% of the site's potable water is sourced from on-site well; therefore the CAPCOA WSW-3 reduction measure was used to calcuate a reduction of 63% in CO2e, resulting in 26.5151 MTCO2e instead of the 71.6625 total MTCO2e reported in Appendix C.

(7) Construction GHG emissions CO2e based on a 30 year amortization rate.

(8) CO2 sequestration from the planting of ~85 trees (60.18/20 years [trees' lifetime])

Table 24
Impact Summary - Proposed Project and Previously-Approved Cultivation Uses for Parcels 30 and 31

Descriptor	Potential Significant Impact?	
	Previously-Approved Cultivation Use	Proposed Project
Air Quality Impacts:		
Short-Term Construction Impacts		
Regional Air Quality Impacts	No	No
Local Air Quality Impacts	No	No
Long-Term Operational Impact		
Regional Air Quality Impacts	No	No
Local Air Quality Impacts	No	No
Global Climate Change Impacts:		
Greenhouse Gas Emissions	No (with incorporation of project design features[1])	No (with incorporation of project design features[1])
Greenhouse Gas Plan Consistency	No	No

Notes:

(1) Please see Section 6 of this report for details on the project design features.

Table 25
Comparison of Total Operational Emissions from the Entire Previously-Approved Project Versus Project with Substitution of Hotel and Amphitheater Uses on Parcels 30 and 31

Regional Daily Operational Pollutant Emissions[1]

	Pollutant Emissions (pounds/day)					
Activity	ROG	NOx	CO	SO2	PM10	PM2.5
Previously-Approved Entire Specific Plan Project	69.77	58.56	87.78	0.45	25.17	8.21
Entire Specific Plan Project with Substitution of Hotel and Amphitheater on Parcels 30 and 31	74.12	64.96	129.85	0.53	32.47	10.20
Difference in Emissions Over Approved Project	**4.35**	**6.40**	**42.07**	**0.08**	**7.30**	**1.99**

Notes:

(1) Source: Tables 11 and 21

Mitigated Project-Related Annual Greenhouse Gas Emissions[1]

	Greenhouse Gas Emissions (Metric Tons/Year)					
Category	Bio-CO2	NonBio-CO_2	CO_2	CH_4	N_2O	CO_2e
Previously-Approved Entire Specific Plan Project*	112.96	993.56	10,106.92	8.94	0.19	9,875.77
Entire Specific Plan Project with Substitution of Hotel and Amphitheater on Parcels 30 and 31*	112.40	1,475.71	10,588.50	9.05	0.22	10,354.06
Difference in Emissions	**-0.56**	**482.15**	**481.58**	**0.11**	**0.03**	**478.29**

Notes:

(1) Sources: Tables 14 and 23

(*) CO2e value includes GHG emissions reduction of 63% per CAPCOA WSW-3 for transport of water and processing of wastewater due to use of on-site wells.

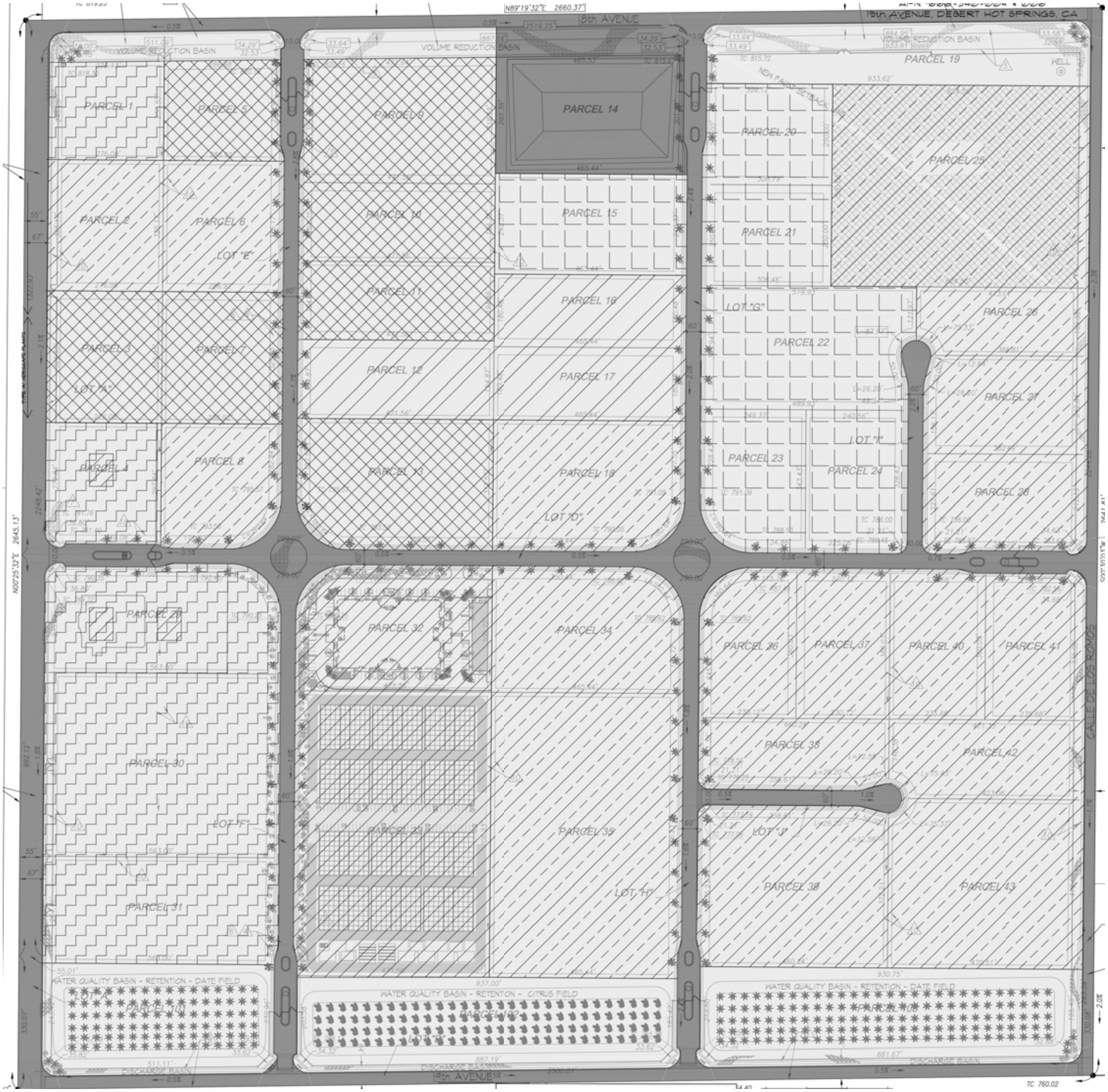

Figure 3
Site Plan - Previously-Approved Cultivation

5. ENERGY ANALYSIS

EXISTING CONDITIONS

This section provides an overview of the existing energy conditions in the project area and region.

Overview

California's estimated annual energy use as of 2020 included:

- Approximately 272,576 gigawatt hours of electricity;[23]
- Approximately 2,074,302 million cubic feet of natural gas per year;[24] and
- Approximately 23.2 billion gallons of transportation fuel (for the year 2015).[25]

As of 2019, the year of most recent data currently available by the United States Energy Information Administration (EIA), energy use in California by demand sector was:

- Approximately 39.3 percent transportation;
- Approximately 23.2 percent industrial;
- Approximately 18.7 percent residential; and
- Approximately 18.9 percent commercial.[26]

California's electricity in-state generation system generates approximately 190,913 gigawatt-hours each year. In 2020, California produced approximately 70 percent of the electricity it uses; the rest was imported from the Pacific Northwest (approximately 15 percent) and the U.S. Southwest (approximately 15 percent). Natural gas is the main source for electricity generation at approximately 48.34 percent of the total in-state electric generation system power as shown in Table 26.

A summary of and context for energy consumption and energy demands within the State is presented in "U.S. Energy Information Administration, California State Profile and Energy Estimates, Quick Facts" excerpted below:

- California was the seventh-largest producer of crude oil among the 50 states in 2018, and, as of January 2019, it ranked third in oil refining capacity.
- California is the largest consumer of jet fuel among the 50 states and accounted for one-fifth of the nation's jet fuel consumption in 2018.
- California's total energy consumption is the second-highest in the nation, but, in 2018, the State's per capita energy consumption ranked the fourth-lowest, due in part to its mild climate and its energy efficiency programs.
- In 2018, California ranked first in the nation as a producer of electricity from solar, geothermal, and biomass resources and fourth in the nation in conventional hydroelectric power generation.
- In 2018, large- and small-scale solar PV and solar thermal installations provided 19% of California's net electricity generation.[27]

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[23] California Energy Commission. Energy Almanac. Total Electric Generation. [Online] 2021. https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2020-total-system-electric-generation

[24] Natural Gas Consumption by End Use. U.S. Energy Information Administration. [Online] October 18, 2021. https://www.eia.gov/dnav/ng/ng_cons_sum_dcu_SCA_a.htm.

[25] California Energy Commission. Revised Transportation Energy Demand Forecast 2018-2030. [Online] April 19, 2018. https://www.energy.ca.gov/assessments/

[26] U.S. Energy Information Administration. California Energy Consumption by End-Use Sector. California State Profile and Energy Estimates.[Online] January 16, 2020 https://www.eia.gov/state/?sid=CA#tabs-2

[27] State Profile and Energy Estimates. Independent Statistics and Analysis. [Online] [Cited: January 16, 2020.] http://www.eia.gov/state/?sid=CA#tabs2.

As indicated above, California is one of the nation's leading energy-producing states, and California per capita energy use is among the nation's most efficient. Given the nature of the proposed project, the remainder of this discussion will focus on the three sources of energy that are most relevant to the project—namely, electricity and natural gas for building uses, and transportation fuel for vehicle trips associated with the proposed project.

Electricity

Electricity would be provided to the project by Southern California Edison (SCE). SCE provides electric power to more than 15 million persons, within a service area encompassing approximately 50,000 square miles.[28] SCE derives electricity from varied energy resources including: fossil fuels, hydroelectric generators, nuclear power plants, geothermal power plants, solar power generation, and wind farms. SCE also purchases from independent power producers and utilities, including out-of-state suppliers.[29]

Table 27 identifies SCE's specific proportional shares of electricity sources in 2020. As shown in Table 27, the 2020 SCE Power Mix has renewable energy at 30.9 percent of the overall energy resources, of which biomass and waste is at 0.1 percent, geothermal is at 5.5 percent, eligible hydroelectric is at 0.8 percent, solar energy is at 15.1 percent, and wind power is at 9.4 percent; other energy sources include large hydroelectric at 3.3 percent, natural gas at 15.2 percent, nuclear at 8.4 percent, other at 0.3 percent, and unspecified sources at 42 percent.

Natural Gas

Natural gas would be provided to the project by Southern California Gas (SoCalGas). The following summary of natural gas resources and service providers, delivery systems, and associated regulation is excerpted from information provided by the California Public Utilities Commission (CPUC).

The CPUC regulates natural gas utility service for approximately 11 million customers that receive natural gas from Pacific Gas and Electric (PG&E), Southern California Gas (SoCalGas), San Diego Gas & Electric (SDG&E), Southwest Gas, and several smaller investor-owned natural gas utilities. The CPUC also regulates independent storage operators Lodi Gas Storage, Wild Goose Storage, Central Valley Storage and Gill Ranch Storage.

The vast majority of California's natural gas customers are residential and small commercial customers, referred to as "core" customers. Larger volume gas customers, like electric generators and industrial customers, are called "noncore" customers. Although very small in number relative to core customers, noncore customers consume about 65% of the natural gas delivered by the state's natural gas utilities, while core customers consume about 35%.

The PUC regulates the California utilities' natural gas rates and natural gas services, including in-state transportation over the utilities' transmission and distribution pipeline systems, storage, procurement, metering and billing.

Most of the natural gas used in California comes from out-of-state natural gas basins. In 2017, for example, California utility customers received 38% of their natural gas supply from basins located in the U.S. Southwest, 27% from Canada, 27% from the U.S. Rocky Mountain area, and 8% from production located in California."[30]

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[28] https://www.sce.com/about-us/who-we-are/leadership/our-service-territory

[29] California Energy Commission. Utility Energy Supply plans from 2015. https://www.energy.ca.gov/almanac/electricity_data/supply_forms.html

[30] California Public Utilities Commission. Natural Gas and California. https://www.cpuc.ca.gov/industries-and-topics/natural-gas/natural-gas-and-california

Transportation Energy Resources

The project would attract additional vehicle trips with resulting consumption of energy resources, predominantly gasoline and diesel fuel. Gasoline (and other vehicle fuels) are commercially-provided commodities and would be available to the project patrons and employees via commercial outlets.

The most recent data available shows the transportation sector emits 40 percent of the total greenhouse gases in the state and about 84 percent of smog-forming oxides of nitrogen (NOx).[31,32] About 28 percent of total United States energy consumption in 2019 was for transporting people and goods from one place to another. In 2019, petroleum comprised about 91 percent of all transportation energy use, excluding fuel consumed for aviation and most marine vessels.[33] In 2020, about 123.49 billion gallons (or about 2.94 billion barrels) of finished motor gasoline were consumed in the United States, an average of about 337 million gallons (or about 8.03 million barrels) per day.[34]

REGULATORY BACKGROUND

Federal and state agencies regulate energy use and consumption through various means and programs. On the federal level, the United States Department of Transportation, the United States Department of Energy, and the United States Environmental Protection Agency are three federal agencies with substantial influence over energy policies and programs. On the state level, the PUC and the California Energy Commissions (CEC) are two agencies with authority over different aspects of energy. Relevant federal and state energy-related laws and plans are summarized below.

Federal Regulations

Corporate Average Fuel Economy (CAFE) Standards

First established by the U.S. Congress in 1975, the Corporate Average Fuel Economy (CAFE) standards reduce energy consumption by increasing the fuel economy of cars and light trucks. The National Highway Traffic Safety Administration (NHTSA) and U.S. Environmental Protection Agency (USEPA) jointly administer the CAFE standards. The U.S. Congress has specified that CAFE standards must be set at the "maximum feasible level" with consideration given for: (1) technological feasibility; (2) economic practicality; (3) effect of other standards on fuel economy; and (4) need for the nation to conserve energy.[35]

Issued by NHTSA and EPA in March 2020 (published on April 30, 2020 and effective after June 29, 2020), the Safer Affordable Fuel-Efficient Vehicles Rule would maintain the CAFE and CO2 standards applicable in model year 2020 for model years 2021 through 2026. The estimated CAFE and CO2 standards for model year 2020 are 43.7 mpg and 204 grams of CO2 per mile for passenger cars and 31.3 mpg and 284 grams of CO2 per mile for light trucks, projecting an overall industry average of 37 mpg, as compared to 46.7 mpg under the standards issued in 2012.[36]

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[31] CARB. California Greenhouse Gas Emissions Inventory – 2020 Edition. https://www.arb.ca.gov/cc/inventory/data/data.htm

[32] CARB. 2016 SIP Emission Projection Data. https://www.arb.ca.gov/app/emsinv/2017/emseic1_query.php?F_DIV=-4&F_YR=2012&F_SEASON=A&SP=SIP105ADJ&F_AREA=CA

[33] US Energy Information Administration. Use of Energy in the United States Explained: Energy Use for Transportation. https://www.eia.gov/energyexplained/?page=us_energy_transportation

[34] https://www.eia.gov/tools/faqs/faq.php?id=23&t=10

[35] https://www.nhtsa.gov/lawsregulations/corporate-average-fuel-economy.

[36] National Highway Traffic Safety Administration (NHTSA) and U.S. Environmental Protection Agency (USEPA), 2018. Federal Register / Vol. 83, No. 165 / Friday, August 24, 2018 / Proposed Rules, The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021–2026 Passenger Cars and Light Trucks 2018. Available at: https://www.epa.gov/regulations-emissions-vehicles-and-engines/safer-affordable-fuel-efficient-safe-vehicles-final-rule.

Intermodal Surface transportation Efficiency Act of 1991 (ISTEA)

The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) promoted the development of intermodal transportation systems to maximize mobility as well as address national and local interests in air quality and energy. ISTEA contained factors that Metropolitan Planning Organizations (MPOs) were to address in developing transportation plans and programs, including some energy-related factors. To meet the new ISTEA requirements, MPOs adopted explicit policies defining the social, economic, energy, and environmental values guiding transportation decisions.

The Transportation Equity Act of the 21st Century (TEA-21)

The Transportation Equity Act for the 21st Century (TEA-21) was signed into law in 1998 and builds upon the initiatives established in the ISTEA legislation, discussed above. TEA-21 authorizes highway, highway safety, transit, and other efficient surface transportation programs. TEA-21 continues the program structure established for highways and transit under ISTEA, such as flexibility in the use of funds, emphasis on measures to improve the environment, and focus on a strong planning process as the foundation of good transportation decisions. TEA-21 also provides for investment in research and its application to maximize the performance of the transportation system through, for example, deployment of Intelligent Transportation Systems, to help improve operations and management of transportation systems and vehicle safety.

State Regulations

Integrated Energy Policy Report (IEPR)

Senate Bill 1389 requires the California Energy Commission (CEC) to prepare a biennial integrated energy policy report that assesses major energy trends and issues facing the State's electricity, natural gas, and transportation fuel sectors and provides policy recommendations to conserve resources; protect the environment; ensure reliable, secure, and diverse energy supplies; enhance the state's economy; and protect public health and safety. The Energy Commission prepares these assessments and associated policy recommendations every two years, with updates in alternate years, as part of the Integrated Energy Policy Report.

The 2019 Integrated Energy Policy Report (2019 IEPR) was adopted February 20, 2020, and continues to work towards improving electricity, natural gas, and transportation fuel energy use in California. The 2019 IEPR focuses on a variety of topics such as decarbonizing buildings, integrating renewables, energy efficiency, energy equity, integrating renewable energy, updates on Southern California electricity reliability, climate adaptation activities for the energy sector, natural gas assessment, transportation energy demand forecast, and the California Energy Demand Forecast.[37]

State of California Energy Plan

The CEC is responsible for preparing the State Energy Plan, which identifies emerging trends related to energy supply, demand, conservation, public health and safety, and the maintenance of a healthy economy. The Plan calls for the state to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the plan identifies a number of strategies, including assistance to public agencies and fleet operators and encouragement of urban designs that reduce vehicle miles traveled and accommodate pedestrian and bicycle access.

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[37] California Energy Commission. Final 2019 Integrated Energy Policy Report. February 20, 2020. https://www.energy.ca.gov/data-reports/reports/integrated-energy-policy-report/2019-integrated-energy-policy-report

California Building Standards Code (Title 24)

The California Building Standards Code Title 24 was previously discussed in Section 2 Air Quality Management of this report.

California Building Energy Efficiency Standards (Title 24, Part 6)

The California Building Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations, Title 24, Part 6) were adopted to ensure that building construction and system design and installation achieve energy efficiency and preserve outdoor and indoor environmental quality. The current California Building Energy Efficiency Standards (Title 24 standards) are the 2016 Title 24 standards, which became effective on January 1, 2017. The 2016 Title 24 standards include efficiency improvements to the residential standards for attics, walls, water heating, and lighting and efficiency improvements to the non-residential standards include alignment with the American Society of Heating and Air-Conditioning Engineers.

California Building Energy Efficiency Standards (Title 24, Part 11)

The 2016 California Green Building Standards Code (California Code of Regulations, Title 24, Part 11), commonly referred to as the CALGreen Code, went into effect on January 1, 2017. The 2016 CALGreen Code includes mandatory measures for non-residential development related to site development; energy efficiency; water efficiency and conservation; material conservation and resource efficiency; and environmental quality. Most mandatory measure changes, when compared to the previously applicable 2013 CALGreen Code, were related to the definitions and to the clarification or addition of referenced manuals, handbooks, and standards. For example, several definitions related to energy that were added or revised affect electric vehicle (EV) chargers and charging and hot water recirculation systems. For new multi-family dwelling units, the residential mandatory measures were revised to provide additional EV charging requirements, including quantity, location, size, single EV space, multiple EV spaces, and identification. For nonresidential mandatory measures, the CALGreen table (Table 5.106.5.3.3) identifying the number of required EV charging spaces has been revised in its entirety.

Senate Bill 350

As previously discussed in Section 2 Air Quality Management of this report, Senate Bill 350 (SB 350) was signed into law October 7, 2015, SB 350 increases California's renewable electricity procurement goal from 33 percent by 2020 to 50 percent by 2030. This will increase the use of Renewables Portfolio Standard (RPS) eligible resources, including solar, wind, biomass, geothermal, and others. In addition, SB 350 requires the state to double statewide energy efficiency savings in electricity and natural gas end uses by 2030. To help ensure these goals are met and the greenhouse gas emission reductions are realized, large utilities will be required to develop and submit Integrated Resource Plans (IRPs). These IRPs will detail how each entity will meet their customers resource needs, reduce greenhouse gas emissions and ramp up the deployment of clean energy resources.

Assembly Bill 32

As discussed in Section 2 Air Quality Management of this report, in 2006 the California State Legislature adopted Assembly Bill 32 (AB 32), the California Global Warming Solutions Act of 2006. AB 32 requires CARB, to adopt rules and regulations that would achieve GHG emissions equivalent to statewide levels in 1990 by 2020 through an enforceable statewide emission cap which will be phased in starting in 2012. Emission reductions shall include carbon sequestration projects that would remove carbon from the atmosphere and best management practices that are technologically feasible and cost effective. Please see Section 4 for further detail on AB 32.

Assembly Bill 1493/Pavley Regulations

As discussed in Section 2 Air Quality Management of this report, California Assembly Bill 1493 enacted on July 22, 2002, required CARB to develop and adopt regulations that reduce GHGs emitted by passenger vehicles and light duty trucks. In 2005, the CARB submitted a "waiver" request to the EPA from a portion of the federal Clean Air Act in order to allow the State to set more stringent tailpipe emission standards for CO_2 and other GHG emissions from passenger vehicles and light duty trucks. On December 19, 2007 the EPA announced that it denied the "waiver" request. On January 21, 2009, CARB submitted a letter to the EPA administrator regarding the State's request to reconsider the waiver denial. The EPA approved the waiver on June 30, 2009.

Executive Order S-1-07/Low Carbon Fuel Standard

As discussed in Section 2 Air Quality Management of this report, Executive Order S-1-07 was issued in 2007 and proclaims that the transportation sector is the main source of GHG emissions in the State, since it generates more than 40 percent of the State's GHG emissions. It establishes a goal to reduce the carbon intensity of transportation fuels sold in the State by at least ten percent by 2020. This Order also directs CARB to determine whether this Low Carbon Fuel Standard (LCFS) could be adopted as a discrete early-action measure as part of the effort to meet the mandates in AB 32.

On April 23, 2009 CARB approved the proposed regulation to implement the low carbon fuel standard. The low carbon fuel standard is anticipated to reduce GHG emissions by about 16 MMT per year by 2020. The low carbon fuel standard is designed to provide a framework that uses market mechanisms to spur the steady introduction of lower carbon fuels. The framework establishes performance standards that fuel producers and importers must meet each year beginning in 2011. Separate standards are established for gasoline and diesel fuels and the alternative fuels that can replace each. The standards are "back-loaded", with more reductions required in the last five years, than during the first five years. This schedule allows for the development of advanced fuels that are lower in carbon than today's fuels and the market penetration of plug-in hybrid electric vehicles, battery electric vehicles, fuel cell vehicles, and flexible fuel vehicles. It is anticipated that compliance with the low carbon fuel standard will be based on a combination of both lower carbon fuels and more efficient vehicles.

Reformulated gasoline mixed with corn-derived ethanol at ten percent by volume and low sulfur diesel fuel represent the baseline fuels. Lower carbon fuels may be ethanol, biodiesel, renewable diesel, or blends of these fuels with gasoline or diesel as appropriate. Compressed natural gas and liquefied natural gas also may be low carbon fuels. Hydrogen and electricity, when used in fuel cells or electric vehicles are also considered as low carbon fuels for the low carbon fuel standard.

California Air Resources Board

CARB's Advanced Clean Cars Program

Closely associated with the Pavley regulations, the Advanced Clean Cars emissions control program was approved by CARB in 2012. The program combines the control of smog, soot, and GHGs with requirements for greater numbers of zero-emission vehicles for model years 2015–2025. The components of the Advanced Clean Cars program include the Low-Emission Vehicle (LEV) regulations that reduce criteria pollutants and GHG emissions from light- and medium-duty vehicles, and the Zero-Emission Vehicle (ZEV) regulation, which requires manufacturers to produce an increasing number of pure ZEVs (meaning battery electric and fuel cell electric vehicles), with provisions to also produce plug-in hybrid electric vehicles (PHEV) in the 2018 through 2025 model years.[38]

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[38] California Air Resources Board, California's Advanced Clean Cars Program, January 18, 2017. www.arb.ca.gov/msprog/acc/acc.htm.

Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling

The Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling (Title 13, California Code of Regulations, Division 3, Chapter 10, Section 2435) was adopted to reduce public exposure to diesel particulate matter and other air contaminants by limiting the idling of diesel-fueled commercial motor vehicles. This section applies to diesel-fueled commercial motor vehicles with gross vehicular weight ratings of greater than 10,000 pounds that are or must be licensed for operation on highways. Reducing idling of diesel-fueled commercial motor vehicles reduces the amount of petroleum-based fuel used by the vehicle.

Regulation to Reduce Emissions of Diesel Particulate Matter, Oxides of Nitrogen, and other Criteria Pollutants, form In-Use Heavy-Duty Diesel-Fueled Vehicles

The Regulation to Reduce Emissions of Diesel Particulate Matter, Oxides of Nitrogen and other Criteria Pollutants, from In-Use Heavy-Duty Diesel-Fueled Vehicles (Title 13, California Code of Regulations, Division 3, Chapter 1, Section 2025) was adopted to reduce emissions of diesel particulate matter, oxides of nitrogen (NO_X) and other criteria pollutants from in-use diesel-fueled vehicles. This regulation is phased, with full implementation by 2023. The regulation aims to reduce emissions by requiring the installation of diesel soot filters and encouraging the retirement, replacement, or repower of older, dirtier engines with newer emission-controlled models. The newer emission-controlled models would use petroleum-based fuel in a more efficient manner.

Sustainable Communities Strategy

The Sustainable Communities and Climate Protection Act of 2008, or Senate Bill 375 (SB 375), coordinates land use planning, regional transportation plans, and funding priorities to help California meet the GHG reduction mandates established in AB 32.

As previously stated in Section 2 Air Quality Management of this report, Senate Bill 375 (SB 375) was adopted September 2008 and aligns regional transportation planning efforts, regional GHG emission reduction targets, and land use and housing allocation. SB 375 requires Metropolitan Planning Organizations (MPO) to adopt a sustainable communities strategy (SCS) or alternate planning strategy (APS) that will prescribe land use allocation in that MPOs Regional Transportation Plan (RTP). CARB, in consultation with each MPO, will provide each affected region with reduction targets for GHGs emitted by passenger cars and light trucks in the region for the years 2020 and 2035. These reduction targets will be updated every eight years but can be updated every four years if advancements in emissions technologies affect the reduction strategies to achieve the targets. CARB is also charged with reviewing each MPO's sustainable communities strategy or alternate planning strategy for consistency with its assigned targets.

The proposed project is located within the Southern California Association of Governments (SCAG) jurisdiction, which has authority to develop the SCS or APS. For the SCAG region, the targets set by CARB are at eight percent below 2005 per capita GHG emissions levels by 2020 and 19 percent below 2005 per capita GHG emissions levels by 2035. These reduction targets became effective October 2018.

Local Regulations

City of Desert Hot Springs General Plan

The City of Desert Hot Springs General Plan includes the following goals and policies related to energy efficiency.

Goal LU-1
A balanced community with a mix of land uses that supports thriving businesses, complete and healthy neighborhoods, and a sustainable desert environment.

Policy LU-1.4 Sustainability. Promote sustainable land uses and building practices that promote efficient energy use and resource sustainability.*Goal MI-11*
Provide for a sustainable physical infrastructure to support a desirable quality of life.

Policy MI-11.11 Reduce Energy. Implement regulations and provide incentives that require public and private developments to reduce energy use over the long term.

Policy MI-11.12 Energy Efficiency. Encourage energy-efficient design of all new projects (public and private), including appropriate structure orientation and the use of shade trees to maximize cooling and reduce fossil fuel consumption for heating and cooling.

Goal OS-4
Increased energy efficiency and conservation.

Policy OS-4.1 Energy Conservation. Seek to incorporate energy conservation measures into new development projects.

Policy OS-4.3 Rooftop Solar Projects. Streamline solar panel permits for small-scale residential and commercial business rooftop projects by removing discretionary planning permits or allowing approval over the counter.

Policy OS-4.4 Solar Energy Systems. Encourage the use of solar energy systems or any other technologies that similarly reduce the use of power from the grid in residential and commercial uses.

Policy OS-4.5 Solar Farms. Allow solar energy farms that minimize disturbing the desert environment.

Policy OS-4.7 Alternative Electricity Options. Continue to explore, assist, and encourage alternative electricity options such as wind or small-scale solar energy facilities.

Goal OS-6
Sustainable development approaches.

Policy OS-6.1 Sustainable Construction. Encourage sustainable construction practices and the use of energy-saving technology within buildings. Consider establishing a green building program that draws from the LEED (Leadership in Energy & Environmental Design) standards.

Policy OS-6.2 Green Building. Require LEED or similar building efficiency certifications for all new public facilities and buildings. Encourage similar green building certifications for private development projects.

PROJECT ENERGY DEMANDS AND ENERGY EFFICIENCY MEASURES

Evaluation Criteria

In compliance with Appendix G of the State CEQA Guidelines, this report analyzes the project's anticipated energy use to determine if the project would:

- Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation; or
- Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

In addition, Appendix F of the State CEQA Guidelines states that the means of achieving the goal of energy conservation includes the following:

- Decreasing overall per capita energy consumption;
- Decreasing reliance on fossil fuels such as coal, natural gas and oil; and
- Increasing reliance on renewable energy sources.

Methodology

Information from the CalEEMod 2020.4.0 Daily and Annual Outputs contained in Appendix B and C, utilized for air quality and greenhouse gas analyses in Sections 2 and 3 of this report, were also utilized for this analysis. The CalEEMod outputs detail project related construction equipment, transportation energy demands, and facility energy demands.

Construction Energy Demands

The construction schedule is anticipated to begin in 2022 and take approximately 12 months to complete and be completed in one phase. Staging of construction vehicles and equipment will occur on-site. The approximately twelve-month schedule is relatively short and the project site is relatively small at approximately 12.66 acres.

Construction Equipment Electricity Usage Estimates

As stated previously, Electrical service will be provided by Southern California Edison. The focus within this section is the energy implications of the construction process, specifically the power cost from on-site electricity consumption during construction of the proposed project. Based on the 2017 National Construction Estimator, Richard Pray (2017)[39], the typical power cost per 1,000 square feet of building construction per month is estimated to be $2.32. The project plans to develop the site with a 175-room hotel and an amphitheater over the course of approximately twelve months. Based on Table 28, the total power cost of the on-site electricity usage during the construction of the proposed project is estimated to be approximately $5,905.56. Furthermore, as of March 1, 2022, SCE's General Service Rate (GS-1) is approximately $0.14 per kWh of electricity.[40] As shown in Table 28, the total electricity usage from project construction related activities is estimated to be approximately 43,236 kWh.

Construction Equipment Fuel Estimates

Fuel consumed by construction equipment would be the primary energy resource expended over the course of project construction. Fuel consumed by construction equipment was evaluated with the following assumptions:

- Construction schedule of 12 months
- All construction equipment was assumed to run on diesel fuel
- Typical daily use of 8 hours, with some equipment operating from ~6-7 hours
- Aggregate fuel consumption rate for all equipment was estimated at 18.5 hp-hr/gallon (from CARB's 2017 Emissions Factors Tables and fuel consumption rate factors as shown in Table D-21 of the Moyer Guidelines: (https://www.arb.ca.gov/msprog/moyer/guidelines/2017gl/2017_gl_appendix_d.pdf).
- Diesel fuel would be the responsibility of the equipment operators/contractors and would be sources within the region.

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[39] Pray, Richard. 2017 National Construction Estimator. Carlsbad : Craftsman Book Company, 2017.

[40] Assumes the project will be under the GS-1 General Service rate under SCE. https://www.sce.com/regulatory/tariff-books/rates-pricing-choices

- Project construction represents a “single-event” for diesel fuel demand and would not require on-going or permanent commitment of diesel fuel resources during long term operation.

Using the CalEEMod data input for the air quality and greenhouse gas analyses (Sections 2 and 3 of this report), the project’s construction phase would consume electricity and fossil fuels as a single energy demand, that is, once construction is completed their use would cease. CARB’s 2013 Emissions Factors Tables show that on average aggregate fuel consumption (gasoline and diesel fuel) would be approximately 18.5 hp-hr-gal. Table 29 shows the results of the analysis of construction equipment.

As presented in Table 29, project construction activities would consume an estimated 47,103 gallons of diesel fuel. As stated previously, project construction would represent a “single-event” diesel fuel demand and would not require on-going or permanent commitment of diesel fuel resources for this purpose.

Construction Worker Fuel Estimates

It is assumed that construction worker trips are from light duty autos (LDA), light duty truck 1 (LDT1), and light duty truck 2 9LDT2) at a mix of 50 percent/25 percent/25 percent, respectively, along area roadways.[41] With respect to estimated VMT, the construction worker trips would generate an estimated 690,525 VMT. Data regarding project related construction worker trips were based on CalEEMod 2020.4.0 model defaults.

Vehicle fuel efficiencies for construction workers were estimated in the air quality and greenhouse gas analyses (Sections 2 and 3 of this report) using information generated using CARB’s 2021 EMFAC model. An aggregate fuel efficiency of 26.4 miles per gallon (mpg) was used to calculate vehicle miles traveled for construction worker trips. Table 30 shows that an estimated 26,174 gallons of fuel would be consumed for construction worker trips.

Construction Vendor/Hauling Fuel Estimates

Tables 31 and 32 show the estimated fuel consumption for vendor and hauling during building construction and architectural coating. With respect to estimated VMT, the vendor and hauling trips would generate an estimated 127,116 VMT. Data regarding project related construction worker trips were based on CalEEMod 2020.4.0 model defaults.

For the architectural coatings it is assumed that the contractors would be responsible for bringing coatings and equipment with them in their light duty vehicles. Therefore, vendors delivering construction material or hauling debris from the site during grading would use medium to heavy duty vehicles with an average fuel consumption of 7.59 mpg for medium heavy-duty trucks and 5.87 for heavy heavy-duty trucks (see Appendix C for details).[42]. Tables 31 and 32 show that an estimated 18,888 gallons of fuel would be consumed for vendor and hauling trips.

Construction Energy Efficiency/Conservation Measures

Construction equipment used over the approximately twelve-month construction phase would conform to CARB regulations and California emissions standards and is evidence of related fuel efficiencies. There are no unusual project characteristics or construction processes that would require the use of equipment that would be more energy intensive than is used for comparable activities; or equipment that would not conform to current emissions standards (and related fuel efficiencies). Equipment employed in construction of the project would therefore not result in inefficient wasteful, or unnecessary consumption of fuel.

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[41] CalEEMod User’s Guide (May 2021) states that the CalEEMod default fleet mix for worker trips includes light duty autos and light duty trucks, LDA, LDT1, LDT2, at a mix of 50%/25%/25%, respectively.

[42] CalEEMod User’s Guide (May 2021) states that the CalEEMod default fleet mix for vendor trips includes medium-heavy duty and heavy-heavy duty trucks, MHDT and HHDT, at a mix of 50%/50%.

The project would utilize construction contractors which practice compliance with applicable CARB regulation regarding retrofitting, repowering, or replacement of diesel off-road construction equipment. Additionally, CARB has adopted the Airborne Toxic Control Measure to limit heavy-duty diesel motor vehicle idling in order to reduce public exposure to diesel particulate matter and other Toxic Air Contaminants. Compliance with these measures would result in a more efficient use of construction-related energy and would minimize or eliminate wasteful or unnecessary consumption of energy. Idling restrictions and the use of newer engines and equipment would result in less fuel combustion and energy consumption.

Additionally, as required by California Code of Regulations Title 13, Motor Vehicles, section 2449(d)(3) Idling, limits idling times of construction vehicles to no more than five minutes, thereby minimizing or eliminating unnecessary and wasteful consumption of fuel due to unproductive idling of construction equipment. Enforcement of idling limitations is realized through periodic site inspections conducted by City building officials, and/or in response to citizen complaints.

Therefore, as the project's construction is required to comply with CARB regulations and does not include the need of construction processes that would require the use of equipment that is more energy efficient, the proposed project annual construction related fuel consumption would not be considered significant.

Operational Energy Demands

Energy consumption in support of or related to project operations would include transportation energy demands (energy consumed by employee and patron vehicles accessing the project site) and facilities energy demands (energy consumed by building operations and site maintenance activities).

Transportation Fuel Consumption

Using the CalEEMod output from the air quality and greenhouse gas analyses (Sections 2 and 3 of this report), it is assumed that an average trip for autos and light trucks was assumed to be 12.5 miles and 3- 4-axle trucks were assumed to travel an average of 5.4 miles[43]. To present a worst-case scenario, it was assumed that vehicles would operate 365 days per year rather than the more likely 253 days (excluding weekends and up to 8 holidays). Table 33 shows the estimated annual fuel consumption for all classes of vehicles from autos to heavy-heavy trucks.

The proposed project would generate approximately 3,933 trips per day on a Saturday with an amphitheater event. The vehicle fleet mix was used from the CalEEMod output. Table 33 shows that an estimated 621,623 gallons of fuel would be consumed per year for the operation of the proposed project.

As shown in the trip generation table provided in the TIA prepared for the proposed project, the trip generation and associated VMT generated by the proposed project is consistent with other similar cultivation, hotel, and amphitheater uses of similar scale and configuration as reflected respectively in either the Institute of Transportation Engineers (ITE) Trip Generation Manual (20th Edition, 2017) and/or surveys, etc. That is, the proposed project does not propose uses or operations that would inherently result in excessive and wasteful vehicle trips and VMT, nor associated excess and wasteful vehicle energy consumption. Furthermore, the state of California consumed approximately 4.2 billion gallons of diesel and 15.1 billion gallons of gasoline in 2015.[44,45] Therefore, the increase in fuel consumption from the proposed project is insignificant in comparison to the State’s demand. Therefore, project transportation energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary.

Facility Energy Demands (Electricity and Natural Gas)

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[43] CalEEMod default distance for H-W (home-work) or C-W (commercial-work) is 12.5 miles; 5.4 miles for H-O (home-other) or C-O (commercial-other).

[44] https://www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/california-gasoline-data-facts-and-statistics

[45] https://www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/diesel-fuel-data-facts-and-statistics

Building operation and site maintenance (including landscape maintenance) would result in the consumption of electricity (provided by Southern California Edison) and natural gas (provided by Southern California Gas Company). The annual natural gas and electricity demands were provided per the CalEEMod output from the air quality and greenhouse gas analyses (Sections 2 and 3 of this report) and are provided in Table 34.

As shown in Table 34, the estimated electricity demand for the proposed project is approximately 3,279,503 kWh per year. In 2020, the non-residential sector of the County of Riverside consumed approximately 8,015 million kWh of electricity.[46] In addition, the estimated natural gas consumption for the proposed project is approximately 10,927,500 kBTU per year. In 2020, the non-residential sector of the County of Riverside consumed approximately 135 million therms of gas.[47][48] Therefore, the increase in both electricity and natural gas demand from the proposed project is insignificant compared to the County's 2020 non-residential sector demand.

Energy use in buildings is divided into energy consumed by the built environment and energy consumed by uses that are independent of the construction of the building such as in plug-in appliances. In California, the California Building Standards Code Title 24 governs energy consumed by the built environment, mechanical systems, and some types of fixed lighting. Non-building energy use, or "plug-in" energy use can be further subdivided by specific end-use (refrigeration, cooking, appliances, etc.).

RENEWABLE ENERGY AND ENERGY EFFICIENCY PLAN CONSISTENCY

Regarding federal transportation regulations, the project site is located in an already developed area. Access to/from the project site is from existing roads. These roads are already in place so the project would not interfere with, nor otherwise obstruct intermodal transportation plans or projects that may be proposed pursuant to the ISTEA because SCAG is not planning for intermodal facilities in the project area.

Regarding the State's Energy Plan and compliance with Title 24 CCR energy efficiency standards, the applicant is required to comply with the California Green Building Standard Code requirements for energy efficient buildings and appliances as well as utility energy efficiency programs implemented by Southern California Edison and Southern California Gas Company.

Regarding Pavley (AB 1493) regulations, an individual project does not have the ability to comply or conflict with these regulations because they are intended for agencies and their adoption of procedures and protocols for reporting and certifying GHG emission reductions from mobile sources.

Regarding the State's Renewable Energy Portfolio Standards, the project would be required to meet or exceed the energy standards established in the California Green Building Standards Code, Title 24, Part 11 (CALGreen). CalGreen Standards require that new buildings reduce water consumption, employ building commissioning to increase building system efficiencies, divert construction waste from landfills, and install low pollutant-emitting finish materials.

As shown in Section 3 above, the proposed project is consistent with the applicable strategies of the City of Desert Hot Springs Climate Action Plan.
Furthermore, as stated in the 2017 Specific Plan, the development of the Specific Plan is to implement "Green Building", renewable energy, and energy efficient design strategies.[49] These strategies include solar on both covered carports and building rooftops, wind turbines, vermiculture, solar water heating systems, and passive solar design strategies. The design strategies that are applicable to the proposed project, Parcels 30, 31, and 25, would include the use of the solar, wind turbines, and passive solar design strategies.

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[46] California Energy Commission, Electricity Consumption by County. https://ecdms.energy.ca.gov/elecbycounty.aspx

[47] California Energy Commission, Gas Consumption by County. http://ecdms.energy.ca.gov/gasbycounty.aspx

[48] 1 kBTU = 1,000 BTU and 1 therm = 100,000 BTU; therefore, 1 therm = 100 kBTU.

[49] Coachillin Industrial Cultivation & Ancillary Canna-Business Park Project Specific Plan, DHS SP#01-17 (April 2017), Section 5.7 Green Building and Energy Efficiency Plan.

CONCLUSIONS

As supported by the preceding analyses, project construction and operations would not result in the inefficient, wasteful or unnecessary consumption of energy. Further, the energy demands of the project can be accommodated within the context of available resources and energy delivery systems. The project would therefore not cause or result in the need for additional energy producing or transmission facilities. The project would not engage in wasteful or inefficient uses of energy and aims to achieve energy conservations goals within the State of California. Notwithstanding, the project proposes hotel and amphitheater uses and will not have any long-term effects on an energy provider's future energy development or future energy conservation strategies.

Table 26
Total Electricity System Power (California 2020)

Fuel Type	California In-State Generation (GWh)	Percent of California In-State Generation	Northwest Imports (GWh)	Southwest Imports (GWh)	Total Imports (GWh)	Percent of Imports	Total California Energy Mix (GWh)	Total California Power Mix
Coal	317	0.17%	194	6,963	7,157	8.76%	7,474	2.74%
Natural Gas	92,298	48.35%	70	8,654	8,724	10.68%	101,022	37.06%
Nuclear	16,280	8.53%	672	8,481	9,154	11.21%	25,434	9.33%
Oil	30	0.02%	-	-	0	0.00%	30	0.01%
Other (Petroleum Coke/Waste Heat)	384	0.20%	125	9	134	0.16%	518	0.19%
Large Hydro	17,938	9.40%	14,078	1,259	15,337	18.78%	33,275	12.21%
Unspecified Sources of Power	-	0.00%	12,870	1,745	14,615	17.90%	14,615	5.36%
Renewables	63,665	33.35%	13,184	13,359	26,543	32.50%	90,208	33.09%
Biomass	5,680	2.97%	975	25	1,000	1.22%	6,679	2.45%
Geothermal	11,345	5.94%	166	1,825	1,991	2.44%	13,336	4.89%
Somall Hydro	3,476	1.82%	320	2	322	0.39%	3,798	1.39%
Solar	29,456	15.43%	284	6,312	6,596	8.08%	36,052	13.23%
Wind	13,708	7.18%	11,438	5,197	16,635	20.37%	30,343	11.13%
Total	190,913	100%	41,193	40,471	81,663	100%	272,576	100%

<u>Notes:</u>

(1) Source: California Energy Commission. 2020 Total System electric Generation. https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2020-total-system-electric-generation

Table 27
SCE 2020 Power Content Mix

Energy Resources	2020 SCE Power Mix
Eligible Renewable	30.9%
Biomass & Biowaste	*0.1%*
Geothermal	*5.5%*
Eligible Hydroelectric	*0.8%*
Solar	*15.1%*
Wind	*9.4%*
Coal	0.0%
Large Hydroelectric	3.3%
Natural Gas	15.2%
Nuclear	8.4%
Other	0.3%
Unspecified Sources of power*	42.0%
Total	100%

Notes:

(1) https://www.sce.com/sites/default/files/inline-files/SCE_2020PowerContentl

* Unspecified sources of power means electricity from transactions that are not traceable to specific generation sources.

Table 28
Project Construction Power Cost and Electricity Usage

Power Cost (per 1,000 square foot of building per month of construction)	Total Building Size (1,000 Square Foot)	Construction Duration (months)	Total Project Construction Power Cost
$2.32	212	12	$5,905.56

Cost per kWh	Total Project Construction Electricity Usage (kWh)
$0.14	43,236

*Assumes the project will be under the GS-1 General Service rate under SCE. https://www.sce.com/regulatory/tariff-books/rates-pricing-choices

Table 29
Construction Equipment Fuel Consumption Estimates

Phase	Number of Days	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor	HP hrs/day	Total Fuel Consumption (gal diesel fuel)[1]
Grading	30	Excavators	2	8	158	0.38	961	1,558
	30	Graders	1	8	187	0.41	613	995
	30	Rubber Tired Dozers	1	8	247	0.4	790	1,282
	30	Scrapers	2	8	367	0.48	2,819	4,571
	30	Tractors/Loaders/Backhoes	2	8	97	0.37	574	931
Building Construction	220	Cranes	1	7	231	0.29	469	5,576
	220	Forklifts	4	8	89	0.2	570	6,774
	220	Generator Sets	1	8	84	0.74	497	5,914
	220	Tractors/Loaders/Backhoes	5	7	97	0.37	1,256	14,938
	220	Welders	1	8	46	0.45	166	1,969
Paving	20	Pavers	2	8	130	0.42	874	944
	20	Paving Equipment	2	8	132	0.36	760	822
	20	Rollers	2	8	80	0.38	486	526
Architectural Coating	25	Air Compressors	1	6	78	0.48	225	304
CONSTRUCTION FUEL DEMAND (gallons of diesel fuel)								47,103

Notes:

(1) Using Carl Moyer Guidelines Table D-21 Fuel consumption rate factors (bhp-hr/gal) for engines less than 750 hp.
(Source: https://www.arb.ca.gov/msprog/moyer/guidelines/2017gl/2017_gl_appendix_d.pdf)

Table 30
Construction Worker Fuel Consumption Estimates

Phase	Number of Days	Worker Trips/Day	Trip Length (miles)	Vehicle Miles Traveled	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
Grading	30	20	11	6,600	26.4	250
Building Construction	220	275	11	665,500	26.4	25,225
Paving	20	15	11	3,300	26.4	125
Architectural Coating	25	55	11	15,125	26.4	573
Total Construction Worker Fuel Consumption						26,174

Notes:

(1) Assumptions for the worker trip length and vehicle miles traveled are consistent with CalEEMod 2020.4.0 defaults.

(2) CalEEMod worker vehicle class is based on an LD_Mix, which, per CalEEMod User's Guide (May 2021), inlcudes LDA, LDT1, and LDT2 at a mix of 50%/25%/25%, respectively.

Table 31

Construction Vendor Fuel Consumption Estimates (MHD & HHD Trucks)[1]

Phase	Number of Days	Vendor Trips/Day	Trip Length (miles)	Vehicle Miles Traveled	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
Grading	30	0	5.4	0	6.7	0
Building Construction	220	107	5.4	127,116	6.7	18,888
Paving	20	0	5.4	0	6.7	0
Architectural Coating	25	0	5.4	0	6.7	0
Total Construction Vendor Fuel Consumption						18,888

Notes:

(1) Assumptions for the vendor trip length and vehicle miles traveled are consistent with CalEEMod 2020.4.0 defaults.

(2) CalEEMod vendor vehicle class is based on an HDT_Mix, which, per CalEEMod User's Guide (May 2021), inlcudes HHDT and MHDT at a mix of 50%/50%.

Table 32

Construction Hauling Fuel Consumption Estimates (HHD Trucks)[1]

Phase	Number of Days	Hauling Trips/Day	Trip Length (miles)	Vehicle Miles Traveled	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
Grading	30	0	20	0	5.9	0
Building Construction	220	0	20	0	5.9	0
Paving	20	0	20	0	5.9	0
Architectural Coating	25	0	20	0	5.9	0
Total Construction Hauling Fuel Consumption						0

Notes:

(1) Assumptions for the hauling trip length and vehicle miles traveled are consistent with CalEEMod 2020.4.0 defaults.

Table 33
Estimated Vehicle Operations Fuel Consumption

Vehicle Type	Vehicle Mix	Number of Vehicles	Average Trip (miles)[1]	Daily VMT	Average Fuel Economy (mpg)	Total Gallons per Day	Total Annual Fuel Consumption (gallons)
Light Auto	Automobile	2,225	12.5	27,813	29.76	934.56	341,114
Light Truck	Automobile	221	12.5	2,763	28.21	97.93	35,743
Light Truck	Automobile	679	12.5	8,488	23.05	368.22	134,401
Medium Truck	Automobile	555	5.4	2,997	19.28	155.45	56,738
Light Heavy Truck	2-Axle Truck	105	5.4	567	14.37	39.46	14,402
Light Heavy Truck 10,000 lbs +	2-Axle Truck	29	5.4	157	17.53	8.93	3,261
Medium Heavy Truck	3-Axle Truck	45	5.4	243	7.69	31.60	11,534
Heavy Heavy Truck	4-Axle Truck	74	5.4	400	5.97	66.93	24,431
Total		3,933	--	43,426	18.23	1703.08	--
Total Annual Fuel Consumption							621,623

Notes:

(1) Based on the size of the site and relative location, trips were assumed to be local rather than regional.

Table 34

Project Annual Operational Energy Demand Summary[1]

Natural Gas Demand	kBTU/year
Hotel Use	2,008,500
Amphitheater	8,919,000
Total	10,927,500

Electricity Demand	kWh/year
Hotel Use	2,617,000
Amphitheater	616,280
Parking Lot	1,400
Parking Lot	44,823
Total	3,279,503

Notes:

(1) Taken from the CalEEMod 2020.4.0 annual output (Appendix C of this report).

6. MITIGATION MEASURES/DESIGN FEATURES

CONSTRUCTION MEASURES

Adherence to SCAQMD Rules 403 and 403.1 is required and the project will be required to obtain and prepare a Fugitive Dust Control Plan.

As the proposed project is an Amendment to the Previously-Approved Cultivation Use, the proposed project is required to adhere to the mitigation provided in the prior Mitigated Negative Declaration. These measures include the following:

AQ-1. Architectural coatings applied to project buildings are to be limited to 50 grams per liter VOC and traffic paints shall be limited to 100 g/L VOC content.

AQ-2. The project applicant shall ensure that all applicable SCAQMD Rules and Regulations are complied with during construction and the construction contractor use construction equipment that have Tier 3 or better engines for any on-site construction.

CUMULATIVE OPERATIONAL MITIGATION MEASURE

The measure proposed below is to reduce the cumulative impacts for operation of the entire SP with Substitution of Hotel and Amphitheater Uses on Parcels 30 and 31.

AQ-3. During an event at the proposed amphitheater, a charter shuttle bus service can be provided with a pick-up location within the Downtown Palm Springs area. There are many resort hotels located near the Downtown area where patrons may be staying from out of town as well as local visitors to the various Downtown attractions. By providing a shuttle pick up location within the Downtown area, the amphitheater patrons do not need to drive the approximate 6-mile distance between the event venue and the Downtown area, where they could park their vehicles at their hotels or at nearby parking lots. The charter shuttle bus service may be a reservation-based optional purchase item provided by the event organizer so that the ridership demand could be determined. The ridership capacity could be adjusted based on the actual demand from the sales.

PROJECT DESIGN FEATURES (OPERATIONAL)

Below are project design features/regulatory requirements that will reduce project-related GHG emissions for Parcels 30 and 31.

<u>Design Features Applicable to the Proposed Project:</u>

Design Feature 1. On-site sustainability design features, including solar panel and wind generation, will provide at least 40 percent of the project's energy needs.[50]

Design Feature 2. All faucets, toilets and showers installed in the proposed structures will use low-flow fixtures that would reduce indoor water demand by at least 20 percent per CalGreen Standards.

Design Feature 3. On-site recycling programs will be included that reduce waste to landfills by 75 percent per AB 341.

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[50] Per SBX1 2, one-third of the State's electricity is to come from renewable sources. The legislation increases California's current 20 percent renewables portfolio standard target in 2010 to a 33 percent renewables portfolio standard by December 31, 2020.

Design Feature 4. Re-application of architectural coatings to project buildings will be limited to 50 grams per liter VOC and traffic paints shall be limited to 100 g/L VOC content.

Design Feature 5. At least 85 new trees shall be planted on Parcels 30 and 31.

Design Feature 6. High-efficiency lighting that is at least 34% more efficient than standard is to be used on-site and Energy Star® appliances will be installed wherever appliances are required on-site.

Design Feature 7. Grey water will be used for all landscaping irrigation on-site.

All of the design features from the previously-approved cultivation use will continue to apply to the other parcels in the Specific Plan. These design features are listed below.

<u>Design Features from the Previously-Approved Cultivation Use (Still Apply to Other Parcels):</u>

Design Feature 8. On-site solar panel, parabolic solar, and wind generation that will provide at least 66 percent of the proposed project's electrical energy needs.[51]

Design Feature 9. All faucets, toilets and showers installed in the proposed structures will utilize low-flow fixtures that would reduce indoor water demand by at least 20% per CalGreen Standards.

Design Feature 10. On-site recycling programs will be included that reduce waste to landfills by 90 percent.

Design Feature 11. Re-application of architectural coatings to project buildings will be limited to 50 grams per liter VOC and traffic paints shall be limited to 100 g/L VOC content.

Design Feature 12. Employee vanpool/ride share programs shall be provided for at least 25 percent of on-site employees.

Design Feature 13. At least 1,166 new trees shall be planted onsite, as identified in the project landscaping plan.

Design Feature 14. Energy-saving features of the project shall exceed 2016 Title 24 Standards energy requirements by at least 32 percent and that Energy Star® appliances are installed wherever appliances are required on-site.

Design Feature 15. Grey water be used for all landscaping irrigation on-site.

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[51] Per SBX1 2, one-third of the State's electricity is to come from renewable sources. The legislation increases California's current 20 percent renewables portfolio standard target in 2010 to a 33 percent renewables portfolio standard by December 31, 2020.

7. REFERENCES

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APPENDICES

APPENDIX A

GLOSSARY OF TERMS

AQMP	Air Quality Management Plan
BACT	Best Available Control Technologies
CAAQS	California Ambient Air Quality Standards
CalEPA	California Environmental Protection Agency
CARB	California Air Resources Board
CCAA	California Clean Air Act
CCAR	California Climate Action Registry
CEQA	California Environmental Quality Act
CFCs	Chlorofluorocarbons
CH_4	Methane
CNG	Compressed natural gas
CO	Carbon monoxide
CO_2	Carbon dioxide
CO_2e	Carbon dioxide equivalent
DPM	Diesel particulate matter
EPA	U.S. Environmental Protection Agency
GHG	Greenhouse gas
GWP	Global warming potential
HIDPM	Hazard Index Diesel Particulate Matter
HFCs	Hydrofluorocarbons
IPCC	International Panel on Climate Change
LCFS	Low Carbon Fuel Standard
LST	Localized Significant Thresholds
$MTCO_2e$	Metric tons of carbon dioxide equivalent
$MMTCO_2e$	Million metric tons of carbon dioxide equivalent
MPO	Metropolitan Planning Organization
NAAQS	National Ambient Air Quality Standards
NOx	Nitrogen Oxides
NO_2	Nitrogen dioxide
N_2O	Nitrous oxide
O_3	Ozone
OPR	Governor’s Office of Planning and Research
PFCs	Perfluorocarbons
PM	Particle matter
PM10	Particles that are less than 10 micrometers in diameter
PM2.5	Particles that are less than 2.5 micrometers in diameter
PMI	Point of maximum impact
PPM	Parts per million
PPB	Parts per billion
RTIP	Regional Transportation Improvement Plan
RTP	Regional Transportation Plan
SANBAG	San Bernardino Association of Governments
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SSAB	Salton Sea Air Basin
SF_6	Sulfur hexafluoride
SIP	State Implementation Plan
SOx	Sulfur Oxides
TAC	Toxic air contaminants
VOC	Volatile organic compounds

APPENDIX B

CALEEMOD MODEL DAILY EMISSIONS PRINTOUTS

19-0174 Coachillin Parcels 30 & 31

Riverside-Salton Sea County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	7.05	Acre	7.05	307,098.00	0
Parking Lot	10.00	Space	0.09	4,000.00	0
Parking Lot	2.94	Acre	2.94	128,066.40	0
Arena	62.13	1000sqft	1.43	62,125.00	0
Hotel	175.00	Room	1.06	150,000.00	0
Recreational Swimming Pool	4.00	1000sqft	0.09	4,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - P30 5.88ac w/ 175rm hotel(150TSF & 46,216sf ftprnt), ~4TSF pool, ~50% prkng(2.94ac), & rmdnr lndscpng(1.79ac); P31/Basin101 6.78ac w/ 62,125sf amphitheater(w/460sf rr & 5,660sf rest), 4.15ac hrdscpe/temp prkng, 10spc prkng, & rmndr lndscpng(1.11ac)

Construction Phase - Construction anticipated to last ~12 months w/ OY 2023. Therefore, modeled as start 1/1/2022 & be completed 1/1/2023. Site is vacant, not demo/site prep & only fine grading needed.

Off-road Equipment - CalEEMod default timing for building construction reduced by ~27%; therefore, ~27% more equipment added.

Grading - Site anticipated to balance.

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

Architectural Coating - SCAQMD Rule 1113 architectural coatings are 50 g/L VOC or less buildings & 100 g/L VOC parking lot striping. Parking lot painting 6% of 40,000sf +128,066sf = 7,924sf.

Vehicle Trips - Per TIA, hotel 8.36 trips/room weekdays & 8.19 trips/room saturdays (default sunday rate) & 2,500 trips/day amphitheater (w/ event) / 62.125 TSF = 40.24 trips/TSF. Hotel pool no additional trips.

Consumer Products - SSAB is within SCAQMD jurisdiction; therefore, factor is 2.04 x 10^-5 lbs/SF/day.

Area Coating - Per SCAQMD Rule 1113 architectural coatings are 50 g/L VOC or less for buildings and 100g/L VOC for parking lots/striping. Parking lot striping 6% of 4,000 + 128,066 = ~7,924 sf.

Sequestration - Parcels 30 & 31 and Basin 101 = 12.66 ac which is ~8.8% of total project acreage (143.79 acres). Total project to plant 966 new trees. 8.8% of 966 = ~85 new trees.

Construction Off-road Equipment Mitigation - Tier 3 equipment to be used during construction.

Mobile Land Use Mitigation - Dwntwn DHS ~4.07mi N. Palm Springs Amtrak stn ~0.89mi S. Sidewalks on/off-site. 1emp/500sf com tourist =212,125sf/500=424 emp/2.49 job ac=170 emp/job acre. At least 5 intersections/0.25 sq mi.

Area Mitigation - Per SCAQMD Rule 1113 paints (50g/L) to be used for buildings, 100g/L for parking lots/striping.

Energy Mitigation - Per applicant, wind and solar energy production to supply ~40% of the site's total energy needs. High-efficiency lighting at least ~34% more efficient than standard. Energy Star appliances.

Water Mitigation - 100% of landscape irrigation from grey water. Low flow faucets/showers/toilets. Water-efficient landscaping to be installed on-site.

Waste Mitigation - AB 341 requires at least 75% of waste be diverted from landfills, 75% by 2020.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Parking	26,350.00	7,924.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	100
tblAreaCoating	Area_Parking	26350	7924
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	7.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	20.00	25.00
tblConstructionPhase	NumDays	300.00	220.00
tblConsumerProducts	ROG_EF	2.14E-05	2.04E-05
tblLandUse	LandUseSquareFeet	254,100.00	150,000.00
tblLandUse	LotAcreage	19.97	1.43
tblLandUse	LotAcreage	5.83	1.06

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	5.00
tblSequestration	NumberOfNewTrees	0.00	85.00
tblVehicleTrips	ST_TR	10.71	40.24
tblVehicleTrips	ST_TR	9.10	0.00
tblVehicleTrips	SU_TR	10.71	0.00
tblVehicleTrips	SU_TR	13.60	0.00
tblVehicleTrips	WD_TR	10.71	0.00
tblVehicleTrips	WD_TR	28.82	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	45.9331	38.8842	49.9897	0.1017	9.3709	1.7524	11.0067	3.6981	1.6375	5.2030	0.0000	10,064.3324	10,064.3324	1.9486	0.3176	10,200.4072
2023	41.1616	1.4023	3.3835	7.0400e-003	0.4602	0.0730	0.5332	0.1221	0.0729	0.1949	0.0000	698.2731	698.2731	0.0278	0.0105	702.0879
Maximum	**45.9331**	**38.8842**	**49.9897**	**0.1017**	**9.3709**	**1.7524**	**11.0067**	**3.6981**	**1.6375**	**5.2030**	**0.0000**	**10,064.3324**	**10,064.3324**	**1.9486**	**0.3176**	**10,200.4072**

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	43.9825	35.3139	54.4242	0.1017	3.7567	1.9471	5.3706	1.4693	1.9437	2.8640	0.0000	10,064.3324	10,064.3324	1.9486	0.3176	10,200.4072
2023	41.0293	1.4563	3.4048	7.0400e-003	0.4602	0.0973	0.5575	0.1221	0.0971	0.2192	0.0000	698.2731	698.2731	0.0278	0.0105	702.0879
Maximum	**43.9825**	**35.3139**	**54.4242**	**0.1017**	**3.7567**	**1.9471**	**5.3706**	**1.4693**	**1.9437**	**2.8640**	**0.0000**	**10,064.3324**	**10,064.3324**	**1.9486**	**0.3176**	**10,200.4072**

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	2.39	8.73	-8.35	0.00	57.11	-12.00	48.63	58.34	-19.32	42.88	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	4.7648	2.4000e-004	0.0267	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0572	0.0572	1.5000e-004		0.0609
Energy	0.3229	2.9351	2.4655	0.0176		0.2231	0.2231		0.2231	0.2231		3,522.1600	3,522.1600	0.0675	0.0646	3,543.0904
Mobile	9.5892	8.6665	60.1848	0.1140	10.8181	0.0941	10.9122	2.8863	0.0880	2.9743		11,724.1478	11,724.1478	0.8099	0.6737	11,945.1607
Total	**14.6769**	**11.6019**	**62.6769**	**0.1316**	**10.8181**	**0.3172**	**11.1354**	**2.8863**	**0.3112**	**3.1975**		**15,246.3649**	**15,246.3649**	**0.8776**	**0.7383**	**15,488.3120**

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	4.7648	2.4000e-004	0.0267	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0572	0.0572	1.5000e-004		0.0609
Energy	0.3229	2.9351	2.4655	0.0176		0.2231	0.2231		0.2231	0.2231		3,522.1600	3,522.1600	0.0675	0.0646	3,543.0904
Mobile	8.8293	6.7038	44.7138	0.0734	6.7107	0.0644	6.7751	1.7905	0.0602	1.8506		7,549.0913	7,549.0913	0.6681	0.5152	7,719.3371
Total	**13.9170**	**9.6391**	**47.2060**	**0.0910**	**6.7107**	**0.2876**	**6.9983**	**1.7905**	**0.2833**	**2.0738**		**11,071.3084**	**11,071.3084**	**0.7358**	**0.5798**	**11,262.4884**

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	5.18	16.92	24.68	30.86	37.97	9.35	37.15	37.97	8.95	35.14	0.00	27.38	27.38	16.16	21.46	27.28

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	1/1/2022	2/11/2022	5	30	
2	Building Construction	Building Construction	2/12/2022	12/18/2022	5	220	
3	Paving	Paving	11/25/2022	12/22/2022	5	20	
4	Architectural Coating	Architectural Coating	11/28/2022	1/1/2023	5	25	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 90

Acres of Paving: 10.08

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 318,188; Non-Residential Outdoor: 106,063; Striped Parking Area: 7,924 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	4	8.00	89	0.20

Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	5	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
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
Grading	8	20.00	0.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	12	275.00	107.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	55.00	0.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.2036	0.0000	9.2036	3.6538	0.0000	3.6538			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**3.6248**	**38.8435**	**29.0415**	**0.0621**	**9.2036**	**1.6349**	**10.8385**	**3.6538**	**1.5041**	**5.1579**		**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

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	0.0678	0.0407	0.6202	1.5300e-003	0.1673	8.6000e-004	0.1682	0.0444	7.9000e-004	0.0452		155.6903	155.6903	4.4200e-003	4.1200e-003	157.0272
Total	**0.0678**	**0.0407**	**0.6202**	**1.5300e-003**	**0.1673**	**8.6000e-004**	**0.1682**	**0.0444**	**7.9000e-004**	**0.0452**		**155.6903**	**155.6903**	**4.4200e-003**	**4.1200e-003**	**157.0272**

3.2 Grading - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.5894	0.0000	3.5894	1.4250	0.0000	1.4250			0.0000			0.0000
Off-Road	1.5231	29.9782	36.7226	0.0621		1.2994	1.2994		1.2994	1.2994	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**1.5231**	**29.9782**	**36.7226**	**0.0621**	**3.5894**	**1.2994**	**4.8888**	**1.4250**	**1.2994**	**2.7244**	**0.0000**	**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

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	0.0678	0.0407	0.6202	1.5300e-003	0.1673	8.6000e-004	0.1682	0.0444	7.9000e-004	0.0452		155.6903	155.6903	4.4200e-003	4.1200e-003	157.0272
Total	**0.0678**	**0.0407**	**0.6202**	**1.5300e-003**	**0.1673**	**8.6000e-004**	**0.1682**	**0.0444**	**7.9000e-004**	**0.0452**		**155.6903**	**155.6903**	**4.4200e-003**	**4.1200e-003**	**157.0272**

3.3 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1081	19.6029	21.4336	0.0339		1.0366	1.0366		0.9705	0.9705		3,229.5326	3,229.5326	0.8303		3,250.2905
Total	**2.1081**	**19.6029**	**21.4336**	**0.0339**		**1.0366**	**1.0366**		**0.9705**	**0.9705**		**3,229.5326**	**3,229.5326**	**0.8303**		**3,250.2905**

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	0.1541	3.8377	1.4641	0.0157	0.5370	0.0514	0.5883	0.1547	0.0491	0.2038		1,660.0340	1,660.0340	0.0182	0.2466	1,733.9804
Worker	0.9321	0.5601	8.5274	0.0210	2.3008	0.0118	2.3127	0.6103	0.0109	0.6212		2,140.7415	2,140.7415	0.0608	0.0566	2,159.1244
Total	**1.0863**	**4.3977**	**9.9915**	**0.0367**	**2.8378**	**0.0632**	**2.9010**	**0.7650**	**0.0600**	**0.8250**		**3,800.7755**	**3,800.7755**	**0.0790**	**0.3032**	**3,893.1049**

3.3 Building Construction - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8445	18.1214	23.1340	0.0339		1.1765	1.1765		1.1765	1.1765	0.0000	3,229.5326	3,229.5326	0.8303		3,250.2905
Total	**0.8445**	**18.1214**	**23.1340**	**0.0339**		**1.1765**	**1.1765**		**1.1765**	**1.1765**	**0.0000**	**3,229.5326**	**3,229.5326**	**0.8303**		**3,250.2905**

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	0.1541	3.8377	1.4641	0.0157	0.5370	0.0514	0.5883	0.1547	0.0491	0.2038		1,660.0340	1,660.0340	0.0182	0.2466	1,733.9804
Worker	0.9321	0.5601	8.5274	0.0210	2.3008	0.0118	2.3127	0.6103	0.0109	0.6212		2,140.7415	2,140.7415	0.0608	0.0566	2,159.1244
Total	**1.0863**	**4.3977**	**9.9915**	**0.0367**	**2.8378**	**0.0632**	**2.9010**	**0.7650**	**0.0600**	**0.8250**		**3,800.7755**	**3,800.7755**	**0.0790**	**0.3032**	**3,893.1049**

3.4 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.3969					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.4998**	**11.1249**	**14.5805**	**0.0228**		**0.5679**	**0.5679**		**0.5225**	**0.5225**		**2,207.6603**	**2,207.6603**	**0.7140**		**2,225.5104**

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	0.0508	0.0306	0.4651	1.1500e-003	0.1255	6.4000e-004	0.1261	0.0333	5.9000e-004	0.0339		116.7677	116.7677	3.3200e-003	3.0900e-003	117.7704
Total	**0.0508**	**0.0306**	**0.4651**	**1.1500e-003**	**0.1255**	**6.4000e-004**	**0.1261**	**0.0333**	**5.9000e-004**	**0.0339**		**116.7677**	**116.7677**	**3.3200e-003**	**3.0900e-003**	**117.7704**

3.4 Paving - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5609	11.2952	17.2957	0.0228		0.6093	0.6093		0.6093	0.6093	0.0000	2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.3969					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9579**	**11.2952**	**17.2957**	**0.0228**		**0.6093**	**0.6093**		**0.6093**	**0.6093**	**0.0000**	**2,207.6603**	**2,207.6603**	**0.7140**		**2,225.5104**

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	0.0508	0.0306	0.4651	1.1500e-003	0.1255	6.4000e-004	0.1261	0.0333	5.9000e-004	0.0339		116.7677	116.7677	3.3200e-003	3.0900e-003	117.7704
Total	**0.0508**	**0.0306**	**0.4651**	**1.1500e-003**	**0.1255**	**6.4000e-004**	**0.1261**	**0.0333**	**5.9000e-004**	**0.0339**		**116.7677**	**116.7677**	**3.3200e-003**	**3.0900e-003**	**117.7704**

3.5 Architectural Coating - 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					
Archit. Coating	40.7972					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	**41.0017**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.9062**

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	0.1864	0.1120	1.7055	4.2100e-003	0.4602	2.3600e-003	0.4625	0.1221	2.1700e-003	0.1242		428.1483	428.1483	0.0122	0.0113	431.8249
Total	**0.1864**	**0.1120**	**1.7055**	**4.2100e-003**	**0.4602**	**2.3600e-003**	**0.4625**	**0.1221**	**2.1700e-003**	**0.1242**		**428.1483**	**428.1483**	**0.0122**	**0.0113**	**431.8249**

3.5 Architectural Coating - 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					
Archit. Coating	40.7972					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0183		281.9062
Total	**40.8566**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.9062**

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	0.1864	0.1120	1.7055	4.2100e-003	0.4602	2.3600e-003	0.4625	0.1221	2.1700e-003	0.1242		428.1483	428.1483	0.0122	0.0113	431.8249
Total	**0.1864**	**0.1120**	**1.7055**	**4.2100e-003**	**0.4602**	**2.3600e-003**	**0.4625**	**0.1221**	**2.1700e-003**	**0.1242**		**428.1483**	**428.1483**	**0.0122**	**0.0113**	**431.8249**

3.5 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	40.7972					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	**40.9888**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8690**

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	0.1727	0.0993	1.5724	4.0700e-003	0.4602	2.2200e-003	0.4624	0.1221	2.0500e-003	0.1241		416.8251	416.8251	0.0110	0.0105	420.2189
Total	**0.1727**	**0.0993**	**1.5724**	**4.0700e-003**	**0.4602**	**2.2200e-003**	**0.4624**	**0.1221**	**2.0500e-003**	**0.1241**		**416.8251**	**416.8251**	**0.0110**	**0.0105**	**420.2189**

3.5 Architectural Coating - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	40.7972					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0168		281.8690
Total	**40.8566**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8690**

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	0.1727	0.0993	1.5724	4.0700e-003	0.4602	2.2200e-003	0.4624	0.1221	2.0500e-003	0.1241		416.8251	416.8251	0.0110	0.0105	420.2189
Total	**0.1727**	**0.0993**	**1.5724**	**4.0700e-003**	**0.4602**	**2.2200e-003**	**0.4624**	**0.1221**	**2.0500e-003**	**0.1241**		**416.8251**	**416.8251**	**0.0110**	**0.0105**	**420.2189**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Improve Walkability Design

Improve Destination Accessibility

Increase Transit Accessibility

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	8.8293	6.7038	44.7138	0.0734	6.7107	0.0644	6.7751	1.7905	0.0602	1.8506		7,549.0913	7,549.0913	0.6681	0.5152	7,719.3371
Unmitigated	9.5892	8.6665	60.1848	0.1140	10.8181	0.0941	10.9122	2.8863	0.0880	2.9743		11,724.1478	11,724.1478	0.8099	0.6737	11,945.1607

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Arena	0.00	2,499.91	0.00	420,982	261,143
Hotel	1,463.00	1,433.25	1041.25	2,076,831	1,288,299
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Recreational Swimming Pool	0.00	0.00	0.00		
Total	1,463.00	3,933.16	1,041.25	2,497,813	1,549,442

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
Arena	12.50	4.20	5.40	0.00	81.00	19.00	66	28	6
Hotel	12.50	4.20	5.40	19.40	61.60	19.00	58	38	4
Other Non-Asphalt Surfaces	12.50	4.20	5.40	0.00	0.00	0.00	0	0	0
Parking Lot	12.50	4.20	5.40	0.00	0.00	0.00	0	0	0
Parking Lot	12.50	4.20	5.40	0.00	0.00	0.00	0	0	0
Parking Lot	12.50	4.20	5.40	0.00	0.00	0.00	0	0	0
Parking Lot	12.50	4.20	5.40	0.00	0.00	0.00	0	0	0
Recreational Swimming Pool	12.50	4.20	5.40	33.00	48.00	19.00	52	39	9

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Arena	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Hotel	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Other Non-Asphalt Surfaces	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Parking Lot	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Recreational Swimming Pool	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

Percent of Electricity Use Generated with Renewable Energy

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.3229	2.9351	2.4655	0.0176		0.2231	0.2231		0.2231	0.2231		3,522.1600	3,522.1600	0.0675	0.0646	3,543.0904
NaturalGas Unmitigated	0.3229	2.9351	2.4655	0.0176		0.2231	0.2231		0.2231	0.2231		3,522.1600	3,522.1600	0.0675	0.0646	3,543.0904

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					
Arena	5502.74	0.0593	0.5395	0.4532	3.2400e-003		0.0410	0.0410		0.0410	0.0410		647.3816	647.3816	0.0124	0.0119	651.2286
Hotel	24435.6	0.2635	2.3957	2.0123	0.0144		0.1821	0.1821		0.1821	0.1821		2,874.7784	2,874.7784	0.0551	0.0527	2,891.8618
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
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
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.3229**	**2.9351**	**2.4655**	**0.0176**		**0.2231**	**0.2231**		**0.2231**	**0.2231**		**3,522.1600**	**3,522.1600**	**0.0675**	**0.0646**	**3,543.0904**

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					
Arena	5.50274	0.0593	0.5395	0.4532	3.2400e-003		0.0410	0.0410		0.0410	0.0410		647.3816	647.3816	0.0124	0.0119	651.2286
Hotel	24.4356	0.2635	2.3957	2.0123	0.0144		0.1821	0.1821		0.1821	0.1821		2,874.7784	2,874.7784	0.0551	0.0527	2,891.8618
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
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
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.3229**	**2.9351**	**2.4655**	**0.0176**		**0.2231**	**0.2231**		**0.2231**	**0.2231**		**3,522.1600**	**3,522.1600**	**0.0675**	**0.0646**	**3,543.0904**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	4.7648	2.4000e-004	0.0267	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0572	0.0572	1.5000e-004		0.0609
Unmitigated	4.7648	2.4000e-004	0.0267	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0572	0.0572	1.5000e-004		0.0609

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	0.2794					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.4829					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.4700e-003	2.4000e-004	0.0267	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0572	0.0572	1.5000e-004		0.0609
Total	**4.7648**	**2.4000e-004**	**0.0267**	**0.0000**		**1.0000e-004**	**1.0000e-004**		**1.0000e-004**	**1.0000e-004**		**0.0572**	**0.0572**	**1.5000e-004**		**0.0609**

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	0.2794					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.4829					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.4700e-003	2.4000e-004	0.0267	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0572	0.0572	1.5000e-004		0.0609
Total	**4.7648**	**2.4000e-004**	**0.0267**	**0.0000**		**1.0000e-004**	**1.0000e-004**		**1.0000e-004**	**1.0000e-004**		**0.0572**	**0.0572**	**1.5000e-004**		**0.0609**

7.0 Water Detail

7.1 Mitigation Measures Water

Use Grey Water

Install Low Flow Bathroom Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

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

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

19-0174 Coachillin Parcels 30 & 31

Riverside-Salton Sea County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	7.05	Acre	7.05	307,098.00	0
Parking Lot	10.00	Space	0.09	4,000.00	0
Parking Lot	2.94	Acre	2.94	128,066.40	0
Arena	62.13	1000sqft	1.43	62,125.00	0
Hotel	175.00	Room	1.06	150,000.00	0
Recreational Swimming Pool	4.00	1000sqft	0.09	4,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - P30 5.88ac w/ 175rm hotel(150TSF & 46,216sf ftprnt), ~4TSF pool, ~50% prkng(2.94ac), & rmdnr lndscpng(1.79ac); P31/Basin101 6.78ac w/ 62,125sf amphitheater(w/460sf rr & 5,660sf rest), 4.15ac hrdscpe/temp prkng, 10spc prkng, & rmndr lndscpng(1.11ac)

Construction Phase - Construction anticipated to last ~12 months w/ OY 2023. Therefore, modeled as start 1/1/2022 & be completed 1/1/2023. Site is vacant, not demo/site prep & only fine grading needed.

Off-road Equipment - CalEEMod default timing for building construction reduced by ~27%; therefore, ~27% more equipment added.

Grading - Site anticipated to balance.

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

Architectural Coating - SCAQMD Rule 1113 architectural coatings are 50 g/L VOC or less buildings & 100 g/L VOC parking lot striping. Parking lot painting 6% of 40,000sf +128,066sf = 7,924sf.

Vehicle Trips - Per TIA, hotel 8.36 trips/room weekdays & 8.19 trips/room saturdays (default sunday rate) & 2,500 trips/day amphitheater (w/ event) / 62.125 TSF = 40.24 trips/TSF. Hotel pool no additional trips.

Consumer Products - SSAB is within SCAQMD jurisdiction; therefore, factor is 2.04 x 10^-5 lbs/SF/day.

Area Coating - Per SCAQMD Rule 1113 architectural coatings are 50 g/L VOC or less for buildings and 100g/L VOC for parking lots/striping. Parking lot striping 6% of 4,000 + 128,066 = ~7,924 sf.

Sequestration - Parcels 30 & 31 and Basin 101 = 12.66 ac which is ~8.8% of total project acreage (143.79 acres). Total project to plant 966 new trees. 8.8% of 966 = ~85 new trees.

Construction Off-road Equipment Mitigation - Tier 3 equipment to be used during construction.

Mobile Land Use Mitigation - Dwntwn DHS ~4.07mi N. Palm Springs Amtrak stn ~0.89mi S. Sidewalks on/off-site. 1emp/500sf com tourist =212,125sf/500=424 emp/2.49 job ac=170 emp/job acre. At least 5 intersections/0.25 sq mi.

Area Mitigation - Per SCAQMD Rule 1113 paints (50g/L) to be used for buildings, 100g/L for parking lots/striping.

Energy Mitigation - Per applicant, wind and solar energy production to supply ~40% of the site's total energy needs. High-efficiency lighting at least ~34% more efficient than standard. Energy Star appliances.

Water Mitigation - 100% of landscape irrigation from grey water. Low flow faucets/showers/toilets. Water-efficient landscaping to be installed on-site.

Waste Mitigation - AB 341 requires at least 75% of waste be diverted from landfills, 75% by 2020.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Parking	26,350.00	7,924.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	100
tblAreaCoating	Area_Parking	26350	7924
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	7.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
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tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	20.00	25.00
tblConstructionPhase	NumDays	300.00	220.00
tblConsumerProducts	ROG_EF	2.14E-05	2.04E-05
tblLandUse	LandUseSquareFeet	254,100.00	150,000.00
tblLandUse	LotAcreage	19.97	1.43
tblLandUse	LotAcreage	5.83	1.06

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	5.00
tblSequestration	NumberOfNewTrees	0.00	85.00
tblVehicleTrips	ST_TR	10.71	40.24
tblVehicleTrips	ST_TR	9.10	0.00
tblVehicleTrips	SU_TR	10.71	0.00
tblVehicleTrips	SU_TR	13.60	0.00
tblVehicleTrips	WD_TR	10.71	0.00
tblVehicleTrips	WD_TR	28.82	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	45.8232	38.8858	48.1556	0.0993	9.3709	1.7526	11.0067	3.6981	1.6377	5.2030	0.0000	9,814.7759	9,814.7759	1.9487	0.3199	9,951.5430
2023	41.1469	1.4060	3.1082	6.6600e-003	0.4602	0.0730	0.5332	0.1221	0.0729	0.1949	0.0000	659.3136	659.3136	0.0280	0.0107	663.2085
Maximum	**45.8232**	**38.8858**	**48.1556**	**0.0993**	**9.3709**	**1.7526**	**11.0067**	**3.6981**	**1.6377**	**5.2030**	**0.0000**	**9,814.7759**	**9,814.7759**	**1.9487**	**0.3199**	**9,951.5430**

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	43.8726	35.5471	52.5900	0.0993	3.7567	1.9473	5.3708	1.4693	1.9439	2.8642	0.0000	9,814.7759	9,814.7759	1.9487	0.3199	9,951.5430
2023	41.0147	1.4600	3.1295	6.6600e-003	0.4602	0.0973	0.5575	0.1221	0.0971	0.2192	0.0000	659.3136	659.3136	0.0280	0.0107	663.2085
Maximum	**43.8726**	**35.5471**	**52.5900**	**0.0993**	**3.7567**	**1.9473**	**5.3708**	**1.4693**	**1.9439**	**2.8642**	**0.0000**	**9,814.7759**	**9,814.7759**	**1.9487**	**0.3199**	**9,951.5430**

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	2.39	8.15	-8.69	0.00	57.11	-11.99	48.63	58.34	-19.32	42.88	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	4.7648	2.4000e-004	0.0267	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0572	0.0572	1.5000e-004		0.0609
Energy	0.3229	2.9351	2.4655	0.0176		0.2231	0.2231		0.2231	0.2231		3,522.1600	3,522.1600	0.0675	0.0646	3,543.0904
Mobile	7.7635	9.1793	56.1774	0.1061	10.8181	0.0942	10.9123	2.8863	0.0882	2.9745		10,924.2943	10,924.2943	0.8636	0.6892	11,151.2786
Total	**12.8512**	**12.1147**	**58.6696**	**0.1238**	**10.8181**	**0.3174**	**11.1355**	**2.8863**	**0.3113**	**3.1977**		**14,446.5114**	**14,446.5114**	**0.9312**	**0.7538**	**14,694.4299**

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	4.7648	2.4000e-004	0.0267	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0572	0.0572	1.5000e-004		0.0609
Energy	0.3229	2.9351	2.4655	0.0176		0.2231	0.2231		0.2231	0.2231		3,522.1600	3,522.1600	0.0675	0.0646	3,543.0904
Mobile	7.0197	7.0982	43.2475	0.0686	6.7107	0.0645	6.7752	1.7905	0.0603	1.8508		7,057.4677	7,057.4677	0.7268	0.5278	7,232.9076
Total	**12.1074**	**10.0335**	**45.7397**	**0.0862**	**6.7107**	**0.2877**	**6.9984**	**1.7905**	**0.2835**	**2.0739**		**10,579.6848**	**10,579.6848**	**0.7945**	**0.5923**	**10,776.0588**

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	5.79	17.18	22.04	30.37	37.97	9.35	37.15	37.97	8.94	35.14	0.00	26.77	26.77	14.69	21.42	26.67

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	1/1/2022	2/11/2022	5	30	
2	Building Construction	Building Construction	2/12/2022	12/18/2022	5	220	
3	Paving	Paving	11/25/2022	12/22/2022	5	20	
4	Architectural Coating	Architectural Coating	11/28/2022	1/1/2023	5	25	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 90

Acres of Paving: 10.08

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 318,188; Non-Residential Outdoor: 106,063; Striped Parking Area: 7,924 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	4	8.00	89	0.20

Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	5	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
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
Grading	8	20.00	0.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	12	275.00	107.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	55.00	0.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.2036	0.0000	9.2036	3.6538	0.0000	3.6538			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**3.6248**	**38.8435**	**29.0415**	**0.0621**	**9.2036**	**1.6349**	**10.8385**	**3.6538**	**1.5041**	**5.1579**		**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

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	0.0619	0.0423	0.5103	1.3900e-003	0.1673	8.6000e-004	0.1682	0.0444	7.9000e-004	0.0452		141.0926	141.0926	4.4900e-003	4.2100e-003	142.4610
Total	**0.0619**	**0.0423**	**0.5103**	**1.3900e-003**	**0.1673**	**8.6000e-004**	**0.1682**	**0.0444**	**7.9000e-004**	**0.0452**		**141.0926**	**141.0926**	**4.4900e-003**	**4.2100e-003**	**142.4610**

3.2 Grading - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.5894	0.0000	3.5894	1.4250	0.0000	1.4250			0.0000			0.0000
Off-Road	1.5231	29.9782	36.7226	0.0621		1.2994	1.2994		1.2994	1.2994	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**1.5231**	**29.9782**	**36.7226**	**0.0621**	**3.5894**	**1.2994**	**4.8888**	**1.4250**	**1.2994**	**2.7244**	**0.0000**	**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

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	0.0619	0.0423	0.5103	1.3900e-003	0.1673	8.6000e-004	0.1682	0.0444	7.9000e-004	0.0452		141.0926	141.0926	4.4900e-003	4.2100e-003	142.4610
Total	**0.0619**	**0.0423**	**0.5103**	**1.3900e-003**	**0.1673**	**8.6000e-004**	**0.1682**	**0.0444**	**7.9000e-004**	**0.0452**		**141.0926**	**141.0926**	**4.4900e-003**	**4.2100e-003**	**142.4610**

3.3 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1081	19.6029	21.4336	0.0339		1.0366	1.0366		0.9705	0.9705		3,229.5326	3,229.5326	0.8303		3,250.2905
Total	**2.1081**	**19.6029**	**21.4336**	**0.0339**		**1.0366**	**1.0366**		**0.9705**	**0.9705**		**3,229.5326**	**3,229.5326**	**0.8303**		**3,250.2905**

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	0.1465	4.0440	1.5254	0.0157	0.5370	0.0515	0.5885	0.1547	0.0493	0.2040		1,662.2871	1,662.2871	0.0179	0.2472	1,736.3838
Worker	0.8506	0.5814	7.0165	0.0191	2.3008	0.0118	2.3127	0.6103	0.0109	0.6212		1,940.0236	1,940.0236	0.0618	0.0580	1,958.8387
Total	**0.9971**	**4.6255**	**8.5419**	**0.0348**	**2.8378**	**0.0633**	**2.9012**	**0.7650**	**0.0602**	**0.8251**		**3,602.3107**	**3,602.3107**	**0.0797**	**0.3051**	**3,695.2225**

3.3 Building Construction - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8445	18.1214	23.1340	0.0339		1.1765	1.1765		1.1765	1.1765	0.0000	3,229.5326	3,229.5326	0.8303		3,250.2905
Total	**0.8445**	**18.1214**	**23.1340**	**0.0339**		**1.1765**	**1.1765**		**1.1765**	**1.1765**	**0.0000**	**3,229.5326**	**3,229.5326**	**0.8303**		**3,250.2905**

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	0.1465	4.0440	1.5254	0.0157	0.5370	0.0515	0.5885	0.1547	0.0493	0.2040		1,662.2871	1,662.2871	0.0179	0.2472	1,736.3838
Worker	0.8506	0.5814	7.0165	0.0191	2.3008	0.0118	2.3127	0.6103	0.0109	0.6212		1,940.0236	1,940.0236	0.0618	0.0580	1,958.8387
Total	**0.9971**	**4.6255**	**8.5419**	**0.0348**	**2.8378**	**0.0633**	**2.9012**	**0.7650**	**0.0602**	**0.8251**		**3,602.3107**	**3,602.3107**	**0.0797**	**0.3051**	**3,695.2225**

3.4 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.660 3	2,207.660 3	0.7140		2,225.510 4
Paving	0.3969					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.4998**	**11.1249**	**14.5805**	**0.0228**		**0.5679**	**0.5679**		**0.5225**	**0.5225**		**2,207.660 3**	**2,207.660 3**	**0.7140**		**2,225.510 4**

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	0.0464	0.0317	0.3827	1.0400e-003	0.1255	6.4000e-004	0.1261	0.0333	5.9000e-004	0.0339		105.8195	105.8195	3.3700e-003	3.1600e-003	106.8458
Total	**0.0464**	**0.0317**	**0.3827**	**1.0400e-003**	**0.1255**	**6.4000e-004**	**0.1261**	**0.0333**	**5.9000e-004**	**0.0339**		**105.8195**	**105.8195**	**3.3700e-003**	**3.1600e-003**	**106.8458**

3.4 Paving - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5609	11.2952	17.2957	0.0228		0.6093	0.6093		0.6093	0.6093	0.0000	2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.3969					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9579**	**11.2952**	**17.2957**	**0.0228**		**0.6093**	**0.6093**		**0.6093**	**0.6093**	**0.0000**	**2,207.6603**	**2,207.6603**	**0.7140**		**2,225.5104**

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	0.0464	0.0317	0.3827	1.0400e-003	0.1255	6.4000e-004	0.1261	0.0333	5.9000e-004	0.0339		105.8195	105.8195	3.3700e-003	3.1600e-003	106.8458
Total	**0.0464**	**0.0317**	**0.3827**	**1.0400e-003**	**0.1255**	**6.4000e-004**	**0.1261**	**0.0333**	**5.9000e-004**	**0.0339**		**105.8195**	**105.8195**	**3.3700e-003**	**3.1600e-003**	**106.8458**

3.5 Architectural Coating - 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					
Archit. Coating	40.7972					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	**41.0017**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.9062**

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	0.1701	0.1163	1.4033	3.8100e-003	0.4602	2.3600e-003	0.4625	0.1221	2.1700e-003	0.1242		388.0047	388.0047	0.0124	0.0116	391.7677
Total	**0.1701**	**0.1163**	**1.4033**	**3.8100e-003**	**0.4602**	**2.3600e-003**	**0.4625**	**0.1221**	**2.1700e-003**	**0.1242**		**388.0047**	**388.0047**	**0.0124**	**0.0116**	**391.7677**

3.5 Architectural Coating - 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					
Archit. Coating	40.7972					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0183		281.9062
Total	**40.8566**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.9062**

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	0.1701	0.1163	1.4033	3.8100e-003	0.4602	2.3600e-003	0.4625	0.1221	2.1700e-003	0.1242		388.0047	388.0047	0.0124	0.0116	391.7677
Total	**0.1701**	**0.1163**	**1.4033**	**3.8100e-003**	**0.4602**	**2.3600e-003**	**0.4625**	**0.1221**	**2.1700e-003**	**0.1242**		**388.0047**	**388.0047**	**0.0124**	**0.0116**	**391.7677**

3.5 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	40.7972					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	**40.9888**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8690**

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	0.1580	0.1030	1.2971	3.6900e-003	0.4602	2.2200e-003	0.4624	0.1221	2.0500e-003	0.1241		377.8656	377.8656	0.0112	0.0107	381.3394
Total	**0.1580**	**0.1030**	**1.2971**	**3.6900e-003**	**0.4602**	**2.2200e-003**	**0.4624**	**0.1221**	**2.0500e-003**	**0.1241**		**377.8656**	**377.8656**	**0.0112**	**0.0107**	**381.3394**

3.5 Architectural Coating - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	40.7972					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0168		281.8690
Total	**40.8566**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8690**

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	0.1580	0.1030	1.2971	3.6900e-003	0.4602	2.2200e-003	0.4624	0.1221	2.0500e-003	0.1241		377.8656	377.8656	0.0112	0.0107	381.3394
Total	**0.1580**	**0.1030**	**1.2971**	**3.6900e-003**	**0.4602**	**2.2200e-003**	**0.4624**	**0.1221**	**2.0500e-003**	**0.1241**		**377.8656**	**377.8656**	**0.0112**	**0.0107**	**381.3394**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Improve Walkability Design

Improve Destination Accessibility

Increase Transit Accessibility

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	7.0197	7.0982	43.2475	0.0686	6.7107	0.0645	6.7752	1.7905	0.0603	1.8508		7,057.4677	7,057.4677	0.7268	0.5278	7,232.9076
Unmitigated	7.7635	9.1793	56.1774	0.1061	10.8181	0.0942	10.9123	2.8863	0.0882	2.9745		10,924.2943	10,924.2943	0.8636	0.6892	11,151.2786

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Arena	0.00	2,499.91	0.00	420,982	261,143
Hotel	1,463.00	1,433.25	1041.25	2,076,831	1,288,299
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Recreational Swimming Pool	0.00	0.00	0.00		
Total	1,463.00	3,933.16	1,041.25	2,497,813	1,549,442

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
Arena	12.50	4.20	5.40	0.00	81.00	19.00	66	28	6
Hotel	12.50	4.20	5.40	19.40	61.60	19.00	58	38	4
Other Non-Asphalt Surfaces	12.50	4.20	5.40	0.00	0.00	0.00	0	0	0
Parking Lot	12.50	4.20	5.40	0.00	0.00	0.00	0	0	0
Parking Lot	12.50	4.20	5.40	0.00	0.00	0.00	0	0	0
Parking Lot	12.50	4.20	5.40	0.00	0.00	0.00	0	0	0
Parking Lot	12.50	4.20	5.40	0.00	0.00	0.00	0	0	0
Recreational Swimming Pool	12.50	4.20	5.40	33.00	48.00	19.00	52	39	9

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Arena	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Hotel	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Other Non-Asphalt Surfaces	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Parking Lot	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Recreational Swimming Pool	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

Percent of Electricity Use Generated with Renewable Energy

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.3229	2.9351	2.4655	0.0176		0.2231	0.2231		0.2231	0.2231		3,522.160 0	3,522.160 0	0.0675	0.0646	3,543.090 4
NaturalGas Unmitigated	0.3229	2.9351	2.4655	0.0176		0.2231	0.2231		0.2231	0.2231		3,522.160 0	3,522.160 0	0.0675	0.0646	3,543.090 4

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					
Arena	5502.74	0.0593	0.5395	0.4532	3.2400e-003		0.0410	0.0410		0.0410	0.0410		647.3816	647.3816	0.0124	0.0119	651.2286
Hotel	24435.6	0.2635	2.3957	2.0123	0.0144		0.1821	0.1821		0.1821	0.1821		2,874.7784	2,874.7784	0.0551	0.0527	2,891.8618
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
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
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.3229**	**2.9351**	**2.4655**	**0.0176**		**0.2231**	**0.2231**		**0.2231**	**0.2231**		**3,522.1600**	**3,522.1600**	**0.0675**	**0.0646**	**3,543.0904**

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					
Arena	5.50274	0.0593	0.5395	0.4532	3.2400e-003		0.0410	0.0410		0.0410	0.0410		647.3816	647.3816	0.0124	0.0119	651.2286
Hotel	24.4356	0.2635	2.3957	2.0123	0.0144		0.1821	0.1821		0.1821	0.1821		2,874.7784	2,874.7784	0.0551	0.0527	2,891.8618
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
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
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.3229**	**2.9351**	**2.4655**	**0.0176**		**0.2231**	**0.2231**		**0.2231**	**0.2231**		**3,522.1600**	**3,522.1600**	**0.0675**	**0.0646**	**3,543.0904**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	4.7648	2.4000e-004	0.0267	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0572	0.0572	1.5000e-004		0.0609
Unmitigated	4.7648	2.4000e-004	0.0267	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0572	0.0572	1.5000e-004		0.0609

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	0.2794					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.4829					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.4700e-003	2.4000e-004	0.0267	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0572	0.0572	1.5000e-004		0.0609
Total	**4.7648**	**2.4000e-004**	**0.0267**	**0.0000**		**1.0000e-004**	**1.0000e-004**		**1.0000e-004**	**1.0000e-004**		**0.0572**	**0.0572**	**1.5000e-004**		**0.0609**

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	0.2794					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.4829					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.4700e-003	2.4000e-004	0.0267	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0572	0.0572	1.5000e-004		0.0609
Total	**4.7648**	**2.4000e-004**	**0.0267**	**0.0000**		**1.0000e-004**	**1.0000e-004**		**1.0000e-004**	**1.0000e-004**		**0.0572**	**0.0572**	**1.5000e-004**		**0.0609**

7.0 Water Detail

7.1 Mitigation Measures Water

Use Grey Water

Install Low Flow Bathroom Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

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

19-0174 Coachillin Parcels 30 & 31 - Approved Uses

Riverside-Salton Sea County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Heavy Industry	349.45	1000sqft	8.02	349,446.00	0
Other Asphalt Surfaces	1.28	Acre	1.28	55,756.80	0
Other Non-Asphalt Surfaces	3.36	Acre	3.36	146,361.60	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - 5.88ac (parcel 30) + 3.42 ac (parcel 31) =9.3 ac w/ 349,446 sf cultivation bldg envelope & remainder paving prkg/rdwys (~1.28ac). Site area also includes a 3.36 ac retention basin (basin 101 site).

Construction Phase - Construction anticipated to last ~12 months w/ OY 2023. Therefore, modeled as start 1/1/2022 & be completed 1/1/2023. Site is vacant, not demo/site prep & only fine grading needed.

Off-road Equipment - CalEEMod default timing for building construction reduced by ~27%; therefore, ~27% more equipment added.

Off-road Equipment - CalEEMod default timing for building construction reduced by ~27%; therefore, ~27% more equipment added.

Grading - Site anticipated to balance.

Architectural Coating - SCAQMD Rule 1113 architectural coatings 50 g/L VOC buildings & 100 g/L VOC parking lot striping. Greenhouses represented ~24% of total site; therefore, estimated ~265,576 sf greenhouses that will not be painted; interior = 398,364sf & exterior 132,788sf.

Vehicle Trips - Parcels 30 & 31 & Basin 101 = 12.66 ac. 12.66 ac is ~8.8% of total 143.79 ac site. Therefore, per TIA, 304 trips for parcels 30/31/Basin 101. 304 trips/349.446 TSF = 0.87 trips/TSF/day.

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

Consumer Products - SSAB is within SCAQMD jurisdiction; therefore, factor is 2.04 x 10^-5 lbs/SF/day.

Area Coating - SCAQMD Rule 1113 architectural coatings 50 g/L VOC buildings & 100 g/L VOC parking lot striping. Greenhouses represented ~24% of total site; therefore, estimated ~265,576 sf greenhouses that will not be painted; interior = 398,364sf & exterior 132,788sf.

Water And Wastewater - 349.446 TSF is 12.5% of original project total square footage (2,800 TSF). Total project had 187,038,719 gallons/year per WSA. 12.5% of 187,038,719 gallons = ~23,379,839.9 gallons/year.

Sequestration - Parcels 30 & 31 and Basin 101 = 12.66 ac which is ~8.8% of total project acreage (143.79 acres). Total project to plant 966 new trees. 8.8% of 966 = ~85 new trees.

Construction Off-road Equipment Mitigation - Tier 3 equipment to be used during construction.

Mobile Land Use Mitigation - Dwntwn DHS ~4.07 mi N. Palm Springs Amtrak stn ~0.89 mi S. 189 emplys/8.02 ac (349.446 TSF) = ~24 emp/ac. Sidewalks connect offsite. At least 5 intersections/0.25 sq mi.

Mobile Commute Mitigation - At least 25% of employees will be eligible for vanpool and/or shuttle.

Area Mitigation - Per SCAQMD Rule 1113 paints (50g/L) to be used for buildings, 100g/L for parking lots/striping.

Energy Mitigation - Incl: solar farm (+parabolic solar) +wind frm = 66% site's energy. combd heat power[CHP] use of NG. HE LEDs plus daylight harvesting (Solartubes) = ~ 52% lighting enrgy rdxn. Enrgy Star appl instl PRN. CHP =28% exceed 2019 title24.

Water Mitigation - 100% of landscape irrigation from grey water. Low flow faucets/showers/toilets. Water-efficient landscaping to be installed on-site.

Waste Mitigation - AB 939 requires 75% of waste be diverted from landfills by 2020; however, the majority (90%) of solid (plant) waste will be recycled on-site (goes to vermiculture).

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	174,723.00	132,788.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	524,169.00	398,364.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	100
tblAreaCoating	Area_Nonresidential_Exterior	174723	132788
tblAreaCoating	Area_Nonresidential_Interior	524169	398364
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	7.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	300.00	220.00
tblConsumerProducts	ROG_EF	2.14E-05	2.04E-05
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	5.00

tblSequestration	NumberOfNewTrees	0.00	85.00
tblVehicleTrips	ST_TR	6.42	0.87
tblVehicleTrips	SU_TR	5.09	0.87
tblVehicleTrips	WD_TR	3.93	0.87
tblWater	IndoorWaterUseRate	80,810,312.50	23,379,839.90

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	69.0636	38.8842	48.1447	0.0953	9.3709	1.7420	11.0067	3.6981	1.6276	5.2030	0.0000	9,395.7939	9,395.7939	1.9486	0.2677	9,516.6442
2023	64.6938	1.3860	3.1262	6.3800e-003	0.3849	0.0727	0.4576	0.1021	0.0725	0.1746	0.0000	630.0654	630.0654	0.0260	8.7600e-003	633.3248
Maximum	**69.0636**	**38.8842**	**48.1447**	**0.0953**	**9.3709**	**1.7420**	**11.0067**	**3.6981**	**1.6276**	**5.2030**	**0.0000**	**9,395.7939**	**9,395.7939**	**1.9486**	**0.2677**	**9,516.6442**

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	67.1130	34.5983	52.5791	0.0953	3.7567	1.9367	5.0570	1.4693	1.9338	2.7696	0.0000	9,395.7939	9,395.7939	1.9486	0.2677	9,516.6442
2023	64.5616	1.4400	3.1475	6.3800e-003	0.3849	0.0970	0.4818	0.1021	0.0968	0.1989	0.0000	630.0654	630.0654	0.0260	8.7600e-003	633.3248
Maximum	**67.1130**	**34.5983**	**52.5791**	**0.0953**	**3.7567**	**1.9367**	**5.0570**	**1.4693**	**1.9338**	**2.7696**	**0.0000**	**9,395.7939**	**9,395.7939**	**1.9486**	**0.2677**	**9,516.6442**

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	1.56	10.51	-8.69	0.00	57.55	-12.07	51.69	58.65	-19.44	44.80	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	7.5563	3.3000e-004	0.0362	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004		0.0775	0.0775	2.0000e-004		0.0826
Energy	0.3338	3.0345	2.5490	0.0182		0.2306	0.2306		0.2306	0.2306		3,641.4470	3,641.4470	0.0698	0.0668	3,663.0863
Mobile	0.9555	1.2328	9.0937	0.0205	2.0184	0.0158	2.0342	0.5385	0.0148	0.5533		2,107.4793	2,107.4793	0.1032	0.0975	2,139.1240
Total	**8.8456**	**4.2676**	**11.6788**	**0.0387**	**2.0184**	**0.2466**	**2.2650**	**0.5385**	**0.2456**	**0.7841**		**5,749.0038**	**5,749.0038**	**0.1732**	**0.1643**	**5,802.2928**

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	7.5563	3.3000e-004	0.0362	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004		0.0775	0.0775	2.0000e-004		0.0826
Energy	0.2899	2.6351	2.2135	0.0158		0.2003	0.2003		0.2003	0.2003		3,162.0780	3,162.0780	0.0606	0.0580	3,180.8687
Mobile	0.9074	1.1084	8.1134	0.0179	1.7582	0.0139	1.7721	0.4691	0.0130	0.4821		1,842.9403	1,842.9403	0.0942	0.0875	1,871.3682
Total	**8.7535**	**3.7438**	**10.3630**	**0.0337**	**1.7582**	**0.2143**	**1.9725**	**0.4691**	**0.2134**	**0.6825**		**5,005.0958**	**5,005.0958**	**0.1550**	**0.1455**	**5,052.3195**

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	1.04	12.27	11.27	12.84	12.89	13.08	12.91	12.89	13.08	12.95	0.00	12.94	12.94	10.49	11.47	12.93

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	1/1/2022	2/11/2022	5	30	
2	Building Construction	Building Construction	2/12/2022	12/18/2022	5	220	
3	Paving	Paving	11/25/2022	12/22/2022	5	20	
4	Architectural Coating	Architectural Coating	12/3/2022	1/1/2023	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 90

Acres of Paving: 4.64

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 398,364; Non-Residential Outdoor: 132,788; Striped Parking Area: 12,127 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	4	8.00	89	0.20

Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	5	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
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
Grading	8	20.00	0.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	12	232.00	90.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	46.00	0.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.2036	0.0000	9.2036	3.6538	0.0000	3.6538			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**3.6248**	**38.8435**	**29.0415**	**0.0621**	**9.2036**	**1.6349**	**10.8385**	**3.6538**	**1.5041**	**5.1579**		**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

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	0.0678	0.0407	0.6202	1.5300e-003	0.1673	8.6000e-004	0.1682	0.0444	7.9000e-004	0.0452		155.6903	155.6903	4.4200e-003	4.1200e-003	157.0272
Total	**0.0678**	**0.0407**	**0.6202**	**1.5300e-003**	**0.1673**	**8.6000e-004**	**0.1682**	**0.0444**	**7.9000e-004**	**0.0452**		**155.6903**	**155.6903**	**4.4200e-003**	**4.1200e-003**	**157.0272**

3.2 Grading - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.5894	0.0000	3.5894	1.4250	0.0000	1.4250			0.0000			0.0000
Off-Road	1.5231	29.9782	36.7226	0.0621		1.2994	1.2994		1.2994	1.2994	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**1.5231**	**29.9782**	**36.7226**	**0.0621**	**3.5894**	**1.2994**	**4.8888**	**1.4250**	**1.2994**	**2.7244**	**0.0000**	**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

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	0.0678	0.0407	0.6202	1.5300e-003	0.1673	8.6000e-004	0.1682	0.0444	7.9000e-004	0.0452		155.6903	155.6903	4.4200e-003	4.1200e-003	157.0272
Total	**0.0678**	**0.0407**	**0.6202**	**1.5300e-003**	**0.1673**	**8.6000e-004**	**0.1682**	**0.0444**	**7.9000e-004**	**0.0452**		**155.6903**	**155.6903**	**4.4200e-003**	**4.1200e-003**	**157.0272**

3.3 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1081	19.6029	21.4336	0.0339		1.0366	1.0366		0.9705	0.9705		3,229.5326	3,229.5326	0.8303		3,250.2905
Total	**2.1081**	**19.6029**	**21.4336**	**0.0339**		**1.0366**	**1.0366**		**0.9705**	**0.9705**		**3,229.5326**	**3,229.5326**	**0.8303**		**3,250.2905**

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	0.1296	3.2279	1.2315	0.0132	0.4517	0.0432	0.4949	0.1301	0.0413	0.1714		1,396.2903	1,396.2903	0.0153	0.2074	1,458.4882
Worker	0.7864	0.4725	7.1940	0.0178	1.9411	9.9600e-003	1.9510	0.5149	9.1700e-003	0.5240		1,806.0074	1,806.0074	0.0513	0.0477	1,821.5159
Total	**0.9160**	**3.7004**	**8.4255**	**0.0309**	**2.3927**	**0.0532**	**2.4459**	**0.6450**	**0.0505**	**0.6955**		**3,202.2976**	**3,202.2976**	**0.0666**	**0.2552**	**3,280.0041**

3.3 Building Construction - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8445	18.1214	23.1340	0.0339		1.1765	1.1765		1.1765	1.1765	0.0000	3,229.5326	3,229.5326	0.8303		3,250.2905
Total	**0.8445**	**18.1214**	**23.1340**	**0.0339**		**1.1765**	**1.1765**		**1.1765**	**1.1765**	**0.0000**	**3,229.5326**	**3,229.5326**	**0.8303**		**3,250.2905**

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	0.1296	3.2279	1.2315	0.0132	0.4517	0.0432	0.4949	0.1301	0.0413	0.1714		1,396.2903	1,396.2903	0.0153	0.2074	1,458.4882
Worker	0.7864	0.4725	7.1940	0.0178	1.9411	9.9600e-003	1.9510	0.5149	9.1700e-003	0.5240		1,806.0074	1,806.0074	0.0513	0.0477	1,821.5159
Total	**0.9160**	**3.7004**	**8.4255**	**0.0309**	**2.3927**	**0.0532**	**2.4459**	**0.6450**	**0.0505**	**0.6955**		**3,202.2976**	**3,202.2976**	**0.0666**	**0.2552**	**3,280.0041**

3.4 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.1677					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.2705**	**11.1249**	**14.5805**	**0.0228**		**0.5679**	**0.5679**		**0.5225**	**0.5225**		**2,207.6603**	**2,207.6603**	**0.7140**		**2,225.5104**

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	0.0508	0.0306	0.4651	1.1500e-003	0.1255	6.4000e-004	0.1261	0.0333	5.9000e-004	0.0339		116.7677	116.7677	3.3200e-003	3.0900e-003	117.7704
Total	**0.0508**	**0.0306**	**0.4651**	**1.1500e-003**	**0.1255**	**6.4000e-004**	**0.1261**	**0.0333**	**5.9000e-004**	**0.0339**		**116.7677**	**116.7677**	**3.3200e-003**	**3.0900e-003**	**117.7704**

3.4 Paving - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5609	11.2952	17.2957	0.0228		0.6093	0.6093		0.6093	0.6093	0.0000	2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.1677					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.7286**	**11.2952**	**17.2957**	**0.0228**		**0.6093**	**0.6093**		**0.6093**	**0.6093**	**0.0000**	**2,207.6603**	**2,207.6603**	**0.7140**		**2,225.5104**

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	0.0508	0.0306	0.4651	1.1500e-003	0.1255	6.4000e-004	0.1261	0.0333	5.9000e-004	0.0339		116.7677	116.7677	3.3200e-003	3.0900e-003	117.7704
Total	**0.0508**	**0.0306**	**0.4651**	**1.1500e-003**	**0.1255**	**6.4000e-004**	**0.1261**	**0.0333**	**5.9000e-004**	**0.0339**		**116.7677**	**116.7677**	**3.3200e-003**	**3.0900e-003**	**117.7704**

3.5 Architectural Coating - 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					
Archit. Coating	64.3577					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	**64.5622**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.9062**

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	0.1559	0.0937	1.4264	3.5200e-003	0.3849	1.9700e-003	0.3868	0.1021	1.8200e-003	0.1039		358.0877	358.0877	0.0102	9.4700e-003	361.1626
Total	**0.1559**	**0.0937**	**1.4264**	**3.5200e-003**	**0.3849**	**1.9700e-003**	**0.3868**	**0.1021**	**1.8200e-003**	**0.1039**		**358.0877**	**358.0877**	**0.0102**	**9.4700e-003**	**361.1626**

3.5 Architectural Coating - 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					
Archit. Coating	64.3577					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0183		281.9062
Total	**64.4171**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.9062**

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	0.1559	0.0937	1.4264	3.5200e-003	0.3849	1.9700e-003	0.3868	0.1021	1.8200e-003	0.1039		358.0877	358.0877	0.0102	9.4700e-003	361.1626
Total	**0.1559**	**0.0937**	**1.4264**	**3.5200e-003**	**0.3849**	**1.9700e-003**	**0.3868**	**0.1021**	**1.8200e-003**	**0.1039**		**358.0877**	**358.0877**	**0.0102**	**9.4700e-003**	**361.1626**

3.5 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	64.3577					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	**64.5493**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8690**

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	0.1445	0.0830	1.3151	3.4100e-003	0.3849	1.8600e-003	0.3867	0.1021	1.7100e-003	0.1038		348.6173	348.6173	9.1600e-003	8.7600e-003	351.4558
Total	**0.1445**	**0.0830**	**1.3151**	**3.4100e-003**	**0.3849**	**1.8600e-003**	**0.3867**	**0.1021**	**1.7100e-003**	**0.1038**		**348.6173**	**348.6173**	**9.1600e-003**	**8.7600e-003**	**351.4558**

3.5 Architectural Coating - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	64.3577					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0168		281.8690
Total	**64.4171**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8690**

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	0.1445	0.0830	1.3151	3.4100e-003	0.3849	1.8600e-003	0.3867	0.1021	1.7100e-003	0.1038		348.6173	348.6173	9.1600e-003	8.7600e-003	351.4558
Total	**0.1445**	**0.0830**	**1.3151**	**3.4100e-003**	**0.3849**	**1.8600e-003**	**0.3867**	**0.1021**	**1.7100e-003**	**0.1038**		**348.6173**	**348.6173**	**9.1600e-003**	**8.7600e-003**	**351.4558**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Improve Walkability Design

Improve Destination Accessibility

Increase Transit Accessibility

Improve Pedestrian Network

Employee Vanpool/Shuttle

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.9074	1.1084	8.1134	0.0179	1.7582	0.0139	1.7721	0.4691	0.0130	0.4821		1,842.9403	1,842.9403	0.0942	0.0875	1,871.3682
Unmitigated	0.9555	1.2328	9.0937	0.0205	2.0184	0.0158	2.0342	0.5385	0.0148	0.5533		2,107.4793	2,107.4793	0.1032	0.0975	2,139.1240

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Heavy Industry	304.02	304.02	304.02	955,175	832,015
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	304.02	304.02	304.02	955,175	832,015

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
General Heavy Industry	12.50	4.20	5.40	59.00	28.00	13.00	92	5	3
Other Asphalt Surfaces	12.50	4.20	5.40	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	12.50	4.20	5.40	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Heavy Industry	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Other Asphalt Surfaces	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Other Non-Asphalt Surfaces	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Install High Efficiency Lighting

Percent of Electricity Use Generated with Renewable Energy

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.2899	2.6351	2.2135	0.0158		0.2003	0.2003		0.2003	0.2003		3,162.0780	3,162.0780	0.0606	0.0580	3,180.8687
NaturalGas Unmitigated	0.3338	3.0345	2.5490	0.0182		0.2306	0.2306		0.2306	0.2306		3,641.4470	3,641.4470	0.0698	0.0668	3,663.0863

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Heavy Industry	30952.3	0.3338	3.0345	2.5490	0.0182		0.2306	0.2306		0.2306	0.2306		3,641.4470	3,641.4470	0.0698	0.0668	3,663.0863
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.3338**	**3.0345**	**2.5490**	**0.0182**		**0.2306**	**0.2306**		**0.2306**	**0.2306**		**3,641.4470**	**3,641.4470**	**0.0698**	**0.0668**	**3,663.0863**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Heavy Industry	26.8777	0.2899	2.6351	2.2135	0.0158		0.2003	0.2003		0.2003	0.2003		3,162.0780	3,162.0780	0.0606	0.0580	3,180.8687
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.2899**	**2.6351**	**2.2135**	**0.0158**		**0.2003**	**0.2003**		**0.2003**	**0.2003**		**3,162.0780**	**3,162.0780**	**0.0606**	**0.0580**	**3,180.8687**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	7.5563	3.3000e-004	0.0362	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004		0.0775	0.0775	2.0000e-004		0.0826
Unmitigated	7.5563	3.3000e-004	0.0362	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004		0.0775	0.0775	2.0000e-004		0.0826

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	0.3526					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	7.2003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.3500e-003	3.3000e-004	0.0362	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004		0.0775	0.0775	2.0000e-004		0.0826
Total	**7.5563**	**3.3000e-004**	**0.0362**	**0.0000**		**1.3000e-004**	**1.3000e-004**		**1.3000e-004**	**1.3000e-004**		**0.0775**	**0.0775**	**2.0000e-004**		**0.0826**

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	0.3526					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	7.2003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.3500e-003	3.3000e-004	0.0362	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004		0.0775	0.0775	2.0000e-004		0.0826
Total	**7.5563**	**3.3000e-004**	**0.0362**	**0.0000**		**1.3000e-004**	**1.3000e-004**		**1.3000e-004**	**1.3000e-004**		**0.0775**	**0.0775**	**2.0000e-004**		**0.0826**

7.0 Water Detail

7.1 Mitigation Measures Water

Use Grey Water

Install Low Flow Bathroom Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

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

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

19-0174 Coachillin Parcels 30 & 31 - Approved Uses

Riverside-Salton Sea County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Heavy Industry	349.45	1000sqft	8.02	349,446.00	0
Other Asphalt Surfaces	1.28	Acre	1.28	55,756.80	0
Other Non-Asphalt Surfaces	3.36	Acre	3.36	146,361.60	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - 5.88ac (parcel 30) + 3.42 ac (parcel 31) =9.3 ac w/ 349,446 sf cultivation bldg envelope & remainder paving prkg/rdwys (~1.28ac). Site area also includes a 3.36 ac retention basin (basin 101 site).

Construction Phase - Construction anticipated to last ~12 months w/ OY 2023. Therefore, modeled as start 1/1/2022 & be completed 1/1/2023. Site is vacant, not demo/site prep & only fine grading needed.

Off-road Equipment - CalEEMod default timing for building construction reduced by ~27%; therefore, ~27% more equipment added.

Off-road Equipment - CalEEMod default timing for building construction reduced by ~27%; therefore, ~27% more equipment added.

Grading - Site anticipated to balance.

Architectural Coating - SCAQMD Rule 1113 architectural coatings 50 g/L VOC buildings & 100 g/L VOC parking lot striping. Greenhouses represented ~24% of total site; therefore, estimated ~265,576 sf greenhouses that will not be painted; interior = 398,364sf & exterior 132,788sf.

Vehicle Trips - Parcels 30 & 31 & Basin 101 = 12.66 ac. 12.66 ac is ~8.8% of total 143.79 ac site. Therefore, per TIA, 304 trips for parcels 30/31/Basin 101. 304 trips/349.446 TSF = 0.87 trips/TSF/day.

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

Consumer Products - SSAB is within SCAQMD jurisdiction; therefore, factor is 2.04 x 10^-5 lbs/SF/day.

Area Coating - SCAQMD Rule 1113 architectural coatings 50 g/L VOC buildings & 100 g/L VOC parking lot striping. Greenhouses represented ~24% of total site; therefore, estimated ~265,576 sf greenhouses that will not be painted; interior = 398,364sf & exterior 132,788sf.

Water And Wastewater - 349.446 TSF is 12.5% of original project total square footage (2,800 TSF). Total project had 187,038,719 gallons/year per WSA. 12.5% of 187,038,719 gallons = ~23,379,839.9 gallons/year.

Sequestration - Parcels 30 & 31 and Basin 101 = 12.66 ac which is ~8.8% of total project acreage (143.79 acres). Total project to plant 966 new trees. 8.8% of 966 = ~85 new trees.

Construction Off-road Equipment Mitigation - Tier 3 equipment to be used during construction.

Mobile Land Use Mitigation - Dwntwn DHS ~4.07 mi N. Palm Springs Amtrak stn ~0.89 mi S. 189 emplys/8.02 ac (349.446 TSF) = ~24 emp/ac. Sidewalks connect offsite. At least 5 intersections/0.25 sq mi.

Mobile Commute Mitigation - At least 25% of employees will be eligible for vanpool and/or shuttle.

Area Mitigation - Per SCAQMD Rule 1113 paints (50g/L) to be used for buildings, 100g/L for parking lots/striping.

Energy Mitigation - Incl: solar farm (+parabolic solar) +wind frm = 66% site's energy. combd heat power[CHP] use of NG. HE LEDs plus daylight harvesting (Solartubes) = ~ 52% lighting enrgy rdxn. Enrgy Star appl instl PRN. CHP =28% exceed 2019 title24.

Water Mitigation - 100% of landscape irrigation from grey water. Low flow faucets/showers/toilets. Water-efficient landscaping to be installed on-site.

Waste Mitigation - AB 939 requires 75% of waste be diverted from landfills by 2020; however, the majority (90%) of solid (plant) waste will be recycled on-site (goes to vermiculture).

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	174,723.00	132,788.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	524,169.00	398,364.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	100
tblAreaCoating	Area_Nonresidential_Exterior	174723	132788
tblAreaCoating	Area_Nonresidential_Interior	524169	398364
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	7.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	300.00	220.00
tblConsumerProducts	ROG_EF	2.14E-05	2.04E-05
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	5.00

tblSequestration	NumberOfNewTrees	0.00	85.00
tblVehicleTrips	ST_TR	6.42	0.87
tblVehicleTrips	SU_TR	5.09	0.87
tblVehicleTrips	WD_TR	3.93	0.87
tblWater	IndoorWaterUseRate	80,810,312.50	23,379,839.90

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	68.9703	38.8858	46.5865	0.0932	9.3709	1.7422	11.0067	3.6981	1.6278	5.2030	0.0000	9,183.833 3	9,183.833 3	1.9487	0.2696	9,305.270 4
2023	64.6815	1.3892	2.8960	6.0600e-003	0.3849	0.0727	0.4576	0.1021	0.0725	0.1746	0.0000	597.4811	597.4811	0.0262	8.9700e-003	600.8075
Maximum	**68.9703**	**38.8858**	**46.5865**	**0.0932**	**9.3709**	**1.7422**	**11.0067**	**3.6981**	**1.6278**	**5.2030**	**0.0000**	**9,183.833 3**	**9,183.833 3**	**1.9487**	**0.2696**	**9,305.270 4**

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	67.0197	34.7947	51.0209	0.0932	3.7567	1.9369	5.0570	1.4693	1.9340	2.7696	0.0000	9,183.833 3	9,183.833 3	1.9487	0.2696	9,305.270 4
2023	64.5493	1.4432	2.9173	6.0600e-003	0.3849	0.0970	0.4818	0.1021	0.0968	0.1989	0.0000	597.4811	597.4811	0.0262	8.9700e-003	600.8075
Maximum	**67.0197**	**34.7947**	**51.0209**	**0.0932**	**3.7567**	**1.9369**	**5.0570**	**1.4693**	**1.9340**	**2.7696**	**0.0000**	**9,183.833 3**	**9,183.833 3**	**1.9487**	**0.2696**	**9,305.270 4**

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	1.56	10.02	-9.00	0.00	57.55	-12.07	51.69	58.65	-19.44	44.80	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	7.5563	3.3000e-004	0.0362	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004		0.0775	0.0775	2.0000e-004		0.0826
Energy	0.3338	3.0345	2.5490	0.0182		0.2306	0.2306		0.2306	0.2306		3,641.4470	3,641.4470	0.0698	0.0668	3,663.0863
Mobile	0.8108	1.3064	8.0510	0.0190	2.0184	0.0158	2.0342	0.5385	0.0148	0.5533		1,956.9317	1,956.9317	0.1058	0.0996	1,989.2593
Total	**8.7009**	**4.3412**	**10.6361**	**0.0372**	**2.0184**	**0.2466**	**2.2650**	**0.5385**	**0.2456**	**0.7841**		**5,598.4561**	**5,598.4561**	**0.1758**	**0.1664**	**5,652.4281**

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	7.5563	3.3000e-004	0.0362	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004		0.0775	0.0775	2.0000e-004		0.0826
Energy	0.2899	2.6351	2.2135	0.0158		0.2003	0.2003		0.2003	0.2003		3,162.0780	3,162.0780	0.0606	0.0580	3,180.8687
Mobile	0.7637	1.1745	7.2317	0.0166	1.7582	0.0139	1.7721	0.4691	0.0131	0.4821		1,711.9226	1,711.9226	0.0972	0.0894	1,740.9843
Total	**8.6098**	**3.8099**	**9.4813**	**0.0325**	**1.7582**	**0.2143**	**1.9725**	**0.4691**	**0.2135**	**0.6825**		**4,874.0781**	**4,874.0781**	**0.1580**	**0.1473**	**4,921.9355**

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	1.05	12.24	10.86	12.84	12.89	13.08	12.91	12.89	13.08	12.95	0.00	12.94	12.94	10.15	11.43	12.92

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	1/1/2022	2/11/2022	5	30	
2	Building Construction	Building Construction	2/12/2022	12/18/2022	5	220	
3	Paving	Paving	11/25/2022	12/22/2022	5	20	
4	Architectural Coating	Architectural Coating	12/3/2022	1/1/2023	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 90

Acres of Paving: 4.64

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 398,364; Non-Residential Outdoor: 132,788; Striped Parking Area: 12,127 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	4	8.00	89	0.20

Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	5	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
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
Grading	8	20.00	0.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	12	232.00	90.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	46.00	0.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.2036	0.0000	9.2036	3.6538	0.0000	3.6538			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**3.6248**	**38.8435**	**29.0415**	**0.0621**	**9.2036**	**1.6349**	**10.8385**	**3.6538**	**1.5041**	**5.1579**		**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

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	0.0619	0.0423	0.5103	1.3900e-003	0.1673	8.6000e-004	0.1682	0.0444	7.9000e-004	0.0452		141.0926	141.0926	4.4900e-003	4.2100e-003	142.4610
Total	**0.0619**	**0.0423**	**0.5103**	**1.3900e-003**	**0.1673**	**8.6000e-004**	**0.1682**	**0.0444**	**7.9000e-004**	**0.0452**		**141.0926**	**141.0926**	**4.4900e-003**	**4.2100e-003**	**142.4610**

3.2 Grading - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.5894	0.0000	3.5894	1.4250	0.0000	1.4250			0.0000			0.0000
Off-Road	1.5231	29.9782	36.7226	0.0621		1.2994	1.2994		1.2994	1.2994	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**1.5231**	**29.9782**	**36.7226**	**0.0621**	**3.5894**	**1.2994**	**4.8888**	**1.4250**	**1.2994**	**2.7244**	**0.0000**	**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

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	0.0619	0.0423	0.5103	1.3900e-003	0.1673	8.6000e-004	0.1682	0.0444	7.9000e-004	0.0452		141.0926	141.0926	4.4900e-003	4.2100e-003	142.4610
Total	**0.0619**	**0.0423**	**0.5103**	**1.3900e-003**	**0.1673**	**8.6000e-004**	**0.1682**	**0.0444**	**7.9000e-004**	**0.0452**		**141.0926**	**141.0926**	**4.4900e-003**	**4.2100e-003**	**142.4610**

3.3 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1081	19.6029	21.4336	0.0339		1.0366	1.0366		0.9705	0.9705		3,229.5326	3,229.5326	0.8303		3,250.2905
Total	**2.1081**	**19.6029**	**21.4336**	**0.0339**		**1.0366**	**1.0366**		**0.9705**	**0.9705**		**3,229.5326**	**3,229.5326**	**0.8303**		**3,250.2905**

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	0.1233	3.4015	1.2831	0.0132	0.4517	0.0434	0.4950	0.1301	0.0415	0.1716		1,398.1854	1,398.1854	0.0150	0.2079	1,460.5098
Worker	0.7176	0.4905	5.9194	0.0161	1.9411	9.9600e-003	1.9510	0.5149	9.1700e-003	0.5240		1,636.6745	1,636.6745	0.0521	0.0489	1,652.5476
Total	**0.8408**	**3.8921**	**7.2025**	**0.0293**	**2.3927**	**0.0533**	**2.4460**	**0.6450**	**0.0506**	**0.6956**		**3,034.8599**	**3,034.8599**	**0.0672**	**0.2568**	**3,113.0573**

3.3 Building Construction - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8445	18.1214	23.1340	0.0339		1.1765	1.1765		1.1765	1.1765	0.0000	3,229.5326	3,229.5326	0.8303		3,250.2905
Total	**0.8445**	**18.1214**	**23.1340**	**0.0339**		**1.1765**	**1.1765**		**1.1765**	**1.1765**	**0.0000**	**3,229.5326**	**3,229.5326**	**0.8303**		**3,250.2905**

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	0.1233	3.4015	1.2831	0.0132	0.4517	0.0434	0.4950	0.1301	0.0415	0.1716		1,398.1854	1,398.1854	0.0150	0.2079	1,460.5098
Worker	0.7176	0.4905	5.9194	0.0161	1.9411	9.9600e-003	1.9510	0.5149	9.1700e-003	0.5240		1,636.6745	1,636.6745	0.0521	0.0489	1,652.5476
Total	**0.8408**	**3.8921**	**7.2025**	**0.0293**	**2.3927**	**0.0533**	**2.4460**	**0.6450**	**0.0506**	**0.6956**		**3,034.8599**	**3,034.8599**	**0.0672**	**0.2568**	**3,113.0573**

3.4 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.1677					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.2705**	**11.1249**	**14.5805**	**0.0228**		**0.5679**	**0.5679**		**0.5225**	**0.5225**		**2,207.6603**	**2,207.6603**	**0.7140**		**2,225.5104**

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	0.0464	0.0317	0.3827	1.0400e-003	0.1255	6.4000e-004	0.1261	0.0333	5.9000e-004	0.0339		105.8195	105.8195	3.3700e-003	3.1600e-003	106.8458
Total	**0.0464**	**0.0317**	**0.3827**	**1.0400e-003**	**0.1255**	**6.4000e-004**	**0.1261**	**0.0333**	**5.9000e-004**	**0.0339**		**105.8195**	**105.8195**	**3.3700e-003**	**3.1600e-003**	**106.8458**

3.4 Paving - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5609	11.2952	17.2957	0.0228		0.6093	0.6093		0.6093	0.6093	0.0000	2,207.660 3	2,207.660 3	0.7140		2,225.510 4
Paving	0.1677					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.7286**	**11.2952**	**17.2957**	**0.0228**		**0.6093**	**0.6093**		**0.6093**	**0.6093**	**0.0000**	**2,207.660 3**	**2,207.660 3**	**0.7140**		**2,225.510 4**

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	0.0464	0.0317	0.3827	1.0400e-003	0.1255	6.4000e-004	0.1261	0.0333	5.9000e-004	0.0339		105.8195	105.8195	3.3700e-003	3.1600e-003	106.8458
Total	**0.0464**	**0.0317**	**0.3827**	**1.0400e-003**	**0.1255**	**6.4000e-004**	**0.1261**	**0.0333**	**5.9000e-004**	**0.0339**		**105.8195**	**105.8195**	**3.3700e-003**	**3.1600e-003**	**106.8458**

3.5 Architectural Coating - 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					
Archit. Coating	64.3577					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	**64.5622**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.9062**

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	0.1423	0.0973	1.1737	3.1900e-003	0.3849	1.9700e-003	0.3868	0.1021	1.8200e-003	0.1039		324.5131	324.5131	0.0103	9.6900e-003	327.6603
Total	**0.1423**	**0.0973**	**1.1737**	**3.1900e-003**	**0.3849**	**1.9700e-003**	**0.3868**	**0.1021**	**1.8200e-003**	**0.1039**		**324.5131**	**324.5131**	**0.0103**	**9.6900e-003**	**327.6603**

3.5 Architectural Coating - 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					
Archit. Coating	64.3577					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0183		281.9062
Total	**64.4171**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.9062**

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	0.1423	0.0973	1.1737	3.1900e-003	0.3849	1.9700e-003	0.3868	0.1021	1.8200e-003	0.1039		324.5131	324.5131	0.0103	9.6900e-003	327.6603
Total	**0.1423**	**0.0973**	**1.1737**	**3.1900e-003**	**0.3849**	**1.9700e-003**	**0.3868**	**0.1021**	**1.8200e-003**	**0.1039**		**324.5131**	**324.5131**	**0.0103**	**9.6900e-003**	**327.6603**

3.5 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	64.3577					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	**64.5493**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8690**

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	0.1322	0.0862	1.0849	3.0900e-003	0.3849	1.8600e-003	0.3867	0.1021	1.7100e-003	0.1038		316.0330	316.0330	9.3400e-003	8.9700e-003	318.9384
Total	**0.1322**	**0.0862**	**1.0849**	**3.0900e-003**	**0.3849**	**1.8600e-003**	**0.3867**	**0.1021**	**1.7100e-003**	**0.1038**		**316.0330**	**316.0330**	**9.3400e-003**	**8.9700e-003**	**318.9384**

3.5 Architectural Coating - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	64.3577					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0168		281.8690
Total	**64.4171**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8690**

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	0.1322	0.0862	1.0849	3.0900e-003	0.3849	1.8600e-003	0.3867	0.1021	1.7100e-003	0.1038		316.0330	316.0330	9.3400e-003	8.9700e-003	318.9384
Total	**0.1322**	**0.0862**	**1.0849**	**3.0900e-003**	**0.3849**	**1.8600e-003**	**0.3867**	**0.1021**	**1.7100e-003**	**0.1038**		**316.0330**	**316.0330**	**9.3400e-003**	**8.9700e-003**	**318.9384**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Improve Walkability Design

Improve Destination Accessibility

Increase Transit Accessibility

Improve Pedestrian Network

Employee Vanpool/Shuttle

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.7637	1.1745	7.2317	0.0166	1.7582	0.0139	1.7721	0.4691	0.0131	0.4821		1,711.9226	1,711.9226	0.0972	0.0894	1,740.9843
Unmitigated	0.8108	1.3064	8.0510	0.0190	2.0184	0.0158	2.0342	0.5385	0.0148	0.5533		1,956.9317	1,956.9317	0.1058	0.0996	1,989.2593

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Heavy Industry	304.02	304.02	304.02	955,175	832,015
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	304.02	304.02	304.02	955,175	832,015

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
General Heavy Industry	12.50	4.20	5.40	59.00	28.00	13.00	92	5	3
Other Asphalt Surfaces	12.50	4.20	5.40	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	12.50	4.20	5.40	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Heavy Industry	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Other Asphalt Surfaces	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Other Non-Asphalt Surfaces	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Install High Efficiency Lighting

Percent of Electricity Use Generated with Renewable Energy

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.2899	2.6351	2.2135	0.0158		0.2003	0.2003		0.2003	0.2003		3,162.0780	3,162.0780	0.0606	0.0580	3,180.8687
NaturalGas Unmitigated	0.3338	3.0345	2.5490	0.0182		0.2306	0.2306		0.2306	0.2306		3,641.4470	3,641.4470	0.0698	0.0668	3,663.0863

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Heavy Industry	30952.3	0.3338	3.0345	2.5490	0.0182		0.2306	0.2306		0.2306	0.2306		3,641.4470	3,641.4470	0.0698	0.0668	3,663.0863
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.3338**	**3.0345**	**2.5490**	**0.0182**		**0.2306**	**0.2306**		**0.2306**	**0.2306**		**3,641.4470**	**3,641.4470**	**0.0698**	**0.0668**	**3,663.0863**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Heavy Industry	26.8777	0.2899	2.6351	2.2135	0.0158		0.2003	0.2003		0.2003	0.2003		3,162.0780	3,162.0780	0.0606	0.0580	3,180.8687
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.2899**	**2.6351**	**2.2135**	**0.0158**		**0.2003**	**0.2003**		**0.2003**	**0.2003**		**3,162.0780**	**3,162.0780**	**0.0606**	**0.0580**	**3,180.8687**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	7.5563	3.3000e-004	0.0362	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004		0.0775	0.0775	2.0000e-004		0.0826
Unmitigated	7.5563	3.3000e-004	0.0362	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004		0.0775	0.0775	2.0000e-004		0.0826

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	0.3526					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	7.2003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.3500e-003	3.3000e-004	0.0362	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004		0.0775	0.0775	2.0000e-004		0.0826
Total	**7.5563**	**3.3000e-004**	**0.0362**	**0.0000**		**1.3000e-004**	**1.3000e-004**		**1.3000e-004**	**1.3000e-004**		**0.0775**	**0.0775**	**2.0000e-004**		**0.0826**

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	0.3526					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	7.2003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.3500e-003	3.3000e-004	0.0362	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004		0.0775	0.0775	2.0000e-004		0.0826
Total	**7.5563**	**3.3000e-004**	**0.0362**	**0.0000**		**1.3000e-004**	**1.3000e-004**		**1.3000e-004**	**1.3000e-004**		**0.0775**	**0.0775**	**2.0000e-004**		**0.0826**

7.0 Water Detail

7.1 Mitigation Measures Water

Use Grey Water

Install Low Flow Bathroom Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

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

19-0174 Coachillin Parcels 30 & 31

Riverside-Salton Sea County, Summer

Includes reduction in mobile sources for 25% participation in Amphitheater shuttle

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	7.05	Acre	7.05	307,098.00	0
Parking Lot	10.00	Space	0.09	4,000.00	0
Parking Lot	2.94	Acre	2.94	128,066.40	0
Arena	62.13	1000sqft	1.43	62,125.00	0
Hotel	175.00	Room	1.06	150,000.00	0
Recreational Swimming Pool	4.00	1000sqft	0.09	4,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - P30 5.88ac w/ 175rm hotel(150TSF & 46,216sf ftprnt), ~4TSF pool, ~50% prkng(2.94ac), & rmdnr lndscpng(1.79ac); P31/Basin101 6.78ac w/ 62,125sf amphitheater(w/460sf rr & 5,660sf rest), 4.15ac hrdscpe/temp prkng, 10spc prkng, & rmndr lndscpng(1.11ac)

Construction Phase - Construction anticipated to last ~12 months w/ OY 2023. Therefore, modeled as start 1/1/2022 & be completed 1/1/2023. Site is vacant, not demo/site prep & only fine grading needed.

Off-road Equipment - CalEEMod default timing for building construction reduced by ~27%; therefore, ~27% more equipment added.

Grading - Site anticipated to balance.

Architectural Coating - SCAQMD Rule 1113 architectural coatings are 50 g/L VOC or less buildings & 100 g/L VOC parking lot striping. Parking lot painting 6% of 40,000sf +128,066sf = 7,924sf.

Vehicle Trips - Per TIA, hotel 8.36 trips/room weekdays & 8.19 trips/room saturdays (default sunday rate) & 1,875 trips/day amphitheater (w/ event and 25% shuttle use)/62.125 TSF = 30.18 trips/TSF. Hotel pool no additional trips.

Consumer Products - SSAB is within SCAQMD jurisdiction; therefore, factor is 2.04 x 10^-5 lbs/SF/day.

Area Coating - Per SCAQMD Rule 1113 architectural coatings are 50 g/L VOC or less for buildings and 100g/L VOC for parking lots/striping. Parking lot striping 6% of 4,000 + 128,066 = ~7,924 sf.

Sequestration - Parcels 30 & 31 and Basin 101 = 12.66 ac which is ~8.8% of total project acreage (143.79 acres). Total project to plant 966 new trees. 8.8% of 966 = ~85 new trees.

Construction Off-road Equipment Mitigation - Tier 3 equipment to be used during construction.

Mobile Land Use Mitigation - Dwntwn DHS ~4.07mi N. Palm Springs Amtrak stn ~0.89mi S. Sidewalks on/off-site. 1emp/500sf com tourist =212,125sf/500=424 emp/2.49 job ac=170 emp/job acre. At least 5 intersections/0.25 sq mi.

Area Mitigation - Per SCAQMD Rule 1113 paints (50g/L) to be used for buildings, 100g/L for parking lots/striping.

Energy Mitigation - Per applicant, wind and solar energy production to supply ~40% of the site's total energy needs. High-efficiency lighting at least ~34% more efficient than standard. Energy Star appliances.

Water Mitigation - 100% of landscape irrigation from grey water. Low flow faucets/showers/toilets. Water-efficient landscaping to be installed on-site.

Waste Mitigation - AB 341 requires at least 75% of waste be diverted from landfills, 75% by 2020.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Parking	26,350.00	7,924.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	100
tblAreaCoating	Area_Parking	26350	7924
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	7.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	20.00	25.00
tblConstructionPhase	NumDays	300.00	220.00
tblConsumerProducts	ROG_EF	2.14E-05	2.04E-05
tblLandUse	LandUseSquareFeet	62,130.00	62,125.00
tblLandUse	LandUseSquareFeet	254,100.00	150,000.00
tblLandUse	LotAcreage	19.97	1.43

tblLandUse	LotAcreage	5.83	1.06
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	5.00
tblSequestration	NumberOfNewTrees	0.00	85.00
tblVehicleTrips	ST_TR	10.71	30.18
tblVehicleTrips	ST_TR	9.10	0.00
tblVehicleTrips	SU_TR	10.71	0.00
tblVehicleTrips	SU_TR	13.60	0.00
tblVehicleTrips	WD_TR	10.71	0.00
tblVehicleTrips	WD_TR	28.82	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	45.9331	38.8842	49.9897	0.1017	9.3709	1.7524	11.0067	3.6981	1.6375	5.2030	0.0000	10,064.3324	10,064.3324	1.9486	0.3176	10,200.4072
2023	41.1616	1.4023	3.3835	7.0400e-003	0.4602	0.0730	0.5332	0.1221	0.0729	0.1949	0.0000	698.2731	698.2731	0.0278	0.0105	702.0879
Maximum	**45.9331**	**38.8842**	**49.9897**	**0.1017**	**9.3709**	**1.7524**	**11.0067**	**3.6981**	**1.6375**	**5.2030**	**0.0000**	**10,064.3324**	**10,064.3324**	**1.9486**	**0.3176**	**10,200.4072**

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	43.9825	35.3139	54.4242	0.1017	3.7567	1.9471	5.3706	1.4693	1.9437	2.8640	0.0000	10,064.3324	10,064.3324	1.9486	0.3176	10,200.4072
2023	41.0293	1.4563	3.4048	7.0400e-003	0.4602	0.0973	0.5575	0.1221	0.0971	0.2192	0.0000	698.2731	698.2731	0.0278	0.0105	702.0879
Maximum	**43.9825**	**35.3139**	**54.4242**	**0.1017**	**3.7567**	**1.9471**	**5.3706**	**1.4693**	**1.9437**	**2.8640**	**0.0000**	**10,064.3324**	**10,064.3324**	**1.9486**	**0.3176**	**10,200.4072**

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	2.39	8.73	-8.35	0.00	57.11	-12.00	48.63	58.34	-19.32	42.88	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	4.7648	2.4000e-004	0.0267	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0572	0.0572	1.5000e-004		0.0609
Energy	0.3229	2.9351	2.4655	0.0176		0.2231	0.2231		0.2231	0.2231		3,522.1600	3,522.1600	0.0675	0.0646	3,543.0904
Mobile	8.1049	7.3714	51.2578	0.0975	9.2617	0.0803	9.3420	2.4711	0.0751	2.5462		10,027.3513	10,027.3513	0.6874	0.5732	10,215.3625
Total	**13.1926**	**10.3068**	**53.7499**	**0.1151**	**9.2617**	**0.3035**	**9.5652**	**2.4711**	**0.2983**	**2.7694**		**13,549.5684**	**13,549.5684**	**0.7550**	**0.6378**	**13,758.5138**

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	4.7648	2.4000e-004	0.0267	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0572	0.0572	1.5000e-004		0.0609
Energy	0.3229	2.9351	2.4655	0.0176		0.2231	0.2231		0.2231	0.2231		3,522.1600	3,522.1600	0.0675	0.0646	3,543.0904
Mobile	7.4543	5.6910	38.0126	0.0627	5.7452	0.0549	5.8001	1.5329	0.0513	1.5842		6,452.9599	6,452.9599	0.5660	0.4376	6,597.5078
Total	**12.5420**	**8.6264**	**40.5048**	**0.0803**	**5.7452**	**0.2781**	**6.0233**	**1.5329**	**0.2745**	**1.8073**		**9,975.1770**	**9,975.1770**	**0.6336**	**0.5022**	**10,140.6591**

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**4.93**	**16.30**	**24.64**	**30.20**	**37.97**	**8.37**	**37.03**	**37.97**	**7.99**	**34.74**	**0.00**	**26.38**	**26.38**	**16.08**	**21.27**	**26.30**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	1/1/2022	2/11/2022	5	30	
2	Building Construction	Building Construction	2/12/2022	12/18/2022	5	220	
3	Paving	Paving	11/25/2022	12/22/2022	5	20	
4	Architectural Coating	Architectural Coating	11/28/2022	1/1/2023	5	25	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 90

Acres of Paving: 10.08

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 318,188; Non-Residential Outdoor: 106,063; Striped Parking Area: 7,924 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	4	8.00	89	0.20

Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	5	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
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
Grading	8	20.00	0.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	12	275.00	107.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	55.00	0.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.2036	0.0000	9.2036	3.6538	0.0000	3.6538			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**3.6248**	**38.8435**	**29.0415**	**0.0621**	**9.2036**	**1.6349**	**10.8385**	**3.6538**	**1.5041**	**5.1579**		**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

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	0.0678	0.0407	0.6202	1.5300e-003	0.1673	8.6000e-004	0.1682	0.0444	7.9000e-004	0.0452		155.6903	155.6903	4.4200e-003	4.1200e-003	157.0272
Total	**0.0678**	**0.0407**	**0.6202**	**1.5300e-003**	**0.1673**	**8.6000e-004**	**0.1682**	**0.0444**	**7.9000e-004**	**0.0452**		**155.6903**	**155.6903**	**4.4200e-003**	**4.1200e-003**	**157.0272**

3.2 Grading - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.5894	0.0000	3.5894	1.4250	0.0000	1.4250			0.0000			0.0000
Off-Road	1.5231	29.9782	36.7226	0.0621		1.2994	1.2994		1.2994	1.2994	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**1.5231**	**29.9782**	**36.7226**	**0.0621**	**3.5894**	**1.2994**	**4.8888**	**1.4250**	**1.2994**	**2.7244**	**0.0000**	**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

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	0.0678	0.0407	0.6202	1.5300e-003	0.1673	8.6000e-004	0.1682	0.0444	7.9000e-004	0.0452		155.6903	155.6903	4.4200e-003	4.1200e-003	157.0272
Total	**0.0678**	**0.0407**	**0.6202**	**1.5300e-003**	**0.1673**	**8.6000e-004**	**0.1682**	**0.0444**	**7.9000e-004**	**0.0452**		**155.6903**	**155.6903**	**4.4200e-003**	**4.1200e-003**	**157.0272**

3.3 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1081	19.6029	21.4336	0.0339		1.0366	1.0366		0.9705	0.9705		3,229.5326	3,229.5326	0.8303		3,250.2905
Total	**2.1081**	**19.6029**	**21.4336**	**0.0339**		**1.0366**	**1.0366**		**0.9705**	**0.9705**		**3,229.5326**	**3,229.5326**	**0.8303**		**3,250.2905**

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	0.1541	3.8377	1.4641	0.0157	0.5370	0.0514	0.5883	0.1547	0.0491	0.2038		1,660.0340	1,660.0340	0.0182	0.2466	1,733.9804
Worker	0.9321	0.5601	8.5274	0.0210	2.3008	0.0118	2.3127	0.6103	0.0109	0.6212		2,140.7415	2,140.7415	0.0608	0.0566	2,159.1244
Total	**1.0863**	**4.3977**	**9.9915**	**0.0367**	**2.8378**	**0.0632**	**2.9010**	**0.7650**	**0.0600**	**0.8250**		**3,800.7755**	**3,800.7755**	**0.0790**	**0.3032**	**3,893.1049**

3.3 Building Construction - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8445	18.1214	23.1340	0.0339		1.1765	1.1765		1.1765	1.1765	0.0000	3,229.5326	3,229.5326	0.8303		3,250.2905
Total	**0.8445**	**18.1214**	**23.1340**	**0.0339**		**1.1765**	**1.1765**		**1.1765**	**1.1765**	**0.0000**	**3,229.5326**	**3,229.5326**	**0.8303**		**3,250.2905**

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	0.1541	3.8377	1.4641	0.0157	0.5370	0.0514	0.5883	0.1547	0.0491	0.2038		1,660.0340	1,660.0340	0.0182	0.2466	1,733.9804
Worker	0.9321	0.5601	8.5274	0.0210	2.3008	0.0118	2.3127	0.6103	0.0109	0.6212		2,140.7415	2,140.7415	0.0608	0.0566	2,159.1244
Total	**1.0863**	**4.3977**	**9.9915**	**0.0367**	**2.8378**	**0.0632**	**2.9010**	**0.7650**	**0.0600**	**0.8250**		**3,800.7755**	**3,800.7755**	**0.0790**	**0.3032**	**3,893.1049**

3.4 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.3969					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.4998**	**11.1249**	**14.5805**	**0.0228**		**0.5679**	**0.5679**		**0.5225**	**0.5225**		**2,207.6603**	**2,207.6603**	**0.7140**		**2,225.5104**

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	0.0508	0.0306	0.4651	1.1500e-003	0.1255	6.4000e-004	0.1261	0.0333	5.9000e-004	0.0339		116.7677	116.7677	3.3200e-003	3.0900e-003	117.7704
Total	**0.0508**	**0.0306**	**0.4651**	**1.1500e-003**	**0.1255**	**6.4000e-004**	**0.1261**	**0.0333**	**5.9000e-004**	**0.0339**		**116.7677**	**116.7677**	**3.3200e-003**	**3.0900e-003**	**117.7704**

3.4 Paving - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5609	11.2952	17.2957	0.0228		0.6093	0.6093		0.6093	0.6093	0.0000	2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.3969					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9579**	**11.2952**	**17.2957**	**0.0228**		**0.6093**	**0.6093**		**0.6093**	**0.6093**	**0.0000**	**2,207.6603**	**2,207.6603**	**0.7140**		**2,225.5104**

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	0.0508	0.0306	0.4651	1.1500e-003	0.1255	6.4000e-004	0.1261	0.0333	5.9000e-004	0.0339		116.7677	116.7677	3.3200e-003	3.0900e-003	117.7704
Total	**0.0508**	**0.0306**	**0.4651**	**1.1500e-003**	**0.1255**	**6.4000e-004**	**0.1261**	**0.0333**	**5.9000e-004**	**0.0339**		**116.7677**	**116.7677**	**3.3200e-003**	**3.0900e-003**	**117.7704**

3.5 Architectural Coating - 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					
Archit. Coating	40.7972					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	**41.0017**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.9062**

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	0.1864	0.1120	1.7055	4.2100e-003	0.4602	2.3600e-003	0.4625	0.1221	2.1700e-003	0.1242		428.1483	428.1483	0.0122	0.0113	431.8249
Total	**0.1864**	**0.1120**	**1.7055**	**4.2100e-003**	**0.4602**	**2.3600e-003**	**0.4625**	**0.1221**	**2.1700e-003**	**0.1242**		**428.1483**	**428.1483**	**0.0122**	**0.0113**	**431.8249**

3.5 Architectural Coating - 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					
Archit. Coating	40.7972					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0183		281.9062
Total	**40.8566**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.9062**

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	0.1864	0.1120	1.7055	4.2100e-003	0.4602	2.3600e-003	0.4625	0.1221	2.1700e-003	0.1242		428.1483	428.1483	0.0122	0.0113	431.8249
Total	**0.1864**	**0.1120**	**1.7055**	**4.2100e-003**	**0.4602**	**2.3600e-003**	**0.4625**	**0.1221**	**2.1700e-003**	**0.1242**		**428.1483**	**428.1483**	**0.0122**	**0.0113**	**431.8249**

3.5 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	40.7972					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	**40.9888**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8690**

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	0.1727	0.0993	1.5724	4.0700e-003	0.4602	2.2200e-003	0.4624	0.1221	2.0500e-003	0.1241		416.8251	416.8251	0.0110	0.0105	420.2189
Total	**0.1727**	**0.0993**	**1.5724**	**4.0700e-003**	**0.4602**	**2.2200e-003**	**0.4624**	**0.1221**	**2.0500e-003**	**0.1241**		**416.8251**	**416.8251**	**0.0110**	**0.0105**	**420.2189**

3.5 Architectural Coating - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	40.7972					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0168		281.8690
Total	**40.8566**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8690**

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	0.1727	0.0993	1.5724	4.0700e-003	0.4602	2.2200e-003	0.4624	0.1221	2.0500e-003	0.1241		416.8251	416.8251	0.0110	0.0105	420.2189
Total	**0.1727**	**0.0993**	**1.5724**	**4.0700e-003**	**0.4602**	**2.2200e-003**	**0.4624**	**0.1221**	**2.0500e-003**	**0.1241**		**416.8251**	**416.8251**	**0.0110**	**0.0105**	**420.2189**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Improve Walkability Design

Improve Destination Accessibility

Increase Transit Accessibility

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	7.4543	5.6910	38.0126	0.0627	5.7452	0.0549	5.8001	1.5329	0.0513	1.5842		6,452.9599	6,452.9599	0.5660	0.4376	6,597.5078
Unmitigated	8.1049	7.3714	51.2578	0.0975	9.2617	0.0803	9.3420	2.4711	0.0751	2.5462		10,027.3513	10,027.3513	0.6874	0.5732	10,215.3625

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Arena	0.00	1,875.08	0.00	315,762	195,873
Hotel	1,463.00	1,433.25	1041.25	2,076,831	1,288,299
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Recreational Swimming Pool	0.00	0.00	0.00		
Total	1,463.00	3,308.33	1,041.25	2,392,593	1,484,172

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
Arena	12.50	4.20	5.40	0.00	81.00	19.00	66	28	6
Hotel	12.50	4.20	5.40	19.40	61.60	19.00	58	38	4
Other Non-Asphalt Surfaces	12.50	4.20	5.40	0.00	0.00	0.00	0	0	0
Parking Lot	12.50	4.20	5.40	0.00	0.00	0.00	0	0	0
Parking Lot	12.50	4.20	5.40	0.00	0.00	0.00	0	0	0
Parking Lot	12.50	4.20	5.40	0.00	0.00	0.00	0	0	0
Parking Lot	12.50	4.20	5.40	0.00	0.00	0.00	0	0	0
Recreational Swimming Pool	12.50	4.20	5.40	33.00	48.00	19.00	52	39	9

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Arena	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Hotel	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Other Non-Asphalt Surfaces	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Parking Lot	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Recreational Swimming Pool	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

Percent of Electricity Use Generated with Renewable Energy

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.3229	2.9351	2.4655	0.0176		0.2231	0.2231		0.2231	0.2231		3,522.1600	3,522.1600	0.0675	0.0646	3,543.0904
NaturalGas Unmitigated	0.3229	2.9351	2.4655	0.0176		0.2231	0.2231		0.2231	0.2231		3,522.1600	3,522.1600	0.0675	0.0646	3,543.0904

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					
Arena	5502.74	0.0593	0.5395	0.4532	3.2400e-003		0.0410	0.0410		0.0410	0.0410		647.3816	647.3816	0.0124	0.0119	651.2286
Hotel	24435.6	0.2635	2.3957	2.0123	0.0144		0.1821	0.1821		0.1821	0.1821		2,874.7784	2,874.7784	0.0551	0.0527	2,891.8618
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
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
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.3229**	**2.9351**	**2.4655**	**0.0176**		**0.2231**	**0.2231**		**0.2231**	**0.2231**		**3,522.1600**	**3,522.1600**	**0.0675**	**0.0646**	**3,543.0904**

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					
Arena	5.50274	0.0593	0.5395	0.4532	3.2400e-003		0.0410	0.0410		0.0410	0.0410		647.3816	647.3816	0.0124	0.0119	651.2286
Hotel	24.4356	0.2635	2.3957	2.0123	0.0144		0.1821	0.1821		0.1821	0.1821		2,874.7784	2,874.7784	0.0551	0.0527	2,891.8618
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
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
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.3229**	**2.9351**	**2.4655**	**0.0176**		**0.2231**	**0.2231**		**0.2231**	**0.2231**		**3,522.1600**	**3,522.1600**	**0.0675**	**0.0646**	**3,543.0904**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	4.7648	2.4000e-004	0.0267	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0572	0.0572	1.5000e-004		0.0609
Unmitigated	4.7648	2.4000e-004	0.0267	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0572	0.0572	1.5000e-004		0.0609

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	0.2794					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.4829					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.4700e-003	2.4000e-004	0.0267	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0572	0.0572	1.5000e-004		0.0609
Total	**4.7648**	**2.4000e-004**	**0.0267**	**0.0000**		**1.0000e-004**	**1.0000e-004**		**1.0000e-004**	**1.0000e-004**		**0.0572**	**0.0572**	**1.5000e-004**		**0.0609**

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	0.2794					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.4829					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.4700e-003	2.4000e-004	0.0267	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0572	0.0572	1.5000e-004		0.0609
Total	**4.7648**	**2.4000e-004**	**0.0267**	**0.0000**		**1.0000e-004**	**1.0000e-004**		**1.0000e-004**	**1.0000e-004**		**0.0572**	**0.0572**	**1.5000e-004**		**0.0609**

7.0 Water Detail

7.1 Mitigation Measures Water

Use Grey Water

Install Low Flow Bathroom Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

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

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

19-0174 Coachillin Parcels 30 & 31

Riverside-Salton Sea County, Winter

Includes reduction in mobile sources for 25% participation in Amphitheater shuttle

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	7.05	Acre	7.05	307,098.00	0
Parking Lot	10.00	Space	0.09	4,000.00	0
Parking Lot	2.94	Acre	2.94	128,066.40	0
Arena	62.13	1000sqft	1.43	62,125.00	0
Hotel	175.00	Room	1.06	150,000.00	0
Recreational Swimming Pool	4.00	1000sqft	0.09	4,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - P30 5.88ac w/ 175rm hotel(150TSF & 46,216sf ftprnt), ~4TSF pool, ~50% prkng(2.94ac), & rmdnr lndscpng(1.79ac); P31/Basin101 6.78ac w/ 62,125sf amphitheater(w/460sf rr & 5,660sf rest), 4.15ac hrdscpe/temp prkng, 10spc prkng, & rmndr lndscpng(1.11ac)

Construction Phase - Construction anticipated to last ~12 months w/ OY 2023. Therefore, modeled as start 1/1/2022 & be completed 1/1/2023. Site is vacant, not demo/site prep & only fine grading needed.

Off-road Equipment - CalEEMod default timing for building construction reduced by ~27%; therefore, ~27% more equipment added.

Grading - Site anticipated to balance.

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

Architectural Coating - SCAQMD Rule 1113 architectural coatings are 50 g/L VOC or less buildings & 100 g/L VOC parking lot striping. Parking lot painting 6% of 40,000sf +128,066sf = 7,924sf.

Vehicle Trips - Per TIA, hotel 8.36 trips/room weekdays & 8.19 trips/room saturdays (default sunday rate) & 1,875 trips/day amphitheater (w/ event and 25% shuttle use)/62.125 TSF = 30.18 trips/TSF. Hotel pool no additional trips.

Consumer Products - SSAB is within SCAQMD jurisdiction; therefore, factor is 2.04 x 10^-5 lbs/SF/day.

Area Coating - Per SCAQMD Rule 1113 architectural coatings are 50 g/L VOC or less for buildings and 100g/L VOC for parking lots/striping. Parking lot striping 6% of 4,000 + 128,066 = ~7,924 sf.

Sequestration - Parcels 30 & 31 and Basin 101 = 12.66 ac which is ~8.8% of total project acreage (143.79 acres). Total project to plant 966 new trees. 8.8% of 966 = ~85 new trees.

Construction Off-road Equipment Mitigation - Tier 3 equipment to be used during construction.

Mobile Land Use Mitigation - Dwntwn DHS ~4.07mi N. Palm Springs Amtrak stn ~0.89mi S. Sidewalks on/off-site. 1emp/500sf com tourist =212,125sf/500=424 emp/2.49 job ac=170 emp/job acre. At least 5 intersections/0.25 sq mi.

Area Mitigation - Per SCAQMD Rule 1113 paints (50g/L) to be used for buildings, 100g/L for parking lots/striping.

Energy Mitigation - Per applicant, wind and solar energy production to supply ~40% of the site's total energy needs. High-efficiency lighting at least ~34% more efficient than standard. Energy Star appliances.

Water Mitigation - 100% of landscape irrigation from grey water. Low flow faucets/showers/toilets. Water-efficient landscaping to be installed on-site.

Waste Mitigation - AB 341 requires at least 75% of waste be diverted from landfills, 75% by 2020.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Parking	26,350.00	7,924.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	100
tblAreaCoating	Area_Parking	26350	7924
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	7.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	20.00	25.00
tblConstructionPhase	NumDays	300.00	220.00
tblConsumerProducts	ROG_EF	2.14E-05	2.04E-05
tblLandUse	LandUseSquareFeet	62,130.00	62,125.00
tblLandUse	LandUseSquareFeet	254,100.00	150,000.00
tblLandUse	LotAcreage	19.97	1.43

tblLandUse	LotAcreage	5.83	1.06
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	5.00
tblSequestration	NumberOfNewTrees	0.00	85.00
tblVehicleTrips	ST_TR	10.71	30.18
tblVehicleTrips	ST_TR	9.10	0.00
tblVehicleTrips	SU_TR	10.71	0.00
tblVehicleTrips	SU_TR	13.60	0.00
tblVehicleTrips	WD_TR	10.71	0.00
tblVehicleTrips	WD_TR	28.82	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	45.8232	38.8858	48.1556	0.0993	9.3709	1.7526	11.0067	3.6981	1.6377	5.2030	0.0000	9,814.7759	9,814.7759	1.9487	0.3199	9,951.5430
2023	41.1469	1.4060	3.1082	6.6600e-003	0.4602	0.0730	0.5332	0.1221	0.0729	0.1949	0.0000	659.3136	659.3136	0.0280	0.0107	663.2085
Maximum	**45.8232**	**38.8858**	**48.1556**	**0.0993**	**9.3709**	**1.7526**	**11.0067**	**3.6981**	**1.6377**	**5.2030**	**0.0000**	**9,814.7759**	**9,814.7759**	**1.9487**	**0.3199**	**9,951.5430**

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	43.8726	35.5471	52.5900	0.0993	3.7567	1.9473	5.3708	1.4693	1.9439	2.8642	0.0000	9,814.7759	9,814.7759	1.9487	0.3199	9,951.5430
2023	41.0147	1.4600	3.1295	6.6600e-003	0.4602	0.0973	0.5575	0.1221	0.0971	0.2192	0.0000	659.3136	659.3136	0.0280	0.0107	663.2085
Maximum	**43.8726**	**35.5471**	**52.5900**	**0.0993**	**3.7567**	**1.9473**	**5.3708**	**1.4693**	**1.9439**	**2.8642**	**0.0000**	**9,814.7759**	**9,814.7759**	**1.9487**	**0.3199**	**9,951.5430**

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	2.39	8.15	-8.69	0.00	57.11	-11.99	48.63	58.34	-19.32	42.88	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	4.7648	2.4000e-004	0.0267	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0572	0.0572	1.5000e-004		0.0609
Energy	0.3229	2.9351	2.4655	0.0176		0.2231	0.2231		0.2231	0.2231		3,522.1600	3,522.1600	0.0675	0.0646	3,543.0904
Mobile	6.5665	7.8076	47.7899	0.0908	9.2617	0.0804	9.3422	2.4711	0.0753	2.5463		9,342.4077	9,342.4077	0.7324	0.5864	9,535.4770
Total	**11.6541**	**10.7430**	**50.2821**	**0.1084**	**9.2617**	**0.3036**	**9.5653**	**2.4711**	**0.2984**	**2.7695**		**12,864.6248**	**12,864.6248**	**0.8001**	**0.6510**	**13,078.6282**

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	4.7648	2.4000e-004	0.0267	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0572	0.0572	1.5000e-004		0.0609
Energy	0.3229	2.9351	2.4655	0.0176		0.2231	0.2231		0.2231	0.2231		3,522.1600	3,522.1600	0.0675	0.0646	3,543.0904
Mobile	5.9297	6.0259	36.7202	0.0586	5.7452	0.0550	5.8003	1.5329	0.0514	1.5843		6,031.9012	6,031.9012	0.6153	0.4482	6,180.8417
Total	**11.0174**	**8.9613**	**39.2124**	**0.0762**	**5.7452**	**0.2782**	**6.0234**	**1.5329**	**0.2746**	**1.8075**		**9,554.1183**	**9,554.1183**	**0.6830**	**0.5128**	**9,723.9929**

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	5.46	16.59	22.02	29.68	37.97	8.37	37.03	37.97	7.99	34.74	0.00	25.73	25.73	14.64	21.24	25.65

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	1/1/2022	2/11/2022	5	30	
2	Building Construction	Building Construction	2/12/2022	12/18/2022	5	220	
3	Paving	Paving	11/25/2022	12/22/2022	5	20	
4	Architectural Coating	Architectural Coating	11/28/2022	1/1/2023	5	25	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 90

Acres of Paving: 10.08

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 318,188; Non-Residential Outdoor: 106,063; Striped Parking Area: 7,924 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	4	8.00	89	0.20

Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	5	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

<u>Trips and VMT</u>

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
Grading	8	20.00	0.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	12	275.00	107.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	55.00	0.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.2036	0.0000	9.2036	3.6538	0.0000	3.6538			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**3.6248**	**38.8435**	**29.0415**	**0.0621**	**9.2036**	**1.6349**	**10.8385**	**3.6538**	**1.5041**	**5.1579**		**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

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	0.0619	0.0423	0.5103	1.3900e-003	0.1673	8.6000e-004	0.1682	0.0444	7.9000e-004	0.0452		141.0926	141.0926	4.4900e-003	4.2100e-003	142.4610
Total	**0.0619**	**0.0423**	**0.5103**	**1.3900e-003**	**0.1673**	**8.6000e-004**	**0.1682**	**0.0444**	**7.9000e-004**	**0.0452**		**141.0926**	**141.0926**	**4.4900e-003**	**4.2100e-003**	**142.4610**

3.2 Grading - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.5894	0.0000	3.5894	1.4250	0.0000	1.4250			0.0000			0.0000
Off-Road	1.5231	29.9782	36.7226	0.0621		1.2994	1.2994		1.2994	1.2994	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**1.5231**	**29.9782**	**36.7226**	**0.0621**	**3.5894**	**1.2994**	**4.8888**	**1.4250**	**1.2994**	**2.7244**	**0.0000**	**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

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	0.0619	0.0423	0.5103	1.3900e-003	0.1673	8.6000e-004	0.1682	0.0444	7.9000e-004	0.0452		141.0926	141.0926	4.4900e-003	4.2100e-003	142.4610
Total	**0.0619**	**0.0423**	**0.5103**	**1.3900e-003**	**0.1673**	**8.6000e-004**	**0.1682**	**0.0444**	**7.9000e-004**	**0.0452**		**141.0926**	**141.0926**	**4.4900e-003**	**4.2100e-003**	**142.4610**

3.3 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1081	19.6029	21.4336	0.0339		1.0366	1.0366		0.9705	0.9705		3,229.5326	3,229.5326	0.8303		3,250.2905
Total	**2.1081**	**19.6029**	**21.4336**	**0.0339**		**1.0366**	**1.0366**		**0.9705**	**0.9705**		**3,229.5326**	**3,229.5326**	**0.8303**		**3,250.2905**

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	0.1465	4.0440	1.5254	0.0157	0.5370	0.0515	0.5885	0.1547	0.0493	0.2040		1,662.2871	1,662.2871	0.0179	0.2472	1,736.3838
Worker	0.8506	0.5814	7.0165	0.0191	2.3008	0.0118	2.3127	0.6103	0.0109	0.6212		1,940.0236	1,940.0236	0.0618	0.0580	1,958.8387
Total	**0.9971**	**4.6255**	**8.5419**	**0.0348**	**2.8378**	**0.0633**	**2.9012**	**0.7650**	**0.0602**	**0.8251**		**3,602.3107**	**3,602.3107**	**0.0797**	**0.3051**	**3,695.2225**

3.3 Building Construction - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8445	18.1214	23.1340	0.0339		1.1765	1.1765		1.1765	1.1765	0.0000	3,229.5326	3,229.5326	0.8303		3,250.2905
Total	**0.8445**	**18.1214**	**23.1340**	**0.0339**		**1.1765**	**1.1765**		**1.1765**	**1.1765**	**0.0000**	**3,229.5326**	**3,229.5326**	**0.8303**		**3,250.2905**

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	0.1465	4.0440	1.5254	0.0157	0.5370	0.0515	0.5885	0.1547	0.0493	0.2040		1,662.2871	1,662.2871	0.0179	0.2472	1,736.3838
Worker	0.8506	0.5814	7.0165	0.0191	2.3008	0.0118	2.3127	0.6103	0.0109	0.6212		1,940.0236	1,940.0236	0.0618	0.0580	1,958.8387
Total	**0.9971**	**4.6255**	**8.5419**	**0.0348**	**2.8378**	**0.0633**	**2.9012**	**0.7650**	**0.0602**	**0.8251**		**3,602.3107**	**3,602.3107**	**0.0797**	**0.3051**	**3,695.2225**

3.4 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.3969					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.4998**	**11.1249**	**14.5805**	**0.0228**		**0.5679**	**0.5679**		**0.5225**	**0.5225**		**2,207.6603**	**2,207.6603**	**0.7140**		**2,225.5104**

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	0.0464	0.0317	0.3827	1.0400e-003	0.1255	6.4000e-004	0.1261	0.0333	5.9000e-004	0.0339		105.8195	105.8195	3.3700e-003	3.1600e-003	106.8458
Total	**0.0464**	**0.0317**	**0.3827**	**1.0400e-003**	**0.1255**	**6.4000e-004**	**0.1261**	**0.0333**	**5.9000e-004**	**0.0339**		**105.8195**	**105.8195**	**3.3700e-003**	**3.1600e-003**	**106.8458**

3.4 Paving - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5609	11.2952	17.2957	0.0228		0.6093	0.6093		0.6093	0.6093	0.0000	2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.3969					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9579**	**11.2952**	**17.2957**	**0.0228**		**0.6093**	**0.6093**		**0.6093**	**0.6093**	**0.0000**	**2,207.6603**	**2,207.6603**	**0.7140**		**2,225.5104**

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	0.0464	0.0317	0.3827	1.0400e-003	0.1255	6.4000e-004	0.1261	0.0333	5.9000e-004	0.0339		105.8195	105.8195	3.3700e-003	3.1600e-003	106.8458
Total	**0.0464**	**0.0317**	**0.3827**	**1.0400e-003**	**0.1255**	**6.4000e-004**	**0.1261**	**0.0333**	**5.9000e-004**	**0.0339**		**105.8195**	**105.8195**	**3.3700e-003**	**3.1600e-003**	**106.8458**

3.5 Architectural Coating - 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					
Archit. Coating	40.7972					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	**41.0017**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.9062**

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	0.1701	0.1163	1.4033	3.8100e-003	0.4602	2.3600e-003	0.4625	0.1221	2.1700e-003	0.1242		388.0047	388.0047	0.0124	0.0116	391.7677
Total	**0.1701**	**0.1163**	**1.4033**	**3.8100e-003**	**0.4602**	**2.3600e-003**	**0.4625**	**0.1221**	**2.1700e-003**	**0.1242**		**388.0047**	**388.0047**	**0.0124**	**0.0116**	**391.7677**

3.5 Architectural Coating - 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					
Archit. Coating	40.7972					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0183		281.9062
Total	**40.8566**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.9062**

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	0.1701	0.1163	1.4033	3.8100e-003	0.4602	2.3600e-003	0.4625	0.1221	2.1700e-003	0.1242		388.0047	388.0047	0.0124	0.0116	391.7677
Total	**0.1701**	**0.1163**	**1.4033**	**3.8100e-003**	**0.4602**	**2.3600e-003**	**0.4625**	**0.1221**	**2.1700e-003**	**0.1242**		**388.0047**	**388.0047**	**0.0124**	**0.0116**	**391.7677**

3.5 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	40.7972					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	**40.9888**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8690**

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	0.1580	0.1030	1.2971	3.6900e-003	0.4602	2.2200e-003	0.4624	0.1221	2.0500e-003	0.1241		377.8656	377.8656	0.0112	0.0107	381.3394
Total	**0.1580**	**0.1030**	**1.2971**	**3.6900e-003**	**0.4602**	**2.2200e-003**	**0.4624**	**0.1221**	**2.0500e-003**	**0.1241**		**377.8656**	**377.8656**	**0.0112**	**0.0107**	**381.3394**

3.5 Architectural Coating - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	40.7972					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0168		281.8690
Total	**40.8566**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8690**

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	0.1580	0.1030	1.2971	3.6900e-003	0.4602	2.2200e-003	0.4624	0.1221	2.0500e-003	0.1241		377.8656	377.8656	0.0112	0.0107	381.3394
Total	**0.1580**	**0.1030**	**1.2971**	**3.6900e-003**	**0.4602**	**2.2200e-003**	**0.4624**	**0.1221**	**2.0500e-003**	**0.1241**		**377.8656**	**377.8656**	**0.0112**	**0.0107**	**381.3394**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Improve Walkability Design

Improve Destination Accessibility

Increase Transit Accessibility

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	5.9297	6.0259	36.7202	0.0586	5.7452	0.0550	5.8003	1.5329	0.0514	1.5843		6,031.9012	6,031.9012	0.6153	0.4482	6,180.8417
Unmitigated	6.5665	7.8076	47.7899	0.0908	9.2617	0.0804	9.3422	2.4711	0.0753	2.5463		9,342.4077	9,342.4077	0.7324	0.5864	9,535.4770

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Arena	0.00	1,875.08	0.00	315,762	195,873
Hotel	1,463.00	1,433.25	1041.25	2,076,831	1,288,299
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		

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

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Recreational Swimming Pool	0.00	0.00	0.00		
Total	1,463.00	3,308.33	1,041.25	2,392,593	1,484,172

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
Arena	12.50	4.20	5.40	0.00	81.00	19.00	66	28	6
Hotel	12.50	4.20	5.40	19.40	61.60	19.00	58	38	4
Other Non-Asphalt Surfaces	12.50	4.20	5.40	0.00	0.00	0.00	0	0	0
Parking Lot	12.50	4.20	5.40	0.00	0.00	0.00	0	0	0
Parking Lot	12.50	4.20	5.40	0.00	0.00	0.00	0	0	0
Parking Lot	12.50	4.20	5.40	0.00	0.00	0.00	0	0	0
Parking Lot	12.50	4.20	5.40	0.00	0.00	0.00	0	0	0
Recreational Swimming Pool	12.50	4.20	5.40	33.00	48.00	19.00	52	39	9

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Arena	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Hotel	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Other Non-Asphalt Surfaces	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Parking Lot	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Recreational Swimming Pool	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

Percent of Electricity Use Generated with Renewable Energy

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.3229	2.9351	2.4655	0.0176		0.2231	0.2231		0.2231	0.2231		3,522.1600	3,522.1600	0.0675	0.0646	3,543.0904
NaturalGas Unmitigated	0.3229	2.9351	2.4655	0.0176		0.2231	0.2231		0.2231	0.2231		3,522.1600	3,522.1600	0.0675	0.0646	3,543.0904

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					
Arena	5502.74	0.0593	0.5395	0.4532	3.2400e-003		0.0410	0.0410		0.0410	0.0410		647.3816	647.3816	0.0124	0.0119	651.2286
Hotel	24435.6	0.2635	2.3957	2.0123	0.0144		0.1821	0.1821		0.1821	0.1821		2,874.7784	2,874.7784	0.0551	0.0527	2,891.8618
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
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
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.3229**	**2.9351**	**2.4655**	**0.0176**		**0.2231**	**0.2231**		**0.2231**	**0.2231**		**3,522.1600**	**3,522.1600**	**0.0675**	**0.0646**	**3,543.0904**

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					
Arena	5.50274	0.0593	0.5395	0.4532	3.2400e-003		0.0410	0.0410		0.0410	0.0410		647.3816	647.3816	0.0124	0.0119	651.2286
Hotel	24.4356	0.2635	2.3957	2.0123	0.0144		0.1821	0.1821		0.1821	0.1821		2,874.7784	2,874.7784	0.0551	0.0527	2,891.8618
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
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
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.3229**	**2.9351**	**2.4655**	**0.0176**		**0.2231**	**0.2231**		**0.2231**	**0.2231**		**3,522.1600**	**3,522.1600**	**0.0675**	**0.0646**	**3,543.0904**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	4.7648	2.4000e-004	0.0267	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0572	0.0572	1.5000e-004		0.0609
Unmitigated	4.7648	2.4000e-004	0.0267	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0572	0.0572	1.5000e-004		0.0609

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	0.2794					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.4829					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.4700e-003	2.4000e-004	0.0267	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0572	0.0572	1.5000e-004		0.0609
Total	**4.7648**	**2.4000e-004**	**0.0267**	**0.0000**		**1.0000e-004**	**1.0000e-004**		**1.0000e-004**	**1.0000e-004**		**0.0572**	**0.0572**	**1.5000e-004**		**0.0609**

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	0.2794					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.4829					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.4700e-003	2.4000e-004	0.0267	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0572	0.0572	1.5000e-004		0.0609
Total	**4.7648**	**2.4000e-004**	**0.0267**	**0.0000**		**1.0000e-004**	**1.0000e-004**		**1.0000e-004**	**1.0000e-004**		**0.0572**	**0.0572**	**1.5000e-004**		**0.0609**

7.0 Water Detail

7.1 Mitigation Measures Water

Use Grey Water

Install Low Flow Bathroom Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

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

APPENDIX C

CALEEMOD MODEL ANNUAL EMISSIONS PRINTOUTS AND EMFAC DATA

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

19-0174 Coachillin Parcels 30 & 31

Riverside-Salton Sea County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	7.05	Acre	7.05	307,098.00	0
Parking Lot	10.00	Space	0.09	4,000.00	0
Parking Lot	2.94	Acre	2.94	128,066.40	0
Arena	62.13	1000sqft	1.43	62,125.00	0
Hotel	175.00	Room	1.06	150,000.00	0
Recreational Swimming Pool	4.00	1000sqft	0.09	4,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - P30 5.88ac w/ 175rm hotel(150TSF & 46,216sf ftprnt), ~4TSF pool, ~50% prkng(2.94ac), & rmdnr lndscpng(1.79ac); P31/Basin101 6.78ac w/ 62,125sf amphitheater(w/460sf rr & 5,660sf rest), 4.15ac hrdscpe/temp prkng, 10spc prkng, & rmndr lndscpng(1.11ac)

Construction Phase - Construction anticipated to last ~12 months w/ OY 2023. Therefore, modeled as start 1/1/2022 & be completed 1/1/2023. Site is vacant, not demo/site prep & only fine grading needed.

Off-road Equipment - CalEEMod default timing for building construction reduced by ~27%; therefore, ~27% more equipment added.

Grading - Site anticipated to balance.

Architectural Coating - SCAQMD Rule 1113 architectural coatings are 50 g/L VOC or less buildings & 100 g/L VOC parking lot striping. Parking lot painting 6% of 40,000sf +128,066sf = 7,924sf.

Vehicle Trips - Per TIA, hotel 8.36 trips/room weekdays & 8.19 trips/room saturdays (default sunday rate) & 2,500 trips/day amphitheater (w/ event) / 62.125 TSF = 40.24 trips/TSF. Hotel pool no additional trips.

Consumer Products - SSAB is within SCAQMD jurisdiction; therefore, factor is 2.04 x 10^-5 lbs/SF/day.

Area Coating - Per SCAQMD Rule 1113 architectural coatings are 50 g/L VOC or less for buildings and 100g/L VOC for parking lots/striping. Parking lot striping 6% of 4,000 + 128,066 = ~7,924 sf.

Sequestration - Parcels 30 & 31 and Basin 101 = 12.66 ac which is ~8.8% of total project acreage (143.79 acres). Total project to plant 966 new trees. 8.8% of 966 = ~85 new trees.

Construction Off-road Equipment Mitigation - Tier 3 equipment to be used during construction.

Mobile Land Use Mitigation - Dwntwn DHS ~4.07mi N. Palm Springs Amtrak stn ~0.89mi S. Sidewalks on/off-site. 1emp/500sf com tourist =212,125sf/500=424 emp/2.49 job ac=170 emp/job acre. At least 5 intersections/0.25 sq mi.

Area Mitigation - Per SCAQMD Rule 1113 paints (50g/L) to be used for buildings, 100g/L for parking lots/striping.

Energy Mitigation - Per applicant, wind and solar energy production to supply ~40% of the site's total energy needs. High-efficiency lighting at least ~34% more efficient than standard. Energy Star appliances.

Water Mitigation - 100% of landscape irrigation from grey water. Low flow faucets/showers/toilets. Water-efficient landscaping to be installed on-site.

Waste Mitigation - AB 341 requires at least 75% of waste be diverted from landfills, 75% by 2020.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Parking	26,350.00	7,924.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	100
tblAreaCoating	Area_Parking	26350	7924
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	7.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	20.00	25.00
tblConstructionPhase	NumDays	300.00	220.00
tblConsumerProducts	ROG_EF	2.14E-05	2.04E-05
tblLandUse	LandUseSquareFeet	254,100.00	150,000.00
tblLandUse	LotAcreage	19.97	1.43
tblLandUse	LotAcreage	5.83	1.06

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	5.00
tblSequestration	NumberOfNewTrees	0.00	85.00
tblVehicleTrips	ST_TR	10.71	40.24
tblVehicleTrips	ST_TR	9.10	0.00
tblVehicleTrips	SU_TR	10.71	0.00
tblVehicleTrips	SU_TR	13.60	0.00
tblVehicleTrips	WD_TR	10.71	0.00
tblVehicleTrips	WD_TR	28.82	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.9233	3.3782	3.9672	8.8800e-003	0.4546	0.1523	0.6068	0.1402	0.1422	0.2824	0.0000	798.5903	798.5903	0.1242	0.0307	810.8568
2023	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.9233**	**3.3782**	**3.9672**	**8.8800e-003**	**0.4546**	**0.1523**	**0.6068**	**0.1402**	**0.1422**	**0.2824**	**0.0000**	**798.5903**	**798.5903**	**0.1242**	**0.0307**	**810.8568**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.7455	3.0833	4.2968	8.8800e-003	0.3703	0.1632	0.5335	0.1068	0.1628	0.2696	0.0000	798.5898	798.5898	0.1242	0.0307	810.8563
2023	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.7455**	**3.0833**	**4.2968**	**8.8800e-003**	**0.3703**	**0.1632**	**0.5335**	**0.1068**	**0.1628**	**0.2696**	**0.0000**	**798.5898**	**798.5898**	**0.1242**	**0.0307**	**810.8563**

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	**19.25**	**8.73**	**-8.31**	**0.00**	**18.53**	**-7.18**	**12.07**	**23.84**	**-14.50**	**4.54**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**1-1-2022**	**3-31-2022**	1.1072	0.8956
2	**4-1-2022**	**6-30-2022**	0.8838	0.7946
3	**7-1-2022**	**9-30-2022**	0.8935	0.8034
4	**10-1-2022**	**12-31-2022**	1.4167	1.3331
5	**1-1-2023**	**3-31-2023**	0.0152	0.0152
		Highest	1.4167	1.3331

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	0.8694	2.0000e-005	2.4000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.6700e-003	4.6700e-003	1.0000e-005	0.0000	4.9700e-003
Energy	0.0589	0.5357	0.4500	3.2100e-003		0.0407	0.0407		0.0407	0.0407	0.0000	1,164.8270	1,164.8270	0.0603	0.0166	1,171.2932
Mobile	0.6496	0.7851	4.9148	9.5100e-003	0.9448	8.2200e-003	0.9530	0.2524	7.6900e-003	0.2601	0.0000	887.7139	887.7139	0.0653	0.0537	905.3465
Waste						0.0000	0.0000		0.0000	0.0000	24.4239	0.0000	24.4239	1.4434	0.0000	60.5091
Water						0.0000	0.0000		0.0000	0.0000	9.9743	77.2241	87.1984	1.0310	0.0250	120.4167
Total	**1.5779**	**1.3208**	**5.3672**	**0.0127**	**0.9448**	**0.0489**	**0.9937**	**0.2524**	**0.0484**	**0.3008**	**34.3982**	**2,129.7696**	**2,164.1678**	**2.5999**	**0.0953**	**2,257.5704**

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	0.8694	2.0000e-005	2.4000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.6700e-003	4.6700e-003	1.0000e-005	0.0000	4.9700e-003
Energy	0.0589	0.5357	0.4500	3.2100e-003		0.0407	0.0407		0.0407	0.0407	0.0000	890.6417	890.6417	0.0371	0.0138	895.6933
Mobile	0.5830	0.5977	3.7126	6.1200e-003	0.5861	5.5900e-003	0.5917	0.1566	5.2200e-003	0.1618	0.0000	571.0613	571.0613	0.0542	0.0406	584.5036
Waste						0.0000	0.0000		0.0000	0.0000	6.1060	0.0000	6.1060	0.3609	0.0000	15.1273
Water						0.0000	0.0000		0.0000	0.0000	8.3026	60.4328	68.7354	0.8579	0.0208	96.3664
Total	**1.5113**	**1.1334**	**4.1650**	**9.3300e-003**	**0.5861**	**0.0463**	**0.6324**	**0.1566**	**0.0459**	**0.2025**	**14.4086**	**1,522.1404**	**1,536.5490**	**1.3100**	**0.0752**	**1,591.6956**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**4.22**	**14.19**	**22.40**	**26.65**	**37.97**	**5.37**	**36.36**	**37.97**	**5.10**	**32.68**	**58.11**	**28.53**	**29.00**	**49.61**	**21.15**	**29.50**

2.3 Vegetation

Vegetation

	CO2e
Category	MT
New Trees	60.1800
Total	**60.1800**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	1/1/2022	2/11/2022	5	30	
2	Building Construction	Building Construction	2/12/2022	12/18/2022	5	220	
3	Paving	Paving	11/25/2022	12/22/2022	5	20	
4	Architectural Coating	Architectural Coating	11/28/2022	1/1/2023	5	25	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 90

Acres of Paving: 10.08

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 318,188; Non-Residential Outdoor: 106,063; Striped Parking Area: 7,924 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	4	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	5	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
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
Grading	8	20.00	0.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	12	275.00	107.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	55.00	0.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1381	0.0000	0.1381	0.0548	0.0000	0.0548	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0544	0.5827	0.4356	9.3000e-004		0.0245	0.0245		0.0226	0.0226	0.0000	81.8019	81.8019	0.0265	0.0000	82.4633
Total	**0.0544**	**0.5827**	**0.4356**	**9.3000e-004**	**0.1381**	**0.0245**	**0.1626**	**0.0548**	**0.0226**	**0.0774**	**0.0000**	**81.8019**	**81.8019**	**0.0265**	**0.0000**	**82.4633**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.9000e-004	6.5000e-004	8.0400e-003	2.0000e-005	2.4700e-003	1.0000e-005	2.4800e-003	6.6000e-004	1.0000e-005	6.7000e-004	0.0000	1.9646	1.9646	6.0000e-005	6.0000e-005	1.9835
Total	**8.9000e-004**	**6.5000e-004**	**8.0400e-003**	**2.0000e-005**	**2.4700e-003**	**1.0000e-005**	**2.4800e-003**	**6.6000e-004**	**1.0000e-005**	**6.7000e-004**	**0.0000**	**1.9646**	**1.9646**	**6.0000e-005**	**6.0000e-005**	**1.9835**

3.2 Grading - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0538	0.0000	0.0538	0.0214	0.0000	0.0214	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0229	0.4497	0.5508	9.3000e-004		0.0195	0.0195		0.0195	0.0195	0.0000	81.8018	81.8018	0.0265	0.0000	82.4632
Total	**0.0229**	**0.4497**	**0.5508**	**9.3000e-004**	**0.0538**	**0.0195**	**0.0733**	**0.0214**	**0.0195**	**0.0409**	**0.0000**	**81.8018**	**81.8018**	**0.0265**	**0.0000**	**82.4632**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.9000e-004	6.5000e-004	8.0400e-003	2.0000e-005	2.4700e-003	1.0000e-005	2.4800e-003	6.6000e-004	1.0000e-005	6.7000e-004	0.0000	1.9646	1.9646	6.0000e-005	6.0000e-005	1.9835
Total	**8.9000e-004**	**6.5000e-004**	**8.0400e-003**	**2.0000e-005**	**2.4700e-003**	**1.0000e-005**	**2.4800e-003**	**6.6000e-004**	**1.0000e-005**	**6.7000e-004**	**0.0000**	**1.9646**	**1.9646**	**6.0000e-005**	**6.0000e-005**	**1.9835**

3.3 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2319	2.1563	2.3577	3.7300e-003		0.1140	0.1140		0.1068	0.1068	0.0000	322.2761	322.2761	0.0829	0.0000	324.3475
Total	**0.2319**	**2.1563**	**2.3577**	**3.7300e-003**		**0.1140**	**0.1140**		**0.1068**	**0.1068**	**0.0000**	**322.2761**	**322.2761**	**0.0829**	**0.0000**	**324.3475**

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	0.0165	0.4423	0.1641	1.7200e-003	0.0583	5.6600e-003	0.0639	0.0168	5.4100e-003	0.0222	0.0000	165.7501	165.7501	1.8000e-003	0.0246	173.1378
Worker	0.0896	0.0656	0.8108	2.1500e-003	0.2489	1.3000e-003	0.2502	0.0661	1.2000e-003	0.0673	0.0000	198.0941	198.0941	6.1700e-003	5.8800e-003	200.0012
Total	**0.1061**	**0.5079**	**0.9749**	**3.8700e-003**	**0.3071**	**6.9600e-003**	**0.3141**	**0.0829**	**6.6100e-003**	**0.0895**	**0.0000**	**363.8442**	**363.8442**	**7.9700e-003**	**0.0305**	**373.1390**

3.3 Building Construction - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0929	1.9934	2.5447	3.7300e-003		0.1294	0.1294		0.1294	0.1294	0.0000	322.2757	322.2757	0.0829	0.0000	324.3472
Total	**0.0929**	**1.9934**	**2.5447**	**3.7300e-003**		**0.1294**	**0.1294**		**0.1294**	**0.1294**	**0.0000**	**322.2757**	**322.2757**	**0.0829**	**0.0000**	**324.3472**

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	0.0165	0.4423	0.1641	1.7200e-003	0.0583	5.6600e-003	0.0639	0.0168	5.4100e-003	0.0222	0.0000	165.7501	165.7501	1.8000e-003	0.0246	173.1378
Worker	0.0896	0.0656	0.8108	2.1500e-003	0.2489	1.3000e-003	0.2502	0.0661	1.2000e-003	0.0673	0.0000	198.0941	198.0941	6.1700e-003	5.8800e-003	200.0012
Total	**0.1061**	**0.5079**	**0.9749**	**3.8700e-003**	**0.3071**	**6.9600e-003**	**0.3141**	**0.0829**	**6.6100e-003**	**0.0895**	**0.0000**	**363.8442**	**363.8442**	**7.9700e-003**	**0.0305**	**373.1390**

3.4 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0110	0.1113	0.1458	2.3000e-004		5.6800e-003	5.6800e-003		5.2200e-003	5.2200e-003	0.0000	20.0276	20.0276	6.4800e-003	0.0000	20.1895
Paving	3.9700e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0150**	**0.1113**	**0.1458**	**2.3000e-004**		**5.6800e-003**	**5.6800e-003**		**5.2200e-003**	**5.2200e-003**	**0.0000**	**20.0276**	**20.0276**	**6.4800e-003**	**0.0000**	**20.1895**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.4000e-004	3.3000e-004	4.0200e-003	1.0000e-005	1.2300e-003	1.0000e-005	1.2400e-003	3.3000e-004	1.0000e-005	3.3000e-004	0.0000	0.9823	0.9823	3.0000e-005	3.0000e-005	0.9917
Total	**4.4000e-004**	**3.3000e-004**	**4.0200e-003**	**1.0000e-005**	**1.2300e-003**	**1.0000e-005**	**1.2400e-003**	**3.3000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**0.9823**	**0.9823**	**3.0000e-005**	**3.0000e-005**	**0.9917**

3.4 Paving - 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					
Off-Road	5.6100e-003	0.1130	0.1730	2.3000e-004		6.0900e-003	6.0900e-003		6.0900e-003	6.0900e-003	0.0000	20.0275	20.0275	6.4800e-003	0.0000	20.1895
Paving	3.9700e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**9.5800e-003**	**0.1130**	**0.1730**	**2.3000e-004**		**6.0900e-003**	**6.0900e-003**		**6.0900e-003**	**6.0900e-003**	**0.0000**	**20.0275**	**20.0275**	**6.4800e-003**	**0.0000**	**20.1895**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.4000e-004	3.3000e-004	4.0200e-003	1.0000e-005	1.2300e-003	1.0000e-005	1.2400e-003	3.3000e-004	1.0000e-005	3.3000e-004	0.0000	0.9823	0.9823	3.0000e-005	3.0000e-005	0.9917
Total	**4.4000e-004**	**3.3000e-004**	**4.0200e-003**	**1.0000e-005**	**1.2300e-003**	**1.0000e-005**	**1.2400e-003**	**3.3000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**0.9823**	**0.9823**	**3.0000e-005**	**3.0000e-005**	**0.9917**

3.5 Architectural Coating - 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					
Archit. Coating	0.5100					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.5600e-003	0.0176	0.0227	4.0000e-005		1.0200e-003	1.0200e-003		1.0200e-003	1.0200e-003	0.0000	3.1916	3.1916	2.1000e-004	0.0000	3.1968
Total	**0.5125**	**0.0176**	**0.0227**	**4.0000e-005**		**1.0200e-003**	**1.0200e-003**		**1.0200e-003**	**1.0200e-003**	**0.0000**	**3.1916**	**3.1916**	**2.1000e-004**	**0.0000**	**3.1968**

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	2.0400e-003	1.4900e-003	0.0184	5.0000e-005	5.6600e-003	3.0000e-005	5.6900e-003	1.5000e-003	3.0000e-005	1.5300e-003	0.0000	4.5021	4.5021	1.4000e-004	1.3000e-004	4.5455
Total	**2.0400e-003**	**1.4900e-003**	**0.0184**	**5.0000e-005**	**5.6600e-003**	**3.0000e-005**	**5.6900e-003**	**1.5000e-003**	**3.0000e-005**	**1.5300e-003**	**0.0000**	**4.5021**	**4.5021**	**1.4000e-004**	**1.3000e-004**	**4.5455**

3.5 Architectural Coating - 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					
Archit. Coating	0.5100					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.4000e-004	0.0170	0.0229	4.0000e-005		1.1900e-003	1.1900e-003		1.1900e-003	1.1900e-003	0.0000	3.1916	3.1916	2.1000e-004	0.0000	3.1968
Total	**0.5107**	**0.0170**	**0.0229**	**4.0000e-005**		**1.1900e-003**	**1.1900e-003**		**1.1900e-003**	**1.1900e-003**	**0.0000**	**3.1916**	**3.1916**	**2.1000e-004**	**0.0000**	**3.1968**

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	2.0400e-003	1.4900e-003	0.0184	5.0000e-005	5.6600e-003	3.0000e-005	5.6900e-003	1.5000e-003	3.0000e-005	1.5300e-003	0.0000	4.5021	4.5021	1.4000e-004	1.3000e-004	4.5455
Total	**2.0400e-003**	**1.4900e-003**	**0.0184**	**5.0000e-005**	**5.6600e-003**	**3.0000e-005**	**5.6900e-003**	**1.5000e-003**	**3.0000e-005**	**1.5300e-003**	**0.0000**	**4.5021**	**4.5021**	**1.4000e-004**	**1.3000e-004**	**4.5455**

3.5 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	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	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**

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**

3.5 Architectural Coating - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	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**

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**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Improve Walkability Design

Improve Destination Accessibility

Increase Transit Accessibility

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive 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	0.5830	0.5977	3.7126	6.1200e-003	0.5861	5.5900e-003	0.5917	0.1566	5.2200e-003	0.1618	0.0000	571.0613	571.0613	0.0542	0.0406	584.5036
Unmitigated	0.6496	0.7851	4.9148	9.5100e-003	0.9448	8.2200e-003	0.9530	0.2524	7.6900e-003	0.2601	0.0000	887.7139	887.7139	0.0653	0.0537	905.3465

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Arena	0.00	2,499.91	0.00	420,982	261,143
Hotel	1,463.00	1,433.25	1041.25	2,076,831	1,288,299
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		

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

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Recreational Swimming Pool	0.00	0.00	0.00		
Total	1,463.00	3,933.16	1,041.25	2,497,813	1,549,442

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
Arena	12.50	4.20	5.40	0.00	81.00	19.00	66	28	6
Hotel	12.50	4.20	5.40	19.40	61.60	19.00	58	38	4
Other Non-Asphalt Surfaces	12.50	4.20	5.40	0.00	0.00	0.00	0	0	0
Parking Lot	12.50	4.20	5.40	0.00	0.00	0.00	0	0	0
Parking Lot	12.50	4.20	5.40	0.00	0.00	0.00	0	0	0
Parking Lot	12.50	4.20	5.40	0.00	0.00	0.00	0	0	0
Parking Lot	12.50	4.20	5.40	0.00	0.00	0.00	0	0	0
Recreational Swimming Pool	12.50	4.20	5.40	33.00	48.00	19.00	52	39	9

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Arena	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Hotel	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Other Non-Asphalt Surfaces	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Parking Lot	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Recreational Swimming Pool	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

Percent of Electricity Use Generated with Renewable Energy

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive 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	307.5086	307.5086	0.0260	3.1500e-003	309.0950
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	581.6940	581.6940	0.0491	5.9500e-003	584.6948
NaturalGas Mitigated	0.0589	0.5357	0.4500	3.2100e-003		0.0407	0.0407		0.0407	0.0407	0.0000	583.1331	583.1331	0.0112	0.0107	586.5984
NaturalGas Unmitigated	0.0589	0.5357	0.4500	3.2100e-003		0.0407	0.0407		0.0407	0.0407	0.0000	583.1331	583.1331	0.0112	0.0107	586.5984

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					
Arena	2.0085e +006	0.0108	0.0985	0.0827	5.9000e-004		7.4800e-003	7.4800e-003		7.4800e-003	7.4800e-003	0.0000	107.1813	107.1813	2.0500e-003	1.9600e-003	107.8182
Hotel	8.919e +006	0.0481	0.4372	0.3673	2.6200e-003		0.0332	0.0332		0.0332	0.0332	0.0000	475.9518	475.9518	9.1200e-003	8.7300e-003	478.7802
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
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
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0589**	**0.5357**	**0.4500**	**3.2100e-003**		**0.0407**	**0.0407**		**0.0407**	**0.0407**	**0.0000**	**583.1331**	**583.1331**	**0.0112**	**0.0107**	**586.5984**

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					
Arena	2.0085e +006	0.0108	0.0985	0.0827	5.9000e-004		7.4800e-003	7.4800e-003		7.4800e-003	7.4800e-003	0.0000	107.1813	107.1813	2.0500e-003	1.9600e-003	107.8182
Hotel	8.919e +006	0.0481	0.4372	0.3673	2.6200e-003		0.0332	0.0332		0.0332	0.0332	0.0000	475.9518	475.9518	9.1200e-003	8.7300e-003	478.7802
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
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
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0589**	**0.5357**	**0.4500**	**3.2100e-003**		**0.0407**	**0.0407**		**0.0407**	**0.0407**	**0.0000**	**583.1331**	**583.1331**	**0.0112**	**0.0107**	**586.5984**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Arena	616280	109.2945	9.2200e-003	1.1200e-003	109.8583
Hotel	2.6175e +006	464.2020	0.0392	4.7500e-003	466.5967
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	1400	0.2483	2.0000e-005	0.0000	0.2496
Parking Lot	44823.2	7.9492	6.7000e-004	8.0000e-005	7.9902
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000
Total		**581.6940**	**0.0491**	**5.9500e-003**	**584.6948**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Arena	326596	57.9204	4.8900e-003	5.9000e-004	58.2192
Hotel	1.38905e+006	246.3420	0.0208	2.5200e-003	247.6128
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	17750	3.1479	2.7000e-004	3.0000e-005	3.1641
Parking Lot	554.4	0.0983	1.0000e-005	0.0000	0.0988
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000
Total		**307.5086**	**0.0260**	**3.1400e-003**	**309.0950**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive 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	0.8694	2.0000e-005	2.4000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.6700e-003	4.6700e-003	1.0000e-005	0.0000	4.9700e-003
Unmitigated	0.8694	2.0000e-005	2.4000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.6700e-003	4.6700e-003	1.0000e-005	0.0000	4.9700e-003

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	0.0510					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.8181					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.2000e-004	2.0000e-005	2.4000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.6700e-003	4.6700e-003	1.0000e-005	0.0000	4.9700e-003
Total	**0.8694**	**2.0000e-005**	**2.4000e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**4.6700e-003**	**4.6700e-003**	**1.0000e-005**	**0.0000**	**4.9700e-003**

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	0.0510					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.8181					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.2000e-004	2.0000e-005	2.4000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.6700e-003	4.6700e-003	1.0000e-005	0.0000	4.9700e-003
Total	**0.8694**	**2.0000e-005**	**2.4000e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**4.6700e-003**	**4.6700e-003**	**1.0000e-005**	**0.0000**	**4.9700e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

Use Grey Water

Install Low Flow Bathroom Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	68.7354	0.8579	0.0208	96.3664
Unmitigated	87.1984	1.0310	0.0250	120.4167

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Arena	26.7637 / 1.70832	73.6601	0.8776	0.0213	101.9352
Hotel	4.43918 / 0.493243	12.6312	0.1456	3.5300e-003	17.3232
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0.236573 / 0.144996	0.9070	7.7800e-003	1.9000e-004	1.1583
Total		**87.1984**	**1.0310**	**0.0250**	**120.4167**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Arena	22.2781 / 0	58.5129	0.7303	0.0177	82.0346
Hotel	3.69518 / 0	9.7053	0.1211	2.9300e-003	13.6067
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0.196923 / 0	0.5172	6.4600e-003	1.6000e-004	0.7251
Total		**68.7354**	**0.8579**	**0.0208**	**96.3664**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	6.1060	0.3609	0.0000	15.1273
Unmitigated	24.4239	1.4434	0.0000	60.5091

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Arena	1.71	0.3471	0.0205	0.0000	0.8600
Hotel	95.81	19.4486	1.1494	0.0000	48.1830
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	22.8	4.6282	0.2735	0.0000	11.4662
Total		**24.4239**	**1.4434**	**0.0000**	**60.5091**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Arena	0.4275	0.0868	5.1300e-003	0.0000	0.2150
Hotel	23.9525	4.8621	0.2873	0.0000	12.0458
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	5.7	1.1571	0.0684	0.0000	2.8665
Total		**6.1060**	**0.3609**	**0.0000**	**15.1273**

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

	Total CO2	CH4	N2O	CO2e
Category	MT			
Unmitigated	60.1800	0.0000	0.0000	60.1800

11.2 Net New Trees

Species Class

	Number of Trees	Total CO2	CH4	N2O	CO2e
		MT			
Miscellaneous	85	60.1800	0.0000	0.0000	60.1800
Total		**60.1800**	**0.0000**	**0.0000**	**60.1800**

19-0174 Coachillin Parcels 30 & 31 - Approved Uses

Riverside-Salton Sea County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Heavy Industry	349.45	1000sqft	8.02	349,446.00	0
Other Asphalt Surfaces	1.28	Acre	1.28	55,756.80	0
Other Non-Asphalt Surfaces	3.36	Acre	3.36	146,361.60	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - 5.88ac (parcel 30) + 3.42 ac (parcel 31) =9.3 ac w/ 349,446 sf cultivation bldg envelope & remainder paving prkg/rdwys (~1.28ac). Site area also includes a 3.36 ac retention basin (basin 101 site).

Construction Phase - Construction anticipated to last ~12 months w/ OY 2023. Therefore, modeled as start 1/1/2022 & be completed 1/1/2023. Site is vacant, not demo/site prep & only fine grading needed.

Off-road Equipment - CalEEMod default timing for building construction reduced by ~27%; therefore, ~27% more equipment added.

Off-road Equipment - CalEEMod default timing for building construction reduced by ~27%; therefore, ~27% more equipment added.

Grading - Site anticipated to balance.

Architectural Coating - SCAQMD Rule 1113 architectural coatings 50 g/L VOC buildings & 100 g/L VOC parking lot striping. Greenhouses represented ~24% of total site; therefore, estimated ~265,576 sf greenhouses that will not be painted; interior = 398,364sf & exterior 132,788sf.

Vehicle Trips - Parcels 30 & 31 & Basin 101 = 12.66 ac. 12.66 ac is ~8.8% of total 143.79 ac site. Therefore, per TIA, 304 trips for parcels 30/31/Basin 101. 304 trips/349.446 TSF = 0.87 trips/TSF/day.

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

Consumer Products - SSAB is within SCAQMD jurisdiction; therefore, factor is 2.04 x 10^-5 lbs/SF/day.

Area Coating - SCAQMD Rule 1113 architectural coatings 50 g/L VOC buildings & 100 g/L VOC parking lot striping. Greenhouses represented ~24% of total site; therefore, estimated ~265,576 sf greenhouses that will not be painted; interior = 398,364sf & exterior 132,788sf.

Water And Wastewater - 349.446 TSF is 12.5% of original project total square footage (2,800 TSF). Total project had 187,038,719 gallons/year per WSA. 12.5% of 187,038,719 gallons = ~23,379,839.9 gallons/year.

Sequestration - Parcels 30 & 31 and Basin 101 = 12.66 ac which is ~8.8% of total project acreage (143.79 acres). Total project to plant 966 new trees. 8.8% of 966 = ~85 new trees.

Construction Off-road Equipment Mitigation - Tier 3 equipment to be used during construction.

Mobile Land Use Mitigation - Dwntwn DHS ~4.07 mi N. Palm Springs Amtrak stn ~0.89 mi S. 189 emplys/8.02 ac (349.446 TSF) = ~24 emp/ac. Sidewalks connect offsite. At least 5 intersections/0.25 sq mi.

Mobile Commute Mitigation - At least 25% of employees will be eligible for vanpool and/or shuttle.

Area Mitigation - Per SCAQMD Rule 1113 paints (50g/L) to be used for buildings, 100g/L for parking lots/striping.

Energy Mitigation - Incl: solar farm (+parabolic solar) +wind frm = 66% site's energy. combd heat power[CHP] use of NG. HE LEDs plus daylight harvesting (Solartubes) = ~ 52% lighting enrgy rdxn. Enrgy Star appl instl PRN. CHP =28% exceed 2019 title24.

Water Mitigation - 100% of landscape irrigation from grey water. Low flow faucets/showers/toilets. Water-efficient landscaping to be installed on-site.

Waste Mitigation - AB 939 requires 75% of waste be diverted from landfills by 2020; however, the majority (90%) of solid (plant) waste will be recycled on-site (goes to vermiculture).

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	174,723.00	132,788.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	524,169.00	398,364.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	100
tblAreaCoating	Area_Nonresidential_Exterior	174723	132788
tblAreaCoating	Area_Nonresidential_Interior	524169	398364
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	7.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
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tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	300.00	220.00
tblConsumerProducts	ROG_EF	2.14E-05	2.04E-05
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	5.00

tblSequestration	NumberOfNewTrees	0.00	85.00
tblVehicleTrips	ST_TR	6.42	0.87
tblVehicleTrips	SU_TR	5.09	0.87
tblVehicleTrips	WD_TR	3.93	0.87
tblWater	IndoorWaterUseRate	80,810,312.50	23,379,839.90

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	1.0368	3.2936	3.8037	8.2400e-003	0.4045	0.1509	0.5554	0.1267	0.1410	0.2677	0.0000	739.1534	739.1534	0.1229	0.0259	749.9326
2023	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**1.0368**	**3.2936**	**3.8037**	**8.2400e-003**	**0.4045**	**0.1509**	**0.5554**	**0.1267**	**0.1410**	**0.2677**	**0.0000**	**739.1534**	**739.1534**	**0.1229**	**0.0259**	**749.9326**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.8594	2.9989	4.1333	8.2400e-003	0.3203	0.1619	0.4821	0.0933	0.1616	0.2548	0.0000	739.1529	739.1529	0.1229	0.0259	749.9320
2023	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.8594**	**2.9989**	**4.1333**	**8.2400e-003**	**0.3203**	**0.1619**	**0.4821**	**0.0933**	**0.1616**	**0.2548**	**0.0000**	**739.1529**	**739.1529**	**0.1229**	**0.0259**	**749.9320**

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	**17.11**	**8.95**	**-8.66**	**0.00**	**20.82**	**-7.23**	**13.20**	**26.39**	**-14.61**	**4.80**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**1-1-2022**	**3-31-2022**	1.0919	0.8803
2	**4-1-2022**	**6-30-2022**	0.8556	0.7664
3	**7-1-2022**	**9-30-2022**	0.8650	0.7748
4	**10-1-2022**	**12-31-2022**	1.5566	1.4734
5	**1-1-2023**	**3-31-2023**	0.0236	0.0236
		Highest	1.5566	1.4734

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.3787	3.0000e-005	3.2500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.3300e-003	6.3300e-003	2.0000e-005	0.0000	6.7400e-003
Energy	0.0609	0.5538	0.4652	3.3200e-003		0.0421	0.0421		0.0421	0.0421	0.0000	1,217.6515	1,217.6515	0.0634	0.0173	1,224.4056
Mobile	0.1492	0.2392	1.5136	3.5200e-003	0.3613	2.8700e-003	0.3642	0.0965	2.6900e-003	0.0992	0.0000	328.2265	328.2265	0.0174	0.0165	333.5892
Waste						0.0000	0.0000		0.0000	0.0000	87.9600	0.0000	87.9600	5.1983	0.0000	217.9173
Water						0.0000	0.0000		0.0000	0.0000	7.4173	53.9891	61.4065	0.7664	0.0185	86.0914
Total	**1.5888**	**0.7931**	**1.9821**	**6.8400e-003**	**0.3613**	**0.0450**	**0.4063**	**0.0965**	**0.0448**	**0.1413**	**95.3774**	**1,599.8734**	**1,695.2508**	**6.0456**	**0.0524**	**1,862.0101**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.3787	3.0000e-005	3.2500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.3300e-003	6.3300e-003	2.0000e-005	0.0000	6.7400e-003
Energy	0.0529	0.4809	0.4040	2.8900e-003		0.0366	0.0366		0.0366	0.0366	0.0000	685.3996	685.3996	0.0237	0.0113	689.3457
Mobile	0.1406	0.2149	1.3575	3.0800e-003	0.3147	2.5300e-003	0.3172	0.0841	2.3700e-003	0.0865	0.0000	287.1042	287.1042	0.0160	0.0148	291.9227
Waste						0.0000	0.0000		0.0000	0.0000	8.7960	0.0000	8.7960	0.5198	0.0000	21.7917
Water						0.0000	0.0000		0.0000	0.0000	6.1742	44.9405	51.1147	0.6379	0.0154	71.6625
Total	**1.5722**	**0.6958**	**1.7647**	**5.9700e-003**	**0.3147**	**0.0391**	**0.3538**	**0.0841**	**0.0389**	**0.1230**	**14.9702**	**1,017.4506**	**1,032.4208**	**1.1975**	**0.0415**	**1,074.7293**

	ROG	**NOx**	**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	**1.05**	**12.26**	**10.97**	**12.72**	**12.90**	**13.08**	**12.92**	**12.89**	**13.08**	**12.96**	**84.30**	**36.40**	**39.10**	**80.19**	**20.80**	**42.28**

2.3 Vegetation

Vegetation

	CO2e
Category	MT
New Trees	60.1800
Total	**60.1800**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	1/1/2022	2/11/2022	5	30	
2	Building Construction	Building Construction	2/12/2022	12/18/2022	5	220	
3	Paving	Paving	11/25/2022	12/22/2022	5	20	
4	Architectural Coating	Architectural Coating	12/3/2022	1/1/2023	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 90

Acres of Paving: 4.64

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 398,364; Non-Residential Outdoor: 132,788; Striped Parking Area: 12,127 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	4	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	5	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
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
Grading	8	20.00	0.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	12	232.00	90.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	46.00	0.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1381	0.0000	0.1381	0.0548	0.0000	0.0548	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0544	0.5827	0.4356	9.3000e-004		0.0245	0.0245		0.0226	0.0226	0.0000	81.8019	81.8019	0.0265	0.0000	82.4633
Total	**0.0544**	**0.5827**	**0.4356**	**9.3000e-004**	**0.1381**	**0.0245**	**0.1626**	**0.0548**	**0.0226**	**0.0774**	**0.0000**	**81.8019**	**81.8019**	**0.0265**	**0.0000**	**82.4633**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.9000e-004	6.5000e-004	8.0400e-003	2.0000e-005	2.4700e-003	1.0000e-005	2.4800e-003	6.6000e-004	1.0000e-005	6.7000e-004	0.0000	1.9646	1.9646	6.0000e-005	6.0000e-005	1.9835
Total	**8.9000e-004**	**6.5000e-004**	**8.0400e-003**	**2.0000e-005**	**2.4700e-003**	**1.0000e-005**	**2.4800e-003**	**6.6000e-004**	**1.0000e-005**	**6.7000e-004**	**0.0000**	**1.9646**	**1.9646**	**6.0000e-005**	**6.0000e-005**	**1.9835**

3.2 Grading - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0538	0.0000	0.0538	0.0214	0.0000	0.0214	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0229	0.4497	0.5508	9.3000e-004		0.0195	0.0195		0.0195	0.0195	0.0000	81.8018	81.8018	0.0265	0.0000	82.4632
Total	**0.0229**	**0.4497**	**0.5508**	**9.3000e-004**	**0.0538**	**0.0195**	**0.0733**	**0.0214**	**0.0195**	**0.0409**	**0.0000**	**81.8018**	**81.8018**	**0.0265**	**0.0000**	**82.4632**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.9000e-004	6.5000e-004	8.0400e-003	2.0000e-005	2.4700e-003	1.0000e-005	2.4800e-003	6.6000e-004	1.0000e-005	6.7000e-004	0.0000	1.9646	1.9646	6.0000e-005	6.0000e-005	1.9835
Total	**8.9000e-004**	**6.5000e-004**	**8.0400e-003**	**2.0000e-005**	**2.4700e-003**	**1.0000e-005**	**2.4800e-003**	**6.6000e-004**	**1.0000e-005**	**6.7000e-004**	**0.0000**	**1.9646**	**1.9646**	**6.0000e-005**	**6.0000e-005**	**1.9835**

3.3 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2319	2.1563	2.3577	3.7300e-003		0.1140	0.1140		0.1068	0.1068	0.0000	322.2761	322.2761	0.0829	0.0000	324.3475
Total	**0.2319**	**2.1563**	**2.3577**	**3.7300e-003**		**0.1140**	**0.1140**		**0.1068**	**0.1068**	**0.0000**	**322.2761**	**322.2761**	**0.0829**	**0.0000**	**324.3475**

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	0.0139	0.3720	0.1380	1.4500e-003	0.0490	4.7600e-003	0.0538	0.0141	4.5500e-003	0.0187	0.0000	139.4160	139.4160	1.5200e-003	0.0207	145.6299
Worker	0.0756	0.0553	0.6840	1.8100e-003	0.2100	1.1000e-003	0.2111	0.0558	1.0100e-003	0.0568	0.0000	167.1194	167.1194	5.2000e-003	4.9600e-003	168.7283
Total	**0.0895**	**0.4274**	**0.8221**	**3.2600e-003**	**0.2590**	**5.8600e-003**	**0.2648**	**0.0699**	**5.5600e-003**	**0.0755**	**0.0000**	**306.5354**	**306.5354**	**6.7200e-003**	**0.0257**	**314.3582**

3.3 Building Construction - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0929	1.9934	2.5447	3.7300e-003		0.1294	0.1294		0.1294	0.1294	0.0000	322.2757	322.2757	0.0829	0.0000	324.3472
Total	**0.0929**	**1.9934**	**2.5447**	**3.7300e-003**		**0.1294**	**0.1294**		**0.1294**	**0.1294**	**0.0000**	**322.2757**	**322.2757**	**0.0829**	**0.0000**	**324.3472**

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	0.0139	0.3720	0.1380	1.4500e-003	0.0490	4.7600e-003	0.0538	0.0141	4.5500e-003	0.0187	0.0000	139.4160	139.4160	1.5200e-003	0.0207	145.6299
Worker	0.0756	0.0553	0.6840	1.8100e-003	0.2100	1.1000e-003	0.2111	0.0558	1.0100e-003	0.0568	0.0000	167.1194	167.1194	5.2000e-003	4.9600e-003	168.7283
Total	**0.0895**	**0.4274**	**0.8221**	**3.2600e-003**	**0.2590**	**5.8600e-003**	**0.2648**	**0.0699**	**5.5600e-003**	**0.0755**	**0.0000**	**306.5354**	**306.5354**	**6.7200e-003**	**0.0257**	**314.3582**

3.4 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0110	0.1113	0.1458	2.3000e-004		5.6800e-003	5.6800e-003		5.2200e-003	5.2200e-003	0.0000	20.0276	20.0276	6.4800e-003	0.0000	20.1895
Paving	1.6800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0127**	**0.1113**	**0.1458**	**2.3000e-004**		**5.6800e-003**	**5.6800e-003**		**5.2200e-003**	**5.2200e-003**	**0.0000**	**20.0276**	**20.0276**	**6.4800e-003**	**0.0000**	**20.1895**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.4000e-004	3.3000e-004	4.0200e-003	1.0000e-005	1.2300e-003	1.0000e-005	1.2400e-003	3.3000e-004	1.0000e-005	3.3000e-004	0.0000	0.9823	0.9823	3.0000e-005	3.0000e-005	0.9917
Total	**4.4000e-004**	**3.3000e-004**	**4.0200e-003**	**1.0000e-005**	**1.2300e-003**	**1.0000e-005**	**1.2400e-003**	**3.3000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**0.9823**	**0.9823**	**3.0000e-005**	**3.0000e-005**	**0.9917**

3.4 Paving - 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					
Off-Road	5.6100e-003	0.1130	0.1730	2.3000e-004		6.0900e-003	6.0900e-003		6.0900e-003	6.0900e-003	0.0000	20.0275	20.0275	6.4800e-003	0.0000	20.1895
Paving	1.6800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**7.2900e-003**	**0.1130**	**0.1730**	**2.3000e-004**		**6.0900e-003**	**6.0900e-003**		**6.0900e-003**	**6.0900e-003**	**0.0000**	**20.0275**	**20.0275**	**6.4800e-003**	**0.0000**	**20.1895**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.4000e-004	3.3000e-004	4.0200e-003	1.0000e-005	1.2300e-003	1.0000e-005	1.2400e-003	3.3000e-004	1.0000e-005	3.3000e-004	0.0000	0.9823	0.9823	3.0000e-005	3.0000e-005	0.9917
Total	**4.4000e-004**	**3.3000e-004**	**4.0200e-003**	**1.0000e-005**	**1.2300e-003**	**1.0000e-005**	**1.2400e-003**	**3.3000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**0.9823**	**0.9823**	**3.0000e-005**	**3.0000e-005**	**0.9917**

3.5 Architectural Coating - 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					
Archit. Coating	0.6436					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.0500e-003	0.0141	0.0181	3.0000e-005		8.2000e-004	8.2000e-004		8.2000e-004	8.2000e-004	0.0000	2.5533	2.5533	1.7000e-004	0.0000	2.5574
Total	**0.6456**	**0.0141**	**0.0181**	**3.0000e-005**		**8.2000e-004**	**8.2000e-004**		**8.2000e-004**	**8.2000e-004**	**0.0000**	**2.5533**	**2.5533**	**1.7000e-004**	**0.0000**	**2.5574**

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	1.3600e-003	1.0000e-003	0.0123	3.0000e-005	3.7800e-003	2.0000e-005	3.8000e-003	1.0100e-003	2.0000e-005	1.0200e-003	0.0000	3.0123	3.0123	9.0000e-005	9.0000e-005	3.0413
Total	**1.3600e-003**	**1.0000e-003**	**0.0123**	**3.0000e-005**	**3.7800e-003**	**2.0000e-005**	**3.8000e-003**	**1.0100e-003**	**2.0000e-005**	**1.0200e-003**	**0.0000**	**3.0123**	**3.0123**	**9.0000e-005**	**9.0000e-005**	**3.0413**

3.5 Architectural Coating - 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					
Archit. Coating	0.6436					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.9000e-004	0.0136	0.0183	3.0000e-005		9.5000e-004	9.5000e-004		9.5000e-004	9.5000e-004	0.0000	2.5533	2.5533	1.7000e-004	0.0000	2.5574
Total	**0.6442**	**0.0136**	**0.0183**	**3.0000e-005**		**9.5000e-004**	**9.5000e-004**		**9.5000e-004**	**9.5000e-004**	**0.0000**	**2.5533**	**2.5533**	**1.7000e-004**	**0.0000**	**2.5574**

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	1.3600e-003	1.0000e-003	0.0123	3.0000e-005	3.7800e-003	2.0000e-005	3.8000e-003	1.0100e-003	2.0000e-005	1.0200e-003	0.0000	3.0123	3.0123	9.0000e-005	9.0000e-005	3.0413
Total	**1.3600e-003**	**1.0000e-003**	**0.0123**	**3.0000e-005**	**3.7800e-003**	**2.0000e-005**	**3.8000e-003**	**1.0100e-003**	**2.0000e-005**	**1.0200e-003**	**0.0000**	**3.0123**	**3.0123**	**9.0000e-005**	**9.0000e-005**	**3.0413**

3.5 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	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	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**

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**

3.5 Architectural Coating - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	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**

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**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Improve Walkability Design

Improve Destination Accessibility

Increase Transit Accessibility

Improve Pedestrian Network

Employee Vanpool/Shuttle

	ROG	NOx	CO	SO2	Fugitive 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	0.1406	0.2149	1.3575	3.0800e-003	0.3147	2.5300e-003	0.3172	0.0841	2.3700e-003	0.0865	0.0000	287.1042	287.1042	0.0160	0.0148	291.9227
Unmitigated	0.1492	0.2392	1.5136	3.5200e-003	0.3613	2.8700e-003	0.3642	0.0965	2.6900e-003	0.0992	0.0000	328.2265	328.2265	0.0174	0.0165	333.5892

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Heavy Industry	304.02	304.02	304.02	955,175	832,015
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	304.02	304.02	304.02	955,175	832,015

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
General Heavy Industry	12.50	4.20	5.40	59.00	28.00	13.00	92	5	3
Other Asphalt Surfaces	12.50	4.20	5.40	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	12.50	4.20	5.40	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Heavy Industry	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Other Asphalt Surfaces	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Other Non-Asphalt Surfaces	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Install High Efficiency Lighting

Percent of Electricity Use Generated with Renewable Energy

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive 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	161.8821	161.8821	0.0137	1.6600e-003	162.7172
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	614.7691	614.7691	0.0519	6.2900e-003	617.9406
NaturalGas Mitigated	0.0529	0.4809	0.4040	2.8900e-003		0.0366	0.0366		0.0366	0.0366	0.0000	523.5175	523.5175	0.0100	9.6000e-003	526.6285
NaturalGas Unmitigated	0.0609	0.5538	0.4652	3.3200e-003		0.0421	0.0421		0.0421	0.0421	0.0000	602.8824	602.8824	0.0116	0.0111	606.4650

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					
General Heavy Industry	1.12976e+007	0.0609	0.5538	0.4652	3.3200e-003		0.0421	0.0421		0.0421	0.0421	0.0000	602.8824	602.8824	0.0116	0.0111	606.4650
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0609**	**0.5538**	**0.4652**	**3.3200e-003**		**0.0421**	**0.0421**		**0.0421**	**0.0421**	**0.0000**	**602.8824**	**602.8824**	**0.0116**	**0.0111**	**606.4650**

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					
General Heavy Industry	9.81035e +006	0.0529	0.4809	0.4040	2.8900e-003		0.0366	0.0366		0.0366	0.0366	0.0000	523.5175	523.5175	0.0100	9.6000e-003	526.6285
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0529**	**0.4809**	**0.4040**	**2.8900e-003**		**0.0366**	**0.0366**		**0.0366**	**0.0366**	**0.0000**	**523.5175**	**523.5175**	**0.0100**	**9.6000e-003**	**526.6285**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Heavy Industry	3.4665e +006	614.7691	0.0519	6.2900e-003	617.9406
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**614.7691**	**0.0519**	**6.2900e-003**	**617.9406**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Heavy Industry	912806	161.8821	0.0137	1.6600e-003	162.7172
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**161.8821**	**0.0137**	**1.6600e-003**	**162.7172**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.3787	3.0000e-005	3.2500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.3300e-003	6.3300e-003	2.0000e-005	0.0000	6.7400e-003
Unmitigated	1.3787	3.0000e-005	3.2500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.3300e-003	6.3300e-003	2.0000e-005	0.0000	6.7400e-003

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	0.0644					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.3141					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.0000e-004	3.0000e-005	3.2500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.3300e-003	6.3300e-003	2.0000e-005	0.0000	6.7400e-003
Total	**1.3787**	**3.0000e-005**	**3.2500e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**6.3300e-003**	**6.3300e-003**	**2.0000e-005**	**0.0000**	**6.7400e-003**

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	0.0644					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.3141					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.0000e-004	3.0000e-005	3.2500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.3300e-003	6.3300e-003	2.0000e-005	0.0000	6.7400e-003
Total	**1.3787**	**3.0000e-005**	**3.2500e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**6.3300e-003**	**6.3300e-003**	**2.0000e-005**	**0.0000**	**6.7400e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

Use Grey Water

Install Low Flow Bathroom Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	51.1147	0.6379	0.0154	71.6625
Unmitigated	61.4065	0.7664	0.0185	86.0914

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Heavy Industry	23.3798 / 0	61.4065	0.7664	0.0185	86.0914
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**61.4065**	**0.7664**	**0.0185**	**86.0914**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Heavy Industry	19.4614 / 0	51.1147	0.6379	0.0154	71.6625
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**51.1147**	**0.6379**	**0.0154**	**71.6625**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	8.7960	0.5198	0.0000	21.7917
Unmitigated	87.9600	5.1983	0.0000	217.9173

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Heavy Industry	433.32	87.9600	5.1983	0.0000	217.9173
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**87.9600**	**5.1983**	**0.0000**	**217.9173**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Heavy Industry	43.332	8.7960	0.5198	0.0000	21.7917
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**8.7960**	**0.5198**	**0.0000**	**21.7917**

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

	Total CO2	CH4	N2O	CO2e
Category	MT			
Unmitigated	60.1800	0.0000	0.0000	60.1800

11.2 Net New Trees

Species Class

	Number of Trees	Total CO2	CH4	N2O	CO2e
		MT			
Miscellaneous	85	60.1800	0.0000	0.0000	60.1800
Total		**60.1800**	**0.0000**	**0.0000**	**60.1800**

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

19-0174 Coachillin Parcels 30 & 31

Riverside-Salton Sea County, Annual

Includes reduction in mobile sources for 25% participation in Amphitheater shuttle

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	7.05	Acre	7.05	307,098.00	0
Parking Lot	10.00	Space	0.09	4,000.00	0
Parking Lot	2.94	Acre	2.94	128,066.40	0
Arena	62.13	1000sqft	1.43	62,125.00	0
Hotel	175.00	Room	1.06	150,000.00	0
Recreational Swimming Pool	4.00	1000sqft	0.09	4,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - P30 5.88ac w/ 175rm hotel(150TSF & 46,216sf ftprnt), ~4TSF pool, ~50% prkng(2.94ac), & rmdnr lndscpng(1.79ac); P31/Basin101 6.78ac w/ 62,125sf amphitheater(w/460sf rr & 5,660sf rest), 4.15ac hrdscpe/temp prkng, 10spc prkng, & rmndr lndscpng(1.11ac)

Construction Phase - Construction anticipated to last ~12 months w/ OY 2023. Therefore, modeled as start 1/1/2022 & be completed 1/1/2023. Site is vacant, not demo/site prep & only fine grading needed.

Off-road Equipment - CalEEMod default timing for building construction reduced by ~27%; therefore, ~27% more equipment added.

Grading - Site anticipated to balance.

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

Architectural Coating - SCAQMD Rule 1113 architectural coatings are 50 g/L VOC or less buildings & 100 g/L VOC parking lot striping. Parking lot painting 6% of 40,000sf +128,066sf = 7,924sf.

Vehicle Trips - Per TIA, hotel 8.36 trips/room weekdays & 8.19 trips/room saturdays (default sunday rate) & 1,875 trips/day amphitheater (w/ event and 25% shuttle use)/62.125 TSF = 30.18 trips/TSF. Hotel pool no additional trips.

Consumer Products - SSAB is within SCAQMD jurisdiction; therefore, factor is 2.04 x 10^-5 lbs/SF/day.

Area Coating - Per SCAQMD Rule 1113 architectural coatings are 50 g/L VOC or less for buildings and 100g/L VOC for parking lots/striping. Parking lot striping 6% of 4,000 + 128,066 = ~7,924 sf.

Sequestration - Parcels 30 & 31 and Basin 101 = 12.66 ac which is ~8.8% of total project acreage (143.79 acres). Total project to plant 966 new trees. 8.8% of 966 = ~85 new trees.

Construction Off-road Equipment Mitigation - Tier 3 equipment to be used during construction.

Mobile Land Use Mitigation - Dwntwn DHS ~4.07mi N. Palm Springs Amtrak stn ~0.89mi S. Sidewalks on/off-site. 1emp/500sf com tourist =212,125sf/500=424 emp/2.49 job ac=170 emp/job acre. At least 5 intersections/0.25 sq mi.

Area Mitigation - Per SCAQMD Rule 1113 paints (50g/L) to be used for buildings, 100g/L for parking lots/striping.

Energy Mitigation - Per applicant, wind and solar energy production to supply ~40% of the site's total energy needs. High-efficiency lighting at least ~34% more efficient than standard. Energy Star appliances.

Water Mitigation - 100% of landscape irrigation from grey water. Low flow faucets/showers/toilets. Water-efficient landscaping to be installed on-site.

Waste Mitigation - AB 341 requires at least 75% of waste be diverted from landfills, 75% by 2020.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Parking	26,350.00	7,924.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	100
tblAreaCoating	Area_Parking	26350	7924
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

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

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	7.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	20.00	25.00
tblConstructionPhase	NumDays	300.00	220.00
tblConsumerProducts	ROG_EF	2.14E-05	2.04E-05
tblLandUse	LandUseSquareFeet	62,130.00	62,125.00
tblLandUse	LandUseSquareFeet	254,100.00	150,000.00
tblLandUse	LotAcreage	19.97	1.43

tblLandUse	LotAcreage	5.83	1.06
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	5.00
tblSequestration	NumberOfNewTrees	0.00	85.00
tblVehicleTrips	ST_TR	10.71	30.18
tblVehicleTrips	ST_TR	9.10	0.00
tblVehicleTrips	SU_TR	10.71	0.00
tblVehicleTrips	SU_TR	13.60	0.00
tblVehicleTrips	WD_TR	10.71	0.00
tblVehicleTrips	WD_TR	28.82	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.9233	3.3782	3.9672	8.8800e-003	0.4546	0.1523	0.6068	0.1402	0.1422	0.2824	0.0000	798.5903	798.5903	0.1242	0.0307	810.8568
2023	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.9233**	**3.3782**	**3.9672**	**8.8800e-003**	**0.4546**	**0.1523**	**0.6068**	**0.1402**	**0.1422**	**0.2824**	**0.0000**	**798.5903**	**798.5903**	**0.1242**	**0.0307**	**810.8568**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.7455	3.0833	4.2968	8.8800e-003	0.3703	0.1632	0.5335	0.1068	0.1628	0.2696	0.0000	798.5898	798.5898	0.1242	0.0307	810.8563
2023	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.7455**	**3.0833**	**4.2968**	**8.8800e-003**	**0.3703**	**0.1632**	**0.5335**	**0.1068**	**0.1628**	**0.2696**	**0.0000**	**798.5898**	**798.5898**	**0.1242**	**0.0307**	**810.8563**

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	**19.25**	**8.73**	**-8.31**	**0.00**	**18.53**	**-7.18**	**12.07**	**23.84**	**-14.50**	**4.54**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**1-1-2022**	**3-31-2022**	1.1072	0.8956
2	**4-1-2022**	**6-30-2022**	0.8838	0.7946
3	**7-1-2022**	**9-30-2022**	0.8935	0.8034
4	**10-1-2022**	**12-31-2022**	1.4167	1.3331
5	**1-1-2023**	**3-31-2023**	0.0152	0.0152
		Highest	1.4167	1.3331

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	0.8694	2.0000e-005	2.4000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.6700e-003	4.6700e-003	1.0000e-005	0.0000	4.9700e-003
Energy	0.0589	0.5357	0.4500	3.2100e-003		0.0407	0.0407		0.0407	0.0407	0.0000	1,164.8270	1,164.8270	0.0603	0.0166	1,171.2932
Mobile	0.6181	0.7495	4.6926	9.1000e-003	0.9050	7.8600e-003	0.9129	0.2418	7.3600e-003	0.2491	0.0000	849.8507	849.8507	0.0622	0.0513	866.6830
Waste						0.0000	0.0000		0.0000	0.0000	24.4239	0.0000	24.4239	1.4434	0.0000	60.5091
Water						0.0000	0.0000		0.0000	0.0000	9.9743	77.2241	87.1984	1.0310	0.0250	120.4167
Total	**1.5464**	**1.2852**	**5.1449**	**0.0123**	**0.9050**	**0.0486**	**0.9536**	**0.2418**	**0.0481**	**0.2899**	**34.3982**	**2,091.9065**	**2,126.3047**	**2.5969**	**0.0929**	**2,218.9070**

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	0.8694	2.0000e-005	2.4000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.6700e-003	4.6700e-003	1.0000e-005	0.0000	4.9700e-003
Energy	0.0589	0.5357	0.4500	3.2100e-003		0.0407	0.0407		0.0407	0.0407	0.0000	890.6417	890.6417	0.0371	0.0138	895.6933
Mobile	0.5543	0.5700	3.5410	5.8500e-003	0.5614	5.3400e-003	0.5667	0.1500	4.9900e-003	0.1550	0.0000	546.5372	546.5372	0.0516	0.0387	559.3556
Waste						0.0000	0.0000		0.0000	0.0000	6.1060	0.0000	6.1060	0.3609	0.0000	15.1273
Water						0.0000	0.0000		0.0000	0.0000	8.3026	60.4328	68.7354	0.8579	0.0208	96.3664
Total	**1.4826**	**1.1057**	**3.9933**	**9.0600e-003**	**0.5614**	**0.0461**	**0.6075**	**0.1500**	**0.0457**	**0.1957**	**14.4086**	**1,497.6162**	**1,512.0248**	**1.3074**	**0.0733**	**1,566.5476**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**4.13**	**13.97**	**22.38**	**26.40**	**37.97**	**5.19**	**36.30**	**37.97**	**4.93**	**32.49**	**58.11**	**28.41**	**28.89**	**49.65**	**21.11**	**29.40**

2.3 Vegetation

Vegetation

	CO2e
Category	MT
New Trees	60.1800
Total	**60.1800**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	1/1/2022	2/11/2022	5	30	
2	Building Construction	Building Construction	2/12/2022	12/18/2022	5	220	
3	Paving	Paving	11/25/2022	12/22/2022	5	20	
4	Architectural Coating	Architectural Coating	11/28/2022	1/1/2023	5	25	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 90

Acres of Paving: 10.08

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 318,188; Non-Residential Outdoor: 106,063; Striped Parking Area: 7,924 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	4	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	5	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
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
Grading	8	20.00	0.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	12	275.00	107.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	55.00	0.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1381	0.0000	0.1381	0.0548	0.0000	0.0548	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0544	0.5827	0.4356	9.3000e-004		0.0245	0.0245		0.0226	0.0226	0.0000	81.8019	81.8019	0.0265	0.0000	82.4633
Total	**0.0544**	**0.5827**	**0.4356**	**9.3000e-004**	**0.1381**	**0.0245**	**0.1626**	**0.0548**	**0.0226**	**0.0774**	**0.0000**	**81.8019**	**81.8019**	**0.0265**	**0.0000**	**82.4633**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.9000e-004	6.5000e-004	8.0400e-003	2.0000e-005	2.4700e-003	1.0000e-005	2.4800e-003	6.6000e-004	1.0000e-005	6.7000e-004	0.0000	1.9646	1.9646	6.0000e-005	6.0000e-005	1.9835
Total	**8.9000e-004**	**6.5000e-004**	**8.0400e-003**	**2.0000e-005**	**2.4700e-003**	**1.0000e-005**	**2.4800e-003**	**6.6000e-004**	**1.0000e-005**	**6.7000e-004**	**0.0000**	**1.9646**	**1.9646**	**6.0000e-005**	**6.0000e-005**	**1.9835**

3.2 Grading - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0538	0.0000	0.0538	0.0214	0.0000	0.0214	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0229	0.4497	0.5508	9.3000e-004		0.0195	0.0195		0.0195	0.0195	0.0000	81.8018	81.8018	0.0265	0.0000	82.4632
Total	**0.0229**	**0.4497**	**0.5508**	**9.3000e-004**	**0.0538**	**0.0195**	**0.0733**	**0.0214**	**0.0195**	**0.0409**	**0.0000**	**81.8018**	**81.8018**	**0.0265**	**0.0000**	**82.4632**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.9000e-004	6.5000e-004	8.0400e-003	2.0000e-005	2.4700e-003	1.0000e-005	2.4800e-003	6.6000e-004	1.0000e-005	6.7000e-004	0.0000	1.9646	1.9646	6.0000e-005	6.0000e-005	1.9835
Total	**8.9000e-004**	**6.5000e-004**	**8.0400e-003**	**2.0000e-005**	**2.4700e-003**	**1.0000e-005**	**2.4800e-003**	**6.6000e-004**	**1.0000e-005**	**6.7000e-004**	**0.0000**	**1.9646**	**1.9646**	**6.0000e-005**	**6.0000e-005**	**1.9835**

3.3 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2319	2.1563	2.3577	3.7300e-003		0.1140	0.1140		0.1068	0.1068	0.0000	322.2761	322.2761	0.0829	0.0000	324.3475
Total	**0.2319**	**2.1563**	**2.3577**	**3.7300e-003**		**0.1140**	**0.1140**		**0.1068**	**0.1068**	**0.0000**	**322.2761**	**322.2761**	**0.0829**	**0.0000**	**324.3475**

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	0.0165	0.4423	0.1641	1.7200e-003	0.0583	5.6600e-003	0.0639	0.0168	5.4100e-003	0.0222	0.0000	165.7501	165.7501	1.8000e-003	0.0246	173.1378
Worker	0.0896	0.0656	0.8108	2.1500e-003	0.2489	1.3000e-003	0.2502	0.0661	1.2000e-003	0.0673	0.0000	198.0941	198.0941	6.1700e-003	5.8800e-003	200.0012
Total	**0.1061**	**0.5079**	**0.9749**	**3.8700e-003**	**0.3071**	**6.9600e-003**	**0.3141**	**0.0829**	**6.6100e-003**	**0.0895**	**0.0000**	**363.8442**	**363.8442**	**7.9700e-003**	**0.0305**	**373.1390**

3.3 Building Construction - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0929	1.9934	2.5447	3.7300e-003		0.1294	0.1294		0.1294	0.1294	0.0000	322.2757	322.2757	0.0829	0.0000	324.3472
Total	**0.0929**	**1.9934**	**2.5447**	**3.7300e-003**		**0.1294**	**0.1294**		**0.1294**	**0.1294**	**0.0000**	**322.2757**	**322.2757**	**0.0829**	**0.0000**	**324.3472**

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	0.0165	0.4423	0.1641	1.7200e-003	0.0583	5.6600e-003	0.0639	0.0168	5.4100e-003	0.0222	0.0000	165.7501	165.7501	1.8000e-003	0.0246	173.1378
Worker	0.0896	0.0656	0.8108	2.1500e-003	0.2489	1.3000e-003	0.2502	0.0661	1.2000e-003	0.0673	0.0000	198.0941	198.0941	6.1700e-003	5.8800e-003	200.0012
Total	**0.1061**	**0.5079**	**0.9749**	**3.8700e-003**	**0.3071**	**6.9600e-003**	**0.3141**	**0.0829**	**6.6100e-003**	**0.0895**	**0.0000**	**363.8442**	**363.8442**	**7.9700e-003**	**0.0305**	**373.1390**

3.4 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0110	0.1113	0.1458	2.3000e-004		5.6800e-003	5.6800e-003		5.2200e-003	5.2200e-003	0.0000	20.0276	20.0276	6.4800e-003	0.0000	20.1895
Paving	3.9700e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0150**	**0.1113**	**0.1458**	**2.3000e-004**		**5.6800e-003**	**5.6800e-003**		**5.2200e-003**	**5.2200e-003**	**0.0000**	**20.0276**	**20.0276**	**6.4800e-003**	**0.0000**	**20.1895**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.4000e-004	3.3000e-004	4.0200e-003	1.0000e-005	1.2300e-003	1.0000e-005	1.2400e-003	3.3000e-004	1.0000e-005	3.3000e-004	0.0000	0.9823	0.9823	3.0000e-005	3.0000e-005	0.9917
Total	**4.4000e-004**	**3.3000e-004**	**4.0200e-003**	**1.0000e-005**	**1.2300e-003**	**1.0000e-005**	**1.2400e-003**	**3.3000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**0.9823**	**0.9823**	**3.0000e-005**	**3.0000e-005**	**0.9917**

3.4 Paving - 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					
Off-Road	5.6100e-003	0.1130	0.1730	2.3000e-004		6.0900e-003	6.0900e-003		6.0900e-003	6.0900e-003	0.0000	20.0275	20.0275	6.4800e-003	0.0000	20.1895
Paving	3.9700e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**9.5800e-003**	**0.1130**	**0.1730**	**2.3000e-004**		**6.0900e-003**	**6.0900e-003**		**6.0900e-003**	**6.0900e-003**	**0.0000**	**20.0275**	**20.0275**	**6.4800e-003**	**0.0000**	**20.1895**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.4000e-004	3.3000e-004	4.0200e-003	1.0000e-005	1.2300e-003	1.0000e-005	1.2400e-003	3.3000e-004	1.0000e-005	3.3000e-004	0.0000	0.9823	0.9823	3.0000e-005	3.0000e-005	0.9917
Total	**4.4000e-004**	**3.3000e-004**	**4.0200e-003**	**1.0000e-005**	**1.2300e-003**	**1.0000e-005**	**1.2400e-003**	**3.3000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**0.9823**	**0.9823**	**3.0000e-005**	**3.0000e-005**	**0.9917**

3.5 Architectural Coating - 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					
Archit. Coating	0.5100					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.5600e-003	0.0176	0.0227	4.0000e-005		1.0200e-003	1.0200e-003		1.0200e-003	1.0200e-003	0.0000	3.1916	3.1916	2.1000e-004	0.0000	3.1968
Total	**0.5125**	**0.0176**	**0.0227**	**4.0000e-005**		**1.0200e-003**	**1.0200e-003**		**1.0200e-003**	**1.0200e-003**	**0.0000**	**3.1916**	**3.1916**	**2.1000e-004**	**0.0000**	**3.1968**

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	2.0400e-003	1.4900e-003	0.0184	5.0000e-005	5.6600e-003	3.0000e-005	5.6900e-003	1.5000e-003	3.0000e-005	1.5300e-003	0.0000	4.5021	4.5021	1.4000e-004	1.3000e-004	4.5455
Total	**2.0400e-003**	**1.4900e-003**	**0.0184**	**5.0000e-005**	**5.6600e-003**	**3.0000e-005**	**5.6900e-003**	**1.5000e-003**	**3.0000e-005**	**1.5300e-003**	**0.0000**	**4.5021**	**4.5021**	**1.4000e-004**	**1.3000e-004**	**4.5455**

3.5 Architectural Coating - 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					
Archit. Coating	0.5100					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.4000e-004	0.0170	0.0229	4.0000e-005		1.1900e-003	1.1900e-003		1.1900e-003	1.1900e-003	0.0000	3.1916	3.1916	2.1000e-004	0.0000	3.1968
Total	**0.5107**	**0.0170**	**0.0229**	**4.0000e-005**		**1.1900e-003**	**1.1900e-003**		**1.1900e-003**	**1.1900e-003**	**0.0000**	**3.1916**	**3.1916**	**2.1000e-004**	**0.0000**	**3.1968**

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	2.0400e-003	1.4900e-003	0.0184	5.0000e-005	5.6600e-003	3.0000e-005	5.6900e-003	1.5000e-003	3.0000e-005	1.5300e-003	0.0000	4.5021	4.5021	1.4000e-004	1.3000e-004	4.5455
Total	**2.0400e-003**	**1.4900e-003**	**0.0184**	**5.0000e-005**	**5.6600e-003**	**3.0000e-005**	**5.6900e-003**	**1.5000e-003**	**3.0000e-005**	**1.5300e-003**	**0.0000**	**4.5021**	**4.5021**	**1.4000e-004**	**1.3000e-004**	**4.5455**

3.5 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	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	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**

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**

3.5 Architectural Coating - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	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**

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**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Improve Walkability Design

Improve Destination Accessibility

Increase Transit Accessibility

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive 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	0.5543	0.5700	3.5410	5.8500e-003	0.5614	5.3400e-003	0.5667	0.1500	4.9900e-003	0.1550	0.0000	546.5372	546.5372	0.0516	0.0387	559.3556
Unmitigated	0.6181	0.7495	4.6926	9.1000e-003	0.9050	7.8600e-003	0.9129	0.2418	7.3600e-003	0.2491	0.0000	849.8507	849.8507	0.0622	0.0513	866.6830

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Arena	0.00	1,875.08	0.00	315,762	195,873
Hotel	1,463.00	1,433.25	1041.25	2,076,831	1,288,299
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		

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

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Recreational Swimming Pool	0.00	0.00	0.00		
Total	1,463.00	3,308.33	1,041.25	2,392,593	1,484,172

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
Arena	12.50	4.20	5.40	0.00	81.00	19.00	66	28	6
Hotel	12.50	4.20	5.40	19.40	61.60	19.00	58	38	4
Other Non-Asphalt Surfaces	12.50	4.20	5.40	0.00	0.00	0.00	0	0	0
Parking Lot	12.50	4.20	5.40	0.00	0.00	0.00	0	0	0
Parking Lot	12.50	4.20	5.40	0.00	0.00	0.00	0	0	0
Parking Lot	12.50	4.20	5.40	0.00	0.00	0.00	0	0	0
Parking Lot	12.50	4.20	5.40	0.00	0.00	0.00	0	0	0
Recreational Swimming Pool	12.50	4.20	5.40	33.00	48.00	19.00	52	39	9

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Arena	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Hotel	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Other Non-Asphalt Surfaces	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Parking Lot	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Recreational Swimming Pool	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

Percent of Electricity Use Generated with Renewable Energy

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive 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	307.5086	307.5086	0.0260	3.1500e-003	309.0950
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	581.6940	581.6940	0.0491	5.9500e-003	584.6948
NaturalGas Mitigated	0.0589	0.5357	0.4500	3.2100e-003		0.0407	0.0407		0.0407	0.0407	0.0000	583.1331	583.1331	0.0112	0.0107	586.5984
NaturalGas Unmitigated	0.0589	0.5357	0.4500	3.2100e-003		0.0407	0.0407		0.0407	0.0407	0.0000	583.1331	583.1331	0.0112	0.0107	586.5984

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					
Arena	2.0085e +006	0.0108	0.0985	0.0827	5.9000e-004		7.4800e-003	7.4800e-003		7.4800e-003	7.4800e-003	0.0000	107.1813	107.1813	2.0500e-003	1.9600e-003	107.8182
Hotel	8.919e +006	0.0481	0.4372	0.3673	2.6200e-003		0.0332	0.0332		0.0332	0.0332	0.0000	475.9518	475.9518	9.1200e-003	8.7300e-003	478.7802
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
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
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0589**	**0.5357**	**0.4500**	**3.2100e-003**		**0.0407**	**0.0407**		**0.0407**	**0.0407**	**0.0000**	**583.1331**	**583.1331**	**0.0112**	**0.0107**	**586.5984**

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					
Arena	2.0085e +006	0.0108	0.0985	0.0827	5.9000e-004		7.4800e-003	7.4800e-003		7.4800e-003	7.4800e-003	0.0000	107.1813	107.1813	2.0500e-003	1.9600e-003	107.8182
Hotel	8.919e +006	0.0481	0.4372	0.3673	2.6200e-003		0.0332	0.0332		0.0332	0.0332	0.0000	475.9518	475.9518	9.1200e-003	8.7300e-003	478.7802
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
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
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0589**	**0.5357**	**0.4500**	**3.2100e-003**		**0.0407**	**0.0407**		**0.0407**	**0.0407**	**0.0000**	**583.1331**	**583.1331**	**0.0112**	**0.0107**	**586.5984**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Arena	616280	109.2945	9.2200e-003	1.1200e-003	109.8583
Hotel	2.6175e+006	464.2020	0.0392	4.7500e-003	466.5967
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	1400	0.2483	2.0000e-005	0.0000	0.2496
Parking Lot	44823.2	7.9492	6.7000e-004	8.0000e-005	7.9902
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000
Total		**581.6940**	**0.0491**	**5.9500e-003**	**584.6948**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Arena	326596	57.9204	4.8900e-003	5.9000e-004	58.2192
Hotel	1.38905e+006	246.3420	0.0208	2.5200e-003	247.6128
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	17750	3.1479	2.7000e-004	3.0000e-005	3.1641
Parking Lot	554.4	0.0983	1.0000e-005	0.0000	0.0988
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000
Total		**307.5086**	**0.0260**	**3.1400e-003**	**309.0950**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive 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	0.8694	2.0000e-005	2.4000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.6700e-003	4.6700e-003	1.0000e-005	0.0000	4.9700e-003
Unmitigated	0.8694	2.0000e-005	2.4000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.6700e-003	4.6700e-003	1.0000e-005	0.0000	4.9700e-003

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	0.0510					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.8181					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.2000e-004	2.0000e-005	2.4000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.6700e-003	4.6700e-003	1.0000e-005	0.0000	4.9700e-003
Total	**0.8694**	**2.0000e-005**	**2.4000e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**4.6700e-003**	**4.6700e-003**	**1.0000e-005**	**0.0000**	**4.9700e-003**

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	0.0510					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.8181					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.2000e-004	2.0000e-005	2.4000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.6700e-003	4.6700e-003	1.0000e-005	0.0000	4.9700e-003
Total	**0.8694**	**2.0000e-005**	**2.4000e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**4.6700e-003**	**4.6700e-003**	**1.0000e-005**	**0.0000**	**4.9700e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

Use Grey Water

Install Low Flow Bathroom Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	68.7354	0.8579	0.0208	96.3664
Unmitigated	87.1984	1.0310	0.0250	120.4167

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Arena	26.7637 / 1.70832	73.6601	0.8776	0.0213	101.9352
Hotel	4.43918 / 0.493243	12.6312	0.1456	3.5300e-003	17.3232
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0.236573 / 0.144996	0.9070	7.7800e-003	1.9000e-004	1.1583
Total		**87.1984**	**1.0310**	**0.0250**	**120.4167**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Arena	22.2781 / 0	58.5129	0.7303	0.0177	82.0346
Hotel	3.69518 / 0	9.7053	0.1211	2.9300e-003	13.6067
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0.196923 / 0	0.5172	6.4600e-003	1.6000e-004	0.7251
Total		**68.7354**	**0.8579**	**0.0208**	**96.3664**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	6.1060	0.3609	0.0000	15.1273
Unmitigated	24.4239	1.4434	0.0000	60.5091

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Arena	1.71	0.3471	0.0205	0.0000	0.8600
Hotel	95.81	19.4486	1.1494	0.0000	48.1830
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	22.8	4.6282	0.2735	0.0000	11.4662
Total		**24.4239**	**1.4434**	**0.0000**	**60.5091**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Arena	0.4275	0.0868	5.1300e-003	0.0000	0.2150
Hotel	23.9525	4.8621	0.2873	0.0000	12.0458
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	5.7	1.1571	0.0684	0.0000	2.8665
Total		**6.1060**	**0.3609**	**0.0000**	**15.1273**

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

	Total CO2	CH4	N2O	CO2e
Category	MT			
Unmitigated	60.1800	0.0000	0.0000	60.1800

11.2 Net New Trees

Species Class

	Number of Trees	Total CO2	CH4	N2O	CO2e
		MT			
Miscellaneous	85	60.1800	0.0000	0.0000	60.1800
Total		**60.1800**	**0.0000**	**0.0000**	**60.1800**

Source: EMFAC2021 (v1.0.1) Emissions Inventory
Region Type: Air Basin
Region: South Coast
Calendar Year: 2022
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	Trips	Energy Consumption	Fuel Consumption	Fuel Consumption	Total Fuel Consumption	Total VMT	Total VMT	Miles Per Gallon	Vehicle Class
South Coast	2022	HHDT	Aggregate	Aggregate	Gasoline	93.77521787	1876.254559	0	1.271766939	1271.766939	1998484.407	4872.85011	11739264.89	**5.87**	**HHDT**
South Coast	2022	HHDT	Aggregate	Aggregate	Diesel	86344.61493	1308488.279	0	1883.165573	1883165.573		11080949.98			
South Coast	2022	HHDT	Aggregate	Aggregate	Natural Gas	9530.013799	64445.55712	0	114.0470669	114047.0669		653442.0558			
South Coast	2022	LDA	Aggregate	Aggregate	Gasoline	5432984.929	25333114.49	0	7742.158581	7742158.581	7863292.337	217937990	233491817.2	**29.69**	**LDA**
South Coast	2022	LDA	Aggregate	Aggregate	Diesel	16596.66266	70061.62945	0	12.98213336	12982.13336		525055.9524			
South Coast	2022	LDA	Aggregate	Aggregate	Electricity	204269.3588	1027049.78	3533212.262	0	0		9151442.882			
South Coast	2022	LDA	Aggregate	Aggregate	Plug-in Hybrid	123066.1719	508878.6208	856005.7326	108.1516236	108151.6236		5877328.413			
South Coast	2022	LDT1	Aggregate	Aggregate	Gasoline	508118.9525	2234897.36	0	772.6742907	772674.2907	773091.3918	18186231.22	18233327.62	**23.58**	**LDT1**
South Coast	2022	LDT1	Aggregate	Aggregate	Diesel	219.3543012	650.4955004	0	0.181276274	181.2762739		4217.627426			
South Coast	2022	LDT1	Aggregate	Aggregate	Electricity	860.4090968	3929.280026	11231.02673	0	0		29089.70421			
South Coast	2022	LDT1	Aggregate	Aggregate	Plug-in Hybrid	262.0628223	1083.62977	2172.476691	0.2358249	235.8249004		13789.07098			
South Coast	2022	LDT2	Aggregate	Aggregate	Gasoline	2380478.996	11180656.67	0	4304.779926	4304779.926	4326812.467	97358601.17	97676672.01	**22.57**	**LDT2**
South Coast	2022	LDT2	Aggregate	Aggregate	Diesel	7265.359325	35160.20236	0	10.4792726	10479.2726		318070.8386			
South Coast	2022	LDT2	Aggregate	Aggregate	Electricity	6619.441536	34120.34272	95194.32476	0	0		246564.7012			
South Coast	2022	LDT2	Aggregate	Aggregate	Plug-in Hybrid	12770.05734	52804.18709	99473.18925	11.55326881	11553.26881		651602.4969			
South Coast	2022	LHDT1	Aggregate	Aggregate	Gasoline	200207.0512	2982786.755	0	596.2532604	596253.2604	791494.8201	7670055.089	11609061.87	**14.67**	**LHDT1**
South Coast	2022	LHDT1	Aggregate	Aggregate	Diesel	95425.65716	1200334.722	0	195.2415597	195241.5597		3939006.782			
South Coast	2022	LHDT2	Aggregate	Aggregate	Gasoline	31310.70271	466482.8175	0	100.8426005	100842.6005	201968.3332	1148331.498	2852151.512	**14.12**	**LHDT2**
South Coast	2022	LHDT2	Aggregate	Aggregate	Diesel	41221.34914	518512.7157	0	101.1257327	101125.7327		1703820.013			
South Coast	2022	MCY	Aggregate	Aggregate	Gasoline	232866.3127	465732.6253	0	36.03993715	36039.93715	36039.93715	1478622.183	1478622.183	**41.03**	**MCY**
South Coast	2022	MDV	Aggregate	Aggregate	Gasoline	1546490.389	7140651.876	0	3192.182291	3192182.291	3233168.731	58964077.19	60366385.9	**18.67**	**MDV**
South Coast	2022	MDV	Aggregate	Aggregate	Diesel	19342.84345	91596.79576	0	34.03297982	34032.97982		777527.7955			
South Coast	2022	MDV	Aggregate	Aggregate	Electricity	6696.74782	34502.63749	96159.45426	0	0		249064.5022			
South Coast	2022	MDV	Aggregate	Aggregate	Plug-in Hybrid	8117.761373	33566.94328	55475.93063	6.953460429	6953.460429		375716.4182			
South Coast	2022	MH	Aggregate	Aggregate	Gasoline	31850.36852	3186.310866	0	60.85222666	60852.22666	71928.89964	295792.8678	407742.3745	**5.67**	**MH**
South Coast	2022	MH	Aggregate	Aggregate	Diesel	11356.53565	1135.653565	0	11.07667298	11076.67298		111949.5066			
South Coast	2022	MHDT	Aggregate	Aggregate	Gasoline	26007.04178	520348.8919	0	274.1467882	274146.7882	819392.7308	1387695.111	6218651.542	**7.59**	**MHDT**
South Coast	2022	MHDT	Aggregate	Aggregate	Diesel	111240.7041	1363402.45	0	537.3888811	537388.8811		4766318.794			
South Coast	2022	MHDT	Aggregate	Aggregate	Natural Gas	1338.762023	12270.86005	0	7.857061417	7857.061417		64637.63673			
South Coast	2022	OBUS	Aggregate	Aggregate	Gasoline	5619.001977	112424.9916	0	46.10429672	46104.29672	82591.31041	229489.8627	490521.1159	**5.94**	**OBUS**
South Coast	2022	OBUS	Aggregate	Aggregate	Diesel	2896.768075	36743.40436	0	32.79511564	32795.11564		229036.0369			
South Coast	2022	OBUS	Aggregate	Aggregate	Natural Gas	537.7361163	4785.851435	0	3.691898056	3691.898056		31995.21632			
South Coast	2022	SBUS	Aggregate	Aggregate	Gasoline	2656.068282	10624.27313	0	13.13398403	13133.98403	40315.41184	115961.1562	260029.2373	**6.45**	**SBUS**
South Coast	2022	SBUS	Aggregate	Aggregate	Diesel	3463.174133	50146.76145	0	9.812107071	9812.107071		71631.6642			
South Coast	2022	SBUS	Aggregate	Aggregate	Natural Gas	2857.078854	41370.50181	0	17.36932074	17369.32074		72436.41685			
South Coast	2022	UBUS	Aggregate	Aggregate	Gasoline	892.5609011	3570.243605	0	14.15154342	14151.54342	205291.0561	96764.45551	693436.26	**3.38**	**UBUS**
South Coast	2022	UBUS	Aggregate	Aggregate	Diesel	15.79905129	63.19620517	0	0.277029151	277.0291511		1863.133553			
South Coast	2022	UBUS	Aggregate	Aggregate	Electricity	58.06621632	232.2648653	5333.126445	0	0		2542.871299			
South Coast	2022	UBUS	Aggregate	Aggregate	Natural Gas	4946.181814	19784.72726	0	190.8624835	190862.4835		592265.7996			

Source: EMFAC2021 (v1.0.1) Emissions Inventory
Region Type: Air Basin
Region: South Coast
Calendar Year: 2023
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	Trips	Energy Consumption	Fuel Consumption	Fuel Consumption	Total Fuel Consumption	Total VMT	Total VMT	Miles Per Gallon	Vehicle Class
South Coast	2023	HHDT	Aggregate	Aggregate	Gasoline	77.76705152	1555.963167	0	1.13577086	1135.77086	1902570.073	4463.059823	11350616.67	**5.97**	**HHDT**
South Coast	2023	HHDT	Aggregate	Aggregate	Diesel	88939.48335	1354183.938	0	1901.434302	1901434.302		11341687.62			
South Coast	2023	HHDT	Aggregate	Aggregate	Electricity	69.55210742	1090.269168	7969.44745	0	0		4465.990707			
South Coast	2023	HHDT	Aggregate	Aggregate	Natural Gas	9734.51825	62334.09461	0	108.4243363	108424.3363	7680508.917	635905.4264	228542169.3	**29.76**	**LDA**
South Coast	2023	LDA	Aggregate	Aggregate	Gasoline	5370115.979	25014254.84	0	7560.140191	7560140.191		216250190.4			
South Coast	2023	LDA	Aggregate	Aggregate	Diesel	15648.45784	65526.69936	0	11.94439033	11944.39033		486634.8854			
South Coast	2023	LDA	Aggregate	Aggregate	Electricity	241152.5368	1208859.723	4312325.17	0	0		11169438.62			
South Coast	2023	LDA	Aggregate	Aggregate	Plug-in Hybrid	136333.5236	563739.1202	971420.6342	116.5989322	116598.9322	870253.2499	6496196.814	24547955.06	**28.21**	**LDT1**
South Coast	2023	LDT1	Aggregate	Aggregate	Gasoline	499113.9009	2195668.394	0	753.4930394	753493.0394		18009866.74			
South Coast	2023	LDT1	Aggregate	Aggregate	Diesel	197.6298759	575.4909742	0	0.161278255	161.278255		3756.265001			
South Coast	2023	LDT1	Aggregate	Aggregate	Electricity	1012.723437	4715.252993	14723.34847	0	0		38135.23576			
South Coast	2023	LDT1	Aggregate	Aggregate	Plug-in Hybrid	463.9603347	1918.475984	3964.563568	0.400339089	400.3390888	4351441.574	24314.99018	100316975.8	**23.05**	**LDT2**
South Coast	2023	LDT2	Aggregate	Aggregate	Gasoline	2429950.117	11422828.59	0	4340.074795	4340074.795		100292660.9			
South Coast	2023	LDT2	Aggregate	Aggregate	Diesel	7734.815855	37335.71589	0	10.96643985	10966.43985		337920.5463			
South Coast	2023	LDT2	Aggregate	Aggregate	Electricity	11160.73812	57317.98395	159502.5609	0	0		413130.7341			
South Coast	2023	LDT2	Aggregate	Aggregate	Plug-in Hybrid	17128.65814	70827.00142	136848.0138	14.88755019	14887.55019	604831.9262	867992.1123	8688662.767	**14.37**	**LHDT1**
South Coast	2023	LHDT1	Aggregate	Aggregate	Gasoline	200398.3929	2985637.46	0	589.944376	589944.376		7820670.654			
South Coast	2023	LHDT1	Aggregate	Aggregate	Diesel	99896.36028	1256570.543	0	206.0356758	206035.6758	305180.3742	4194656.56	5351327.632	**17.53**	**LHDT2**
South Coast	2023	LHDT2	Aggregate	Aggregate	Gasoline	31213.47663	465034.2937	0	99.14469838	99144.69838		1156671.072			
South Coast	2023	LHDT2	Aggregate	Aggregate	Diesel	43691.53059	549584.4908	0	107.1632097	107163.2097	107163.2097	1828609.129	1828609.129	**17.06**	**MCY**
South Coast	2023	MCY	Aggregate	Aggregate	Gasoline	237586.076	475172.1521	0	36.88140998	36881.40998	3258846.142	1522726.619	62822547.87	**19.28**	**MDV**
South Coast	2023	MDV	Aggregate	Aggregate	Gasoline	1559902.035	7210563.701	0	3188.051046	3188051.046		60070040.07			
South Coast	2023	MDV	Aggregate	Aggregate	Diesel	19613.50466	92462.53217	0	33.91368569	33913.68569		784655.9403			
South Coast	2023	MDV	Aggregate	Aggregate	Electricity	12017.75416	61732.39119	171855.0799	0	0		445125.2375			
South Coast	2023	MDV	Aggregate	Aggregate	Plug-in Hybrid	10053.44096	41570.97836	70940.44124	8.322835871	8322.835871	67468.7074	464374.4805	752062.2021	**11.15**	**MH**
South Coast	2023	MH	Aggregate	Aggregate	Gasoline	30468.55432	3048.074174	0	59.14587153	59145.87153		287687.7216			
South Coast	2023	MH	Aggregate	Aggregate	Diesel	11533.11741	1153.311741	0	11.30112611	11301.12611	819648.6117	114141.8155	6302753.398	**7.69**	**MHDT**
South Coast	2023	MHDT	Aggregate	Aggregate	Gasoline	25436.77287	508938.9517	0	266.1846594	266184.6594		1361855.942			
South Coast	2023	MHDT	Aggregate	Aggregate	Diesel	112753.1691	1384256.954	0	542.1628262	542162.8262		4826755.64			
South Coast	2023	MHDT	Aggregate	Aggregate	Electricity	60.14211345	769.7741807	1354.591964	0	0	52048.54694	1295.841104	289973.7428	**5.57**	**OBUS**
South Coast	2023	MHDT	Aggregate	Aggregate	Natural Gas	1405.746156	12603.45034	0	8.268140472	8268.140472		68507.0989			
South Coast	2023	OBUS	Aggregate	Aggregate	Gasoline	5457.340752	109190.4738	0	43.78040647	43780.40647		220170.8028			
South Coast	2023	OBUS	Aggregate	Aggregate	Diesel	2949.128306	37294.91051	0	33.32983706	33329.83706	50038.16004	233227.1381	381057.5339	**7.62**	**SBUS**
South Coast	2023	OBUS	Aggregate	Aggregate	Natural Gas	467.0036657	4156.332625	0	3.280062265	3280.062265		28665.48863			
South Coast	2023	SBUS	Aggregate	Aggregate	Gasoline	2711.533402	10846.13361	0	13.42826072	13428.26072		119164.9071			
South Coast	2023	SBUS	Aggregate	Aggregate	Diesel	3377.128927	48900.82686	0	9.464602039	9464.602039	41441.52119	69271.73995	241028.6401	**5.82**	**UBUS**
South Coast	2023	SBUS	Aggregate	Aggregate	Electricity	3.674682915	53.20940862	49.36713892	0	0		42.69400814			
South Coast	2023	SBUS	Aggregate	Aggregate	Natural Gas	2976.329163	43097.24627	0	17.80624767	17806.24767		74753.64709			
South Coast	2023	UBUS	Aggregate	Aggregate	Gasoline	894.3697717	3577.479087	0	14.17067148	14170.67148		96960.55907			
South Coast	2023	UBUS	Aggregate	Aggregate	Diesel	14.61165815	58.44663261	0	0.262644403			1749.021883			
South Coast	2023	UBUS	Aggregate	Aggregate	Electricity	58.03212573	232.1285029	5326.224873	0			2539.586791			
South Coast	2023	UBUS	Aggregate	Aggregate	Natural Gas	4957.576963	19830.30785	0	190.2775974			593592.4153			