AIR QUALITY AND GREENHOUSE GAS EMISSIONS IMPACT ANALYSIS

CONDOR DRIVE WAREHOUSE/DISTRIBUTION FACILITY PROJECT

CITY OF MOORPARK

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ACRONYMS AND ABBREVIATIONS

AB	Assembly Bill
Air Basin	South Central Coast Air Basin
AQMP	Air Quality Management Plan
BACT	Best Available Control Technology
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CCAA	California Clean Air Act
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CFCs	chlorofluorocarbons
Cf_4	tetrafluoromethane
C_2F_6	hexafluoroethane
C_2H_6	ethane
CH_4	Methane
City	City of Moorpark
CO	Carbon monoxide
CO_2	Carbon dioxide
CO_2e	Carbon dioxide equivalent
CPUC	California Public Utilities Commission
DPM	Diesel particulate matter
EPA	Environmental Protection Agency
ºF	Fahrenheit
FTIP	Federal Transportation Improvement Program
GHG	Greenhouse gas
GWP	Global warming potential
HAP	Hazardous Air Pollutants
HFCs	Hydrofluorocarbons
IPCC	International Panel on Climate Change

LCFS	Low Carbon Fuel Standard
LST	Localized Significant Thresholds
MATES	Multiple Air Toxics Exposure Study
$MMTCO_2e$	Million metric tons of carbon dioxide equivalent
MPO	Metropolitan Planning Organization
MSAT	Mobile Source Air Toxics
MWh	Megawatt-hour
NAAQS	National Ambient Air Quality Standards
NO_x	Nitrogen oxides
NO_2	Nitrogen dioxide
O_3	Ozone
OPR	Office of Planning and Research
Pfc	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
PPM	Parts per million
PPB	Parts per billion
PPT	Parts per trillion
RTIP	Regional Transportation Improvement Plan
RTP	Regional Transportation Plan
SAR	Second Assessment Report
SB	Senate Bill
SCAQMD	South Coast Air Quality Management District
SCS	Sustainable communities strategy
SF_6	Sulfur Hexafluoride
SIP	State Implementation Plan
SO_x	Sulfur oxides
TAC	Toxic air contaminants
UNFCCC	United Nations' Framework Convention on Climate Change
VCAPCD	Ventura County Air Pollution Control District
VOC	Volatile organic compounds

1.0 INTRODUCTION

1.1 Purpose of Analysis and Study Objectives

This Air Quality and Greenhouse Gas (GHG) Emissions Impact Analysis has been completed to determine the air quality and GHG emissions impacts associated with the proposed Condor Drive Warehouse/Distribution Facility project (proposed project). The following is provided in this report:

- A description of the proposed project;
- A description of the atmospheric setting;
- A description of the criteria pollutants and GHGs;
- A description of the air quality and GHG emissions regulatory framework;
- A description of the air quality, energy, and GHG emissions thresholds including the California Environmental Quality Act (CEQA) significance thresholds;
- An analysis of the conformity of the proposed project with the Ventura County Air Pollution Control District's (VCAPCD) air quality strategies;
- An analysis of the short-term construction related and long-term operational air quality and GHG emissions impacts; and
- An analysis of the conformity of the proposed project with all applicable GHG emissions reduction plans and policies.

1.2 Site Location and Study Area

The project site is located in the northeastern portion of the City of Moorpark (City) at 6000 Condor Drive and the undeveloped parcel located to the northwest of 6000 Condor Drive. The project site includes an 11.90-acre parcel at 6000 Condor Drive (APN 513-0-060-075) and a 2.55-acre parcel (APN 513-0-060-295) that is located to the northwest of 6000 Condor Drive. The project site is bounded by vacant land and State Route 118 to the north, open space area (vacant land) to the east and southeast, and industrial buildings to the southwest and west. The project local study area is shown in Figure 1.

Sensitive Receptors in Project Vicinity

The nearest sensitive receptors to the project site are single-family homes located on the north side of State Route 118, that are as near as 300 feet north of the project site. The nearest K-12 school is Mesa Verde Middle School, which is located as near as 1.5 mile southwest of the project site.

1.3 Proposed Project Description

The proposed project consists of the renovation of the existing warehouse building onsite, implementing approximately 7,000 square feet of office tenant improvements and 180,000 square feet of warehouse improvements that include seven new openings in the building shell. The new building will be one-story with the parcel containing a total of 113 standard parking stalls (9 feet by 20 feet) and 262 delivery parking stalls (11 feet by 27 feet). At the north end of the property, once the two parcels are merged, new paving will expand parking onsite where there is currently 2.55-acres of undeveloped land (APN 513-0-060-295); on this portion of the Project site there will be 150 delivery parking stalls. Additional undeveloped area in the northeast corner of 6000 Condor will also be developed into additional parking, creating

approximately 123 parking spaces in that location. The project will construct a total of 375 parking spaces. The proposed site plan is shown in Figure 2.

1.4 Executive Summary

Standard Air Quality, Energy, and GHG Regulatory Conditions

The proposed project will be required to comply with the following regulatory conditions from the VCDAPCD and State of California (State).

Ventura County Air Pollution Control District Rules

The following lists the VCAPCD rules that are applicable, but not limited to the proposed project.

- Rule 55 Fugitive Dust Control – Controls the emissions of fugitive dust; and
- Rule 74.2 Architectural Coating – Establishes VOC content limits;

State of California Rules

The following lists the State of California Code of Regulations (CCR) air quality emission rules that are applicable, but not limited to the proposed project.

- CCR Title 13, Article 4.8, Chapter 9, Section 2449 – In use Off-Road Diesel Vehicles;
- CCR Title 13, Section 2025 – On-Road Diesel Truck Fleets;
- CCR Title 24 Part 6 – California Building Energy Standards; and
- CCR Title 24 Part 11 – California Green Building Standards.

Summary of Analysis Results

The following is a summary of the proposed project's impacts with regard to the State CEQA Guidelines air quality and GHG emissions checklist questions.

Conflict with or obstruct implementation of the applicable air quality plan?

Less than significant impact.

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

Less than significant impact.

Expose sensitive receptors to substantial pollutant concentrations?

Less than significant impact.

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

Less than significant impact.

Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?

Less than significant impact.

Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHGs?

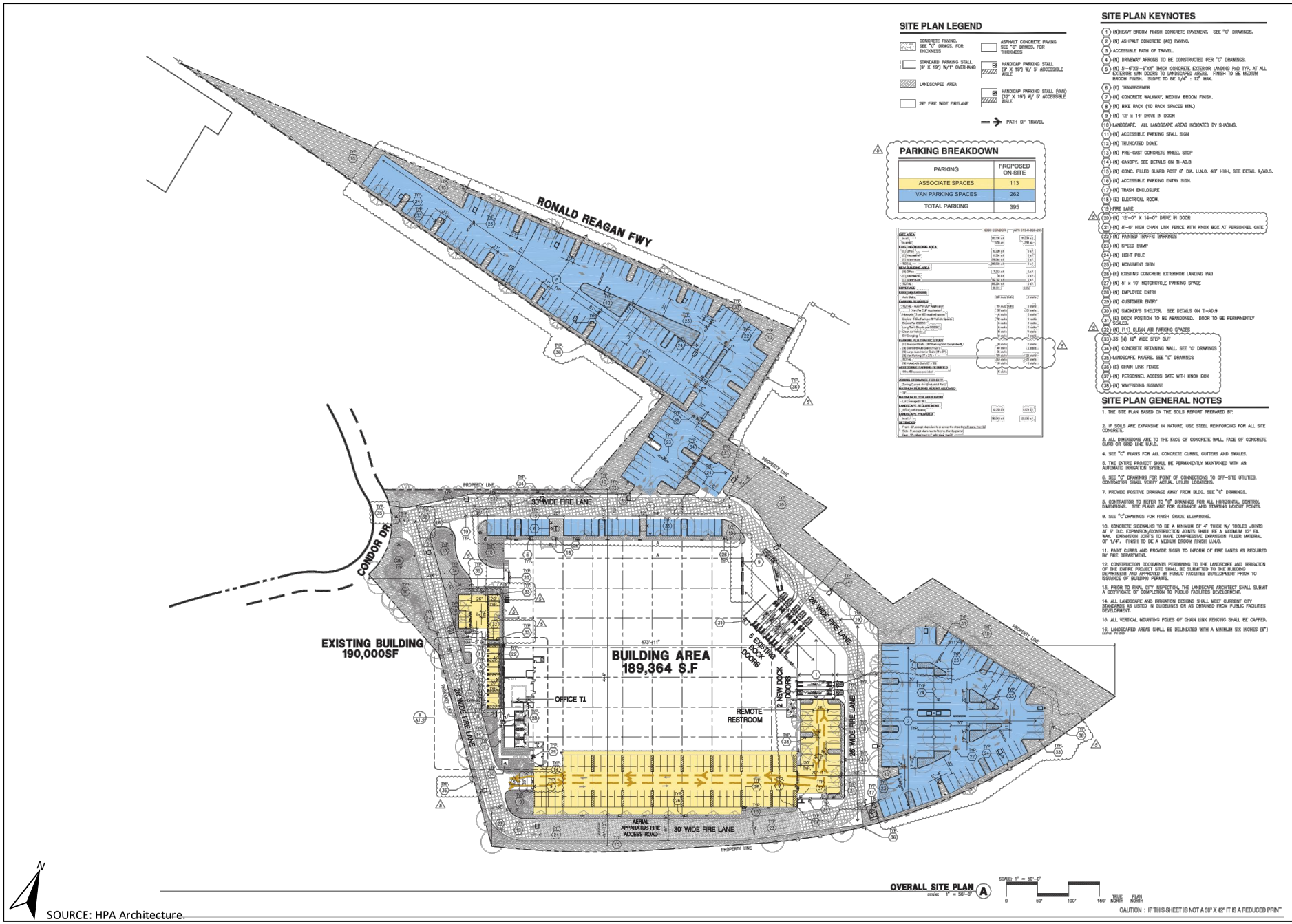
Less than significant impact.

1.5 Mitigation Measures for the Proposed Project

This analysis found that implementation of the State, VCAPCD, and City air quality and GHG emissions reductions regulations were adequate to limit criteria pollutants, toxic air contaminants, odors, and GHG emissions from the proposed project to less than significant levels. No mitigation measures are required for the proposed project with respect to air quality and GHG emissions.

VISTA ENVIRONMENTAL

Figure 1
Project Local Study Area



SOURCE: HPA Architecture.

VISTA ENVIRONMENTAL

Figure 2
Proposed Site Plan

2.0 AIR POLLUTANTS

Air 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.

2.1 Criteria Pollutants and Ozone Precursors

The criteria pollutants consist of: ozone, NO_x, CO, SO_x, lead (Pb), and particulate matter (PM). The ozone precursors consist of NO_x and VOC. 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 and ozone precursors.

Nitrogen Oxides

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 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 NO_x 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. NO_x and the pollutants formed from NO_x 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 is not usually emitted directly into the air but in the vicinity of 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 approximately 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 Oxides

Sulfur Oxide (SOx) gases are formed when fuel containing sulfur, such as coal and oil is burned, as well as 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 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 Pb 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

Particle matter (PM) is the term for a mixture of solid particles and liquid droplets found in the air. PM 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) that are also known as *Respirable Particulate Matter* 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) that are also known as *Fine Particulate Matter* 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.

Volatile Organic Compounds

Hydrocarbons are organic gases that are formed from hydrogen and carbon and sometimes other elements. Hydrocarbons that contribute to formation of O_3 are referred to and regulated as VOCs (also referred to as reactive organic gases). Combustion engine exhaust, oil refineries, and fossil-fueled power plants are the sources of hydrocarbons. Other sources of hydrocarbons include evaporation from petroleum fuels, solvents, dry cleaning solutions, and paint.

VOC is not classified as a criteria pollutant, since VOCs by themselves are not a known source of adverse health effects. The primary health effects of VOCs result from the formation of O_3 and its related health effects. High levels of VOCs in the atmosphere can interfere with oxygen intake by reducing the amount of available oxygen through displacement. Carcinogenic forms of hydrocarbons, such as benzene, are considered toxic air contaminants (TACs). There are no separate health standards for VOCs as a group.

2.2 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. TACs is a term that is defined under the California Clean Air Act and consists of the same substances that are defined as Hazardous Air Pollutants (HAPs) in the Federal Clean Air Act. There are over 700 hundred different types of TACs with varying degrees of toxicity. Sources of TACs 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 40 different toxic air contaminants. The most important of these TACs, in terms of health risk, are diesel particulates, benzene, formaldehyde, 1,3-butadiene, and acetaldehyde. Public exposure to TACs can result from emissions from normal operations as well as from accidental releases. Health effects of TACs include cancer, birth defects, neurological damage, and death.

TACs 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 TACs with varying degrees of toxicity. Sources of TACs include industrial processes, commercial operations (e.g., gasoline stations and dry cleaners), and motor vehicle exhaust.

According to *The California Almanac of Emissions and Air Quality 2013 Edition*, the majority of the estimated health risk from TACs can be attributed to relatively few compounds, the most important of which is DPM. DPM is a subset of PM2.5 because the size of diesel particles are typically 2.5 microns and smaller. The identification of DPM as a TAC in 1998 led the 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 DPM 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 DPM as a toxic air contaminant was based on its potential to cause cancer, premature deaths, and other health problems. Exposure to DPM 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 CARB and as a HAP 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. 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 in Santa Barbara County. Due to the distance to the nearest natural occurrences of asbestos, the project site is not likely to contain asbestos.

3.0 GREENHOUSE GASES

3.1 Greenhouse Gases

Constituent gases of the Earth's atmosphere, called atmospheric greenhouse gases (GHGs), play a critical role in the Earth's radiation amount by trapping infrared radiation 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 (O_3), 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. Emissions of CO_2 and N_2O 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

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) indicates that concentrations were 379 ppm in 2005, an increase of more than 30 percent. Left unchecked, the IPCC projects that concentration of carbon dioxide in the atmosphere is projected to increase to a minimum of 540 ppm by 2100 as a direct result of anthropogenic sources. This

could result in an average global temperature rise of at least two degrees Celsius or 3.6 degrees Fahrenheit.

Methane

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

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. N_2O 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 race cars).

Chlorofluorocarbons

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. They were 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

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

Perfluorocarbons (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

Sulfur Hexafluoride (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 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.

3.2 Global Warming Potential

GHGs have varying global warming potential (GWP). The GWP is the potential of a gas or aerosol to trap heat in the atmosphere; it is the cumulative radiative forcing effects of a gas over a specified time horizon resulting from the emission of a unit mass of gas relative to the reference gas, CO_2. The GHGs listed by the IPCC and the CEQA Guidelines are discussed in this section in order of abundance in the atmosphere. Water vapor, the most abundant GHG, is not included in this list because its natural concentrations and fluctuations far outweigh its anthropogenic (human-made) sources. To simplify reporting and analysis, GHGs are commonly defined in terms of their GWP. The IPCC defines the GWP of various GHG emissions on a normalized scale that recasts all GHG emissions in terms of CO_2e. As such, the GWP of CO_2 is equal to 1. The GWP values used in this analysis are based on the IPCC Second Assessment Report (SAR) and United Nations Framework Convention on Climate Change (UNFCCC) reporting guidelines, and are detailed in Table A. The SAR GWPs are used in CARB's California inventory and Assembly Bill (AB) 32 Scoping Plan estimates.

Table A – Global Warming Potentials, Atmospheric Lifetimes and Abundances of GHGs

Gas	Atmospheric Lifetime (years)[1]	Global Warming Potential (100 Year Horizon)[2]	Atmospheric Abundance
Carbon Dioxide (CO_2)	50-200	1	379 ppm
Methane (CH_4)	9-15	25	1,774 ppb
Nitrous Oxide (N_2O)	114	298	319 ppb
HFC-23	270	14,800	18 ppt
HFC-134a	14	1,430	35 ppt
HFC-152a	1.4	124	3.9 ppt
PFC: Tetrafluoromethane (CF_4)	50,000	7,390	74 ppt
PFC: Hexafluoroethane (C_2F_6)	10,000	12,200	2.9 ppt
Sulfur Hexafluoride (SF_6)	3,200	22,800	5.6 ppt

Notes:
[1] Defined as the half-life of the gas.

[2] Compared to the same quantity of CO_2 emissions and is based on the Intergovernmental Panel On Climate Change (IPCC) 2007 standard, which is utilized in CalEEMod (Version 2016.3.2),that is used in this report (CalEEMod user guide: Appendix A).
Definitions: ppm = parts per million; ppb = parts per billion; ppt = parts per trillion
Source: IPCC 2007, EPA 2015

3.3 Greenhouse Gas Emissions Inventory

According to https://cdiac.ess-dive.lbl.gov/trends/emis/tre_glob_2014.html 9,855 million metric tons (MMT) of CO_2 equivalent (CO_2e) emissions were created globally in the year 2014. According to https://www.epa.gov/ghgemissions/global-greenhouse-gas-emissions-data the breakdown of global GHG emissions by sector consists of: 25 percent from electricity and heat production; 21 percent from industry; 24 percent from agriculture, forestry and other land use activities; 14 percent from transportation; 6 percent from building energy use; and 10 percent from all other sources of energy use.

According to *Inventory of U.S. Greenhouse Gas Emissions and Sinks 1990-2016,* prepared by EPA, in 2016 total U.S. GHG emissions were 6,511.3 million metric tons (MMT) of CO_2 equivalent (CO_2e) emissions. Total U.S. emissions have increased by 2.4 percent between 1990 and 2016 and GHG emissions decreased by 1.9 percent between 2015 and 2016. The recent decrease in GHG emissions was a result of multiple factors, including substitution from coal to natural gas in the electricity sector and from a warmer winter and a slow-down in the economy in 2016. However, according to https://rhg.com/research/preliminary-us-emissions-estimates-for-2018/ the preliminary estimates for 2018 show that GHG emissions have increased by 3.4 percent, which is primarily a result from a strong economy that required the use of more transportation fuels and power generation.

According to https://www.arb.ca.gov/cc/inventory/data/data.htm the State of California created 429.4 $MMTCO_2e$ in 2016. The breakdown of California GHG emissions by sector consists of: 41 percent from transportation; 23 percent from industrial; 16 percent from electricity generation; 8 percent from agriculture; 7 percent from residential buildings; 5 percent from commercial buildings; and 1 percent from other uses of energy. In 2016, GHG emissions were 12 $MMTCO_2e$ lower than 2015 levels, which represent a 6 percent year-over-year decline.

4.0 AIR QUALITY MANAGEMENT

The air quality at the project site 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.

4.1 Federal – United States Environmental Protection Agency

The Clean Air Act, first passed in 1963 with major amendments in 1970, 1977 and 1990, is the overarching legislation covering regulation of air pollution in the United States. The Clean Air Act has established the mandate for requiring regulation of both mobile and stationary sources of air pollution at the state and federal level. The Environmental Protection Agency (EPA) was created in 1970 in order to consolidate research, monitoring, standard-setting and enforcement authority into a single agency.

The 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. NAAQS pollutants were identified using medical evidence and are shown below in Table B.

Table B – State and Federal Criteria Pollutant Standards

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) Pulmonary function decrements 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 0.030 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; and (c) Increased risk of premature death from heart or lung diseases in elderly.

Air Pollutant	Concentration / Averaging Time		Most Relevant Effects
	California Standards	Federal Primary Standards	
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; and (f) Property damage.
Lead	1.5 µg/m^3 / 30-day	0.15 µg/m^3 /3-month rolling	(a) Learning disabilities; and (b) Impairment of blood formation and nerve conduction.
Visibility Reducing Particles	Extinction coefficient of 0.23 per kilometer - visibility of ten miles or more due to particles when relative humidity is less than 70 percent.	No Federal Standards	Visibility impairment on days when relative humidity is less than 70 percent.

Source: http://www.arb.ca.gov/research/aaqs/aaqs2.pdf .

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 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 SIP.

Areas are classified under the Federal Clean Air Act as either "attainment" or "nonattainment" areas for each criteria pollutant, based on whether the NAAQS have been achieved or not. Attainment relative to the state standards is determined by the California Air Resources Board (CARB). The CARB defines attainment as the category given to an area with no violations in the past three years. The County has been designated by the Federal Environmental Protection Agency (EPA) as a nonattainment area for ozone. Currently, the Air Basin is in attainment with the ambient air quality standards for CO, SO2, NO2, PM10, and PM2.5.

4.2 State – California Air Resources Board

The California Air Resources Board (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 SIP. The CAAQS for criteria pollutants are shown above in Table B. 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 Air Basin has been designated by the CARB as a non-attainment area for ozone and PM10, as the California Ambient Air Quality Standards (CAAQS) are more stringent than the national ambient air quality

standards. The VCAPCD is require to adopt plans on a triennial basis that show progress towards meeting the state ozone and PM10 standards. The County is considered attainment or unclassified under State standards for all other pollutants.

The following lists the State of California Code of Regulations (CCR) air quality emission rules that are applicable, but not limited to all warehouse projects in the State.

Assembly Bill 2588

The Air Toxics "Hot Spots" Information and Assessment Act (Assembly Bill [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 in California. 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.

CARB Regulation for In-Use Off-Road Diesel Vehicles

On July 26, 2007, the California Air Resources Board (CARB) adopted California Code of Regulations Title 13, Article 4.8, Chapter 9, Section 2449 to reduce diesel particulate matter (DPM) and NOx emissions from in-use off-road heavy-duty diesel vehicles in California. Such vehicles are used in construction, mining, and industrial operations. The regulation limits idling to no more than five consecutive minutes, requires reporting and labeling, and requires disclosure of the regulation upon vehicle sale. Performance requirements of the rule are based on a fleet's average NOx emissions, which can be met by replacing older vehicles with newer, cleaner vehicles or by applying exhaust retrofits. The regulation was amended in 2010 to delay the original timeline of the performance requirement making the first compliance deadline January 1, 2014 for large fleets (over 5,000 horsepower), 2017 for medium fleets (2,501-5,000 horsepower), and 2019 for small fleets (2,500 horsepower or less). Currently, no commercial operation in California may add any equipment to their fleet that has a Tier 0 or Tier 1 engine. By January 1, 2018 medium and large fleets will be restricted from adding Tier 2 engines to their fleets and by January 2023, no commercial operation will be allowed to add Tier 2 engines to their fleets. It should be noted that commercial fleets may continue to use their existing Tier 0 and 1 equipment, if they can demonstrate that the average emissions from their entire fleet emissions meet the NOx emissions targets.

CARB Resolution 08-43 for On-Road Diesel Truck Fleets

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 Final) or latter emission standards. In the interim period, this regulation provides annual interim targets for fleet owners to meet. By January 1, 2014, 50 percent of a truck fleet is required to have installed Best Available Control Technology (BACT) for NOx emissions and 100 percent of a truck fleet installed BACT for PM10 emissions. This regulation also provides a few exemptions including a onetime per year 3-day pass for trucks registered outside of California. All on-road diesel trucks utilized during construction of the proposed project will be required to comply with Resolution 08-43.

4.3 Regional – Southern California Association of Governments

The Southern California Association of Governments (SCAG) is the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino, and Imperial Counties and addresses regional issues relating to transportation, the economy, community development and the environment. SCAG is the federally designated Metropolitan Planning Organization (MPO) for the majority of the southern California region and is the largest MPO in the nation. With respect to air quality planning, SCAG has prepared the *2016-2040 Regional Transportation Plan/Sustainable Communities Strategy* (RTP/SCS), adopted April, 2016 and the *2019 Federal Transportation Improvement* Program (FTIP), adopted September 2018, which addresses regional development and growth forecasts. Although the RTP/SCS and FTIP are primarily planning documents for future transportation projects a key component of these plans are to integrate land use planning with transportation planning that promotes higher density infill development in close proximity to existing transit service. 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 RTP/SCS, FTIP, and AQMP are based on projections originating within the City and County General Plans.

4.4 Local – Ventura County Air Pollution Control District

The VCAPCD is the agency principally responsible for comprehensive air pollution control in the County. The VCAPCD works directly with SCAG, the County Transportation Commission, and local governments and cooperates actively with federal and state government agencies. The VCAPCD develops rules and regulations to reduce emissions, protect public health and agriculture, and to achieve and maintain state and federal air quality standards. In addition, the VCAPCD establishes permitting requirements for stationary sources, inspects emissions sources, and enforces such measures through educational programs or fines, when necessary.

The following lists the VCAPCD rules that are applicable but not limited to all warehouse projects in the Air Basin.

<u>Rule 55 – Fugitive Dust Control</u>

Rule 55 governs emissions of fugitive dust during construction activities and requires the following:

1. Visible Dust Beyond the Property Line: No person shall cause or allow the emissions of fugitive dust from any applicable source such that the dust remains visible beyond the midpoint (width) of a public street or road adjacent to the property line of the emission source or beyond 50 feet from the property line if there is not an adjacent public street or road.
2. Opacity: No person shall cause or allow the emissions of fugitive dust from any applicable source such that the dust causes 20 percent opacity or greater during each observation and the total duration of such observations (not necessarily consecutive) is a cumulative 3 minutes or more in any one (1) hour. Only opacity readings from a single source shall be included in the cumulative total used to determine compliance.
3. Track-Out

a. No person shall allow track-out to extend 25 feet or more in length unless at least one of the following three control measures is utilized:

   i. Track-Out Area Improvement: Pave or apply chemical stabilization at sufficient concentration and frequency to maintain a stabilized surface starting from the point of

intersection with public paved surface, and extend for a centerline distance of at least 100 feet with an acceptable width to accommodate traffic ingress and egress from the site.

ii. Track-Out Prevention: Check and clean the undercarriage and wheels on all vehicles before leaving unpaved surface or install a properly functioning and well-maintained track-out control device(s) that prevents track-out of soil onto paved public roads.

iii. Track-Out Removal: Remove track-out from pavement as soon as possible but no later than one hour after it has been deposited on the paved road. If a street sweeper is used to remove any track-out, only PM10-efficient street sweepers certified to meet South Coast AQMD Rule 1186 requirements shall be used. The make and model information and certification documentation of any sweeper used shall be made available upon request.

b. Notwithstanding the preceding, all track-out shall be removed at the conclusion of each workday or evening shift subject to the same condition regarding PM-10 efficient street sweepers as outlined in Subsection B.3.a.iii. The use of blowers for removal of track-out is expressly prohibited under any circumstances.

Rule 74.2 – Architectural Coatings

Rule 74.2 governs the sale, use, and manufacturing of architectural coatings and limits the VOC content in sealers, coatings, paints and solvents. This rule regulates the VOC contents of paints available during construction. Therefore, all paints and solvents used during construction and operation of the proposed project must comply with SCAQMD Rule 1113.

5.0 GLOBAL CLIMATE CHANGE MANAGEMENT

The regulatory setting related to global climate change is addressed through the efforts of various international, federal, state, regional, and local government agencies. These agencies work jointly, as well as individually, to reduce GHG emissions through legislation, regulations, planning, policy-making, education, and a variety of programs. The agencies responsible for global climate change regulations are discussed below.

5.1 International

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. The parties of the UNFCCC adopted the Kyoto Protocol, which set binding GHG reduction targets for 37 industrialized countries, the objective of reducing their collective GHG emissions by five percent below 1990 levels by 2012. The Kyoto Protocol has been ratified by 182 countries, but has not been ratified by the United States. It should be noted that Japan and Canada opted out of the Kyoto Protocol and the remaining developed countries that ratified the Kyoto Protocol have not met their Kyoto targets. The Kyoto Protocol expired in 2012 and the amendment for the second commitment period from 2013 to 2020 has not yet entered into legal force. The Parties to the Kyoto Protocol negotiated the Paris Agreement in December 2015, agreeing to set a goal of limiting global warming to less than 2 degrees Celsius compared with pre-industrial levels. The Paris Agreement has been adopted by 195 nations with 147 ratifying it, including the United States by President Obama, who ratified it by Executive Order on September 3, 2016. On June 1, 2017, President Trump announced that the United States is withdrawing from the Paris Agreement and on November 4, 2019 the United States gave formal notice to withdraw, which took 12 months to take effect. The formal withdrawal took effect on November 4, 2020. However, the Paris Agreement is still legally binding by the other remaining nations.

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.

5.2 Federal – United States Environmental Protection Agency

The United States Environmental Protection Agency (EPA) is responsible for implementing federal policy to address global climate change. The Federal government administers a wide array of public-private partnerships to reduce U.S. GHG intensity. These programs focus on energy efficiency, renewable energy, methane, and other non-CO_2 gases, agricultural practices and implementation of technologies to achieve GHG reductions. EPA implements several voluntary programs that substantially contribute to the reduction of GHG emissions.

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 CO2 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 did not impose any requirements on industry or other entities, however, since 2009 the EPA has been providing GHG emission standards for vehicles and other stationary sources of GHG emissions that are regulated by the EPA. On September 13, 2013 the EPA Administrator signed 40 CFR Part 60, that limits emissions from new sources to 1,100 pounds of CO_2 per MWh for fossil fuel-fired utility boilers and 1,000 pounds of CO_2 per MWh for large natural gas-fired combustion units.

On August 3, 2015, the EPA announced the Clean Power Plan, emissions guidelines for U.S. states to follow in developing plans to reduce GHG emissions from existing fossil fuel-fired power plants (Federal Register Vol. 80, No. 205, October 23 2015). On February 9, 2016 the Supreme Court stayed implementation of the Clean Power Plan due to a legal challenge from 29 states and in April 2017, the Supreme Court put the case on a 60 day hold and directed both sides to make arguments for whether it should keep the case on hold indefinitely or close it and remand the issue to the EPA. On October 11, 2017, the EPA issued a formal proposal to repeal the Clean Power Plan, however the repeal of the Plan will require following the same rule-making system used to create regulations and will likely result in court challenges.

On September 27, 2019, the EPA and the National Highway Safety Administration published the *Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks* (SAFE Vehicles Rule). Part One of the Rule revokes California's authority to set its own GHG emissions standards and zero-emission vehicle mandates in California, which results in one emission standard to be used nationally for all passenger cars and light trucks that is set by the EPA.

5.3 State

The California Air Resources Board (CARB) has the primary responsible for implementing state policy to address global climate change, however there are State regulations related to global climate change that affect a variety of State agencies. CARB, which is a part of the California Environmental Protection Agency, is responsible for the coordination and administration of both the federal and state air pollution control programs within California. In this capacity, the CARB conducts research, sets California Ambient Air Quality Standards (CAAQS), compiles emission inventories, develops suggested control measures, provides oversight of local programs, and prepares the SIP. 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.

In 2008, CARB approved a Climate Change Scoping Plan that proposes a "comprehensive set of actions designed to reduce overall carbon GHG emissions in California, improve our environment, reduce our dependence on oil, diversify our energy sources, save energy, create new jobs, and enhance public health" (CARB 2008). The Climate Change Scoping Plan has a range of GHG reduction actions which include direct regulations; alternative compliance mechanisms; monetary and non-monetary incentives; voluntary actions; market-based mechanisms such as a cap-and-trade system. In 2014, CARB approved the First Update to the Climate Change Scoping Plan (CARB, 2014) that identifies additional strategies moving beyond the 2020 targets to the year 2050. On December 14, 2017 CARB adopted the California's 2017 Climate Change Scoping Plan, November 2017 (CARB, 2017) that provides specific statewide policies and measures to achieve the 2030 GHG reduction target of 40 percent below 1990 levels by 2030 and the aspirational 2050 GHG reduction target of 80 percent below 1990 levels by 2050. In addition, the State has passed the following laws directing CARB to develop actions to reduce GHG emissions, which are listed below in chronological order, with the most current first.

Executive Order N-79-20

The California Governor issued Executive Order N-79-20 on September 23, 2020 that requires all new passenger cars and trucks and commercial drayage trucks sold in California to be zero-emissions by the year 2035 and all medium- heavy-duty vehicles (commercial trucks) sold in the state to be zero-emission by 2045 for all operations where feasible. Executive Order N-79-20 also requires all off-road vehicles and equipment to transition to 100 percent zero-emission equipment, where feasible by 2035.

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 California Energy Commission (CEC) is the agency responsible for the standards that are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. In 2008 the State set an energy-use reduction goal of zero-net-energy use of all new homes by 2020 and the CEC was mandated to meet this goal through revisions to the Title 24, Part 6 regulations.

The Title 24 standards are updated on a three-year schedule and since 2008 the standards have been incrementally moving to the 2020 goal of the zero-net-energy use. Currently the 2019 Title 24 standards are in effect and have been designed so that the average new home built in California will now use zero-net-energy. Single-family homes built with 2019 standards will use about 7 percent less energy due to energy efficiency measures versus those built under the 2016 standards. The 2019 standards also now require that all single-family homes to have rooftop solar photovoltaic systems and when the solar systems are factored in, homes built under the 2019 standards will use about 53 percent less energy than homes built under the prior 2016 standards. In addition to requiring rooftop solar systems, the 2019 standards also encourage the use of battery storage and heat pump water heaters, require the more widespread use of LED lighting, as well as improve the building's thermal envelope through high performance attics, walls and windows. The 2019 standards also require improvements to ventilation systems by requiring highly efficient air filters to trap hazardous air particulates as well as improvements to kitchen ventilation systems. (https://www.energy.ca.gov/title24/2019standards/documents/2018_Title_24_2019_Building_Standards_FAQ.pdf)

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

CCR Title 24, Part 11: *California Green Building Standards* (CalGreen) was developed in response to continued efforts to reduce GHG emissions associated with energy consumption. The CalGreen Building Standards are also updated every three years and the current version is the 2019 California Green Building Standard Code that become effective on January 1, 2020.

The CalGreen Code contains requirements for construction site selection; storm water control during construction; construction waste reduction; indoor water use reduction; material selection; natural resource conservation; site irrigation conservation; and more. The code provides for design options allowing the designer to determine how best to achieve compliance for a given site or building condition. The code also requires building commissioning, which is a process for verifying that all building systems (e.g., heating and cooling equipment and lighting systems) are functioning at their maximum efficiency.

The CalGreen Code provides standards for bicycle parking, carpool/vanpool/electric vehicle spaces, light and glare reduction, grading and paving, energy efficient appliances, renewable energy, graywater systems, water efficient plumbing fixtures, recycling and recycled materials, pollutant controls (including moisture control and indoor air quality), acoustical controls, storm water management, building design, insulation, flooring, and framing, among others. Implementation of the CalGreen Code measures reduces energy consumption and vehicle trips and encourages the use of alternative-fuel vehicles, which reduces pollutant emissions.

Some of the notable changes in the 2019 CalGreen Code over the prior 2016 CalGreen Code include: an alignment of building code engineering requirements with the national standards that include anchorage requirements for solar panels, provides design requirements for buildings in tsunami zones, increases Minimum Efficiency Reporting Value (MERV) for air filters from 8 to 13, increased electric vehicle charging requirements in parking areas, and sets minimum requirements for use of shade trees.

Senate Bill 100

Senate Bill 100 (SB 100) was adopted September 2018 and requires that by December 1, 2045 that 100 percent of retail sales of electricity to be generated from renewable or zero-carbon emission sources of electricity. SB 100 supersedes the renewable energy requirements set by SB 350, SB 1078, SB 107, and SB X1-2. However, the interim renewable energy thresholds from the prior Bills of 44 percent by December 31, 2024, 52 percent by December 31, 2027, and 60 percent by December 31, 2030, will remain in effect.

Executive Order B-48-18 and Assembly Bill 2127

The California Governor issued Executive Order B-48-18 on January 26, 2018 that orders all state entities to work with the private sector to put at least five million zero-emission vehicles on California roads by 2030 and to install 200 hydrogen fueling stations and 250,000 electric vehicle chargers by 2025. Currently there are approximately 350,000 electric vehicles operating in California, which represents approximately 1.5 percent of the 24 million vehicles total currently operating in California. Implementation of Executive Order B-48-18 would result in approximately 20 percent of all vehicles in California to be zero emission electric vehicles. Assembly Bill 2127 (AB 2127) was codified into statute on September 13, 2018 and requires that the California Energy Commission working with the State Air Resources Board prepare biannual assessments of the statewide electric vehicle charging infrastructure needed to support the levels of zero emission vehicle adoption required for the State to meet its goals of putting at least 5 million zero-emission vehicles on California roads by 2030.

Executive Order B-30-15, Senate Bill 32 and Assembly Bill 197

The California Governor issued Executive Order B-30-15 on April 29, 2015 that aims to reduce California's GHG emissions 40 percent below 1990 levels by 2030. This executive order aligns California's GHG reduction targets with those of other international governments, such as the European Union that set the same target for 2030 in October, 2014. This target will make it possible to reach the ultimate goal of reducing GHG emissions 80 percent under 1990 levels by 2050 that is based on scientifically established levels needed in the U.S.A to limit global warming below 2 degrees Celsius – the warming threshold at which scientists say there will likely be major climate disruptions such as super droughts and rising sea levels. Assembly Bill 197 (AB 197) (September 8, 2016) and Senate Bill 32 (SB 32) (September 8, 2016) codified into statute the GHG emissions reduction targets of at least 40 percent below 1990 levels by 2030 as detailed in Executive Order B-30-15. AB 197 also requires additional GHG emissions reporting that is broken down to sub-county levels and requires CARB to consider the social costs of emissions impacting disadvantaged communities.

Executive Order B-29-15

The California Governor issued Executive Order B-29-15 on April 1, 2015 and directed the State Water Resources Control Board to impose restrictions to achieve a statewide 25% reduction in urban water usage and directed the Department of Water Resources to replace 50 million square feet of lawn with drought tolerant landscaping through an update to the State's Model Water Efficient Landscape Ordinance. The Ordinance also requires installation of more efficient irrigation systems, promotion of greywater usage and onsite stormwater capture, and limits the turf planted in new residential landscapes to 25 percent of the total area and restricts turf from being planted in median strips or in parkways unless the parkway is next to a parking strip and a flat surface is required to enter and exit vehicles. Executive Order B-29-15 would reduce GHG emissions associated with the energy used to transport and filter water.

Assembly Bill 341 and Senate Bills 939 and 1374

Senate Bill 939 (SB 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. Assembly Bill 341 (AB 341) was adopted in 2011 and builds upon the waste reduction measures of SB 939 and 1374, and sets a new target of a 75 percent reduction in solid waste generated by the year 2020.

Senate Bill 375

Senate Bill 375 (SB 375) was adopted September 2008 in order to support the State's climate action goals to reduce GHG emissions through coordinated regional transportation planning efforts, regional GHG emission reduction targets, and land use and housing allocation. SB 375 requires CARB to set regional targets for GHG emissions reductions from passenger vehicle use. In 2010, CARB established targets for 2020 and 2035 for each Metropolitan Planning Organizations (MPO) within the State. It was up to each MPO to adopt a sustainable communities strategy (SCS) that will prescribe land use allocation in that MPOs Regional Transportation Plan (RTP) to meet CARB's 2020 and 2035 GHG emission reduction targets. These reduction targets are required to be updated every eight years and the most current targets are detailed at: https://ww2.arb.ca.gov/our-work/programs/sustainable-communities-program/regional-plan-targets, which provides GHG emissions reduction targets for SCAG of 8 percent by 2020 and 19 percent by 2035.

The *2016-2040 Regional Transportation Plan/Sustainable Communities Strategy* (RTP/SCS), adopted by SCAG April, 2016 provides a 2020 GHG emission reduction target of 8 percent and a 2035 GHG emission reduction target of 18 percent. SCAG will need to develop additional strategies in its next revision of the RTP/SCS in order to meet CARB's new 19 percent GHG emission reduction target for 2035. CARB is also charged with reviewing SCAG's RTP/SCS for consistency with its assigned targets.

City and County land use policies, including General Plans, are not required to be consistent with the RTP and associated SCS. However, new provisions of CEQA incentivize, through streamlining and other provisions, qualified projects that are consistent with an approved SCS and categorized as "transit priority projects."

Assembly Bill 1109

California Assembly Bill 1109 (AB 1109) was adopted October 2007, also known as the Lighting Efficiency and Toxics Reduction Act, prohibits the manufacturing of lights after January 1, 2010 that contain levels of hazardous substances prohibited by the European Union pursuant to the RoHS Directive. AB 1109 also requires reductions in energy usage for lighting and is structured to reduce lighting electrical consumption by: (1) At least 50 percent reduction from 2007 levels for indoor residential lighting; and (2) At least 25 percent reduction from 2007 levels for indoor commercial and all outdoor lighting by 2018. AB 1109 would reduce GHG emissions through reducing the amount of electricity required to be generated by fossil fuels in California.

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 Executive 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.

In 2009 CARB approved the proposed regulation to implement the LCFS. The standard was challenged in the courts, but has been in effect since 2011 and was re-approved by the CARB in 2015. The LCFS is anticipated to reduce GHG emissions by about 16 MMT per year by 2020. The LCFS 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 annually. Reformulated gasoline mixed with corn-derived ethanol 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. 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.

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 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 addresses GHG emissions. The CEQA Guidelines Amendments changed 14 sections of the CEQA Guidelines and incorporated 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 GHG 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 GHG 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 must specifically consider a project's energy use and energy efficiency potential.

Assembly Bill 32

In 2006, the California State Legislature adopted 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 utilize best management practices that are technologically feasible and cost effective.

In 2007 CARB released the calculated Year 1990 GHG emissions of 431 million metric tons of CO2e ($MMTCO_2e$). The 2020 target of 431 $MMTCO_2e$ requires the reduction of 78 $MMTCO_2e$, or approximately 16 percent from the State's projected 2020 business as usual emissions of 509 $MMTCO_2e$ (CARB, 2014). Under AB 32, CARB was required to adopt regulations by January 1, 2011 to achieve reductions in GHGs to meet the 1990 cap by 2020. Early measures CARB took to lower GHG emissions included requiring operators of the largest industrial facilities that emit 25,000 metric tons of CO_2 in a calendar year to submit

verification of GHG emissions by December 1, 2010. The CARB Board also approved nine discrete early action measures that include regulations affecting landfills, motor vehicle fuels, refrigerants in cars, port operations and other sources, all of which became enforceable on or before January 1, 2010.

CARB's Scoping Plan that was adopted in 2009, proposes a variety of measures including: strengthening energy efficiency and building standards; targeted fees on water and energy use; a market-based cap-and-trade system; achieving a 33 percent renewable energy mix; and a fee regulation to fund the program. The 2014 update to the Scoping Plan identifies strategies moving beyond the 2020 targets to the year 2050.

The Cap and Trade Program established under the Scoping Plan sets a statewide limit on sources responsible for 85 percent of California's GHG emissions, and has established a market for long-term investment in energy efficiency and cleaner fuels since 2012.

Executive Order S-3-05

In 2005 the California Governor issued Executive Order S 3-05, GHG Emission, 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. The State achieved its first goal of reducing GHG emissions to 2000 levels by 2010.

Assembly Bill 1493

California Assembly Bill 1493 (also known as the Pavley Bill, in reference to its author Fran Pavley) was enacted on July 22, 2002 and required CARB to develop and adopt regulations that reduce GHGs emitted by passenger vehicles and light duty trucks. In 2004, CARB approved the "Pavley I" regulations limiting the amount of GHGs that may be released from new passenger automobiles that are being phased in between model years 2009 through 2016. These regulations will reduce GHG emissions by 30 percent from 2002 levels by 2016. In June 2009, the EPA granted California the authority to implement GHG emission reduction standards for light duty vehicles, in September 2009, amendments to the Pavley I regulations were adopted by CARB and implementation of the "Pavley I" regulations started in 2009.

The second set of regulations "Pavley II" was developed in 2010, and is being phased in between model years 2017 through 2025 with the goal of reducing GHG emissions by 45 percent by the year 2020 as compared to the 2002 fleet. The Pavley II standards were developed by linking the GHG emissions and formerly separate toxic tailpipe emissions standards previously known as the "LEV III" (third stage of the Low Emission Vehicle standards) into a single regulatory framework. The new rules reduce emissions from gasoline-powered cars as well as promote zero-emissions auto technologies such as electricity and hydrogen, and through increasing the infrastructure for fueling hydrogen vehicles. In 2009, the U.S. EPA

granted California the authority to implement the GHG standards for passenger cars, pickup trucks and sport utility vehicles and these GHG emissions standards are currently being implemented nationwide. However, EPA has performed a midterm evaluation of the longer-term standards for model years 2022-2025, and based on the findings of this midterm evaluation, the EPA has proposed to amend the corporate average fuel economy (CAFE) and GHG emissions standards for light vehicles for model years 2021 through 2026. The EPA's proposed amendments do not include any extension of the legal waiver granted to California by the 1970 Clean Air Act and which has allowed the State to set tighter standards for vehicle pipe emissions than the EPA standards. On September 20, 2019, California filed suit over the EPA decision to revoke California's legal waiver that has been joined by 22 other states.

5.4 Regional – Ventura County Air Pollution Control District

The VCAPCD has not yet adopted any GHG thresholds. However, at its September 13, 2011 Board meeting, the Ventura County Air Pollution Control Board (VCAPCB) requested that VCAPCD staff report back on possible GHG significance thresholds for evaluating GHG impacts of land use projects in Ventura County under CEQA. As such, the VCAPCD staff prepared the *Greenhouse Gas Thresholds of Significance Options for Land Use Development Projects in Ventura County,* November 8,2011. The Report presented a number of options for setting GHG significance thresholds and analyzed some of the adopted thresholds as well as others that were currently under consideration by other air districts in California. The report concluded that establishing local CEQA significance thresholds for global-scale environmental concerns is a major challenge, and that each of the numerous approaches and options that have been put forth to assess GHG emissions from land use development projects for CEQA purposes has their own set of advantages and disadvantages. While the report did not establish a specific approach that would be used by the VCAPCD to analyze GHG impacts under CEQA, it indicated that because Ventura County is adjacent to the SCAQMD's jurisdiction and is a part of the SCAG region, it would be most desirable for the VCAPCD to set local GHG emission thresholds of significance for land use development projects at levels consistent with those set by the SCAQMD. Therefore, based on the Report recommendations, the VCAPCD would continue to evaluate and develop suitable interim GHG threshold options for Ventura County with preference for GHG threshold consistency with the SCAQMD and the SCAG region.

5.5 Local – City of Moorpark

Local jurisdictions, such as the City of Moorpark, have the authority and responsibility to reduce GHG emissions through their police power and decision-making authority. Specifically, the City is responsible for the assessment and mitigation of GHG emissions resulting from its land use decisions. In accordance with CEQA requirements and the CEQA review process, the City assesses the global climate change potential of new development projects, requires mitigation of potentially significant global climate change impacts by conditioning discretionary permits, and monitors and enforces implementation of such mitigation. The currently adopted General Plan provides no policies specifically for the purpose of reducing GHG emissions. As such, the City relies on guidance to reduce GHG emissions from the VCAPCD, SCAG, and State agencies.

6.0 ATMOSPHERIC SETTING

6.1 Regional Climate

The project site is located within the southeastern portion of the County of Ventura, which is part of the South Central Coast Air Basin (Air Basin) and includes San Luis Obispo County, Santa Barbara County, and Ventura County. Ventura County is divided into two airsheds for air quality planning purposes: the Ojai Valley Airshed and the Oxnard Plain Airshed. The regional climate within the Air Basin is dominated by the intensity and location of the semi-permanent Pacific high pressure zone, which, from spring to fall, induces regional subsidence and temperature inversion layers. The region is characterized by warm summers, mild winters, infrequent seasonal rainfall, and moderate humidity, with the predominate wind patterns follow a diurnal land/sea breeze cycle, with typical daytime winds from the west. The diurnal land/sea breeze pattern is a common occurrence in the Air Basin and it recirculates air contaminants. Air pollutant are pushed toward the ocean during the early morning by the land breeze and toward the east during the afternoon, by the sea breeze. This creates a "sloshing" effect, causing pollutants to remain in the area for several days. This pollutant "sloshing" effect happens most predominately from May through October, which is the "smog" season for the Air Basin.

6.2 Local Climate

The climate of Moorpark that is located within southeastern Ventura County, which is part of the inland portion of the Oxnard Plain Airshed, and is located approximately 18 miles from the coast of the Pacific Ocean. The City experiences the mild Mediterranean climate, typical of Southern California. The temperature and precipitation levels for the Thousand Oaks 1 SW Monitoring Station, which is the nearest weather station to the project sites with historical data are shown below in Table C. Table C shows that July is typically the warmest month and January is typically the coolest month. Rainfall in the project area varies considerably in both time and space. Almost all the annual rainfall comes from the fringes of mid-latitude storms from late November to early April, with summers being almost completely dry.

Table C – Monthly Climate Data

Month	Average Maximum Temperature (°F)	Average Minimum Temperature (°F)	Average Total Precipitation (inches)
January	61.7	43.2	2.94
February	65.0	45.0	3.41
March	67.9	45.4	0.99
April	71.8	47.2	0.33
May	73.7	51.5	0.33
June	80.9	55.0	0.00
July	85.9	60.0	0.00
August	84.5	58.9	0.01
September	81.3	55.1	0.07
October	74.7	52.4	1.52
November	71.3	48.0	0.21
December	65.2	43.9	0.67
Annual	**73.7**	**50.5**	**10.49**

Source: https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca8904

6.3 Monitored Local 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. The air quality of Ventura County is monitored by a network of air monitoring stations operated by CARB and VCAPCD. Since not all air monitoring stations measure all of the tracked pollutants, the data from the following two monitoring stations, listed in the order of proximity to the project site have been used, Thousand Oaks – Moorpark Street Monitoring Station (Thousand Oaks Station) and Simi Valley-Cochran Street Monitoring Station (Simi Valley Station).

The Thousand Oaks Station is located approximately 5.5 miles south of the project site at 2323 Moorpark Road, Thousand Oaks and the Simi Valley Station is located approximately 9.5 miles east of the project site at 5400 Cochran Street, Simi Valley. The monitoring data is presented in Table D and shows the most recent three years of monitoring data from CARB. Ozone and PM2.5 were measured at the Thousand Oaks Station and PM10 and NO_2 was measured at the Simi Valley Station.

Table D – Local Area Air Quality Monitoring Summary

	Year		
Pollutant (Standard)	**2016**	**2017**	**2018**
Ozone:[1]			
Maximum 1-Hour Concentration (ppm)	0.090	0.080	0.082
Days > CAAQS (0.09 ppm)	0	0	0
Maximum 8-Hour Concentration (ppm)	0.073	0.073	0.074
Days > NAAQS (0.070 ppm)	**6**	**1**	**1**
Days > CAAQs (0.070 ppm)	**6**	**1**	**2**
Nitrogen Dioxide:[2]			
Maximum 1-Hour Concentration (ppb)	46.0	43.0	45.0
Days > NAAQS (100 ppb)	0	0	0
Inhalable Particulates (PM10) :[2]			
Maximum 24-Hour National Measurement (ug/m^3)	154.3	110.5	127.9
Days > NAAQS (150 ug/m^3)	0	0	0
Days > CAAQS (50 ug/m^3)	**9**	**6**	**4**
Annual Arithmetic Mean (AAM) (ug/m^3)	24.0	23.5	19.5
Annual > NAAQS (50 ug/m^3)	No	No	No
Annual > CAAQS (20 ug/m^3)	**Yes**	**Yes**	No
Ultra-Fine Particulates (PM2.5):[1]			
Maximum 24-Hour National Measurement (ug/m^3)	31.3	29.6	19.4
Days > NAAQS (35 ug/m^3)	0	0	0
Annual Arithmetic Mean (AAM) (ug/m^3)	9.2	8.7	7.6
Annual > NAAQS and CAAQS (12 ug/m^3)	No	No	No

Notes: Exceedances are listed in **bold.** CAAQS = California Ambient Air Quality Standard; NAAQS = National Ambient Air Quality Standard; ppm = parts per million; ppb = parts per billion; ND = no data available.

[1] Data obtained from the Thousand Oaks Station.

[2] Data obtained from the Simi Valley Station.
Source: http://www.arb.ca.gov/adam/

Ozone

The State 1-hour concentration standard for ozone has not been exceeded in the past three years at the Thousand Oaks Station. The State 8-hour ozone standard has been exceeded between 1 and 6 days each year over the past three years at the Thousand Oaks Station. The Federal 8-hour ozone standard has been exceeded between 1 and 6 days each year over the past three years at the Thousand Oaks 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 Ventura County contribute to the ozone levels experienced in Moorpark, with the more significant areas being those directly upwind.

Nitrogen Dioxide

The Simi Valley Station has not exceedance of the Federal 1-hour NO_2 standard for the last three years.

Particulate Matter

The Federal 24-hour concentration standards for PM10 have not been exceeded over the past three years at the Simi Valley Station. The State 24-hour concentration standards for PM10 had been exceeded between 4 and 9 days each year over the past three years at the Simi Valley Station. The annual PM10 concentration at the Simi Valley Station has not exceeded the Federal standards for the past three years. The annual PM10 concentration at the Simi Valley Station has exceeded the State standards two of the last three years.

Over the past three years the 24-hour concentration standard for PM2.5 has not been at the Camp Pendleton Station. No data is available at the Camp Pendleton Station for annual PM2.5 concentrations at the Camp Pendleton Station. There does not appear to be a noticeable trend for PM10 or PM2.5 in either maximum particulate concentrations or days of exceedances in the area. Particulate levels in the area are due to natural sources, grading operations, and motor vehicles.

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.

7.0 MODELING PARAMETERS AND ASSUMPTIONS

7.1 CalEEMod Model Input Parameters

The criteria air pollution and GHG emissions impacts created by the proposed project have been analyzed through use of CalEEMod Version 2016.3.2. CalEEMod is a computer model published by the SCAQMD for estimating air pollutant emissions. The CalEEMod program uses the EMFAC2014 computer program to calculate the emission rates specific for Ventura County for employee, vendor and haul truck vehicle trips and the OFFROAD2011 computer program to calculate emission rates for heavy equipment operations. EMFAC2014 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.

The project characteristics in the CalEEMod model were set to a project location of Ventura County, a Climate Zone of 8, utility company of Southern California Edison, and an opening year of 2021 was utilized in this analysis.

Land Use Parameters

The proposed project consists of the renovation of the existing 180,000 square foot warehouse building space and approximately 7,000 square feet of office tenant improvements that would result in the renovation of approximately 187,000 square feet of building space. In addition, the proposed project would construct a total of 375 parking spaces. The proposed project's land use parameters that were entered into the CalEEMod model are shown in Table E.

Table E – CalEEMod Land Use Parameters

Proposed Land Use	Land Use Subtype in CalEEMod	Land Use Size[1]	Lot Acreage[2]	Building/Paving (square feet)
Warehouse Distribution Facility	Industrial Park	187 TSF	1.22	187,000
Parking Lots (new & reconfigured)	Parking Lot	117 PS	4.3	46,800

Notes:
[1] TSF = Thousand Square Feet; PS = Parking Space
[2] Lot acreage calculated based on a total project site of 14.45 acres.

Construction Parameters

Construction activities are anticipated to start around February 2021 and would be completed by August 2021. The phases of construction activities that have been analyzed are detailed below and include: 1) Grading, 2) Building Construction/Renovation, 3) Paving, and 4) Application of architectural coatings. Since the project site is currently developed, the site preparation activities that consist of removal of rocks and tree stumps would not be required during construction of the proposed project.

Grading

The grading phase is anticipated to start around February 2021 and has been modeled as occurring over six weeks, which is based on the CalEEMod default timing. The onsite equipment would consist of two excavators, one grader, one rubber tired dozer, two scrapers, and two of either tractors, loaders, or backhoes. The grading activities would generate 20 worker trips per day.

Building Construction/Renovation

The building construction/renovation would occur after the completion of the grading phase and was modeled as occurring over 20 weeks, which is based on the construction schedule provided by the applicant. The building construction would require up to 142 worker trips and 55 vendor trips per day. The onsite equipment would consist of the simultaneous operation of one crane, three forklifts, one generator set, one welder, and three of either tractors, loaders, or backhoes, which is based on the CalEEMod default equipment mix.

Paving

The paving activities was modeled as occurring concurrently with the building construction phase and was modeled as occurring over four weeks. The paving phase would require up to 15 worker trips per day. The onsite equipment would consist of the simultaneous operation of two pavers, two paving equipment, and two rollers, which is based on the CalEEMod default equipment mix.

Architectural Coating

The application of architectural coatings was modeled occurring concurrently with the building construction and paving phases and was modeled as occurring over four weeks. The architectural coating phase was modeled based on covering 158,153 square feet of residential interior area, 52,718 square feet of residential exterior area, and 2,808 square feet of parking area that includes striping of the parking lots, painting of signs, and other architectural coatings in public areas. The architectural coating phase would require up to 18 worker trip per day. The onsite equipment would consist of one air compressor, which is based on the CalEEMod default equipment mix.

Operational Emissions Modeling

The operations-related criteria air pollutant emissions and GHG emissions created by the proposed project have been analyzed through use of the CalEEMod model. The proposed project was analyzed in the CalEEMod model based on the land use parameters provided above.

Mobile Sources

Mobile sources include emissions the additional vehicle miles generated from the proposed project. The vehicle trips associated with the proposed project have been analyzed through use of trip rates obtained from the *Traffic Impact Study for 6000 & 6100 Condor Drive Warehousing/Distribution Facility* (Traffic Impact Study), prepared by NV5 Engineers and Consultants, Inc., October 22, 2020,

The Traffic Impact Study found that the proposed project would generate a gross 1,716 daily trips, which equates to a daily trip rate of 9.18 per thousand square feet of building space that was entered into the CalEEMod model. The use of the gross daily trip rate from the Traffic Study provides for a conservative (worst-case) analysis, since it does not take credit for the trips generated from the existing warehouse. No other changes were made to the CalEEMod default mobile source parameters.

Area Sources

Area sources include emissions from hearths, consumer products, landscape equipment and architectural coatings. The area source emissions were based on the on-going use of the proposed 95 unit assisted living facility. The woodstoves and fireplaces were set to zero, since no wood stoves or fireplaces would

be installed in the project. No other changes were made to the default area source parameters in the CalEEMod model.

Energy Usage

Energy usage includes emissions from electricity and natural gas used onsite. The energy usage was based on the ongoing use of the proposed 95 unit assisted living facility in the CalEEMod Model. No changes were made to the default energy usage parameters in the CalEEMod model.

The new 2019 Title 24, Part 6 building energy efficiency standards went into effect January 1, 2020 that result in 7 percent more efficient building energy efficiency than the 2016 Title 24 standards and require new lighting energy improvements that are 30 percent more efficient than the prior 2016 building standards. In order to account for the new standards, the CalEEMod "mitigation" of exceed Title 24 by 7 percent and provide a 30 percent lighting energy improvement was selected. A summary of the new 2019 Title 24 standards can be found at: https://www.energy.ca.gov/title24/2019standards/documents/2018_Title_24_2019_Building_Standards_FAQ.pdf.

Solid Waste

Waste includes the GHG emissions associated with the processing of waste from the proposed project as well as the GHG emissions from the waste once it is interred into a landfill. The analysis was based on the default CalEEMod waste generation rates of 83 tons of solid waste per year from the proposed project. No changes were made to the default solid waste parameters or mitigation measures in the CalEEMod model.

The CalEEMod "mitigation" of a 50 percent reduction in landfill waste was selected to account for implementation of AB 341 that provides strategies to reduce, recycle or compost solid waste by 75 percent by 2020. Only 50 percent was selected, since AB 341 builds upon the waste reduction measures of SB 939 and 1374 and therefore, it was assumed approximately 25 percent of the waste reduction target has already been accounted for in the CalEEMod model.

Water and Wastewater

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. The analysis was based on the default CalEEMod water usage rate of 6,189,632 gallons per year of indoor water usage and 3,902,160 gallons per year of outdoor water usage. No changes were made to the default water and wastewater parameters in the CalEEMod model.

The CalEEMod "mitigation" of the use of low flow faucets, showers, and toilets and use of smart irrigation system controllers were selected to account for the implementation of the 2016 CCR Title 24 Part 11 (CalGreen) requirements.

8.0 THRESHOLDS OF SIGNIFICANCE

8.1 Criteria Pollutant Standards

The *Ventura County Air Quality Assessment Guidelines* (VCAQPD Guidelines), prepared by VCAQPD, October 2003, details that a proposed project's criteria pollutant emissions would be considered significant, if a project would generate daily operational emissions exceeding 25 pounds of ROG or NOx. These thresholds are not intended to be applied to construction emissions since such emissions are temporary.

The VCAPCD has not established quantitative thresholds for particulate matter for either operation or construction. However, the VCAPCD indicates that a project that may generate fugitive dust emissions in such quantities as to cause injury, detriment, nuisance, or annoyance to any considerable number of persons, or which may endanger the comfort, repose, health, or safety of any such person, or which may cause or have a natural tendency to cause injury or damage to business or property would have a significant air quality impact. This threshold is particularly applicable to the generation of fugitive dust during construction grading operations. To determine whether a regional air quality impact would occur, the project generated emissions are compared to the VCAPD's recommended regional thresholds for operational emissions.

8.2 Sensitive Receptor Standards

Carbon Monoxide Hotspots

A CO hotspot is a localized concentration of CO that is above the State or national 1-hour or eight hour CO ambient air standards. Localized CO "hotspots" can occur at intersections with heavy peak hour traffic. Specifically, hotspots can be created at intersections where traffic levels are sufficiently high such that the local CO concentration exceeds the federal AAQS of 35.0 parts per million (ppm) or the State AAQS of 20.0 ppm.

According to the VCAPCD Guidelines, a CO screening analysis should be conducted for intersections that would be significantly affected by a project and that experience, or are anticipated to experience, level of service (LOS) E or F. "Hot spots" are defined as locations where local ambient CO concentrations exceed the state or federal ambient air quality standards.

Fugitive Dust

(a) A project that may be reasonably expected to generate fugitive dust emissions in such quantities as to cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which may endanger the comfort, repose, health, or safety of any such person or the public, or which may cause, or have a natural tendency to cause, injury or damage to business or property (see California Health and Safety Code, Division 26, §41700) will have a significant adverse air quality impact.

(b) A project for which an appropriate air dispersion modeling analysis shows a possible violation of an ambient particulate standard will have a significant.

Toxic Air Contaminants

Impacts from toxic air contaminants (TACs) may be estimated by conducting a health risk assessment (HRA). The HRA procedure involves the use of an air quality model and a protocol approved by the APCD. Following are the recommended significance thresholds:

(a) Lifetime probability of contracting cancer is greater than 10 in one million (as identified in an HRA).

(b) Ground-level concentrations of non-carcinogenic toxic air pollutants would result in a Hazard Index of greater than 1 (as identified in an HRA).

The Hazard Index is determined by dividing the "annual exposure level" by the "reference exposure level." The "annual exposure level" (AEL) is the estimated annual average concentration level of a TAC that is estimated to occur as a result of the proposed project. The "reference exposure level" (REL) is a concentration level or dose, at or below which no adverse health effects are anticipated. RELs generally are based on the most sensitive adverse health effect reported in the medical and toxicological literature.

San Joaquin Valley Fever

There is no recommended threshold for a significant San Joaquin Valley Fever impact. However, listed below are factors that may indicate a project's potential to create significant Valley Fever impacts:

- Disturbance of the top soil of undeveloped land (to a depth of about 12 inches)
- Dry, alkaline, sandy soils.
- Virgin, undisturbed, non-urban areas.
- Windy areas.
- Archaeological resources probable or known to exist in the area (Native American midden sites).
- Special events (fairs, concerts) and motorized activities (motocross track, All Terrain Vehicle activities) on unvegetated soil (non-grass).
- Non-native population (i.e., out-of-area construction workers).

The lead agency should consider the factors above that are applicable to the project or the project site. The likelihood that the Valley Fever fungus may be present and impact nearby land uses (or the project itself) increases with the number of the above factors applicable to the project or the project site. Based on these or other factors, if a lead agency determines that project activities may create a significant Valley Fever impact, the District recommends that the lead agency consider the Valley Fever mitigation measures listed in the VCAPCD Guidelines.

8.3 Odor Impacts

A qualitative assessment indicating that a project may reasonably be expected to generate odorous emissions in such quantities as to cause detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which may endanger the comfort, repose, health, or safety of any such person or the public, or which may cause, or have a natural tendency to cause, injury or damage to business or property (see California Health and Safety Code, Division 26, §41700) will have a significant adverse air quality impact.

8.4 Greenhouse Gas Emissions

The VCAPCD has not yet adopted any GHG thresholds. However, at its September 13, 2011 Board meeting, the Ventura County Air Pollution Control Board (VCAPCB) requested that VCAPCD staff report back on possible GHG significance thresholds for evaluating GHG impacts of land use projects in Ventura County under CEQA. As such, the VCAPCD staff prepared the *Greenhouse Gas Thresholds of Significance Options for Land Use Development Projects in Ventura County,* November 8,2011. The Report presented a number of options for setting GHG significance thresholds and analyzed some of the adopted thresholds as well as others that were currently under consideration by other air districts in California. The report concluded that establishing local CEQA significance thresholds for global-scale environmental concerns is a major challenge, and that each of the numerous approaches and options that have been put forth to assess GHG emissions from land use development projects for CEQA purposes has their own set of advantages and disadvantages. While the report did not establish a specific approach that would be used by the VCAPCD to analyze GHG impacts under CEQA, it indicated that because Ventura County is adjacent to the SCAQMD's jurisdiction and is a part of the SCAG region, it would be most desirable for the VCAPCD to set local GHG emission thresholds of significance for land use development projects at levels consistent with those set by the SCAQMD. Therefore, based on the Report recommendations, the VCAPCD would continue to evaluate and develop suitable interim GHG threshold options for Ventura County with preference for GHG threshold consistency with the SCAQMD and the SCAG region.

In order to identify significance criteria under CEQA for development projects, SCAQMD initiated a Working Group, which provided detailed methodology for evaluating significance under CEQA. 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 3,000 $MTCO_2e$ for all land use projects. Although the SCAQMD provided substantial evidence supporting the use of the above threshold, as of November 2017, the SCAQMD Board has not yet considered or approved the Working Group's thresholds.

It should be noted that SCAQMD's Working Group's thresholds were prepared prior to the issuance of Executive Order B-30-15 on April 29, 2015 that provided a reduction goal of 40 percent below 1990 levels by 2030. This target was codified into statute through passage of AB 197 and SB 32 in September 2016. However, to date no air district or local agency within California has provided guidance on how to address AB 197 and SB 32 with relation to land use projects. In addition, the California Supreme Court's ruling on *Cleveland National Forest Foundation v. San Diego Association of Governments* (Cleveland v. SANDAG), Filed July 13, 2017 stated:

> SANDAG did not abuse its discretion in declining to adopt the 2050 goal as a measure of significance in light of the fact that the Executive Order does not specify any plan or implementation measures to achieve its goal. In its response to comments, the EIR said: "It is uncertain what role regional land use and transportation strategies can or should play in achieving the EO's 2050 emissions reduction target. A recent California Energy Commission report concludes, however, that the primary strategies to achieve this target should be major 'decarbonization' of electricity supplies and fuels, and major improvements in energy efficiency [citation].

Although, the above court case was referencing California's GHG emission targets for the year 2050, at this time it is also unclear what role land use strategies can or should play in achieving the AB 197 and SB 32 reduction goal of 40 percent below 1990 levels by 2030. As such this analysis has relied on the SCAQMD

Working Group's recommended thresholds. Therefore, the proposed project would be considered to create a significant cumulative GHG impact if the proposed project would exceed the annual threshold of 3,000 $MTCO_2e$.

9.0 IMPACT ANALYSIS

9.1 CEQA Thresholds of Significance

Consistent with CEQA and the State CEQA Guidelines, a significant impact related to air quality and GHG emissions would occur if the proposed project is determined to:

- Conflict with or obstruct implementation of the applicable air quality plan;
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard;
- Expose sensitive receptors to substantial pollutant concentrations;
- Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people;
- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or
- Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHGs.

9.2 Air Quality Compliance

The proposed project would not conflict with or obstruct implementation of the Ventura County Air Quality Management Plans (AQMPs). According to the VCAPCD Guidelines, a project is consistent with the growth projections provided in the AQMPs, if the proposed project conforms to the applicable General Plan land use designations and if the projected population growth created by the proposed project is within the population forecasts developed by the Ventura Council of Governments for the project area. For this project, the City of Moorpark General Plan's Land Use Plan defines the long range land use assumptions that are represented in the AQMPs.

The project site is currently designated as Light Industrial (I-1) in the General Plan. The proposed warehouse and distribution facility is an allowed use in the Light Industrial land use designation. As such, the proposed project is consistent with the current land use designation and is not anticipated to exceed the AQMP assumptions for the project site. Projects that would result in population growth, are limited to residential projects. Since the proposed project consists of a warehouse and distribution facility, implementation of the proposed project would not result in any population growth in Ventura County. It should also be noted that the project would provide employment opportunities in an area where there is more housing than jobs and the proposed project would consist of development of a last mile delivery facility in an area that is currently serviced by distribution facilities that are located farther away. As such, development of the proposed project would assist in implementation of the AQMP by potentially reducing vehicle miles traveled. Based on the above, the proposed project will not result in an inconsistency with the AQMP. Therefore, a less than significant impact will occur in relation to implementation of the AQMP.

Level of Significance

Less than significant.

9.3 Cumulative Net Increase in Non-Attainment Pollution

The proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard. The following section calculates the potential air emissions associated with the construction and operations of the proposed project and compares the emissions to the VCAPCD criteria pollutant emissions standards detailed above in Section 8.1.

Construction Emissions

The construction activities for the proposed project are anticipated to start around February 2021 and would be completed by August 2021 and would include renovation of the existing 180,000 square foot warehouse building space and approximately 7,000 square feet of office tenant improvements that would result in the renovation of approximately 187,000 square feet of building space. In addition, the proposed project would construct a total of 375 parking spaces.

The VCAPCD Guidelines details that construction-related ROG, NOx, and fugitive dust (PM10 and PM2.5) emissions should be quantified. As such, the CalEEMod model has been utilized to calculate the construction-related emissions from the proposed project and the input parameters utilized in this analysis have been detailed in Section 7.1. The worst-case summer and winter daily construction-related criteria pollutant emissions from the proposed project's construction activities are shown below in Table F and the CalEEMod model daily printouts are included in Appendix A.

Table F – Construction-Related Maximum Daily Air Pollutant Emissions

Season	Pollutant Emissions (pounds/day)			
	ROG	NOx	PM10	PM2.5
Summer	227.40	46.44	10.82	5.47
Winter	227.49	46.45	10.82	5.47

Source: CalEEMod Version 2016.3.2.

As detailed in the VCAPCD Guidelines, the VCAPCD has not established quantitative thresholds for particulate matter (PM10 and PM2.5) and the 25 pounds per day threshold for ROG and NOx do not apply to construction emissions, since the emissions are temporary. However, the VCAPCD indicates that a project that may generate fugitive dust emissions in such quantities as to cause injury, detriment, nuisance, or annoyance to any considerable number of persons, or which may endanger the comfort, repose, health, or safety of any such person, or which may cause or have a natural tendency to cause injury or damage to business or property would have a significant air quality impact.

In order to reduce air quality impacts from construction activities, the VCAPCD requires that all projects minimize construction emissions through adherence to the VCAPCD Rule 55 fugitive dust control measures and minimize ROG through adherence to the VCAPCD Rule 74.2 architectural coating VOC content limits. Compliance with VCAPCD Rules 55 and 74.2 would ensure that construction emission would not be generated in such quantities as to cause injury, detriment, nuisance, or annoyance to any considerable number of persons, or that may endanger the comfort, repose, health or safety of any such person or the public. Therefore, a less than significant air quality impact would occur from construction of the proposed project.

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, emissions from energy usage, and onsite area source emissions created from the on-going use of the proposed project. The operations-related criteria air quality impacts created by the proposed project have been analyzed through use of the CalEEMod model and the input parameters utilized in this analysis have been detailed in Section 8.1. The summer and winter VOC, NOx, CO, SO_2, PM10, and PM2.5 daily emissions created from the proposed project's long-term operations have been calculated and are summarized below in Table G and the CalEEMod daily emissions printouts are shown in Appendix A.

Table G – Operational Criteria Pollutant Emissions

	Pollutant Emissions (pounds/day)					
Activity	**ROG**	**NOx**	**CO**	**SO_2**	**PM10**	**PM2.5**
Summer						
Area Sources[1]	5.28	<0.00	0.06	<0.00	<0.00	<0.00
Energy Usage[2]	0.05	0.43	0.36	<0.00	0.03	0.03
Mobile Sources[3]	2.63	9.85	31.12	0.11	9.62	2.63
Total Summer Emissions	**7.95**	**10.28**	**31.54**	**0.11**	**9.65**	**2.66**
Winter						
Area Sources[1]	5.28	<0.00	0.06	<0.00	<0.00	<0.00
Energy Usage[2]	0.05	0.43	0.36	<0.00	0.03	0.03
Mobile Sources[3]	2.49	10.29	31.53	0.10	9.62	2.63
Total Winter Emissions	**7.82**	**10.72**	**31.95**	**0.10**	**9.65**	**2.66**
VCAPCD Thresholds	**25**	**25**	**--[4]**	**--[4]**	**--[4]**	**--[4]**
Exceeds Threshold?	No	No	--	--	--	--

Notes:
[1] Area sources consist of emissions from consumer products, architectural coatings, and landscaping equipment.
[2] Energy usage consist of emissions from natural gas usage.
[3] Mobile sources consist of emissions from vehicles and road dust.
[4] VCAPCD does not provide a quantitative threshold for these pollutants.
Source: Calculated from CalEEMod Version 2016.3.2.

Table G shows that operation of the proposed project would not exceed the VCAPCD threshold for ROG and NOx. Therefore, a less than significant air quality impact would occur from operation of the proposed project.

In *Sierra Club v. County of Fresno* (2018) 6 Cal.5th 502 (also referred to as "*Friant Ranch*"), the California Supreme Court held that when an EIR concluded that when a project would have significant impacts to air quality impacts, an EIR should "make a reasonable effort to substantively connect a project's air quality impacts to likely health consequences." As shown in Table T above, and unlike the project at issue in the *Friant Ranch* case, the project's emissions of criteria pollutants would not exceed the SCAQMD's thresholds and would not have a significant air quality impact. Therefore, it is not necessary to connect this small project's air quality impacts to likely health impacts. However, for informational purposes this analysis considers the Court's direction as follows:

1) The air quality discussion shall describe the specific health risks created from each criteria pollutant, including diesel particulate matter.

Although it has been determined that the project would not result in significant air quality impacts, this analysis details the specific health risks created from each criteria pollutant above in Section 3.1 and specifically in Table B. In addition, the specific health risks created from diesel particulate matter is detailed above in Section 2.2 of this analysis. As such, this analysis meets the part 1 requirements of the Friant Ranch Case.

2) The analysis shall identify the magnitude of the health risks created from the Project. The Ruling details how to identify the magnitude of the health risks. Specifically, on page 24 of the ruling it states "The Court of Appeal identified several ways in which the EIR could have framed the analysis so as to adequately inform the public and decision makers of possible adverse health effects. The County could have, for example, identified the Project's impact on the days of nonattainment per year."

Table G above shows that the primary source of operational air emissions would be created from mobile source emissions that would be generated throughout the Air Basin and would result in a less than significant impact to air quality. If there were a significant impact, any adverse health impacts created from the proposed project should be assessed on a basin-wide level. As indicated above in Table B, the Air Basin has been designated by EPA for the national standards as a non-attainment area for ozone, PM2.5, and partial non-attainment for lead. In addition, PM10 has been designated by the State as non-attainment. It should be noted that VOC and NOx are ozone precursors, as such they have been considered as non-attainment pollutants.

According to *The California Almanac of Emissions and Air Quality 2013 Edition,* prepared by CARB, shows that for the County of Ventura in the year 2020 the total ROG emissions will be 11 tons per day, NOx emissions will be 19 tons per day, SOx emissions will be 1 ton per day, PM10 emissions will be 18 tons per day, and PM2.5 emissions will be 6 tons per day. The Report does not provide any data for CO emissions. The project contribution to each criteria pollutant in the Air Basin is shown in Table H.

Table H – Project's Contribution to Criteria Pollutants in the Air Basin

	Pollutant Emissions (pounds/day)					
Emissions Source	**ROG**	**NOx**	**CO**	**SO_2**	**PM10**	**PM2.5**
Project Emissions[1]	7.96	10.72	31.95	0.11	9.65	2.66
Total Emissions in Air Basin[2]	22,000	38,000	--	2,000	36,000	12,000
Project's Percent of Air Emissions	**0.035%**	**0.028%**	**--**	**0.005%**	**0.027%**	**0.0022%**

Notes:
[1] From the project's total operational emissions shown above in Table G.
[2] California Almanac of Emissions and Air Quality 2013 Edition.

As shown in Table H, the project would increase criteria pollutant emissions by as much as 0.035 percent for ROG in the County. Due to these nominal increases in the Air Basin-wide criteria pollutant emissions, no increases in days of non-attainment are anticipated to occur from operation of the proposed project. Accordingly, because the project results in a less than significant impact to air quality, operation of the project is not anticipated to result in a quantitative increase in premature deaths, asthma in children, days children will miss school, asthma-related emergency room visits, or an increase in acute bronchitis among children due to the criteria pollutants created by the proposed project. Impacts would be less than significant.

Therefore, the proposed project would not result in a cumulatively considerable net increase of any criteria pollutant.

Level of Significance

Less than significant impact.

9.4 Sensitive Receptors

The proposed project would not expose sensitive receptors to substantial pollutant concentrations. As detailed above in Section 8.2 the VCAPCD Guidelines detail that carbon monoxide hotspots, fugitive dust, toxic air contaminant impacts, and San Joaquin Valley Fever project-related impacts to nearby sensitive receptors should be analyzed. The nearest sensitive receptors to the project site are single-family homes located on the north side of State Route 118, that are as near as 300 feet north of the project site.

Carbon Monoxide Hotspot Analysis

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 impacts to sensitive receptors. According to the VCAPCD Guidelines, a CO screening analysis should be conducted for intersections that would be significantly affected by a project and that experience, or are anticipated to experience, level of service (LOS) E or F. "Hot spots" are defined as locations where local ambient CO concentrations exceed the state or federal ambient air quality standards.

According to the *Traffic Impact Study for 6000 & 6100 Condor Drive Warehousing/Distribution Facility* (Traffic Impact Study), prepared by NV5 Engineers and Consultants, Inc., October 22, 2020, there are three intersections that will operate at LOS E or F for the with project condition and include:

- Princeton Avenue and Condor Drive North – LOS E;
- Princeton Avenue and State Route 118 Eastbound Ramps – LOS F; and
- Princeton Avenue and Condor Drive South – LOS F.

It should be noted that since the warehouse on the project site currently exists, the Traffic Impact Study found that the LOS would actually improve for the first two listed intersections and although the delay at the intersection at Princeton Avenue and Condo Drive South would increase by as much as 10.4 seconds for the PM peak hour, it is created by an additional 21 PM peak hour trips at this unsignalized intersection. As such due to the nominal project trips at this intersection, the proposed project would create a less than significant impact to CO Hotspots.

Fugitive Dust Emissions

Construction activities are a source of fugitive dust (PM10 and PM2.5) emissions that may have a substantial, although temporary, impact on local air quality. In addition, fugitive dust may be a nuisance to those living and working in the immediate vicinity of the proposed construction activities. Fugitive dust emissions from the proposed project would be created during onsite earth moving activities. The anticipated onsite worst-case PM10 emissions for each phase of construction have been provided above in Table F. However, it should be noted that fugitive dust emissions vary substantially from day to day, depending on the level and type of activity and weather conditions. Additionally, most of the PM10

emissions from onsite construction activities are from inert silicates, rather than the complex organic particles released from combustion sources, which are more harmful to health.

Construction activities associated with the proposed project would be required to implement emissions control measures detailed in VCAPCD Rule 55 fugitive dust control measures. With implementation of VCAPCD's Rule 55, the proposed project would not exceed the VCAPCD standards for fugitive dust. Fugitive dust emissions would be less than significant for construction activities and no fugitive dust emissions are anticipated to occur from operational activities.

Toxic Air Contaminants Impacts

Toxic Air Contaminants Impacts from Construction

The greatest potential for toxic air contaminant emissions would be related to diesel particulate matter (DPM) emissions associated with heavy equipment operations during construction of the proposed project. VCAPCD and CAPCOA methodology, health effects from carcinogenic air toxics are usually described in terms of "individual cancer risk". "Individual Cancer Risk" is the likelihood that a person exposed to concentrations of toxic air contaminants over a 70-year lifetime will contract cancer, based on the use of standard risk-assessment methodology. Given the relatively limited number of heavy-duty construction equipment and the short-term construction schedule, the proposed project would not result in a long-term (i.e., 70 years) substantial source of toxic air contaminant emissions and corresponding individual cancer risk. In addition, California Code of Regulations Title 13, Article 4.8, Chapter 9, Section 2449 regulates emissions from off-road diesel equipment in California. This regulation limits idling of equipment to no more than five minutes, requires equipment operators to label each piece of equipment and provide annual reports to CARB of their fleet's usage and emissions. This regulation also requires systematic upgrading of the emission Tier level of each fleet, and currently no commercial operator is allowed to purchase Tier 0 or Tier 1 equipment and by January 2023 no commercial operator is allowed to purchase Tier 2 equipment. In addition to the purchase restrictions, equipment operators need to meet fleet average emissions targets that become more stringent each year between years 2014 and 2023. Therefore, no significant short-term toxic air contaminant impacts would occur during construction of the proposed project. As such, construction of the proposed project would result in a less than significant exposure of sensitive receptors to substantial pollutant concentrations.

Operations-Related Toxic Air Contaminant Impacts

Particulate matter (PM) from diesel exhaust is the predominant TAC in most areas and according to *The California Almanac of Emissions and Air Quality 2013 Edition*, prepared by CARB, about 80 percent of the outdoor TAC cancer risk is from diesel exhaust. Some chemicals in diesel exhaust, such as benzene and formaldehyde have been listed as carcinogens by State Proposition 65 and the Federal Hazardous Air Pollutants program.

According to the *VMT Study for DCX6 Delivery Station 6000 & 6100 Condor Drive,* prepared by NV5 Engineers and Consultants, Inc., October 27, 2020, the proposed project would generate 25 line haul truck deliveries per day. According to the *Health Risk Assessments for Proposed Land Use Projects,* prepared by CAPCOA, July 2009, a truck distribution facility that accommodates 100 or more truck deliveries per day has the potential to create significant health risks from TAC emissions. Since the proposed project would generate a quarter of the truck trips that CAPCOA found would have the potential to create significant health risks, a less than significant TAC impact would occur during the on-going operations of the proposed project and no mitigation would be required.

San Joaquin Valley Fever

San Joaquin Valley Fever, or coccidioidomycosis, is an infection caused by inhalation of the spores of the fungus, Coccidioides immitis. The spores live in soil and can live for an extended time in harsh environmental conditions. Activities or conditions that increase the amount of fugitive dust contribute to greater exposure, and include dust storms, grading, and recreational off-road activities.

The proposed project would have the potential to disturb the soil during construction activities. However, the project site is located in a developed area and most of the project site is currently developed. As such, the project site does not meet any of the potential conditions detailed in the VCAPCD Guidelines of sites that are likely to contain San Joaquin Valley Fever. In addition, construction activities will be required to adhere to the VCAPCD Rule 55 fugitive dust control measures that will minimize the generation of fugitive dust that contributes to the exposure of persons to San Joaquin Valley Fever. Therefore, impacts to San Joaquin Valley Fever would be less than significant.

Level of Significance

Less than significant impact.

9.5 Odor Emissions Adversely Affecting a Substantial Number of People

The proposed project would not create objectionable odors affecting a substantial number of people. Individual responses to odors are highly variable and can result in a variety of effects. Generally, the impact of an odor results from a variety of factors such as frequency, duration, offensiveness, location, and sensory perception. The frequency is a measure of how often an individual is exposed to an odor in the ambient environment. The intensity refers to an individual's or group's perception of the odor strength or concentration. The duration of an odor refers to the elapsed time over which an odor is experienced. The offensiveness of the odor is the subjective rating of the pleasantness or unpleasantness of an odor. The location accounts for the type of area in which a potentially affected person lives, works, or visits; the type of activity in which he or she is engaged; and the sensitivity of the impacted receptor.

Sensory perception has four major components: detectability, intensity, character, and hedonic tone. The detection (or threshold) of an odor is based on a panel of responses to the odor. There are two types of thresholds: the odor detection threshold and the recognition threshold. The detection threshold is the lowest concentration of an odor that will elicit a response in a percentage of the people that live and work in the immediate vicinity of the project site and is typically presented as the mean (or 50 percent of the population). The recognition threshold is the minimum concentration that is recognized as having a characteristic odor quality, this is typically represented by recognition by 50 percent of the population. The intensity refers to the perceived strength of the odor. The odor character is what the substance smells like. The hedonic tone is a judgment of the pleasantness or unpleasantness of the odor. The hedonic tone varies in subjective experience, frequency, odor character, odor intensity, and duration. Potential odor impacts have been analyzed separately for construction and operations below.

Construction-Related Odor Impacts

Potential sources that may emit odors during construction activities include the application of coatings such as asphalt pavement, paints and solvents and from emissions from diesel equipment. The objectionable odors that may be produced during the construction process would be temporary and would not likely be noticeable for extended periods of time beyond the project site's boundaries. Due to

the transitory nature of construction odors, a less than significant odor impact would occur and no mitigation would be required.

Operations-Related Odor Impacts

The proposed project would consist of the development of a warehouse distribution facility. Potential sources that may emit odors during the on-going operations of the proposed project would primarily occur from odor emissions from the trash storage areas. Pursuant to City regulations, permanent trash enclosures that protect trash bins from rain as well as limit air circulation would be required for the trash storage areas. Due to the distance of the nearest receptors from the project site and through compliance with City regulations, no significant impact related to odors would occur during the on-going operations of the proposed project. Therefore, a less than significant odor impact would occur and no mitigation would be required.

Level of Significance

Less than significant impact.

9.6 Generation of Greenhouse Gas Emissions

The proposed project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. The proposed project would consist of development of a warehouse distribution facility. The proposed project is anticipated to generate GHG emissions from construction activities and from operational activities that would include area sources, energy usage, mobile sources, waste disposal, and water usage. The project's GHG emissions have been calculated with the CalEEMod model based on the construction and operational parameters detailed above in Section 7.1. A summary of the results is shown below in Table I and the CalEEMod model run is provided in Appendix B.

Table I – Project Related Greenhouse Gas Annual Emissions

	Greenhouse Gas Emissions (Metric Tons per Year)			
Category	**CO_2**	**CH_4**	**N_2O**	**CO_2e**
Construction				
Total Construction Emissions	340.65	0.07	0.00	342.34
Amortized Construction Emissions[1] (30 Years)	**11.35**	**0.00**	**0.00**	**11.41**
Operations				
Area Sources[2]	0.01	0.00	0.00	0.01
Energy Usage[3]	833.25	0.03	0.01	836.43
Mobile Sources[4]	1721.06	0.07	0.00	1,722.88
Solid Waste[5]	23.53	1.39	0.00	58.31
Water and Wastewater[6]	163.00	1.20	0.03	201.64
Total Operational Emissions	**2,740.85**	**2.69**	**0.04**	**2,819.27**
Total Annual Emission (Construction & Operations)	**2,752.21**	**2.69**	**0.04**	**2,830.68**
Threshold of Significance				**3,000**
Exceed Thresholds?				**No**

Notes:
[1] Construction emissions amortized over 30 years as recommended in the SCAQMD GHG Working Group on November 19, 2009.
[2] Area sources consist of GHG emissions from consumer products, architectural coatings, and landscaping equipment.
[3] Energy usage consists of GHG emissions from electricity and natural gas usage.
[4] Mobile sources consist of GHG emissions from vehicles.
[5] 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.

Source: CalEEMod Version 2016.3.2.

The data provided in Table I shows that the construction activities would create 342.34 $MTCO_2e$, which equates to 11.41 $MTCO_2e$ per year, when amortized over 30 years. Table I also shows that operational activities would create 2,819.27 $MTCO_2e$ per year and when combined with the amortized construction emissions, the proposed project would create a total of 2,830.68 $MTCO_2e$ per year, which is within the 3,000 $MTCO_2e$ per year threshold that is described above in Section 8.4. Therefore, a less than significant generation of greenhouse gas emissions would occur from development of the proposed project. Impacts would be less than significant.

Level of Significance

Less than significant impact.

9.7 Greenhouse Gas Plan Consistency

The proposed project would not conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing GHG emissions. Neither the City of Moorpark nor the VCAPCD has adopted a Climate Action Plan or other qualified GHG reduction plan. SCAG has incorporated a sustainable community strategy into its 2016-2040 RTP/SCS plan, which is designed to help the region achieve it SB 375 GHG emissions reduction targets. The SCAG's 2016-2040 RTP/SCS demonstrates that the SCAG region would achieve its regional emissions reduction targets for the 2020 and 2035 target years. The proposed project would not alter the basic population projections used in the plan and would be consistent with the City of Moorpark General Plan land use designation for the project site.

The proposed project would be required to comply with existing State regulations for reducing GHG emissions, that include Title 24 Part 6 and Part 11 energy efficiency requirements. As such, since there are no applicable local GHG reduction plans and the proposed project would comply with all regional (SCAG) and State regulations intended to reduce GHG emissions, the proposed project would be consistent with the applicable plans and programs designed to reduce GHG emissions. Impacts would be less than significant.

Level of Significance

Less than significant impact.

10.0 REFERENCES

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APPENDIX A

CalEEMod Model Daily Printouts

Condor Drive Warehouse-Distribution Facility

Ventura County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Industrial Park	187.00	1000sqft	4.29	187,000.00	0
Parking Lot	375.00	Space	10.16	150,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	31
Climate Zone	8			**Operational Year**	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Total project site 14.45 acres

Construction Phase - Construction Start 2-1-21 finish 8-2-21

Vehicle Trips - Daily Trip Rate set to 9.18 per TSF to match the 1,716 gross daily trips from the Traffic Study

Energy Mitigation - Exceed Title 24 by 7% and lighting by 30% to account for 2019 Title 24 improvements

Water Mitigation - Use low flow fixtures and water-efficient irrigation systems

Waste Mitigation - 50% reduction was selected to account for AB 341 requirements

Condor Drive Warehouse-Distribution Facility - Ventura County, Summer

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	300.00	100.00
tblConstructionPhase	PhaseEndDate	8/12/2022	8/2/2021
tblConstructionPhase	PhaseEndDate	6/17/2022	8/1/2021
tblConstructionPhase	PhaseEndDate	4/23/2021	3/12/2021
tblConstructionPhase	PhaseEndDate	7/15/2022	8/2/2021
tblConstructionPhase	PhaseStartDate	7/16/2022	7/6/2021
tblConstructionPhase	PhaseStartDate	4/24/2021	3/13/2021
tblConstructionPhase	PhaseStartDate	3/13/2021	2/1/2021
tblConstructionPhase	PhaseStartDate	6/18/2022	7/6/2021
tblLandUse	LotAcreage	3.37	10.16
tblVehicleTrips	ST_TR	2.49	9.18
tblVehicleTrips	SU_TR	0.73	9.18
tblVehicleTrips	WD_TR	6.83	9.18

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					
2021	227.3950	46.4394	39.1302	0.0811	8.8376	1.9865	10.8241	3.6401	1.8276	5.4676	0.0000	7,982.2239	7,982.2239	1.9467	0.0000	8,019.7477
Maximum	**227.3950**	**46.4394**	**39.1302**	**0.0811**	**8.8376**	**1.9865**	**10.8241**	**3.6401**	**1.8276**	**5.4676**	**0.0000**	**7,982.2239**	**7,982.2239**	**1.9467**	**0.0000**	**8,019.7477**

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					
2021	227.3950	46.4394	39.1302	0.0811	8.8376	1.9865	10.8241	3.6401	1.8276	5.4676	0.0000	7,982.2239	7,982.2239	1.9467	0.0000	8,019.7477
Maximum	**227.3950**	**46.4394**	**39.1302**	**0.0811**	**8.8376**	**1.9865**	**10.8241**	**3.6401**	**1.8276**	**5.4676**	**0.0000**	**7,982.2239**	**7,982.2239**	**1.9467**	**0.0000**	**8,019.7477**

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	5.2762	5.3000e-004	0.0576	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1230	0.1230	3.3000e-004		0.1312
Energy	0.0505	0.4591	0.3856	2.7500e-003		0.0349	0.0349		0.0349	0.0349		550.9041	550.9041	0.0106	0.0101	554.1779
Mobile	2.6264	9.8484	31.1234	0.1067	9.5275	0.0875	9.6150	2.5445	0.0816	2.6262		10,796.8341	10,796.8341	0.4400		10,807.8343
Total	**7.9531**	**10.3080**	**31.5666**	**0.1095**	**9.5275**	**0.1226**	**9.6501**	**2.5445**	**0.1167**	**2.6613**		**11,347.8612**	**11,347.8612**	**0.4509**	**0.0101**	**11,362.1433**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	5.2762	5.3000e-004	0.0576	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1230	0.1230	3.3000e-004		0.1312
Energy	0.0472	0.4289	0.3603	2.5700e-003		0.0326	0.0326		0.0326	0.0326		514.6614	514.6614	9.8600e-003	9.4400e-003	517.7198
Mobile	2.6264	9.8484	31.1234	0.1067	9.5275	0.0875	9.6150	2.5445	0.0816	2.6262		10,796.8341	10,796.8341	0.4400		10,807.8343
Total	**7.9498**	**10.2778**	**31.5412**	**0.1093**	**9.5275**	**0.1203**	**9.6478**	**2.5445**	**0.1144**	**2.6590**		**11,311.6184**	**11,311.6184**	**0.4502**	**9.4400e-003**	**11,325.6852**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.04	0.29	0.08	0.16	0.00	1.87	0.02	0.00	1.96	0.09	0.00	0.32	0.32	0.16	6.53	0.32

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	2/1/2021	3/12/2021	5	30	
2	Building Construction	Building Construction	3/13/2021	8/1/2021	5	100	
3	Paving	Paving	7/6/2021	8/2/2021	5	20	
4	Architectural Coating	Architectural Coating	7/6/2021	8/2/2021	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 10.16

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 280,500; Non-Residential Outdoor: 93,500; Striped Parking Area: 9,000 (Architectural Coating – sqft)

OffRoad Equipment

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

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	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	142.00	55.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	28.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Grading - 2021

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					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265		6,007.0434	6,007.0434	1.9428		6,055.6134
Total	**4.1912**	**46.3998**	**30.8785**	**0.0620**	**8.6733**	**1.9853**	**10.6587**	**3.5965**	**1.8265**	**5.4230**		**6,007.0434**	**6,007.0434**	**1.9428**		**6,055.6134**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0685	0.0396	0.5108	1.5500e-003	0.1643	1.1400e-003	0.1654	0.0436	1.0500e-003	0.0446		153.9978	153.9978	3.8600e-003		154.0944
Total	**0.0685**	**0.0396**	**0.5108**	**1.5500e-003**	**0.1643**	**1.1400e-003**	**0.1654**	**0.0436**	**1.0500e-003**	**0.0446**		**153.9978**	**153.9978**	**3.8600e-003**		**154.0944**

3.2 Grading - 2021

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					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265	0.0000	6,007.0434	6,007.0434	1.9428		6,055.6134
Total	**4.1912**	**46.3998**	**30.8785**	**0.0620**	**8.6733**	**1.9853**	**10.6587**	**3.5965**	**1.8265**	**5.4230**	**0.0000**	**6,007.0434**	**6,007.0434**	**1.9428**		**6,055.6134**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0685	0.0396	0.5108	1.5500e-003	0.1643	1.1400e-003	0.1654	0.0436	1.0500e-003	0.0446		153.9978	153.9978	3.8600e-003		154.0944
Total	**0.0685**	**0.0396**	**0.5108**	**1.5500e-003**	**0.1643**	**1.1400e-003**	**0.1654**	**0.0436**	**1.0500e-003**	**0.0446**		**153.9978**	**153.9978**	**3.8600e-003**		**154.0944**

3.3 Building Construction - 2021

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	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**		**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1545	5.3052	1.3596	0.0141	0.3718	0.0148	0.3866	0.1070	0.0141	0.1211		1,515.7213	1,515.7213	0.1160		1,518.6220
Worker	0.4864	0.2808	3.6265	0.0110	1.1665	8.0800e-003	1.1746	0.3094	7.4500e-003	0.3169		1,093.3844	1,093.3844	0.0274		1,094.0703
Total	**0.6408**	**5.5860**	**4.9861**	**0.0251**	**1.5383**	**0.0229**	**1.5612**	**0.4164**	**0.0216**	**0.4380**		**2,609.1058**	**2,609.1058**	**0.1435**		**2,612.6923**

3.3 Building Construction - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**	**0.0000**	**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1545	5.3052	1.3596	0.0141	0.3718	0.0148	0.3866	0.1070	0.0141	0.1211		1,515.7213	1,515.7213	0.1160		1,518.6220
Worker	0.4864	0.2808	3.6265	0.0110	1.1665	8.0800e-003	1.1746	0.3094	7.4500e-003	0.3169		1,093.3844	1,093.3844	0.0274		1,094.0703
Total	**0.6408**	**5.5860**	**4.9861**	**0.0251**	**1.5383**	**0.0229**	**1.5612**	**0.4164**	**0.0216**	**0.4380**		**2,609.1058**	**2,609.1058**	**0.1435**		**2,612.6923**

3.4 Paving - 2021

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	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235		2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	1.3310					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.5865**	**12.9191**	**14.6532**	**0.0228**		**0.6777**	**0.6777**		**0.6235**	**0.6235**		**2,207.2109**	**2,207.2109**	**0.7139**		**2,225.0573**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0514	0.0297	0.3831	1.1600e-003	0.1232	8.5000e-004	0.1241	0.0327	7.9000e-004	0.0335		115.4984	115.4984	2.9000e-003		115.5708
Total	**0.0514**	**0.0297**	**0.3831**	**1.1600e-003**	**0.1232**	**8.5000e-004**	**0.1241**	**0.0327**	**7.9000e-004**	**0.0335**		**115.4984**	**115.4984**	**2.9000e-003**		**115.5708**

3.4 Paving - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235	0.0000	2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	1.3310					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.5865**	**12.9191**	**14.6532**	**0.0228**		**0.6777**	**0.6777**		**0.6235**	**0.6235**	**0.0000**	**2,207.2109**	**2,207.2109**	**0.7139**		**2,225.0573**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0514	0.0297	0.3831	1.1600e-003	0.1232	8.5000e-004	0.1241	0.0327	7.9000e-004	0.0335		115.4984	115.4984	2.9000e-003		115.5708
Total	**0.0514**	**0.0297**	**0.3831**	**1.1600e-003**	**0.1232**	**8.5000e-004**	**0.1241**	**0.0327**	**7.9000e-004**	**0.0335**		**115.4984**	**115.4984**	**2.9000e-003**		**115.5708**

3.5 Architectural Coating - 2021

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	221.9006					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
Total	**222.1195**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**		**281.4481**	**281.4481**	**0.0193**		**281.9309**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0959	0.0554	0.7151	2.1600e-003	0.2300	1.5900e-003	0.2316	0.0610	1.4700e-003	0.0625		215.5969	215.5969	5.4100e-003		215.7322
Total	**0.0959**	**0.0554**	**0.7151**	**2.1600e-003**	**0.2300**	**1.5900e-003**	**0.2316**	**0.0610**	**1.4700e-003**	**0.0625**		**215.5969**	**215.5969**	**5.4100e-003**		**215.7322**

3.5 Architectural Coating - 2021

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	221.9006					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309
Total	**222.1195**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**	**0.0000**	**281.4481**	**281.4481**	**0.0193**		**281.9309**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0959	0.0554	0.7151	2.1600e-003	0.2300	1.5900e-003	0.2316	0.0610	1.4700e-003	0.0625		215.5969	215.5969	5.4100e-003		215.7322
Total	**0.0959**	**0.0554**	**0.7151**	**2.1600e-003**	**0.2300**	**1.5900e-003**	**0.2316**	**0.0610**	**1.4700e-003**	**0.0625**		**215.5969**	**215.5969**	**5.4100e-003**		**215.7322**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.6264	9.8484	31.1234	0.1067	9.5275	0.0875	9.6150	2.5445	0.0816	2.6262		10,796.8341	10,796.8341	0.4400		10,807.8343
Unmitigated	2.6264	9.8484	31.1234	0.1067	9.5275	0.0875	9.6150	2.5445	0.0816	2.6262		10,796.8341	10,796.8341	0.4400		10,807.8343

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Industrial Park	1,716.66	1,716.66	1716.66	4,500,788	4,500,788
Parking Lot	0.00	0.00	0.00		
Total	1,716.66	1,716.66	1,716.66	4,500,788	4,500,788

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
Industrial Park	9.50	7.30	7.30	59.00	28.00	13.00	79	19	2
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Industrial Park	0.583307	0.042169	0.188993	0.113757	0.020157	0.006497	0.019402	0.017654	0.001149	0.000992	0.003948	0.000375	0.001600
Parking Lot	0.583307	0.042169	0.188993	0.113757	0.020157	0.006497	0.019402	0.017654	0.001149	0.000992	0.003948	0.000375	0.001600

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Install High Efficiency Lighting

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0472	0.4289	0.3603	2.5700e-003		0.0326	0.0326		0.0326	0.0326		514.6614	514.6614	9.8600e-003	9.4400e-003	517.7198
NaturalGas Unmitigated	0.0505	0.4591	0.3856	2.7500e-003		0.0349	0.0349		0.0349	0.0349		550.9041	550.9041	0.0106	0.0101	554.1779

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					
Industrial Park	4682.68	0.0505	0.4591	0.3856	2.7500e-003		0.0349	0.0349		0.0349	0.0349		550.9041	550.9041	0.0106	0.0101	554.1779
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
Total		**0.0505**	**0.4591**	**0.3856**	**2.7500e-003**		**0.0349**	**0.0349**		**0.0349**	**0.0349**		**550.9041**	**550.9041**	**0.0106**	**0.0101**	**554.1779**

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					
Industrial Park	4.37462	0.0472	0.4289	0.3603	2.5700e-003		0.0326	0.0326		0.0326	0.0326		514.6614	514.6614	9.8600e-003	9.4400e-003	517.7198
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
Total		**0.0472**	**0.4289**	**0.3603**	**2.5700e-003**		**0.0326**	**0.0326**		**0.0326**	**0.0326**		**514.6614**	**514.6614**	**9.8600e-003**	**9.4400e-003**	**517.7198**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.2762	5.3000e-004	0.0576	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1230	0.1230	3.3000e-004		0.1312
Unmitigated	5.2762	5.3000e-004	0.0576	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1230	0.1230	3.3000e-004		0.1312

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.2159					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.0549					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.3800e-003	5.3000e-004	0.0576	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1230	0.1230	3.3000e-004		0.1312
Total	**5.2762**	**5.3000e-004**	**0.0576**	**0.0000**		**2.1000e-004**	**2.1000e-004**		**2.1000e-004**	**2.1000e-004**		**0.1230**	**0.1230**	**3.3000e-004**		**0.1312**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.2159					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.0549					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.3800e-003	5.3000e-004	0.0576	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1230	0.1230	3.3000e-004		0.1312
Total	**5.2762**	**5.3000e-004**	**0.0576**	**0.0000**		**2.1000e-004**	**2.1000e-004**		**2.1000e-004**	**2.1000e-004**		**0.1230**	**0.1230**	**3.3000e-004**		**0.1312**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

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

Condor Drive Warehouse-Distribution Facility

Ventura County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Industrial Park	187.00	1000sqft	4.29	187,000.00	0
Parking Lot	375.00	Space	10.16	150,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	31
Climate Zone	8			**Operational Year**	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Total project site 14.45 acres

Construction Phase - Construction Start 2-1-21 finish 8-2-21

Vehicle Trips - Daily Trip Rate set to 9.18 per TSF to match the 1,716 gross daily trips from the Traffic Study

Energy Mitigation - Exceed Title 24 by 7% and lighting by 30% to account for 2019 Title 24 improvements

Water Mitigation - Use low flow fixtures and water-efficient irrigation systems

Waste Mitigation - 50% reduction was selected to account for AB 341 requirements

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	300.00	100.00
tblConstructionPhase	PhaseEndDate	8/12/2022	8/2/2021
tblConstructionPhase	PhaseEndDate	6/17/2022	8/1/2021
tblConstructionPhase	PhaseEndDate	4/23/2021	3/12/2021
tblConstructionPhase	PhaseEndDate	7/15/2022	8/2/2021
tblConstructionPhase	PhaseStartDate	7/16/2022	7/6/2021
tblConstructionPhase	PhaseStartDate	4/24/2021	3/13/2021
tblConstructionPhase	PhaseStartDate	3/13/2021	2/1/2021
tblConstructionPhase	PhaseStartDate	6/18/2022	7/6/2021
tblLandUse	LotAcreage	3.37	10.16
tblVehicleTrips	ST_TR	2.49	9.18
tblVehicleTrips	SU_TR	0.73	9.18
tblVehicleTrips	WD_TR	6.83	9.18

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					
2021	227.4900	46.4462	39.1856	0.0800	8.8376	1.9865	10.8241	3.6401	1.8276	5.4676	0.0000	7,876.0128	7,876.0128	1.9465	0.0000	7,913.6897
Maximum	**227.4900**	**46.4462**	**39.1856**	**0.0800**	**8.8376**	**1.9865**	**10.8241**	**3.6401**	**1.8276**	**5.4676**	**0.0000**	**7,876.0128**	**7,876.0128**	**1.9465**	**0.0000**	**7,913.6897**

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					
2021	227.4900	46.4462	39.1856	0.0800	8.8376	1.9865	10.8241	3.6401	1.8276	5.4676	0.0000	7,876.0128	7,876.0128	1.9465	0.0000	7,913.6897
Maximum	**227.4900**	**46.4462**	**39.1856**	**0.0800**	**8.8376**	**1.9865**	**10.8241**	**3.6401**	**1.8276**	**5.4676**	**0.0000**	**7,876.0128**	**7,876.0128**	**1.9465**	**0.0000**	**7,913.6897**

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	5.2762	5.3000e-004	0.0576	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1230	0.1230	3.3000e-004		0.1312
Energy	0.0505	0.4591	0.3856	2.7500e-003		0.0349	0.0349		0.0349	0.0349		550.9041	550.9041	0.0106	0.0101	554.1779
Mobile	2.4936	10.2916	31.5290	0.1023	9.5275	0.0884	9.6159	2.5445	0.0825	2.6270		10,347.3434	10,347.3434	0.4467		10,358.5115
Total	**7.8203**	**10.7512**	**31.9722**	**0.1050**	**9.5275**	**0.1235**	**9.6510**	**2.5445**	**0.1176**	**2.6621**		**10,898.3705**	**10,898.3705**	**0.4576**	**0.0101**	**10,912.8205**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	5.2762	5.3000e-004	0.0576	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1230	0.1230	3.3000e-004		0.1312
Energy	0.0472	0.4289	0.3603	2.5700e-003		0.0326	0.0326		0.0326	0.0326		514.6614	514.6614	9.8600e-003	9.4400e-003	517.7198
Mobile	2.4936	10.2916	31.5290	0.1023	9.5275	0.0884	9.6159	2.5445	0.0825	2.6270		10,347.3434	10,347.3434	0.4467		10,358.5115
Total	**7.8170**	**10.7210**	**31.9469**	**0.1048**	**9.5275**	**0.1212**	**9.6487**	**2.5445**	**0.1153**	**2.6599**		**10,862.1278**	**10,862.1278**	**0.4569**	**9.4400e-003**	**10,876.3624**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.04	0.28	0.08	0.17	0.00	1.85	0.02	0.00	1.95	0.09	0.00	0.33	0.33	0.15	6.53	0.33

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	2/1/2021	3/12/2021	5	30	
2	Building Construction	Building Construction	3/13/2021	8/1/2021	5	100	
3	Paving	Paving	7/6/2021	8/2/2021	5	20	
4	Architectural Coating	Architectural Coating	7/6/2021	8/2/2021	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 10.16

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 280,500; Non-Residential Outdoor: 93,500; Striped Parking Area: 9,000 (Architectural Coating – sqft)

OffRoad Equipment

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

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	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	142.00	55.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	28.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Grading - 2021

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					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265		6,007.0434	6,007.0434	1.9428		6,055.6134
Total	**4.1912**	**46.3998**	**30.8785**	**0.0620**	**8.6733**	**1.9853**	**10.6587**	**3.5965**	**1.8265**	**5.4230**		**6,007.0434**	**6,007.0434**	**1.9428**		**6,055.6134**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0777	0.0464	0.4975	1.4700e-003	0.1643	1.1400e-003	0.1654	0.0436	1.0500e-003	0.0446		146.5363	146.5363	3.7300e-003		146.6294
Total	**0.0777**	**0.0464**	**0.4975**	**1.4700e-003**	**0.1643**	**1.1400e-003**	**0.1654**	**0.0436**	**1.0500e-003**	**0.0446**		**146.5363**	**146.5363**	**3.7300e-003**		**146.6294**

3.2 Grading - 2021

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					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265	0.0000	6,007.0434	6,007.0434	1.9428		6,055.6134
Total	**4.1912**	**46.3998**	**30.8785**	**0.0620**	**8.6733**	**1.9853**	**10.6587**	**3.5965**	**1.8265**	**5.4230**	**0.0000**	**6,007.0434**	**6,007.0434**	**1.9428**		**6,055.6134**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0777	0.0464	0.4975	1.4700e-003	0.1643	1.1400e-003	0.1654	0.0436	1.0500e-003	0.0446		146.5363	146.5363	3.7300e-003		146.6294
Total	**0.0777**	**0.0464**	**0.4975**	**1.4700e-003**	**0.1643**	**1.1400e-003**	**0.1654**	**0.0436**	**1.0500e-003**	**0.0446**		**146.5363**	**146.5363**	**3.7300e-003**		**146.6294**

3.3 Building Construction - 2021

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	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**		**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1642	5.2972	1.5377	0.0138	0.3718	0.0156	0.3874	0.1070	0.0149	0.1219		1,478.5292	1,478.5292	0.1234		1,481.6150
Worker	0.5517	0.3291	3.5323	0.0104	1.1665	8.0800e-003	1.1746	0.3094	7.4500e-003	0.3169		1,040.4077	1,040.4077	0.0265		1,041.0689
Total	**0.7160**	**5.6263**	**5.0700**	**0.0242**	**1.5383**	**0.0237**	**1.5620**	**0.4164**	**0.0224**	**0.4388**		**2,518.9369**	**2,518.9369**	**0.1499**		**2,522.6840**

3.3 Building Construction - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**	**0.0000**	**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1642	5.2972	1.5377	0.0138	0.3718	0.0156	0.3874	0.1070	0.0149	0.1219		1,478.5292	1,478.5292	0.1234		1,481.6150
Worker	0.5517	0.3291	3.5323	0.0104	1.1665	8.0800e-003	1.1746	0.3094	7.4500e-003	0.3169		1,040.4077	1,040.4077	0.0265		1,041.0689
Total	**0.7160**	**5.6263**	**5.0700**	**0.0242**	**1.5383**	**0.0237**	**1.5620**	**0.4164**	**0.0224**	**0.4388**		**2,518.9369**	**2,518.9369**	**0.1499**		**2,522.6840**

3.4 Paving - 2021

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	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235		2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	1.3310					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.5865**	**12.9191**	**14.6532**	**0.0228**		**0.6777**	**0.6777**		**0.6235**	**0.6235**		**2,207.2109**	**2,207.2109**	**0.7139**		**2,225.0573**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0583	0.0348	0.3731	1.1000e-003	0.1232	8.5000e-004	0.1241	0.0327	7.9000e-004	0.0335		109.9022	109.9022	2.7900e-003		109.9721
Total	**0.0583**	**0.0348**	**0.3731**	**1.1000e-003**	**0.1232**	**8.5000e-004**	**0.1241**	**0.0327**	**7.9000e-004**	**0.0335**		**109.9022**	**109.9022**	**2.7900e-003**		**109.9721**

3.4 Paving - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235	0.0000	2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	1.3310					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.5865**	**12.9191**	**14.6532**	**0.0228**		**0.6777**	**0.6777**		**0.6235**	**0.6235**	**0.0000**	**2,207.2109**	**2,207.2109**	**0.7139**		**2,225.0573**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0583	0.0348	0.3731	1.1000e-003	0.1232	8.5000e-004	0.1241	0.0327	7.9000e-004	0.0335		109.9022	109.9022	2.7900e-003		109.9721
Total	**0.0583**	**0.0348**	**0.3731**	**1.1000e-003**	**0.1232**	**8.5000e-004**	**0.1241**	**0.0327**	**7.9000e-004**	**0.0335**		**109.9022**	**109.9022**	**2.7900e-003**		**109.9721**

3.5 Architectural Coating - 2021

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	221.9006					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
Total	**222.1195**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**		**281.4481**	**281.4481**	**0.0193**		**281.9309**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1088	0.0649	0.6965	2.0600e-003	0.2300	1.5900e-003	0.2316	0.0610	1.4700e-003	0.0625		205.1508	205.1508	5.2200e-003		205.2812
Total	**0.1088**	**0.0649**	**0.6965**	**2.0600e-003**	**0.2300**	**1.5900e-003**	**0.2316**	**0.0610**	**1.4700e-003**	**0.0625**		**205.1508**	**205.1508**	**5.2200e-003**		**205.2812**

3.5 Architectural Coating - 2021

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	221.9006					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309
Total	**222.1195**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**	**0.0000**	**281.4481**	**281.4481**	**0.0193**		**281.9309**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1088	0.0649	0.6965	2.0600e-003	0.2300	1.5900e-003	0.2316	0.0610	1.4700e-003	0.0625		205.1508	205.1508	5.2200e-003		205.2812
Total	**0.1088**	**0.0649**	**0.6965**	**2.0600e-003**	**0.2300**	**1.5900e-003**	**0.2316**	**0.0610**	**1.4700e-003**	**0.0625**		**205.1508**	**205.1508**	**5.2200e-003**		**205.2812**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.4936	10.2916	31.5290	0.1023	9.5275	0.0884	9.6159	2.5445	0.0825	2.6270		10,347.3434	10,347.3434	0.4467		10,358.5115
Unmitigated	2.4936	10.2916	31.5290	0.1023	9.5275	0.0884	9.6159	2.5445	0.0825	2.6270		10,347.3434	10,347.3434	0.4467		10,358.5115

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Industrial Park	1,716.66	1,716.66	1716.66	4,500,788	4,500,788
Parking Lot	0.00	0.00	0.00		
Total	1,716.66	1,716.66	1,716.66	4,500,788	4,500,788

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
Industrial Park	9.50	7.30	7.30	59.00	28.00	13.00	79	19	2
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Industrial Park	0.583307	0.042169	0.188993	0.113757	0.020157	0.006497	0.019402	0.017654	0.001149	0.000992	0.003948	0.000375	0.001600
Parking Lot	0.583307	0.042169	0.188993	0.113757	0.020157	0.006497	0.019402	0.017654	0.001149	0.000992	0.003948	0.000375	0.001600

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Install High Efficiency Lighting

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0472	0.4289	0.3603	2.5700e-003		0.0326	0.0326		0.0326	0.0326		514.6614	514.6614	9.8600e-003	9.4400e-003	517.7198
NaturalGas Unmitigated	0.0505	0.4591	0.3856	2.7500e-003		0.0349	0.0349		0.0349	0.0349		550.9041	550.9041	0.0106	0.0101	554.1779

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					
Industrial Park	4682.68	0.0505	0.4591	0.3856	2.7500e-003		0.0349	0.0349		0.0349	0.0349		550.9041	550.9041	0.0106	0.0101	554.1779
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
Total		**0.0505**	**0.4591**	**0.3856**	**2.7500e-003**		**0.0349**	**0.0349**		**0.0349**	**0.0349**		**550.9041**	**550.9041**	**0.0106**	**0.0101**	**554.1779**

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					
Industrial Park	4.37462	0.0472	0.4289	0.3603	2.5700e-003		0.0326	0.0326		0.0326	0.0326		514.6614	514.6614	9.8600e-003	9.4400e-003	517.7198
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
Total		**0.0472**	**0.4289**	**0.3603**	**2.5700e-003**		**0.0326**	**0.0326**		**0.0326**	**0.0326**		**514.6614**	**514.6614**	**9.8600e-003**	**9.4400e-003**	**517.7198**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.2762	5.3000e-004	0.0576	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1230	0.1230	3.3000e-004		0.1312
Unmitigated	5.2762	5.3000e-004	0.0576	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1230	0.1230	3.3000e-004		0.1312

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.2159					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.0549					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.3800e-003	5.3000e-004	0.0576	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1230	0.1230	3.3000e-004		0.1312
Total	**5.2762**	**5.3000e-004**	**0.0576**	**0.0000**		**2.1000e-004**	**2.1000e-004**		**2.1000e-004**	**2.1000e-004**		**0.1230**	**0.1230**	**3.3000e-004**		**0.1312**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.2159					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.0549					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.3800e-003	5.3000e-004	0.0576	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1230	0.1230	3.3000e-004		0.1312
Total	**5.2762**	**5.3000e-004**	**0.0576**	**0.0000**		**2.1000e-004**	**2.1000e-004**		**2.1000e-004**	**2.1000e-004**		**0.1230**	**0.1230**	**3.3000e-004**		**0.1312**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

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 B

CalEEMod Model Annual Printouts

Condor Drive Warehouse-Distribution Facility

Ventura County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Industrial Park	187.00	1000sqft	4.29	187,000.00	0
Parking Lot	375.00	Space	10.16	150,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	31
Climate Zone	8			**Operational Year**	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Total project site 14.45 acres

Construction Phase - Construction Start 2-1-21 finish 8-2-21

Vehicle Trips - Daily Trip Rate set to 9.18 per TSF to match the 1,716 gross daily trips from the Traffic Study

Energy Mitigation - Exceed Title 24 by 7% and lighting by 30% to account for 2019 Title 24 improvements

Water Mitigation - Use low flow fixtures and water-efficient irrigation systems

Waste Mitigation - 50% reduction was selected to account for AB 341 requirements

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	300.00	100.00
tblConstructionPhase	PhaseEndDate	8/12/2022	8/2/2021
tblConstructionPhase	PhaseEndDate	6/17/2022	8/1/2021
tblConstructionPhase	PhaseEndDate	4/23/2021	3/12/2021
tblConstructionPhase	PhaseEndDate	7/15/2022	8/2/2021
tblConstructionPhase	PhaseStartDate	7/16/2022	7/6/2021
tblConstructionPhase	PhaseStartDate	4/24/2021	3/13/2021
tblConstructionPhase	PhaseStartDate	3/13/2021	2/1/2021
tblConstructionPhase	PhaseStartDate	6/18/2022	7/6/2021
tblLandUse	LotAcreage	3.37	10.16
tblVehicleTrips	ST_TR	2.49	9.18
tblVehicleTrips	SU_TR	0.73	9.18
tblVehicleTrips	WD_TR	6.83	9.18

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					
2021	2.4400	1.9978	1.7217	3.8100e-003	0.2115	0.0866	0.2982	0.0760	0.0808	0.1568	0.0000	340.6475	340.6475	0.0678	0.0000	342.3417
Maximum	**2.4400**	**1.9978**	**1.7217**	**3.8100e-003**	**0.2115**	**0.0866**	**0.2982**	**0.0760**	**0.0808**	**0.1568**	**0.0000**	**340.6475**	**340.6475**	**0.0678**	**0.0000**	**342.3417**

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					
2021	2.4400	1.9978	1.7217	3.8100e-003	0.2115	0.0866	0.2982	0.0760	0.0808	0.1568	0.0000	340.6472	340.6472	0.0678	0.0000	342.3414
Maximum	**2.4400**	**1.9978**	**1.7217**	**3.8100e-003**	**0.2115**	**0.0866**	**0.2982**	**0.0760**	**0.0808**	**0.1568**	**0.0000**	**340.6472**	**340.6472**	**0.0678**	**0.0000**	**342.3414**

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	2-1-2021	4-30-2021	1.1726	1.1726
2	5-1-2021	7-31-2021	3.0627	3.0627
3	8-1-2021	9-30-2021	0.1801	0.1801
		Highest	3.0627	3.0627

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	0.9624	5.0000e-005	5.1800e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0100	0.0100	3.0000e-005	0.0000	0.0107
Energy	9.2200e-003	0.0838	0.0704	5.0000e-004		6.3700e-003	6.3700e-003		6.3700e-003	6.3700e-003	0.0000	941.4911	941.4911	0.0369	8.9300e-003	945.0750
Mobile	0.4491	1.8690	5.6053	0.0188	1.7024	0.0160	1.7184	0.4554	0.0149	0.4703	0.0000	1,721.0625	1,721.0625	0.0727	0.0000	1,722.8789
Waste						0.0000	0.0000		0.0000	0.0000	47.0695	0.0000	47.0695	2.7817	0.0000	116.6128
Water						0.0000	0.0000		0.0000	0.0000	13.7193	179.4084	193.1276	1.4165	0.0348	238.9119
Total	**1.4207**	**1.9528**	**5.6809**	**0.0193**	**1.7024**	**0.0224**	**1.7248**	**0.4554**	**0.0213**	**0.4767**	**60.7888**	**2,841.9720**	**2,902.7607**	**4.3078**	**0.0437**	**3,023.4893**

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	0.9624	5.0000e-005	5.1800e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0100	0.0100	3.0000e-005	0.0000	0.0107
Energy	8.6100e-003	0.0783	0.0658	4.7000e-004		5.9500e-003	5.9500e-003		5.9500e-003	5.9500e-003	0.0000	833.2521	833.2521	0.0325	7.9500e-003	836.4346
Mobile	0.4491	1.8690	5.6053	0.0188	1.7024	0.0160	1.7184	0.4554	0.0149	0.4703	0.0000	1,721.0625	1,721.0625	0.0727	0.0000	1,722.8789
Waste						0.0000	0.0000		0.0000	0.0000	23.5348	0.0000	23.5348	1.3909	0.0000	58.3064
Water						0.0000	0.0000		0.0000	0.0000	11.5790	151.4207	162.9997	1.1955	0.0294	201.6417
Total	**1.4201**	**1.9473**	**5.6762**	**0.0192**	**1.7024**	**0.0219**	**1.7244**	**0.4554**	**0.0209**	**0.4762**	**35.1138**	**2,705.7453**	**2,740.8591**	**2.6916**	**0.0373**	**2,819.2723**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.04**	**0.28**	**0.08**	**0.16**	**0.00**	**1.88**	**0.02**	**0.00**	**1.97**	**0.09**	**42.24**	**4.79**	**5.58**	**37.52**	**14.66**	**6.75**

3.0 Construction Detail

Construction Phase

Condor Drive Warehouse-Distribution Facility - Ventura County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	2/1/2021	3/12/2021	5	30	
2	Building Construction	Building Construction	3/13/2021	8/1/2021	5	100	
3	Paving	Paving	7/6/2021	8/2/2021	5	20	
4	Architectural Coating	Architectural Coating	7/6/2021	8/2/2021	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 10.16

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 280,500; Non-Residential Outdoor: 93,500; Striped Parking Area: 9,000 (Architectural Coating – sqft)

OffRoad Equipment

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

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	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	142.00	55.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	28.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Grading - 2021

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					0.1301	0.0000	0.1301	0.0540	0.0000	0.0540	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0629	0.6960	0.4632	9.3000e-004		0.0298	0.0298		0.0274	0.0274	0.0000	81.7425	81.7425	0.0264	0.0000	82.4034
Total	**0.0629**	**0.6960**	**0.4632**	**9.3000e-004**	**0.1301**	**0.0298**	**0.1599**	**0.0540**	**0.0274**	**0.0814**	**0.0000**	**81.7425**	**81.7425**	**0.0264**	**0.0000**	**82.4034**

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	1.0400e-003	6.7000e-004	7.3900e-003	2.0000e-005	2.4200e-003	2.0000e-005	2.4400e-003	6.4000e-004	2.0000e-005	6.6000e-004	0.0000	2.0102	2.0102	5.0000e-005	0.0000	2.0115
Total	**1.0400e-003**	**6.7000e-004**	**7.3900e-003**	**2.0000e-005**	**2.4200e-003**	**2.0000e-005**	**2.4400e-003**	**6.4000e-004**	**2.0000e-005**	**6.6000e-004**	**0.0000**	**2.0102**	**2.0102**	**5.0000e-005**	**0.0000**	**2.0115**

3.2 Grading - 2021

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					0.1301	0.0000	0.1301	0.0540	0.0000	0.0540	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0629	0.6960	0.4632	9.3000e-004		0.0298	0.0298		0.0274	0.0274	0.0000	81.7424	81.7424	0.0264	0.0000	82.4033
Total	**0.0629**	**0.6960**	**0.4632**	**9.3000e-004**	**0.1301**	**0.0298**	**0.1599**	**0.0540**	**0.0274**	**0.0814**	**0.0000**	**81.7424**	**81.7424**	**0.0264**	**0.0000**	**82.4033**

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	1.0400e-003	6.7000e-004	7.3900e-003	2.0000e-005	2.4200e-003	2.0000e-005	2.4400e-003	6.4000e-004	2.0000e-005	6.6000e-004	0.0000	2.0102	2.0102	5.0000e-005	0.0000	2.0115
Total	**1.0400e-003**	**6.7000e-004**	**7.3900e-003**	**2.0000e-005**	**2.4200e-003**	**2.0000e-005**	**2.4400e-003**	**6.4000e-004**	**2.0000e-005**	**6.6000e-004**	**0.0000**	**2.0102**	**2.0102**	**5.0000e-005**	**0.0000**	**2.0115**

3.3 Building Construction - 2021

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	0.0951	0.8716	0.8288	1.3500e-003		0.0479	0.0479		0.0451	0.0451	0.0000	115.8186	115.8186	0.0279	0.0000	116.5172
Total	**0.0951**	**0.8716**	**0.8288**	**1.3500e-003**		**0.0479**	**0.0479**		**0.0451**	**0.0451**	**0.0000**	**115.8186**	**115.8186**	**0.0279**	**0.0000**	**116.5172**

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	7.9300e-003	0.2682	0.0722	7.0000e-004	0.0183	7.6000e-004	0.0191	5.2800e-003	7.2000e-004	6.0000e-003	0.0000	68.0434	68.0434	5.4100e-003	0.0000	68.1787
Worker	0.0246	0.0159	0.1749	5.3000e-004	0.0573	4.0000e-004	0.0577	0.0152	3.7000e-004	0.0156	0.0000	47.5747	47.5747	1.2000e-003	0.0000	47.6048
Total	**0.0325**	**0.2841**	**0.2471**	**1.2300e-003**	**0.0756**	**1.1600e-003**	**0.0767**	**0.0205**	**1.0900e-003**	**0.0216**	**0.0000**	**115.6182**	**115.6182**	**6.6100e-003**	**0.0000**	**115.7835**

3.3 Building Construction - 2021

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	0.0951	0.8716	0.8288	1.3500e-003		0.0479	0.0479		0.0451	0.0451	0.0000	115.8185	115.8185	0.0279	0.0000	116.5171
Total	**0.0951**	**0.8716**	**0.8288**	**1.3500e-003**		**0.0479**	**0.0479**		**0.0451**	**0.0451**	**0.0000**	**115.8185**	**115.8185**	**0.0279**	**0.0000**	**116.5171**

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	7.9300e-003	0.2682	0.0722	7.0000e-004	0.0183	7.6000e-004	0.0191	5.2800e-003	7.2000e-004	6.0000e-003	0.0000	68.0434	68.0434	5.4100e-003	0.0000	68.1787
Worker	0.0246	0.0159	0.1749	5.3000e-004	0.0573	4.0000e-004	0.0577	0.0152	3.7000e-004	0.0156	0.0000	47.5747	47.5747	1.2000e-003	0.0000	47.6048
Total	**0.0325**	**0.2841**	**0.2471**	**1.2300e-003**	**0.0756**	**1.1600e-003**	**0.0767**	**0.0205**	**1.0900e-003**	**0.0216**	**0.0000**	**115.6182**	**115.6182**	**6.6100e-003**	**0.0000**	**115.7835**

3.4 Paving - 2021

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	0.0126	0.1292	0.1465	2.3000e-004		6.7800e-003	6.7800e-003		6.2400e-003	6.2400e-003	0.0000	20.0235	20.0235	6.4800e-003	0.0000	20.1854
Paving	0.0133					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0259**	**0.1292**	**0.1465**	**2.3000e-004**		**6.7800e-003**	**6.7800e-003**		**6.2400e-003**	**6.2400e-003**	**0.0000**	**20.0235**	**20.0235**	**6.4800e-003**	**0.0000**	**20.1854**

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	5.2000e-004	3.4000e-004	3.6900e-003	1.0000e-005	1.2100e-003	1.0000e-005	1.2200e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.0051	1.0051	3.0000e-005	0.0000	1.0057
Total	**5.2000e-004**	**3.4000e-004**	**3.6900e-003**	**1.0000e-005**	**1.2100e-003**	**1.0000e-005**	**1.2200e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**1.0051**	**1.0051**	**3.0000e-005**	**0.0000**	**1.0057**

3.4 Paving - 2021

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	0.0126	0.1292	0.1465	2.3000e-004		6.7800e-003	6.7800e-003		6.2400e-003	6.2400e-003	0.0000	20.0235	20.0235	6.4800e-003	0.0000	20.1854
Paving	0.0133					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0259**	**0.1292**	**0.1465**	**2.3000e-004**		**6.7800e-003**	**6.7800e-003**		**6.2400e-003**	**6.2400e-003**	**0.0000**	**20.0235**	**20.0235**	**6.4800e-003**	**0.0000**	**20.1854**

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	5.2000e-004	3.4000e-004	3.6900e-003	1.0000e-005	1.2100e-003	1.0000e-005	1.2200e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.0051	1.0051	3.0000e-005	0.0000	1.0057
Total	**5.2000e-004**	**3.4000e-004**	**3.6900e-003**	**1.0000e-005**	**1.2100e-003**	**1.0000e-005**	**1.2200e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**1.0051**	**1.0051**	**3.0000e-005**	**0.0000**	**1.0057**

3.5 Architectural Coating - 2021

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	2.2190					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1900e-003	0.0153	0.0182	3.0000e-005		9.4000e-004	9.4000e-004		9.4000e-004	9.4000e-004	0.0000	2.5533	2.5533	1.8000e-004	0.0000	2.5576
Total	**2.2212**	**0.0153**	**0.0182**	**3.0000e-005**		**9.4000e-004**	**9.4000e-004**		**9.4000e-004**	**9.4000e-004**	**0.0000**	**2.5533**	**2.5533**	**1.8000e-004**	**0.0000**	**2.5576**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.7000e-004	6.3000e-004	6.9000e-003	2.0000e-005	2.2600e-003	2.0000e-005	2.2700e-003	6.0000e-004	1.0000e-005	6.1000e-004	0.0000	1.8762	1.8762	5.0000e-005	0.0000	1.8774
Total	**9.7000e-004**	**6.3000e-004**	**6.9000e-003**	**2.0000e-005**	**2.2600e-003**	**2.0000e-005**	**2.2700e-003**	**6.0000e-004**	**1.0000e-005**	**6.1000e-004**	**0.0000**	**1.8762**	**1.8762**	**5.0000e-005**	**0.0000**	**1.8774**

3.5 Architectural Coating - 2021

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	2.2190					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1900e-003	0.0153	0.0182	3.0000e-005		9.4000e-004	9.4000e-004		9.4000e-004	9.4000e-004	0.0000	2.5533	2.5533	1.8000e-004	0.0000	2.5576
Total	**2.2212**	**0.0153**	**0.0182**	**3.0000e-005**		**9.4000e-004**	**9.4000e-004**		**9.4000e-004**	**9.4000e-004**	**0.0000**	**2.5533**	**2.5533**	**1.8000e-004**	**0.0000**	**2.5576**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.7000e-004	6.3000e-004	6.9000e-003	2.0000e-005	2.2600e-003	2.0000e-005	2.2700e-003	6.0000e-004	1.0000e-005	6.1000e-004	0.0000	1.8762	1.8762	5.0000e-005	0.0000	1.8774
Total	**9.7000e-004**	**6.3000e-004**	**6.9000e-003**	**2.0000e-005**	**2.2600e-003**	**2.0000e-005**	**2.2700e-003**	**6.0000e-004**	**1.0000e-005**	**6.1000e-004**	**0.0000**	**1.8762**	**1.8762**	**5.0000e-005**	**0.0000**	**1.8774**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.4491	1.8690	5.6053	0.0188	1.7024	0.0160	1.7184	0.4554	0.0149	0.4703	0.0000	1,721.0625	1,721.0625	0.0727	0.0000	1,722.8789
Unmitigated	0.4491	1.8690	5.6053	0.0188	1.7024	0.0160	1.7184	0.4554	0.0149	0.4703	0.0000	1,721.0625	1,721.0625	0.0727	0.0000	1,722.8789

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Industrial Park	1,716.66	1,716.66	1716.66	4,500,788	4,500,788
Parking Lot	0.00	0.00	0.00		
Total	1,716.66	1,716.66	1,716.66	4,500,788	4,500,788

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
Industrial Park	9.50	7.30	7.30	59.00	28.00	13.00	79	19	2
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Industrial Park	0.583307	0.042169	0.188993	0.113757	0.020157	0.006497	0.019402	0.017654	0.001149	0.000992	0.003948	0.000375	0.001600
Parking Lot	0.583307	0.042169	0.188993	0.113757	0.020157	0.006497	0.019402	0.017654	0.001149	0.000992	0.003948	0.000375	0.001600

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Install High Efficiency Lighting

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	748.0441	748.0441	0.0309	6.3900e-003	750.7203
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	850.2827	850.2827	0.0351	7.2600e-003	853.3246
NaturalGas Mitigated	8.6100e-003	0.0783	0.0658	4.7000e-004		5.9500e-003	5.9500e-003		5.9500e-003	5.9500e-003	0.0000	85.2080	85.2080	1.6300e-003	1.5600e-003	85.7143
NaturalGas Unmitigated	9.2200e-003	0.0838	0.0704	5.0000e-004		6.3700e-003	6.3700e-003		6.3700e-003	6.3700e-003	0.0000	91.2084	91.2084	1.7500e-003	1.6700e-003	91.7504

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					
Industrial Park	1.70918e+006	9.2200e-003	0.0838	0.0704	5.0000e-004		6.3700e-003	6.3700e-003		6.3700e-003	6.3700e-003	0.0000	91.2084	91.2084	1.7500e-003	1.6700e-003	91.7504
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
Total		**9.2200e-003**	**0.0838**	**0.0704**	**5.0000e-004**		**6.3700e-003**	**6.3700e-003**		**6.3700e-003**	**6.3700e-003**	**0.0000**	**91.2084**	**91.2084**	**1.7500e-003**	**1.6700e-003**	**91.7504**

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					
Industrial Park	1.59674e+006	8.6100e-003	0.0783	0.0658	4.7000e-004		5.9500e-003	5.9500e-003		5.9500e-003	5.9500e-003	0.0000	85.2080	85.2080	1.6300e-003	1.5600e-003	85.7143
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
Total		**8.6100e-003**	**0.0783**	**0.0658**	**4.7000e-004**		**5.9500e-003**	**5.9500e-003**		**5.9500e-003**	**5.9500e-003**	**0.0000**	**85.2080**	**85.2080**	**1.6300e-003**	**1.5600e-003**	**85.7143**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Industrial Park	2.61613e+006	833.5551	0.0344	7.1200e-003	836.5371
Parking Lot	52500	16.7276	6.9000e-004	1.4000e-004	16.7875
Total		**850.2827**	**0.0351**	**7.2600e-003**	**853.3246**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Industrial Park	2.311e+006	736.3348	0.0304	6.2900e-003	738.9690
Parking Lot	36750	11.7093	4.8000e-004	1.0000e-004	11.7512
Total		**748.0441**	**0.0309**	**6.3900e-003**	**750.7203**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.9624	5.0000e-005	5.1800e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0100	0.0100	3.0000e-005	0.0000	0.0107
Unmitigated	0.9624	5.0000e-005	5.1800e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0100	0.0100	3.0000e-005	0.0000	0.0107

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	0.2219					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.7400					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.8000e-004	5.0000e-005	5.1800e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0100	0.0100	3.0000e-005	0.0000	0.0107
Total	**0.9624**	**5.0000e-005**	**5.1800e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0100**	**0.0100**	**3.0000e-005**	**0.0000**	**0.0107**

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	0.2219					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.7400					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.8000e-004	5.0000e-005	5.1800e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0100	0.0100	3.0000e-005	0.0000	0.0107
Total	**0.9624**	**5.0000e-005**	**5.1800e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0100**	**0.0100**	**3.0000e-005**	**0.0000**	**0.0107**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	162.9997	1.1955	0.0294	201.6417
Unmitigated	193.1276	1.4165	0.0348	238.9119

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Industrial Park	43.2437 / 0	193.1276	1.4165	0.0348	238.9119
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**193.1276**	**1.4165**	**0.0348**	**238.9119**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Industrial Park	36.4977 / 0	162.9997	1.1955	0.0294	201.6417
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**162.9997**	**1.1955**	**0.0294**	**201.6417**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	23.5348	1.3909	0.0000	58.3064
Unmitigated	47.0695	2.7817	0.0000	116.6128

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Industrial Park	231.88	47.0695	2.7817	0.0000	116.6128
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**47.0695**	**2.7817**	**0.0000**	**116.6128**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Industrial Park	115.94	23.5348	1.3909	0.0000	58.3064
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**23.5348**	**1.3909**	**0.0000**	**58.3064**

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