AIR QUALITY AND GREENHOUSE GAS ASSESSMENT
FOR
OD FREIGHT
COUNTY OF SAN BERNARDINO, CALIFORNIA

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1.0 INTRODUCTION

OD Freight Lines, Inc. ("Project Proponent") has submitted an application to the County of San Bernardino for the redevelopment of 8.5 acres (APN 0232-051-29). The project site is currently developed with an approximately 4,000 square-foot structure used by as a prior freight facility. The proposed project includes the development of an approximately 32,150 square-foot building for freight forwarding and dispatch uses. The Project Site is located at 15550 Arrow Route on the northwest corner of Lime Avenue and Arrow Route in unincorporated County of San Bernardino. Refer to Figures 1, 2, and 3 for a regional location map, project vicinity map, and site plan, respectively.

This report is a study of the potential impacts the Proposed Project may have on the local and regional air quality in the vicinity during construction and ultimate operational use. Air quality emissions modeling data output is included in Appendix A.

2.0 GENERAL SETTING

2.1 CLIMATE

The Proposed Project is located in western San Bernardino County. The study area has a Mediterranean climate with warm dry summers, mild winters and moderate rainfall. The climate is modified by the cold California Current in the Pacific Ocean, the mountain ranges that outline the Los Angeles Basin and San Bernardino Valley, and the deserts to the north and east.

The California Current causes a cold layer of air to form close to the surface. As the air above this layer is warm, air within it cannot rise normally, a phenomenon known as an inversion. The inversion traps pollutants close to the surface causing higher than usual concentrations of ozone, suspended particles and other ingredients of smog. The mountains prevent cooler marine air from traveling very far inland, making the deserts drier and hotter than the coastal regions. The hot desert air rises and cooler marine air from the west moves inland in the form of a sea breeze. A sea breeze is normal in all coastal regions, but in southern California it is exceptionally strong due to the great contrasts in temperature and the funneling effects of the mountains. In this region, the sea breeze brings higher quantities of pollutants from the Los Angeles metropolitan area to the inland valleys, exacerbating problems caused by local pollution sources.

The topographic and climatologic regional effects summarized above cause numerous days when air pollutants exceed federal and/or State air quality standards. This has led to aggressive air quality management measures being required by the federal, State, and local governments.

2.2 APPLICABLE POLICES, PLANS, AND REGULATIONS

A combination of climatic and geographic factors, and urbanization cause the interior valleys of Southern California to have higher air pollution levels than the coastal areas. The South Coast Air Quality Management District (SCAQMD) monitors and enforces the federal and state air quality standards in association with federal, state, local, and regional governmental agencies.

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Source: Lilburn Corp., April, 2021.

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REGIONAL LOCATION

OD Freight Air Quality Analysis

Fontana, California

FIGURE 1

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Feet

Source: Lilburn Corp., April, 2021.

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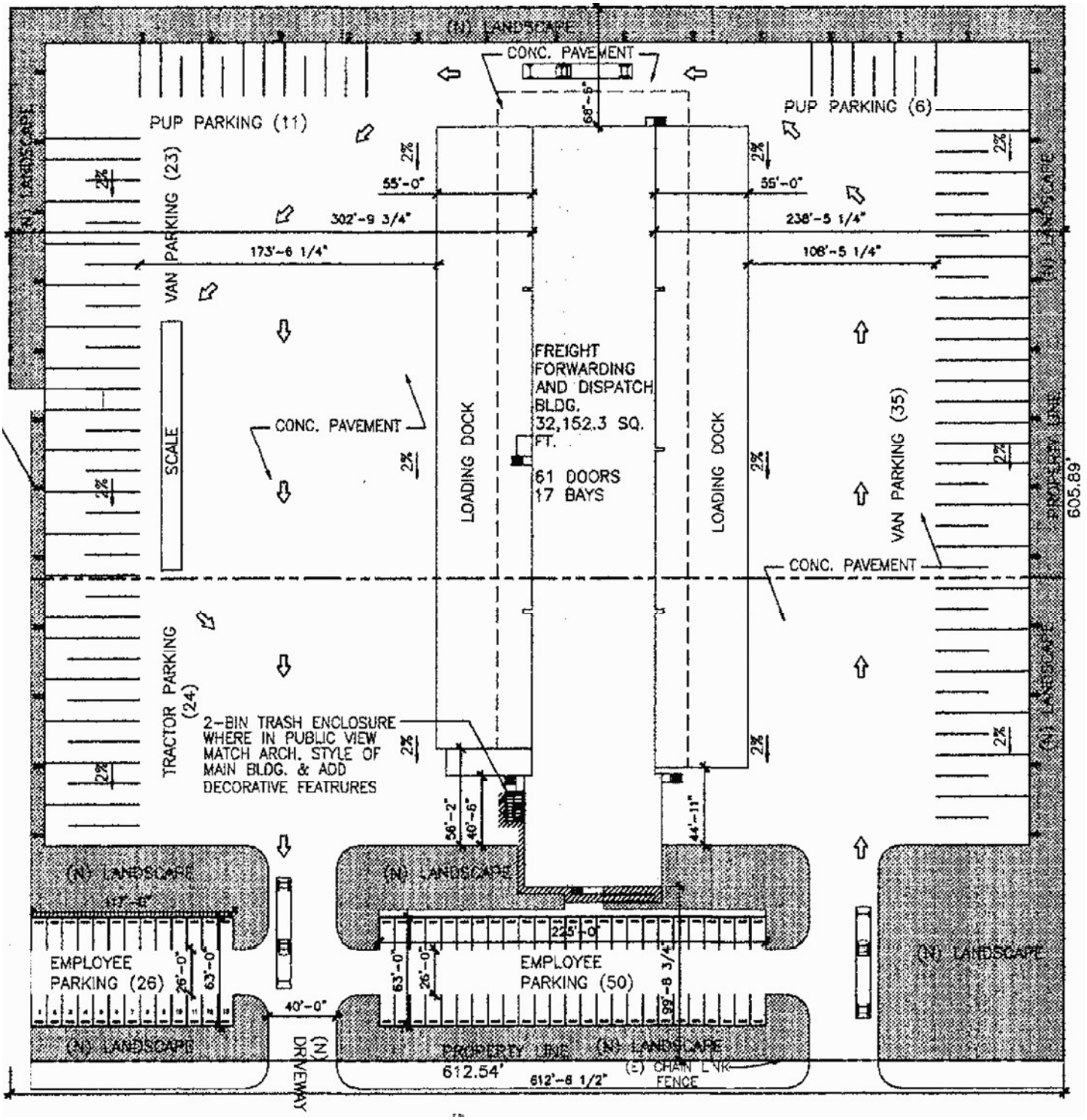
PROJECT VICINITY

OD Freight Air Quality Analysis

Fontana, California

FIGURE 2



SITE PLAN

OD Freight Air Quality Analysis

Fontana, California

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FIGURE 3

These agencies work jointly as well as individually to reduce air pollution through legislation, regulation, policy making, education, and a variety of programs. These agencies include:

Environmental Protection Agency (EPA) - Responsible for setting and enforcing the national standards for atmospheric pollutants, including the Clean Air Act (CAA), as amended.

California Air Resources Board (CARB) - Part of the California Environmental Protection Agency (Cal-EPA) and responsible for assuring implementation of the California Clean Air Act (CCAA), responding to federal regulations, and regulating emission standards.

SCAQMD - Primarily responsible for comprehensive air pollution control in the South Coast Air Basin (SCAB), and the Riverside County portions of the Salton Sea Air Basin (SSAB) and Mojave Desert Air Basin (MDAB). SCAQMD implements the CAA and CCAA and works directly with federal, state, and local agencies.

Local Governments - Have the authority and responsibility to reduce air pollution through their local land use decision-making authority and the California Environmental Quality Act.

Air emissions from the Proposed Project are subject to federal, state, and local rules and regulations as implemented through provisions of the federal Clean Air Act, California Clean Air Act, and the 2016 Air Quality Management Plan (AQMP) adopted and updated regularly by SCAQMD. The following is an overview of current rules and regulations.

Federal Clean Air Act. The federal Clean Air Act was established in an effort to assure that acceptable levels of air quality are maintained in all areas of the United States. These levels are based upon health-related exposure limits and are referred to as National Ambient Air Quality Standards (NAAQS). The NAAQS establish maximum allowable concentrations of specific pollutants in the atmosphere and characterize the amount of exposure deemed safe of the public. The NAAQS set standards for the following pollutants:

Nitrogen dioxide (NO_2)
Sulfur dioxide (SO_2)
Particulate matter less than 10 microns, aerodynamic diameter (PM_{10})
Particulate matter less than 2.5 microns, aerodynamic diameter ($PM_{2.5}$)
Ozone (O_3)
Lead (Pb)
Carbon Monoxide (CO)

Primary and secondary NAAQS have been established and are shown in Table 1. Primary standards reflect levels of air quality deemed necessary by the EPA to provide an adequate margin of safety to protect public health. Areas found to be in violation of primary standards are termed “nonattainment areas”. Secondary standards reflect levels of air quality necessary to protect public welfare from the known or anticipated adverse effects of a pollutant.

Table 1
State and Federal
Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[1]		Federal Standards[2]		
		Concentration[3]	Method[4]	Primary[3,5]	Secondary[3,6]	Method[7]
Ozone (O_3)[8]	1-Hour	0.09 ppm (180 µg/m^3)	Ultraviolet Photometry	---	Same as Primary Standard	Ultraviolet Photometry
	8-Hour	0.07 ppm (137 µg/m^3)		0.070 ppm (137 µg/m^3)		
Respirable Particulate Matter (PM_{10})[9]	24-Hour	50 µg/m^3	Gravimetric or Beta Attenuation	150 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetic Analysis
	Annual Arithmetic Mean	20 µg/m^3		---		
Fine Particulate Matter ($PM_{2.5}$)[9]	24-Hour	---		35 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetic Analysis
	Annual Arithmetic Mean	12 µg/m^3	Gravimetric or Beta Attenuation	12 µg/m^3	15 µg/m^3	
Carbon Monoxide (CO)	1-Hour	20 ppm (23 mg/m^3)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m^3)	---	Non-Dispersive Infrared Photometry (NDIR)
	8-Hour	9.0 ppm (10 mg/m^3)		9 ppm (10 mg/m^3)		
	8-Hour (Lake Tahoe)	6 ppm (7 mg/m^3)		–		
Nitrogen Dioxide (NO_2)[10]	1-Hour	0.18 ppm (339 µg/m^3)	Gas Phase Chemiluminescence	100 ppb (188 µg/m^3)	---	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m^3)		0.053 ppb (100 µg/m^3)	Same as Primary Standard	
Sulfur Dioxide (SO_2)[11]	1-Hour	0.25 ppm (655 µg/m^3)	Ultraviolet Fluorescence	75 ppd (196 µg/m^3)	–	Ultraviolet Flourescence, Spectrophotometry (Pararosaniline Method)
	3-Hour	---		--	0.5 ppm (1300 µg/m^3)	
	24-Hour	0.04 ppm (105 µg/m^3)		0.14 ppm (for certain areas)[10]	---	
	Annual Arithmetic Mean	–		0.030 ppm (for certain areas)[10]	–	
Lead[12,13]	30-day average	1.5 µg/m^3	Atomic Absorption	–	–	High Volume Sampler and Atomic Absorption
	Calendar Quarter	--		1.5 µg/m^3 (for certain areas)[12]	Same as Primary Standard	
	Rolling 3-Month Average	–		0.15 µg/m^3		
Visibility-Reducing Particles[14]	8-Hour	See footnote 14	Beta Attenuation and Transmittance through Filter Tape	**No Federal Standards**		
Sulfates	24-Hour	25 µg/m^3	Ion Chromatography			
Hydrogen Sulfide	1-Hour	0.03 ppm (42 µg/m^3)	Ultraviolet Fluorescence			
Vinyl Chloride[12]	24-Hour	0.01 ppm (26 µg/m^3)	Gas Chromatography			

Source: ARB, May 4, 2016.

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM10, PM2.5, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m3 is equal to or less than one. For PM2.5, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.

3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
4. Any equivalent measurement method which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.
5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
7. Reference method as described by the U.S. EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the U.S. EPA.
8. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.
9. On December 14, 2012, the national annual PM2.5 primary standard was lowered from 15 µg/m3 to 12.0 µg/m3. The existing national 24-hour PM2.5 standards (primary and secondary) were retained at 35 µg/m3, as was the annual secondary standard of 15 µg/m3. The existing 24-hour PM10 standards (primary and secondary) of 150 µg/m3 also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
10. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm
11. On June 2, 2010, a new 1-hour SO2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.
    Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.
12. The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants
13. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 µg/m3 as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.
14. In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

California Clean Air Act. Under the federal Clean Air Act, state and local authorities have primary responsibility for assuring that their respective regions are in attainment of, or have a verifiable plan to attain, the NAAQS. The federal Clean Air Act also provides state and local agencies authority to promulgate more stringent ambient air quality standards. The California Ambient Air Quality Standards (CAAQS) for the following pollutants are also included in Table 1.

Hydrogen sulfide (H_2S)
Vinyl chloride
Sulfates (SO_4)
Visibility-reducing particles

Under the provisions of the federal and California Clean Air Acts, air quality districts in areas not in attainment of the NAAQS or CAAQS are required to prepare an AQMP. An AQMP

establishes an area-specific program to control existing and proposed sources of air emissions so that the NAAQS or CAAQS may be attained by the applicable target date. CARB and EPA are required to designate areas of the state as “attainment”, “nonattainment”, or "unclassified" for state and federal ambient air quality standards. An attainment designation for an area signifies that pollutant concentrations did not violate the standard for that pollutant. A nonattainment designation indicates that a pollutant concentration violated the standard at least once, excluding those occasions when a violation was caused by an extraordinary event. An unclassified designation indicates a lack of adequate air quality data or other information on which to base an attainment or nonattainment designation.

2.3 EXISTING AIR QUALITY

Air quality is determined primarily by the types and amounts of contaminants emitted into the atmosphere, the size and topography of the local air basin, and the pollutant-dispersing properties of local weather patterns. When airborne pollutants are produced in such volume that they are not dispersed by local meteorological conditions, air quality problems result. Dispersion of pollutants in the SCAB is influenced by periodic temperature inversions, persistent meteorological conditions and the local topography. As pollutants become more concentrated in the atmosphere, photochemical reactions occur, producing ozone and other oxidants.

The federal Clean Air Act was established in an effort to assure that acceptable levels of air quality are maintained in all areas of the United States. These levels are based upon health-related exposure limits and are referred to as NAAQS. The NAAQS establish maximum allowable concentrations of specific pollutants in the atmosphere and characterize the amount of exposure deemed safe for the public.

NAAQS have been set for a number of criteria pollutants. The following is a brief description of health effects and whether the SCAB is or is not in attainment for these pollutants:

Ozone (O_3) is a strong-smelling, pale blue, reactive, toxic chemical gas consisting of three oxygen atoms. It is a secondary pollutant formed in the atmosphere by a photochemical process involving the sun’s energy and O3 precursors. These precursors are mainly oxides of nitrogen (NOx) and volatile organic compounds (VOCs) (also referred to as reactive organic gases [ROG]). The maximum effects of precursor emissions on O3 concentrations usually occur several hours after they are emitted and many miles from the source. Meteorology and terrain play major roles in O3 formation, and ideal conditions occur during summer and early autumn on days with low wind speeds or stagnant air, warm temperatures, and cloudless skies. The O3 that the U.S. Environmental Protection Agency (EPA) and the California Air Resources Board (CARB) regulate as a criteria air pollutant is produced close to ground level, where people live, exercise, and breathe. Ground-level O3 is a harmful air pollutant that causes numerous adverse health effects and is thus considered “bad” O3. Stratospheric, or “good,” O3 occurs naturally in the upper atmosphere, where it reduces the amount of ultraviolet light (i.e., solar radiation) entering the Earth’s atmosphere. Without the protection of the beneficial stratospheric O3 layer, plant and animal life would be seriously harmed Pollutants emitted in the Los Angeles area contribute to the ozone levels experienced in the SCAB.

Data summarized in Table 2 shows that the 1-hour ozone standard was exceeded between 33 to 41 days per year between 2015 and 2019 at the Fontana-Arrow Highway air monitoring site, the closest monitoring station to the Project Site. The SCAB is designated as a nonattainment basin for ozone. The 8-hour Ozone standard has been exceeded between 49 to 69 days per year between 2015 and 2019.

Table 2
Ozone Data: Fontana-Arrow Highway Air Monitoring Site
2015 – 2019

Year	Days Exceeding 1-Hour Standard	Days Exceeding 8-Hour Standard	Maximum 1-Hour Reading (ppm)	Maximum 8-Hour Reading (ppm)
2015	36	57	0.133	0.111
2015	34	49	0.139	0.105
2017	33	49	0.137	0.118
2018	38	69	0.141	0.111
2019	41	67	0.124	0.109

Source: CARB, 2021

Carbon Monoxide (CO) CO is a colorless, odorless gas formed by the incomplete combustion of hydrocarbon, or fossil fuels. CO is emitted almost exclusively from motor vehicles, power plants, refineries, industrial boilers, ships, aircraft, and trains. In urban areas, automobile exhaust accounts for most CO emissions. CO is a nonreactive air pollutant that dissipates relatively quickly; therefore, ambient CO concentrations generally follow the spatial and temporal distributions of vehicular traffic. CO concentrations are influenced by local meteorological conditions—primarily wind speed, topography, and atmospheric stability. CO from motor vehicle exhaust can become locally concentrated when surface-based temperature inversions are combined with calm atmospheric conditions, which is a typical situation at dusk in urban areas from November to February. The highest levels of CO typically occur during the colder months of the year, when inversion conditions are more frequent.

CO is harmful because it binds to hemoglobin in the blood, reducing the ability of blood to carry oxygen. This interferes with oxygen delivery to the body's organs. The most common effects of CO exposure are fatigue, headaches, confusion and reduced mental alertness, light-headedness, and dizziness due to inadequate oxygen delivery to the brain. For people with cardiovascular disease, short-term CO exposure can further reduce their body's already compromised ability to respond to the increased oxygen demands of exercise, exertion, or stress. Inadequate oxygen delivery to the heart muscle leads to chest pain and decreased exercise tolerance. Unborn babies whose mothers experience high levels of CO exposure during pregnancy are at risk of adverse developmental effects.

Nitrogen dioxide (NO_2) NO2 is a brownish, highly reactive gas that is present in all urban atmospheres. The major mechanism for the formation of NO2 in the atmosphere is the oxidation of the primary air pollutant nitric oxide (NO), which is a colorless, odorless gas. NOx, which includes NO2 and NO, plays a major role, together with VOC, in the atmospheric reactions that produce O3. NOx is formed from fuel combustion under high temperature or pressure. In

addition, NO2 is an important precursor to acid rain and may affect both terrestrial and aquatic ecosystems. The two major emissions sources are transportation and stationary fuel combustion sources (such as electric utility and industrial boilers).

A large body of health science literature indicates that exposure to NO2 can induce adverse health effects. The strongest health evidence, and the health basis for the ambient air quality standards (AAQS) for NO2, results from controlled human exposure studies that show that NO2 exposure can intensify responses to allergens in allergic asthmatics. In addition, several epidemiological studies have demonstrated associations between NO2 exposure and premature death, cardiopulmonary effects, decreased lung function growth in children, respiratory symptoms, emergency room visits for asthma, and intensified allergic responses. Infants and children are particularly at risk because they have disproportionately higher exposure to NO2 than adults due to their greater breathing rate for their body weight and their typically greater outdoor exposure duration. Several studies have shown that long-term NO2 exposure during childhood, the period of rapid lung growth, can lead to smaller lungs at maturity in children with higher compared to lower levels of exposure. In addition, children with asthma have a greater degree of airway responsiveness compared with adult asthmatics. In adults, the greatest risk is to people who have chronic respiratory diseases, such as asthma and chronic obstructive pulmonary disease.

Particulate Matter pollution consists of very small liquid and solid particles floating in the air, which can include smoke, soot, dust, salts, acids, and metals. Particulate matter can form when gases emitted from industries and motor vehicles undergo chemical reactions in the atmosphere. $PM_{2.5}$ and PM_{10} represent fractions of particulate matter. Coarse particulate matter (PM_{10}) is about 1/7 the thickness of a human hair. Major sources of PM_{10} include crushing or grinding operations; dust stirred up by vehicles traveling on roads; wood-burning stoves and fireplaces; dust from construction, landfills, and agriculture; wildfires and brush/waste burning; industrial sources; windblown dust from open lands; and atmospheric chemical and photochemical reactions. Fine particulate matter ($PM_{2.5}$) is roughly 1/28 the diameter of a human hair. $PM_{2.5}$ results from fuel combustion (e.g., from motor vehicles, power generation, and industrial facilities), residential fireplaces, and woodstoves. In addition, $PM_{2.5}$ can be formed in the atmosphere from gases such as sulfur oxides, NOx, and VOCs.

A number of adverse health effects have been associated with exposure to both $PM_{2.5}$ and PM_{10}. For $PM_{2.5}$, short-term exposures (up to 24-hour duration) have been associated with premature mortality, increased hospital admissions for heart or lung causes, acute and chronic bronchitis, asthma attacks, emergency room visits, respiratory symptoms, and restricted activity days. These adverse health effects have been reported primarily in infants, children, and older adults with preexisting heart or lung diseases. In addition, of all of the common air pollutants, $PM_{2.5}$ is associated with the greatest proportion of adverse health effects related to air pollution, both in the United States and worldwide based on the World Health Organization's Global Burden of Disease Project. Short-term exposures to PM_{10} have been associated primarily with worsening of respiratory diseases, including asthma and chronic obstructive pulmonary disease, leading to hospitalization and emergency department visits.

Long-term exposure (months to years) to $PM_{2.5}$ has been linked to premature death, particularly in people who have chronic heart or lung diseases, and reduced lung function growth in children.

The effects of long-term exposure to PM_{10} are less clear, although several studies suggest a link between long-term PM_{10} exposure and respiratory mortality. The International Agency for Research on Cancer published a review in 2015 that concluded that particulate matter in outdoor air pollution causes lung cancer.

Data summarized in Table 3 shows that PM_{10} levels at the Fontana-Arrow Highway air monitoring site did not exceed standards between 2015 and 2019, while insufficient data was available to determine whether the State Standard was exceeded during the same time period.

Table 3
PM_{10} Data: Fontana-Arrow Highway Air Monitoring Site
2015 – 2019

Year	Days Exceeding State Standard	Days Exceeding Federal Standard	Maximum 24-Hour Reading ($\mu g/m^3$)
2015	*	*	96.0
2016	*	0	94.8
2017	*	*	75.3
2018	*	0	64.1
2019	*	0	88.8

Source: CARB, 2021
State Standard – 50 $\mu g/m^3$ based on 24-*hour average
Federal Standard – 150 $\mu g/m^3$ based on 24-hour average
$\mu g/m^3$ = micrograms per cubic meter
Measurements usually taken every 6 days.
* Insufficient Data

The data summarized in Table 4 shows that $PM_{2.}$ levels at the Fontana-Arrow Highway air monitoring site has been exceeded between 0 to 10 days per year between 2015 and 2019.

Table 4
$PM_{2.5}$ Data: Fontana-Arrow Highway Air Monitoring Site
2015 – 2019

Year	Maximum 24-Hour Reading ($\mu g/m^3$)	Days Exceeding Federal Standard
2015	50.5	10
2016	58.8	3
2017	39.2	3
2018	29.2	0
2019	81.3	9

Source: CARB, 2021
Federal Standard – lowered to 35 $\mu g/m^3$ in 2006; based on 24 hour average.
$\mu g/m^3$ = micrograms per cubic meter
* Insufficient Data

Sulfur dioxide (SO_2) is a gas produced when fossil fuels are burned. SO_2 is the main pollutant contributing to the formation of acid rain. No exceedances of this pollutant have occurred for decades and concentrations are well under Federal and State standards.

Lead (Pb) Lead in the atmosphere occurs as particulate matter. Sources of lead include leaded gasoline; the manufacturing of batteries, paints, ink, ceramics, and ammunition; and secondary lead smelters. Prior to 1978, mobile emissions were the primary source of atmospheric lead. Between 1978 and 1987, the phase out of leaded gasoline reduced the overall inventory of airborne lead by nearly 95%. With the phase out of leaded gasoline, secondary lead smelters, battery recycling, and manufacturing facilities are becoming lead-emissions sources of greater concern.

Prolonged exposure to atmospheric lead poses a serious threat to human health. Health effects associated with exposure to lead include gastrointestinal disturbances, anemia, kidney disease, and, in severe cases, neuromuscular and neurological dysfunction. Of particular concern are low-level lead exposures during infancy and childhood, as children are highly susceptible to the effects of lead. Such exposures are associated with decrements in neurobehavioral performance, including intelligence quotient performance, psychomotor performance, reaction time, and growth.

Hydrogen Sulfide (H_2S) This pollutant is not commonly found in the ambient atmosphere but can originate from natural sources such as volcanoes, sulfur hot springs, or mineral brine associated with dry lakebeds. The CAAQS for H_2S is not health-based but rather an aesthetic one, because the compound smells like rotten eggs. This pollutant is not an issue in the project area.

Sulfates are produced by the reaction in the air of sulfur dioxide (SO_2), which is a component of acid rain. Sources for sulfur dioxide include coal burning power plants and diesel engines. California does not have any coal burning power plants and all diesel fuels sold in the state are now lower in sulfur. Sulfates are not an issue in the area.

Visibility-reducing particles are common in the SCAB due to the vast open desert area, especially during windy conditions. Particles reduce visibility, obscuring the desert scenery, including views of the mountains. Dust control measures reduce particulates in the area.

Volatile Organic Compounds. Hydrocarbons are organic gases that are formed from hydrogen and carbon and sometimes other elements. Hydrocarbons that contribute to formation of O3 are referred to and regulated as VOCs. Combustion engine exhaust, oil refineries, and fossil-fueled power plants are the main sources of hydrocarbons. Other sources of hydrocarbons include evaporation from petroleum fuels, solvents, dry cleaning solutions, and paint.

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 TACs. There are no separate health standards for VOCs as a group.

Air Quality Attainment Plans

The project area is under the jurisdiction of the SCAQMD, which implements and enforces the applicable AQMP. The 2016 AQMP was adopted by the SCAQMD on March 3, 2017. The Plan recognized the critical importance of working with other agencies to develop new regulations, as well as secure funding and other incentives that encourage the accelerated transition of vehicles, buildings, and industrial facilities to cleaner technologies in a manner that benefits not only air quality, but also local businesses and the regional economy. The 2016 AQMP also includes transportation control measures developed by the Southern California Association of Governments (SCAG) from the 2016 Regional Transportation Plan/ Sustainable Communities Strategy. The 2016 AQMP includes the integrated strategies and measures needed to meet the NAAQS. The 2016 AQMP demonstrates attainment of the 1-hour and 8-hour ozone NAAQS as well as the latest 24-hour and annual $PM_{2.5}$ standards.

The 2016 AQMP is a comprehensive and integrated Plan primarily focused on addressing the ozone standards. The Plan is a regional and multi-agency effort (AQMD, California Air Resources Board, Southern California Association of Governments (SCAG) and U.S. EPA). State and federal planning requirements include developing control strategies, attainment demonstrations, reasonable further progress, and maintenance plans. The 2016 AQMP incorporate the latest scientific and technical information and planning assumptions, including the latest applicable growth assumptions, Regional Transportation Plan/Sustainable Communities Strategy, and updated emission inventory methodologies for various source categories.

The primary guidance for implementing the air quality standards in relation to the California Environmental Quality Act (CEQA) is the 1993 SCAQMD CEQA Air Quality Handbook. This handbook is being revised and updated, but until the new edition is published, the 1993 version as updated, is still the current reference and directive.

Climate Change and Greenhouse Gases

Gases that trap heat in the atmosphere are often called Greenhouse Gases (GHG); analogous to a greenhouse. GHGs are emitted by natural processes and human activities. The accumulation of GHGs in the atmosphere helps regulate the earth's temperature. Without these natural GHGs, the Earth's surface would be approximately 60°F cooler (EPA 2017). Emissions from human activities such as electricity production and vehicles have elevated the concentration of these gases in the atmosphere.

GHGs have varying global warming potential (GWP). A GWP is a "quantified measure of the globally averaged relative radiative forcing impacts of a particular greenhouse gas, defined as the accumulated radiative forcing within a specific time horizon caused by emitting one kilogram of the gas, relative to that of the reference gas" (EPA 2017). The reference gas for GWP is carbon dioxide; carbon dioxide has a GWP of one. For example, methane has a GWP of 21, which means that it has a greater global warming effect than carbon dioxide on a molecule per molecule basis. One teragram of carbon dioxide equivalent (Tg CO2 Eq.) is the emissions of the gas multiplied by the GWP. One teragram is equal to one million metric tons. The carbon dioxide

equivalent is a good way to assess emissions because it gives weight to the GWP of the gas. The lifetime and GWP of selected GHG are summarized in Table 5. As shown in the table, GWP for a 100-year time horizon ranges from one (carbon dioxide) to 23,500 (sulfur hexafluoride).

Table 5
Global Warming Potentials and Atmospheric Lifetimes of Select Greenhouse Gases

Gas	Lifetime (years)	Global Warming Potential (100-year time horizon)
Carbon Dioxide	*	1
Methane	12.4†	28
Nitrous Oxide	121†	265
HFC-23	222	12,400
HFC-134a	13.4	1,300
HFC-152a	1.5	138
PFC-14: Tetrafluoromethane (CF4)	50,000	6,630
PFC-116: Hexafluoroethane (C2F6)	10,000	11,100
Sulfur Hexafluoride (SF6)	3,200	23,500

Source: IPCC 2013
* No single lifetime can be given.
† Perturbation lifetime is used in calculation of metrics, not the lifetime of the atmospheric burden.

Water vapor is the most abundant, important, and variable GHG in the atmosphere. It is not considered a pollutant; in the atmosphere it maintains a climate necessary for life. The main source of water vapor is evaporation from the oceans (approximately 85 percent). Other sources include evaporation from other water bodies, sublimation (change from solid to gas) from ice and snow, and transpiration from plant leaves.

Carbon dioxide (CO_2) is an odorless, colorless natural GHG. Natural sources include the following: decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic outgassing. Carbon dioxide is the primary greenhouse gas emitted through human activities and anthropogenic sources of carbon dioxide are from burning coal, oil, natural gas, and wood. Concentrations are currently around 400 ppm; some say that concentrations may increase to 540 ppm by 2100 as a direct result of anthropogenic sources (IPCC 2001). Some predict that this will result in an average global temperature rise of at least 2° Celsius (IPCC 2001).

Methane is a flammable gas and is the main component of natural gas. When one molecule of methane is burned in the presence of oxygen, one molecule of carbon dioxide and two molecules of water are released. There are no health effects from methane. A natural source of methane is from the anaerobic decay of organic matter. Geological deposits known as natural gas fields contain methane, which is extracted for fuel. Other sources are from landfills, fermentation of manure, and cattle.

Nitrous oxide (N_2O), also known as laughing gas, is a colorless GHG. Higher concentrations can cause dizziness, euphoria, and sometimes slight hallucinations. Nitrous oxide is produced by microbial processes in soil and water, including those reactions which occur in fertilizer containing nitrogen. In addition to agricultural sources, some industrial processes (fossil fuel-fired power plants, nylon production, nitric acid production, and vehicle emissions) also contribute to its atmospheric load. It is used in rocket engines, as an aerosol spray propellant, and in race cars.

Chlorofluorocarbons (CFCs) are gases formed synthetically by replacing all hydrogen atoms in methane or ethane 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 were first synthesized in 1928 for use as refrigerants, aerosol propellants, and cleaning solvents. They destroy stratospheric ozone; therefore, their production was stopped as required by the Montreal Protocol.

Black Carbon. Black carbon is a component of fine particulate matter, which has been identified as a leading environmental risk factor for premature death. It is produced from the incomplete combustion of fossil fuels and biomass burning, particularly from older diesel engines and forest fires. Black carbon warms the atmosphere by absorbing solar radiation, influences cloud formation, and darkens the surface of snow and ice, which accelerates heat absorption and melting. Black carbon is a short-lived species that varies spatially, which makes it difficult to quantify the global warming potential. Diesel particulate matter emissions are a major source of black carbon and are toxic air contaminants that have been regulated and controlled in California for several decades to protect public health. In relation to declining diesel particulate matter from the California Air Resources Board's (CARB's) regulations pertaining to diesel engines, diesel fuels, and burning activities, CARB estimates that annual black carbon emissions in California have reduced by 70% between 1990 and 2010, with 95% control expected by 2020 (CARB 2014).

Fluorinated Gases. Fluorinated gases (also referred to as F-gases) are synthetic powerful GHGs emitted from many industrial processes. Fluorinated gases are commonly used as substitutes for stratospheric ozone-depleting substances (e.g., CFCs, hydrochlorofluorocarbons [HCFCs], and halons). The most prevalent fluorinated gases include the following:

> *Hydrofluorocarbons (HFCs)* are synthetic man-made chemicals that are used as a substitute for CFCs for automobile air conditioners and refrigerants.
>
> *Perfluorocarbons (PFCs)* have stable molecular structures and do not break down though the chemical processes in the lower atmosphere. High-energy ultraviolet rays about 60 kilometers above Earth's surface are able to destroy the compounds. PFCs have very long lifetimes, between 10,000 and 50,000 years. Two common PFCs are tetrafluoromethane and hexafluoroethane. Concentrations of tetrafluoromethane in the atmosphere are over 79 ppt (IPCC 2013). The two main sources of PFCs are primary aluminum production and semiconductor manufacture.

Sulfur hexafluoride (SF6) is an inorganic, odorless, colorless, nontoxic, nonflammable gas. It also has the highest GWP (23,500) of any gas evaluated. Concentrations in 2011 were about 7.3 ppt, while concentrations in 2005 were about 5.6 ppt (EPA 2013). 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.

Nitrogen Trifluoride: NF3 is used in the manufacture of a variety of electronics, including semiconductors and flat panel displays.

Ozone found in the troposphere is considered a GHG; however, unlike the other GHG, ozone in the troposphere is relatively short-lived and therefore is not global in nature. Ozone is not directly emitted into the air but is formed through chemical reactions between precursor emissions of reactive organic gases (ROG) and nitrogen oxides (NO_X) in the presence of sunlight. It is difficult to make an accurate determination of the contribution of ozone precursors (nitrogen oxides and volatile organic compounds) to climate change (CARB 2004).

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 with sulfur in it is burned. Black carbon (or soot) is emitted during biomass burning incomplete combustion of fossil fuels. Particulate matter regulation has been lowering aerosol concentrations in the United States; however, global concentrations are likely increasing.

Assembly Bill 32

In 2006, the California State Legislature adopted Assembly Bill 32 (AB 32), the California Global Warming Solutions Act of 2006. AB 32 requires CARB, to adopt rules and regulations that would achieve GHG emissions equivalent to statewide levels in 1990 by 2020 through an enforceable statewide emission cap which was phased in starting in 2012. On January 1, 2017 AB 32 was revised to include a statewide GHG emission reduction of 40 percent below the state GHG emissions limit no later than December 31, 2020.

Senate Bill 32

The California Global Warming Solutions Act of 2006: emissions limit, or SB-32, is a California Senate bill expanding upon AB-32 to reduce greenhouse gas (GHG) emissions. SB-32 sets into law the mandated reduction target in GHG emissions as written into Executive Order B-30-15.

The Senate bill requires that there be a reduction in GHG emissions to 40% below the 1990 levels by 2030. Greenhouse gas emissions include carbon dioxide, methane, nitrous oxide, sulfur hexafluoride, hydrofluorocarbons, and perfluorocarbons. CARB is responsible for ensuring that California meets this goal. AB-32 required California to reduce greenhouse gas emissions to 1990 levels by 2020 and SB-32 continues that timeline to reach the targets set in Executive Order B-30-15. SB-32 provides another intermediate target between the 2020 and 2050 targets set in

Executive Order S-3-05. SB-32 was contingent on the passing of AB-197, which increases legislative oversight of CARB and is intended to ensure CARB must report to the Legislature. AB-197 also passed and was signed into law on September 8, 2016.

Assembly Bill 197

California Assembly Bill 197 (AB 197). AB-197 was signed into law on September 8, 2016. It increases legislative oversight of the CARB and is intended to ensure CARB must report to the Legislature. AB-197 is directly related to SB-32 in that AB-197 contains language stating AB-197 is only operative if SB-32 is enacted and becomes law on or before January 1, 2017.

The provisions of AB-197 are intended to provide more legislative oversight of CARB by adding two new legislatively appointed non-voting members to the CARB Board, increasing the Legislature's role in the ARB Board's decisions. Additionally, AB-197 limits the term length of CARB Board members to six years. AB-197 also requires that CARB "protect the state's most impacted and disadvantaged communities … consider the social costs of the emissions of greenhouse gases" in preparing plans to meet GHG reduction goals.

AB-197 requires a committee to be formed and called the Joint Legislative Committee on Climate Change Policies (JLCCCP), which will be responsible, among other duties, for addressing and prioritizing the disadvantaged communities in California. Additionally, as part of AB-197, reports of emissions inventories for GHGs, criteria pollutants, and toxic air contaminants are required to be made public and updated at least once a year.

Title 24, Part 6 California Energy Code

Title 24, part 6 California Energy Code is the Energy Efficiency Standards for residential and nonresidential buildings, new construction, remodels and additions.

Title 24, Part 11 CALGreen

CALGreen is California’s first green building code and first in the nation state-mandated green building code. It is formally known as the California Green Building Standards Code, Title 24, Part 11, of the California Code of Regulations.

The purpose of CALGreen is to improve public health, safety, and general welfare through enhanced design and construction of buildings using concepts which reduce negative impacts and promote those principles which have a positive environmental impact and encourage sustainable construction practices.

CALGreen was adopted to address the five divisions of building construction: Planning and design, Energy efficiency, Water efficiency and conservation, Material conservation and resource efficiency, and Environmental quality.

SB 100

On September 10, 2018, Governor Jerry Brown signed California's most ambitious energy bill into law: Senate Bill 100 (SB 100). This environmental measure sets a world-leading precedent by committing to 100% clean energy in California by 2045, speeding up the state's timeline for moving to carbon-free power sources.

AB 2127

Existing law requires the State Energy Resources Conservation and Development Commission (Energy Commission), on a biennial basis, to adopt an integrated energy policy report containing an overview of major energy trends and issues facing the state. Existing law requires the Energy Commission, as a part of the report, to conduct transportation forecasting and assessment activities that include, among other things, an assessment of trends in transportation fuels, technologies, and infrastructure supply and demand.

Existing law requires the Public Utilities Commission (PUC) , in consultation with the State Air Resources Board and the Energy Commission, to direct the electrical corporations to file applications for programs and investments to accelerate widespread transportation electrification to achieve certain state goals.
This bill would require the Energy Commission, working with the State Air Resources Board and the PUC, to prepare and biennially update a statewide assessment of the electric vehicle charging infrastructure needed to support the levels of electric vehicle adoption required for the state to meet its goals of putting at least 5 million zero-emission vehicles on California roads by 2030 and of reducing emissions of greenhouse gases to 40% below 1990 levels by 2030. The bill would require the Energy Commission to regularly seek data and input from stakeholders relating to electric vehicle charging infrastructure.

SB 375

The Sustainable Communities and Climate Protection Act of 2008, also known as Senate Bill 375 or SB 375, is a State of California law targeting greenhouse gas emissions from passenger vehicles. The Global Warming Solutions Act of 2006 (AB 32) sets goals for the reduction of statewide greenhouse gas emissions. Passenger vehicles are the single largest source of greenhouse gas emissions statewide, accounting for 30% of total emissions. SB 375 therefore provides key support to achieve the goals of AB 32.

SB 375 instructs the California Air Resources Board (CARB) to set regional emissions' reduction targets from passenger vehicles. The Metropolitan Planning Organization for each region must then develop a "Sustainable Communities Strategy" (SCS) that integrates transportation, land-use and housing policies to plan for achievement of the emissions target for their region.

EPA Safe Vehicles Rule

The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule, issued today by NHTSA and EPA, sets tough but feasible fuel economy and carbon dioxide standards that increase 1.5% in stringency each year from model years 2021 through 2026.

County of San Bernardino

In September 2011, the County adopted a Greenhouse Gas Emissions (GHG) Reduction Plan (September 2011) (GHG Plan). The GHG Plan presents a comprehensive set of actions to reduce the County's internal and external GHG emissions to 15% below current levels (2007 levels) by 2020, consistent with the AB 32 Scoping Plan. GHG emissions impacts are assessed through the GHG Development Review Process (DRP) by applying appropriate reduction requirements as part of the discretionary approval of new development projects. Through its development review process, the County will implement CEQA requiring new development projects to quantify project GHG emissions and adopt feasible mitigation to reduce project emissions below a level of significance. A review standard of 3,000 metric tons of CO2 equivalent (MTCO2e) per year is used to identify projects that require the use of Screening Tables or a project-specific technical analysis to quantify and mitigate project emissions. The purpose of the Screening Tables is to provide guidance in measuring the reduction of greenhouse gas emissions attributable to certain design and construction measures incorporated into development projects.

Implementation of the County's GHG Plan is achieved through the Development Review Process by applying appropriate reduction requirements to projects, which reduce GHG emissions. All new developments are required to quantify the project's GHG emissions and adopt feasible mitigation to reduce project emissions below a level of significance. A review standard of 3,000 metric tons of carbon dioxide equivalent (MTCO2e) per year is used to identify and mitigate project emissions.

Health and Other Effects

The potential health effects from global climate change may arise from temperature increases, climate-sensitive diseases, extreme events, and air quality. There may be direct temperature effects through increases in average temperature leading to more extreme heat waves and less extreme cold spells. Those living in warmer climates are likely to experience more stress and heat-related problems (i.e., heat rash and heat stroke). In addition, climate sensitive diseases may increase, such as those spread by mosquitoes and other disease carrying insects. Those diseases include malaria, dengue fever, yellow fever, and encephalitis. Extreme events such as flooding and hurricanes can displace people and agriculture, which would have negative consequences. Drought in some areas may increase, which would decrease water and food availability. Global climate change may also contribute to air quality problems from increased frequency of smog and particulate air pollution (EPA 2006).

3.0 AIR QUALITY IMPACT EVALUATION

3.1 STANDARDS OF SIGNIFICANCE

Air quality analyses for the Proposed Project have been conducted in accordance with the CEQA Air Quality Handbook prepared by the SCAQMD (1993 as updated) and the San Bernardino County Screening Threshold for Greenhouse Gas Emissions ((3,000 metric tons of CO_2 equivalent (MTCO2e)). SCAQMD has established the following emissions criteria (found at http://www.aqmd.gov/ceqa/hdbk.html) for determining whether the impacts from a project would be considered significant under CEQA:

Thresholds of Significance for Construction:

- 75 pounds per day of ROG
- 100 pounds per day of NO_x
- 550 pounds per day of CO
- 150 pounds per day of SO_X
- 150 pounds per day of PM_{10}
- 55 pounds per day of $PM_{2.5}$

Thresholds of Significance for Operations:

- 55 pounds per day of ROG
- 55 pounds per day of NO_x
- 550 pounds per day of CO
- 150 pounds per day of SO_X
- 150 pounds per day of PM_{10}
- 55 pounds per day of $PM_{2.5}$

3.2 CONSTRUCTION AIR QUALITY EVALUATION

The Proposed Project is on approximately 8.5 acres. Construction-related emissions generated by the Proposed Project would be from short-term construction activities. The Proposed Project was screened using CalEEMod version 2016.3.2. The criteria pollutants and Greenhouse Gas (GHGs) analyzed include reactive organic gases (ROG), nitrous oxides (NO_x), carbon monoxide (CO), particulates (PM_{10} and $PM_{2.5}$), carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O). Construction emissions are screened and quantified to document the effectiveness of control measures.

The CalEEMod model allows the user to set certain defaults and run the model to incorporate SCAQMD required rules and regulations. Therefore, per SCAQMD Rules 403, the mitigation requiring that exposed surfaces during construction be watered twice per day was “turned on”. The developer and its contractor will be required to comply with mandated SCAQMD rules and regulations, including but not limited to Rule 403. Therefore, the following dust control

conditions applicable to the site activities as recommended by Rule 403 shall also be implemented:

1. The Project Proponent shall ensure that any portion of the site to be graded shall be pre-watered prior to the onset of grading activities.

   (a) The Project Proponent shall ensure that watering of the site or other soil stabilization method shall be employed on an on-going basis after the initiation of any grading activity on the site at least twice daily. Portions of the site that are actively being graded shall be watered regularly to ensure that a crust is formed on the ground surface and shall be watered at the end of each workday.

   (b) The Project Proponent shall ensure that all disturbed areas are treated to prevent erosion until the site is constructed upon.

   (c) The Project Proponent shall ensure that landscaped areas are installed as soon as possible to reduce the potential for wind erosion.

   (d) The Project Proponent shall ensure that all grading activities are suspended during first and second stage ozone episodes or when winds exceed 25 miles per hour.

During construction, exhaust emissions from construction vehicles and equipment and fugitive dust generated by equipment traveling over exposed surfaces, would increase NO_X and PM_{10} levels in the area. The following Best Management Practices shall be implemented to reduce emissions.

2. To reduce emissions, all equipment used in grading and construction must be tuned and maintained to the manufacturer's specification to maximize efficient burning of vehicle fuel. Site development will be limited to one acre disturbed per day.
3. The contractor shall utilize (as much as possible) pre-coated building materials and coating transfer or spray equipment with high transfer efficiency, such as high volume, low pressure (HVLP) spray method, or manual coatings application such as paint brush, hand roller, trowel, dauber, rag, or sponge.
4. The contractor shall utilize water-based or low VOC coating per SCAQMD Rule 1113. The following measures shall also be implemented:
   - Use Super-Compliant VOC paints whenever possible.
   - If feasible, avoid painting during peak smog season: July, August, and September.
   - Recycle leftover paint. Take any left-over paint to a household hazardous waste center; do not mix leftover water-based and oil-based paints.
   - Keep lids closed on all paint containers when not in use to prevent VOC emissions and excessive odors.
   - For water-based paints, clean up with water only. Whenever possible, do not rinse the clean-up water down the drain or pour it directly into the ground or the storm drain. Set aside the can of clean-up water and take it to a hazardous waste center (www.cleanup.org).
   - Recycle the empty paint can.
   - Look for non-solvent containing stripping products.

- Use Compliant Low-VOC cleaning solvents to clean paint application equipment.
- Keep all paint and solvent laden rags in sealed containers to prevent VOC emissions.

5. The Project Proponent shall ensure that existing power sources are utilized where feasible via temporary power poles to avoid on-site diesel power generation.
6. The Project Proponent shall ensure that construction personnel are informed of ride sharing and transit opportunities.
7. All buildings on the project site shall conform to energy use guidelines in Title 24 of the California Administrative Code as updated to reduce energy consumption and reduce GHG emissions.
8. The operator shall maintain and effectively utilize and schedule on site equipment and delivery trucks in order to minimize exhaust emissions from truck idling.

Modeled Analysis

The emissions calculations for the construction phase of the Proposed Project includes fugitive dust from grading and exhaust emissions from on-site equipment and worker travel and are summarized in Table 6 and Table 7, which represent summer and winter construction emissions, respectively. The fugitive dust emissions are based on earthwork activities per day. The proposed construction activities will include implementation of the "best available fugitive dust control requirements" listed above and the developer will comply with SCAQMD rules and regulations (particularly Rule 403) that require controls for fugitive dust. These standard conditions will reduce emissions to the lowest amounts feasible. Construction emissions were screened and quantified to document the effectiveness of control measures. For additional information, refer to Appendix A for the CalEEMod emissions model output data.

Table 6
Summer Construction Emissions
(Pounds Per Day)

Source/Phase	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Demolition	2.7	25.9	21.1	0.0	1.6	1.2
Site Preparation	3.2	33.1	20.2	0.0	19.9	11.5
Grading	2.0	20.9	15.8	0.0	7.6	4.3
Building Construction	2.6	21.7	23.4	0.0	3.0	1.4
Paving	1.9	10.2	15.0	0.0	0.6	0.5
Architectural Coating	21.4	1.4	2.9	0.0	0.6	0.1
Highest Value (lbs/day)	**21.4**	**25.9**	**23.4**	**0.0**	**19.9**	**11.5**
SCAQMD Threshold	75	100	550	150	150	55
Significant	**No**	**No**	**No**	**No**	**No**	**No**

Source: CalEEMod 2016.3.2, Summer Emissions
Phases don't overlap and represent the highest concentration.

Table 7
Winter Construction Emissions
(Pounds Per Day)

Source/Phase	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Demolition	2.7	25.9	21.0	0.0	1.5	1.2
Site Preparation	3.2	33.1	20.1	0.0	19.9	11.5
Grading	2.0	20.9	15.7	0.0	7.7	4.3
Building Construction	2.6	21.6	22.5	0.0	3.0	1.3
Paving	1.9	10.5	14.9	0.0	0.7	0.5
Architectural Coating	21.4	1.4	1.4	0.0	0.5	0.1
Highest Value (lbs/day)	**21.4**	**25.9**	**22.5**	**0.0**	**19.9**	**11.5**
SCAQMD Threshold	75	100	550	150	150	55
Significant	**No**	**No**	**No**	**No**	**No**	**No**

Source: CalEEMod 2016.3.2, Winter Emissions
Phases don't overlap and represent the highest concentration.

As shown in Table 6 and Table 7, construction emissions during either summer or winter seasonal conditions would not exceed SCAQMD thresholds. Impacts would be less than significant, and no mitigation measures are required.

Greenhouse Gas Emissions

Greenhouse gas (GHG) emissions are cumulative in nature, in that, no one single project can measurably contribute to climate change and its affects (global average change in temperature, rising sea levels etc.). The direct or indirect GHG impacts are therefore not evaluated on a local level, but whether or not the GHG emissions resulting from the project are cumulative; that is, they add considerably to an increase in GHGs as compared to the existing environmental setting based on: 1) an established significance threshold(s); or 2) the extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions.

AB 32 defines seven (7) major GHGs that are emitted into the atmosphere, the first three are both biogenic (occur naturally in the environment) and anthropogenic (are man-made), through the burning of fossil fuels, the decay of organic waste in landfills etc. and they include carbon dioxide (CO_2), methane (CH_4) and nitrous oxide (N_2O). The other four, known as Fluorinated gases (Hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, and nitrogen trifluoride) are synthetic (made artificially by chemical processes). The Proposed Project would not generate Fluorinated gases as defined by AB 32, only the GHGs (CO_2, CH_4, and N_2O) that are emitted by construction equipment. Therefore, GHG emissions from CO_2, CH_4, and N_2O are modeled. Results for GHG emissions related to construction of the Proposed Project are shown in Table 8.

Table 8
Greenhouse Gas Construction Emissions
(MT Per Year)

Source/Phase	CO_2	CH_4	N_20
Demolition	36.0	0.0	0.0
Site Preparation	17.5	0.0	0.0
Grading	27.3	0.0	0.0
Building Construction	553.7	0.0	0.0
Paving	21.3	0.0	0.0
Architectural Coating	5.2	0.0	0.0
Total (MTCO2e)	**636.9**		
SB County Screening Threshold (MTCO2e)	3,000		
Significant	**No**		

Source: CalEEMod 2016.3.2, Annual Emissions

Model results for GHG emissions related to construction of the Proposed Project as shown in Table 8. As shown in Table 8, project short-term GHG emissions from construction activities does not exceed San Bernardino County Greenhouse Gas Screening Thresholdes of 3,000 $MTCO_2e$ and therefore would not result in a significant impact.

3.3 OPERATIONAL AIR QUALITY EVALUATION

Operational emissions are categorized as energy (generation and distribution of energy to the end use), area (operational use of the project), mobile (vehicle trips), water (generation and distribution of water to the land use), and waste (collecting and hauling waste to the landfill). The proposed project will not include the manufacture or production of any products on-site; therefore, no industrial type emissions will be generated. The operational mobile source emissions were calculated in accordance with the Trip Generation Assessment (TGA) prepared for the Proposed Project by Ganddini Group in October 2019. The Proposed Project is anticipated to generate approximatively 507 daily trips. The Trip Generation rates from the TGA were input into the CalEEMod Version 2016.3.2 model. Emissions associated with the operational activities are listed in Tables 9 through 11.

Table 9
Summer Operational Emissions
(Pounds Per Day)

Source	ROG/VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Area	0.9	0.0	0.0	0.0	0.0	0.0
Energy	0.0	0.3	0.3	0.0	0.0	0.0
Mobile	1.0	24.3	10.9	0.1	5.1	1.4
Total Value (lbs/day)	**1.9**	**24.6**	**11.2**	**0.1**	**5.1**	**1.4**
SCAQMD Threshold	55	55	550	150	150	55
Significant	**No**	**No**	**No**	**No**	**No**	**No**

Source: CalEEMod 2016.3.2, Summer Emissions

Table 10
Winter Operational Emissions
(Pounds Per Day)

Source	ROG/VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Area	0.9	0.0	0.0	0.0	0.0	0.0
Energy	0.0	0.3	0.2	0.0	0.0	0.0
Mobile	1.0	24.1	10.4	0.0	5.1	1.4
Total Value (lbs/day)	**1.9**	**24.4**	**10.6**	**0.0**	**5.1**	**1.4**
SCAQMD Threshold	55	55	550	150	150	55
Significant	**No**	**No**	**No**	**No**	**No**	**No**

Source: CalEEMod 2016.3.2, Winter Emissions

Table 11
Greenhouse Gas Operational Emissions
(MT Per Year)

Source	CO_2	CH_4	N_2O
Area	0.0	0.0	0.0
Energy	191.6	0.0	0.0
Mobile	2,011.1	0.0	0.0
Waste	8.9	0.5	0.0
Water	36.5	0.3	0.0
Construction Amortized over 30 years	21.2		
Total MTCO2e Per Year	**2,294.3**		
SB County Screening Threshold (MTCO2e)	3,000		
Significant	**No**		

Source: CalEEMod 2016.3.2, Annual Emissions

As shown in Tables 9 through 11, operational emissions produced from the Proposed Project would not exceed thresholds and therefore would not result in a significant impact.

3.4 LOCALIZED SIGNIFICANCE THRESHOLD

SCAQMD has developed a methodology to assess the localized impacts of emissions from a proposed project as outlined within the Final Localized Significance Threshold (LST) Methodology report; completed in June 2003 and revised in July 2008. The use of LSTs is voluntary, to be implemented at the discretion of local public agencies acting as a lead agency pursuant to CEQA. LSTs apply to projects that must undergo CEQA or the National Environmental Policy Act (NEPA) and are five acres or less. LST methodology is incorporated to represent worst-case scenario emissions thresholds. CalEEMod version 2016.3.2 was used to estimate the on-site and off-site construction emissions. The LSTs were developed to analyze the significance of potential local air quality impacts of proposed projects to sensitive receptors and provide screening tables for small projects (one, two, or five acres). Projects are evaluated based on geographic location and distance from the sensitive receptor (25, 50, 100, 200, or 500 meters from the site).

For the purposes of a CEQA analysis, the SCAQMD considers a sensitive receptor to be a receptor such as a residence, hospital, convalescent facility or anywhere that it is possible for an individual to remain for 24 hours. Additionally, schools, playgrounds, childcare centers, and athletic facilities can also be considered as sensitive receptors. Commercial and industrial facilities are not included in the definition of a sensitive receptor because employees do not typically remain on-site for a full 24 hours, but are usually present for shorter periods of time, such as eight hours.

The Project Site is surrounded by light to heavy industry/manufacturing uses. Therefore, impact to sensitive receptors is not anticipated.

3.5 PROJECT CUMULATIVE IMPACTS

Development of the Proposed Project will be conditioned to comply with current SCAQMD rules and regulations to minimize impacts to air quality as discussed herein. The redevelopment of the site as a freight forwarding/dispatch facility is not anticipated to generate significant impacts or generate significant operational mobile emissions. The Proposed Project is anticipated to generate approximately 507 daily trips. Approval of the project does not require a zone change nor a general plan amendment and is consistent with the San Bernardino Countywide Plan. Therefore, cumulative impacts are anticipated to be less than significant.

4.0 REPORT SUMMARY

Construction emissions from the Proposed Project will not exceed the CEQA thresholds of significance. Construction emissions are considered short-term. Potential dust emissions would be further reduced by implementation of standard dust control measures (water exposed surfaces twice per day, etc.) as required for all projects within the SCAB. Therefore, potential impacts from construction activities are determined to be less than significant and no further analysis is required.

The operational emissions from the Proposed Project would not exceed SCAQMD thresholds of significance nor San Bernardino County Greenhouse Gas Screening Threshold. No impacts to local or regional air quality are anticipated during project operations. The Proposed Project as well as all projects within the SCAB will be required to comply with current SCAQMD rules and regulations as applicable. Therefore, potential impacts from operational activities are determined to be less than significant and no further analysis is required.

5.0 REFERENCES

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APPENDIX A
MODELING RESULTS

OD Freight Fontana

San Bernardino-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	35.31	1000sqft	0.81	35,313.00	0
Parking Lot	144.87	1000sqft	3.33	144,867.00	0
Other Asphalt Surfaces	118.68	1000sqft	2.72	118,683.00	0
Other Non-Asphalt Surfaces	80.61	1000sqft	1.85	80,605.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	32
Climate Zone	10			**Operational Year**	2023
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 -

Demolition -

Fleet Mix - Per TIA

Construction Off-road Equipment Mitigation -

Vehicle Trips - Per TIA

OD Freight Fontana - San Bernardino-South Coast County, Annual

Table Name	Column Name	Default Value	New Value
tblFleetMix	HHD	0.06	0.34
tblFleetMix	LDA	0.56	0.53
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.18	0.00
tblFleetMix	LHD1	0.02	0.10
tblFleetMix	LHD2	4.9390e-003	0.00
tblFleetMix	MCY	5.8070e-003	0.00
tblFleetMix	MDV	0.11	0.00
tblFleetMix	MH	8.8400e-004	0.00
tblFleetMix	MHD	0.02	0.03
tblFleetMix	OBUS	1.3640e-003	0.00
tblFleetMix	SBUS	8.0300e-004	0.00
tblFleetMix	UBUS	1.5280e-003	0.00
tblVehicleTrips	ST_TR	1.32	14.49
tblVehicleTrips	SU_TR	0.68	14.49
tblVehicleTrips	WD_TR	6.97	14.49

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.3306	2.9260	2.8532	7.0800e-003	0.3864	0.1170	0.5033	0.1453	0.1095	0.2548	0.0000	634.5732	634.5732	0.0964	0.0000	636.9825
2023	0.2569	0.3086	0.3979	8.8000e-004	0.0265	0.0130	0.0395	7.1300e-003	0.0122	0.0193	0.0000	78.3386	78.3386	0.0134	0.0000	78.6734
Maximum	**0.3306**	**2.9260**	**2.8532**	**7.0800e-003**	**0.3864**	**0.1170**	**0.5033**	**0.1453**	**0.1095**	**0.2548**	**0.0000**	**634.5732**	**634.5732**	**0.0964**	**0.0000**	**636.9825**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.3306	2.9260	2.8532	7.0800e-003	0.2996	0.1170	0.4165	0.0993	0.1095	0.2088	0.0000	634.5729	634.5729	0.0964	0.0000	636.9821
2023	0.2569	0.3086	0.3979	8.8000e-004	0.0265	0.0130	0.0395	7.1300e-003	0.0122	0.0193	0.0000	78.3386	78.3386	0.0134	0.0000	78.6733
Maximum	**0.3306**	**2.9260**	**2.8532**	**7.0800e-003**	**0.2996**	**0.1170**	**0.4165**	**0.0993**	**0.1095**	**0.2088**	**0.0000**	**634.5729**	**634.5729**	**0.0964**	**0.0000**	**636.9821**

	ROG	NOx	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**	**21.02**	**0.00**	**15.99**	**30.18**	**0.00**	**16.78**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-3-2022	4-2-2022	0.8684	0.8684
2	4-3-2022	7-2-2022	0.7912	0.7912
3	7-3-2022	10-2-2022	0.7999	0.7999
4	10-3-2022	1-2-2023	0.7969	0.7969
5	1-3-2023	4-2-2023	0.5424	0.5424
		Highest	0.8684	0.8684

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	0.1715	4.0000e-005	4.8400e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.4200e-003	9.4200e-003	2.0000e-005	0.0000	0.0100
Energy	6.1900e-003	0.0562	0.0472	3.4000e-004		4.2700e-003	4.2700e-003		4.2700e-003	4.2700e-003	0.0000	191.5830	191.5830	6.5600e-003	2.2400e-003	192.4132
Mobile	0.1733	4.4723	1.8891	0.0211	0.9052	0.0111	0.9164	0.2460	0.0106	0.2565	0.0000	2,011.1304	2,011.1304	0.0980	0.0000	2,013.5798
Waste						0.0000	0.0000		0.0000	0.0000	8.8869	0.0000	8.8869	0.5252	0.0000	22.0170
Water						0.0000	0.0000		0.0000	0.0000	2.5905	33.8765	36.4670	0.2675	6.5700e-003	45.1122
Total	**0.3510**	**4.5285**	**1.9411**	**0.0215**	**0.9052**	**0.0154**	**0.9207**	**0.2460**	**0.0149**	**0.2608**	**11.4775**	**2,236.5994**	**2,248.0769**	**0.8972**	**8.8100e-003**	**2,273.1323**

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	0.1715	4.0000e-005	4.8400e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.4200e-003	9.4200e-003	2.0000e-005	0.0000	0.0100
Energy	6.1900e-003	0.0562	0.0472	3.4000e-004		4.2700e-003	4.2700e-003		4.2700e-003	4.2700e-003	0.0000	191.5830	191.5830	6.5600e-003	2.2400e-003	192.4132
Mobile	0.1733	4.4723	1.8891	0.0211	0.9052	0.0111	0.9164	0.2460	0.0106	0.2565	0.0000	2,011.1304	2,011.1304	0.0980	0.0000	2,013.5798
Waste						0.0000	0.0000		0.0000	0.0000	8.8869	0.0000	8.8869	0.5252	0.0000	22.0170
Water						0.0000	0.0000		0.0000	0.0000	2.5905	33.8765	36.4670	0.2675	6.5700e-003	45.1122
Total	**0.3510**	**4.5285**	**1.9411**	**0.0215**	**0.9052**	**0.0154**	**0.9207**	**0.2460**	**0.0149**	**0.2608**	**11.4775**	**2,236.5994**	**2,248.0769**	**0.8972**	**8.8100e-003**	**2,273.1323**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/3/2022	1/28/2022	5	20	
2	Site Preparation	Site Preparation	1/29/2022	2/11/2022	5	10	
3	Grading	Grading	2/12/2022	3/11/2022	5	20	
4	Building Construction	Building Construction	3/12/2022	1/27/2023	5	230	
5	Paving	Paving	1/28/2023	2/24/2023	5	20	
6	Architectural Coating	Architectural Coating	2/25/2023	3/24/2023	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 7.9

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 52,970; Non-Residential Outdoor: 17,657; Striped Parking Area: 20,649 (Architectural Coating – sqft)

OffRoad Equipment

OD Freight Fontana - San Bernardino-South Coast County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Excavators	3	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	1	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
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
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	3	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
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
Demolition	6	15.00	0.00	18.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	159.00	62.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	32.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.9700e-003	0.0000	1.9700e-003	3.0000e-004	0.0000	3.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0264	0.2572	0.2059	3.9000e-004		0.0124	0.0124		0.0116	0.0116	0.0000	33.9902	33.9902	9.5500e-003	0.0000	34.2289
Total	**0.0264**	**0.2572**	**0.2059**	**3.9000e-004**	**1.9700e-003**	**0.0124**	**0.0144**	**3.0000e-004**	**0.0116**	**0.0119**	**0.0000**	**33.9902**	**33.9902**	**9.5500e-003**	**0.0000**	**34.2289**

3.2 Demolition - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.0000e-005	1.9200e-003	3.3000e-004	1.0000e-005	1.5000e-004	0.0000	1.6000e-004	4.0000e-005	0.0000	5.0000e-005	0.0000	0.6588	0.6588	4.0000e-005	0.0000	0.6598
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	6.5000e-004	4.7000e-004	4.9000e-003	1.0000e-005	1.6400e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3157	1.3157	3.0000e-005	0.0000	1.3165
Total	**7.0000e-004**	**2.3900e-003**	**5.2300e-003**	**2.0000e-005**	**1.7900e-003**	**1.0000e-005**	**1.8200e-003**	**4.8000e-004**	**1.0000e-005**	**5.0000e-004**	**0.0000**	**1.9745**	**1.9745**	**7.0000e-005**	**0.0000**	**1.9763**

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					8.9000e-004	0.0000	8.9000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0264	0.2572	0.2059	3.9000e-004		0.0124	0.0124		0.0116	0.0116	0.0000	33.9902	33.9902	9.5500e-003	0.0000	34.2289
Total	**0.0264**	**0.2572**	**0.2059**	**3.9000e-004**	**8.9000e-004**	**0.0124**	**0.0133**	**1.3000e-004**	**0.0116**	**0.0117**	**0.0000**	**33.9902**	**33.9902**	**9.5500e-003**	**0.0000**	**34.2289**

3.2 Demolition - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.0000e-005	1.9200e-003	3.3000e-004	1.0000e-005	1.5000e-004	0.0000	1.6000e-004	4.0000e-005	0.0000	5.0000e-005	0.0000	0.6588	0.6588	4.0000e-005	0.0000	0.6598
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	6.5000e-004	4.7000e-004	4.9000e-003	1.0000e-005	1.6400e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3157	1.3157	3.0000e-005	0.0000	1.3165
Total	**7.0000e-004**	**2.3900e-003**	**5.2300e-003**	**2.0000e-005**	**1.7900e-003**	**1.0000e-005**	**1.8200e-003**	**4.8000e-004**	**1.0000e-005**	**5.0000e-004**	**0.0000**	**1.9745**	**1.9745**	**7.0000e-005**	**0.0000**	**1.9763**

3.3 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0159	0.1654	0.0985	1.9000e-004		8.0600e-003	8.0600e-003		7.4200e-003	7.4200e-003	0.0000	16.7197	16.7197	5.4100e-003	0.0000	16.8549
Total	**0.0159**	**0.1654**	**0.0985**	**1.9000e-004**	**0.0903**	**8.0600e-003**	**0.0984**	**0.0497**	**7.4200e-003**	**0.0571**	**0.0000**	**16.7197**	**16.7197**	**5.4100e-003**	**0.0000**	**16.8549**

3.3 Site Preparation - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.9000e-004	2.8000e-004	2.9400e-003	1.0000e-005	9.9000e-004	1.0000e-005	9.9000e-004	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.7894	0.7894	2.0000e-005	0.0000	0.7899
Total	**3.9000e-004**	**2.8000e-004**	**2.9400e-003**	**1.0000e-005**	**9.9000e-004**	**1.0000e-005**	**9.9000e-004**	**2.6000e-004**	**1.0000e-005**	**2.7000e-004**	**0.0000**	**0.7894**	**0.7894**	**2.0000e-005**	**0.0000**	**0.7899**

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					0.0407	0.0000	0.0407	0.0223	0.0000	0.0223	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0159	0.1654	0.0985	1.9000e-004		8.0600e-003	8.0600e-003		7.4200e-003	7.4200e-003	0.0000	16.7197	16.7197	5.4100e-003	0.0000	16.8549
Total	**0.0159**	**0.1654**	**0.0985**	**1.9000e-004**	**0.0407**	**8.0600e-003**	**0.0487**	**0.0223**	**7.4200e-003**	**0.0298**	**0.0000**	**16.7197**	**16.7197**	**5.4100e-003**	**0.0000**	**16.8549**

3.3 Site Preparation - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.9000e-004	2.8000e-004	2.9400e-003	1.0000e-005	9.9000e-004	1.0000e-005	9.9000e-004	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.7894	0.7894	2.0000e-005	0.0000	0.7899
Total	**3.9000e-004**	**2.8000e-004**	**2.9400e-003**	**1.0000e-005**	**9.9000e-004**	**1.0000e-005**	**9.9000e-004**	**2.6000e-004**	**1.0000e-005**	**2.7000e-004**	**0.0000**	**0.7894**	**0.7894**	**2.0000e-005**	**0.0000**	**0.7899**

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0655	0.0000	0.0655	0.0337	0.0000	0.0337	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0195	0.2086	0.1527	3.0000e-004		9.4100e-003	9.4100e-003		8.6600e-003	8.6600e-003	0.0000	26.0548	26.0548	8.4300e-003	0.0000	26.2654
Total	**0.0195**	**0.2086**	**0.1527**	**3.0000e-004**	**0.0655**	**9.4100e-003**	**0.0749**	**0.0337**	**8.6600e-003**	**0.0423**	**0.0000**	**26.0548**	**26.0548**	**8.4300e-003**	**0.0000**	**26.2654**

3.4 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	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	6.5000e-004	4.7000e-004	4.9000e-003	1.0000e-005	1.6400e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3157	1.3157	3.0000e-005	0.0000	1.3165
Total	**6.5000e-004**	**4.7000e-004**	**4.9000e-003**	**1.0000e-005**	**1.6400e-003**	**1.0000e-005**	**1.6600e-003**	**4.4000e-004**	**1.0000e-005**	**4.5000e-004**	**0.0000**	**1.3157**	**1.3157**	**3.0000e-005**	**0.0000**	**1.3165**

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					0.0295	0.0000	0.0295	0.0152	0.0000	0.0152	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0195	0.2086	0.1527	3.0000e-004		9.4100e-003	9.4100e-003		8.6600e-003	8.6600e-003	0.0000	26.0547	26.0547	8.4300e-003	0.0000	26.2654
Total	**0.0195**	**0.2086**	**0.1527**	**3.0000e-004**	**0.0295**	**9.4100e-003**	**0.0389**	**0.0152**	**8.6600e-003**	**0.0238**	**0.0000**	**26.0547**	**26.0547**	**8.4300e-003**	**0.0000**	**26.2654**

3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	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	6.5000e-004	4.7000e-004	4.9000e-003	1.0000e-005	1.6400e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3157	1.3157	3.0000e-005	0.0000	1.3165
Total	**6.5000e-004**	**4.7000e-004**	**4.9000e-003**	**1.0000e-005**	**1.6400e-003**	**1.0000e-005**	**1.6600e-003**	**4.4000e-004**	**1.0000e-005**	**4.5000e-004**	**0.0000**	**1.3157**	**1.3157**	**3.0000e-005**	**0.0000**	**1.3165**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1792	1.6396	1.7182	2.8300e-003		0.0850	0.0850		0.0799	0.0799	0.0000	243.3115	243.3115	0.0583	0.0000	244.7688
Total	**0.1792**	**1.6396**	**1.7182**	**2.8300e-003**		**0.0850**	**0.0850**		**0.0799**	**0.0799**	**0.0000**	**243.3115**	**243.3115**	**0.0583**	**0.0000**	**244.7688**

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0161	0.5998	0.1193	1.7100e-003	0.0410	9.2000e-004	0.0420	0.0119	8.8000e-004	0.0127	0.0000	163.9833	163.9833	0.0108	0.0000	164.2522
Worker	0.0719	0.0522	0.5455	1.6200e-003	0.1831	1.1600e-003	0.1842	0.0486	1.0700e-003	0.0497	0.0000	146.4342	146.4342	3.8100e-003	0.0000	146.5295
Total	**0.0879**	**0.6520**	**0.6648**	**3.3300e-003**	**0.2241**	**2.0800e-003**	**0.2262**	**0.0605**	**1.9500e-003**	**0.0624**	**0.0000**	**310.4175**	**310.4175**	**0.0146**	**0.0000**	**310.7818**

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	0.1792	1.6396	1.7182	2.8300e-003		0.0850	0.0850		0.0799	0.0799	0.0000	243.3112	243.3112	0.0583	0.0000	244.7685
Total	**0.1792**	**1.6396**	**1.7182**	**2.8300e-003**		**0.0850**	**0.0850**		**0.0799**	**0.0799**	**0.0000**	**243.3112**	**243.3112**	**0.0583**	**0.0000**	**244.7685**

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0161	0.5998	0.1193	1.7100e-003	0.0410	9.2000e-004	0.0420	0.0119	8.8000e-004	0.0127	0.0000	163.9833	163.9833	0.0108	0.0000	164.2522
Worker	0.0719	0.0522	0.5455	1.6200e-003	0.1831	1.1600e-003	0.1842	0.0486	1.0700e-003	0.0497	0.0000	146.4342	146.4342	3.8100e-003	0.0000	146.5295
Total	**0.0879**	**0.6520**	**0.6648**	**3.3300e-003**	**0.2241**	**2.0800e-003**	**0.2262**	**0.0605**	**1.9500e-003**	**0.0624**	**0.0000**	**310.4175**	**310.4175**	**0.0146**	**0.0000**	**310.7818**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0157	0.1439	0.1624	2.7000e-004		7.0000e-003	7.0000e-003		6.5800e-003	6.5800e-003	0.0000	23.1805	23.1805	5.5100e-003	0.0000	23.3183
Total	**0.0157**	**0.1439**	**0.1624**	**2.7000e-004**		**7.0000e-003**	**7.0000e-003**		**6.5800e-003**	**6.5800e-003**	**0.0000**	**23.1805**	**23.1805**	**5.5100e-003**	**0.0000**	**23.3183**

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.1600e-003	0.0441	9.8100e-003	1.6000e-004	3.9100e-003	4.0000e-005	3.9500e-003	1.1300e-003	4.0000e-005	1.1700e-003	0.0000	15.1879	15.1879	8.2000e-004	0.0000	15.2085
Worker	6.4100e-003	4.4800e-003	0.0476	1.5000e-004	0.0174	1.1000e-004	0.0175	4.6300e-003	1.0000e-004	4.7300e-003	0.0000	13.4225	13.4225	3.3000e-004	0.0000	13.4306
Total	**7.5700e-003**	**0.0485**	**0.0574**	**3.1000e-004**	**0.0213**	**1.5000e-004**	**0.0215**	**5.7600e-003**	**1.4000e-004**	**5.9000e-003**	**0.0000**	**28.6104**	**28.6104**	**1.1500e-003**	**0.0000**	**28.6391**

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	0.0157	0.1439	0.1624	2.7000e-004		7.0000e-003	7.0000e-003		6.5800e-003	6.5800e-003	0.0000	23.1805	23.1805	5.5100e-003	0.0000	23.3183
Total	**0.0157**	**0.1439**	**0.1624**	**2.7000e-004**		**7.0000e-003**	**7.0000e-003**		**6.5800e-003**	**6.5800e-003**	**0.0000**	**23.1805**	**23.1805**	**5.5100e-003**	**0.0000**	**23.3183**

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.1600e-003	0.0441	9.8100e-003	1.6000e-004	3.9100e-003	4.0000e-005	3.9500e-003	1.1300e-003	4.0000e-005	1.1700e-003	0.0000	15.1879	15.1879	8.2000e-004	0.0000	15.2085
Worker	6.4100e-003	4.4800e-003	0.0476	1.5000e-004	0.0174	1.1000e-004	0.0175	4.6300e-003	1.0000e-004	4.7300e-003	0.0000	13.4225	13.4225	3.3000e-004	0.0000	13.4306
Total	**7.5700e-003**	**0.0485**	**0.0574**	**3.1000e-004**	**0.0213**	**1.5000e-004**	**0.0215**	**5.7600e-003**	**1.4000e-004**	**5.9000e-003**	**0.0000**	**28.6104**	**28.6104**	**1.1500e-003**	**0.0000**	**28.6391**

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0103	0.1019	0.1458	2.3000e-004		5.1000e-003	5.1000e-003		4.6900e-003	4.6900e-003	0.0000	20.0269	20.0269	6.4800e-003	0.0000	20.1888
Paving	7.9300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0183**	**0.1019**	**0.1458**	**2.3000e-004**		**5.1000e-003**	**5.1000e-003**		**4.6900e-003**	**4.6900e-003**	**0.0000**	**20.0269**	**20.0269**	**6.4800e-003**	**0.0000**	**20.1888**

3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-004	4.2000e-004	4.4900e-003	1.0000e-005	1.6400e-003	1.0000e-005	1.6500e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.2663	1.2663	3.0000e-005	0.0000	1.2670
Total	**6.0000e-004**	**4.2000e-004**	**4.4900e-003**	**1.0000e-005**	**1.6400e-003**	**1.0000e-005**	**1.6500e-003**	**4.4000e-004**	**1.0000e-005**	**4.5000e-004**	**0.0000**	**1.2663**	**1.2663**	**3.0000e-005**	**0.0000**	**1.2670**

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	0.0103	0.1019	0.1458	2.3000e-004		5.1000e-003	5.1000e-003		4.6900e-003	4.6900e-003	0.0000	20.0268	20.0268	6.4800e-003	0.0000	20.1888
Paving	7.9300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0183**	**0.1019**	**0.1458**	**2.3000e-004**		**5.1000e-003**	**5.1000e-003**		**4.6900e-003**	**4.6900e-003**	**0.0000**	**20.0268**	**20.0268**	**6.4800e-003**	**0.0000**	**20.1888**

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-004	4.2000e-004	4.4900e-003	1.0000e-005	1.6400e-003	1.0000e-005	1.6500e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.2663	1.2663	3.0000e-005	0.0000	1.2670
Total	**6.0000e-004**	**4.2000e-004**	**4.4900e-003**	**1.0000e-005**	**1.6400e-003**	**1.0000e-005**	**1.6500e-003**	**4.4000e-004**	**1.0000e-005**	**4.5000e-004**	**0.0000**	**1.2663**	**1.2663**	**3.0000e-005**	**0.0000**	**1.2670**

3.7 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2115					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9200e-003	0.0130	0.0181	3.0000e-005		7.1000e-004	7.1000e-004		7.1000e-004	7.1000e-004	0.0000	2.5533	2.5533	1.5000e-004	0.0000	2.5571
Total	**0.2135**	**0.0130**	**0.0181**	**3.0000e-005**		**7.1000e-004**	**7.1000e-004**		**7.1000e-004**	**7.1000e-004**	**0.0000**	**2.5533**	**2.5533**	**1.5000e-004**	**0.0000**	**2.5571**

3.7 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2900e-003	9.0000e-004	9.5800e-003	3.0000e-005	3.5100e-003	2.0000e-005	3.5300e-003	9.3000e-004	2.0000e-005	9.5000e-004	0.0000	2.7014	2.7014	7.0000e-005	0.0000	2.7030
Total	**1.2900e-003**	**9.0000e-004**	**9.5800e-003**	**3.0000e-005**	**3.5100e-003**	**2.0000e-005**	**3.5300e-003**	**9.3000e-004**	**2.0000e-005**	**9.5000e-004**	**0.0000**	**2.7014**	**2.7014**	**7.0000e-005**	**0.0000**	**2.7030**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2115					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9200e-003	0.0130	0.0181	3.0000e-005		7.1000e-004	7.1000e-004		7.1000e-004	7.1000e-004	0.0000	2.5533	2.5533	1.5000e-004	0.0000	2.5571
Total	**0.2135**	**0.0130**	**0.0181**	**3.0000e-005**		**7.1000e-004**	**7.1000e-004**		**7.1000e-004**	**7.1000e-004**	**0.0000**	**2.5533**	**2.5533**	**1.5000e-004**	**0.0000**	**2.5571**

3.7 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2900e-003	9.0000e-004	9.5800e-003	3.0000e-005	3.5100e-003	2.0000e-005	3.5300e-003	9.3000e-004	2.0000e-005	9.5000e-004	0.0000	2.7014	2.7014	7.0000e-005	0.0000	2.7030
Total	**1.2900e-003**	**9.0000e-004**	**9.5800e-003**	**3.0000e-005**	**3.5100e-003**	**2.0000e-005**	**3.5300e-003**	**9.3000e-004**	**2.0000e-005**	**9.5000e-004**	**0.0000**	**2.7014**	**2.7014**	**7.0000e-005**	**0.0000**	**2.7030**

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	0.1733	4.4723	1.8891	0.0211	0.9052	0.0111	0.9164	0.2460	0.0106	0.2565	0.0000	2,011.1304	2,011.1304	0.0980	0.0000	2,013.5798
Unmitigated	0.1733	4.4723	1.8891	0.0211	0.9052	0.0111	0.9164	0.2460	0.0106	0.2565	0.0000	2,011.1304	2,011.1304	0.0980	0.0000	2,013.5798

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	511.69	511.69	511.69	2,265,885	2,265,885
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	511.69	511.69	511.69	2,265,885	2,265,885

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.533000	0.000000	0.000000	0.000000	0.103000	0.000000	0.027000	0.337000	0.000000	0.000000	0.000000	0.000000	0.000000
Other Asphalt Surfaces	0.555935	0.035798	0.180985	0.113549	0.015175	0.004939	0.018497	0.064736	0.001364	0.001528	0.005807	0.000803	0.000884
Other Non-Asphalt Surfaces	0.555935	0.035798	0.180985	0.113549	0.015175	0.004939	0.018497	0.064736	0.001364	0.001528	0.005807	0.000803	0.000884
Parking Lot	0.555935	0.035798	0.180985	0.113549	0.015175	0.004939	0.018497	0.064736	0.001364	0.001528	0.005807	0.000803	0.000884

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	130.3577	130.3577	5.3800e-003	1.1100e-003	130.8241
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	130.3577	130.3577	5.3800e-003	1.1100e-003	130.8241
NaturalGas Mitigated	6.1900e-003	0.0562	0.0472	3.4000e-004		4.2700e-003	4.2700e-003		4.2700e-003	4.2700e-003	0.0000	61.2253	61.2253	1.1700e-003	1.1200e-003	61.5892
NaturalGas Unmitigated	6.1900e-003	0.0562	0.0472	3.4000e-004		4.2700e-003	4.2700e-003		4.2700e-003	4.2700e-003	0.0000	61.2253	61.2253	1.1700e-003	1.1200e-003	61.5892

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	1.14732e+006	6.1900e-003	0.0562	0.0472	3.4000e-004		4.2700e-003	4.2700e-003		4.2700e-003	4.2700e-003	0.0000	61.2253	61.2253	1.1700e-003	1.1200e-003	61.5892
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
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		**6.1900e-003**	**0.0562**	**0.0472**	**3.4000e-004**		**4.2700e-003**	**4.2700e-003**		**4.2700e-003**	**4.2700e-003**	**0.0000**	**61.2253**	**61.2253**	**1.1700e-003**	**1.1200e-003**	**61.5892**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	1.14732e+006	6.1900e-003	0.0562	0.0472	3.4000e-004		4.2700e-003	4.2700e-003		4.2700e-003	4.2700e-003	0.0000	61.2253	61.2253	1.1700e-003	1.1200e-003	61.5892
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
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		**6.1900e-003**	**0.0562**	**0.0472**	**3.4000e-004**		**4.2700e-003**	**4.2700e-003**		**4.2700e-003**	**4.2700e-003**	**0.0000**	**61.2253**	**61.2253**	**1.1700e-003**	**1.1200e-003**	**61.5892**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	358427	114.2025	4.7100e-003	9.8000e-004	114.6111
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	50703.4	16.1552	6.7000e-004	1.4000e-004	16.2130
Total		**130.3577**	**5.3800e-003**	**1.1200e-003**	**130.8241**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	358427	114.2025	4.7100e-003	9.8000e-004	114.6111
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	50703.4	16.1552	6.7000e-004	1.4000e-004	16.2130
Total		**130.3577**	**5.3800e-003**	**1.1200e-003**	**130.8241**

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	0.1715	4.0000e-005	4.8400e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.4200e-003	9.4200e-003	2.0000e-005	0.0000	0.0100
Unmitigated	0.1715	4.0000e-005	4.8400e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.4200e-003	9.4200e-003	2.0000e-005	0.0000	0.0100

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	0.0212					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1499					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.5000e-004	4.0000e-005	4.8400e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.4200e-003	9.4200e-003	2.0000e-005	0.0000	0.0100
Total	**0.1715**	**4.0000e-005**	**4.8400e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**	**0.0000**	**9.4200e-003**	**9.4200e-003**	**2.0000e-005**	**0.0000**	**0.0100**

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	0.0212					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1499					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.5000e-004	4.0000e-005	4.8400e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.4200e-003	9.4200e-003	2.0000e-005	0.0000	0.0100
Total	**0.1715**	**4.0000e-005**	**4.8400e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**	**0.0000**	**9.4200e-003**	**9.4200e-003**	**2.0000e-005**	**0.0000**	**0.0100**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	36.4670	0.2675	6.5700e-003	45.1122
Unmitigated	36.4670	0.2675	6.5700e-003	45.1122

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	8.16544 / 0	36.4670	0.2675	6.5700e-003	45.1122
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**36.4670**	**0.2675**	**6.5700e-003**	**45.1122**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	8.16544 / 0	36.4670	0.2675	6.5700e-003	45.1122
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**36.4670**	**0.2675**	**6.5700e-003**	**45.1122**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	8.8869	0.5252	0.0000	22.0170
Unmitigated	8.8869	0.5252	0.0000	22.0170

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	43.78	8.8869	0.5252	0.0000	22.0170
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**8.8869**	**0.5252**	**0.0000**	**22.0170**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	43.78	8.8869	0.5252	0.0000	22.0170
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**8.8869**	**0.5252**	**0.0000**	**22.0170**

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

OD Freight Fontana

San Bernardino-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	35.31	1000sqft	0.81	35,313.00	0
Parking Lot	144.87	1000sqft	3.33	144,867.00	0
Other Asphalt Surfaces	118.68	1000sqft	2.72	118,683.00	0
Other Non-Asphalt Surfaces	80.61	1000sqft	1.85	80,605.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	32
Climate Zone	10			**Operational Year**	2023
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 -

Demolition -

Fleet Mix - Per TIA

Construction Off-road Equipment Mitigation -

Vehicle Trips - Per TIA

Table Name	Column Name	Default Value	New Value
tblFleetMix	HHD	0.06	0.34
tblFleetMix	LDA	0.56	0.53
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.18	0.00
tblFleetMix	LHD1	0.02	0.10
tblFleetMix	LHD2	4.9390e-003	0.00
tblFleetMix	MCY	5.8070e-003	0.00
tblFleetMix	MDV	0.11	0.00
tblFleetMix	MH	8.8400e-004	0.00
tblFleetMix	MHD	0.02	0.03
tblFleetMix	OBUS	1.3640e-003	0.00
tblFleetMix	SBUS	8.0300e-004	0.00
tblFleetMix	UBUS	1.5280e-003	0.00
tblVehicleTrips	ST_TR	1.32	14.49
tblVehicleTrips	SU_TR	0.68	14.49
tblVehicleTrips	WD_TR	6.97	14.49

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	3.2556	33.1344	23.4505	0.0604	18.2675	1.6138	19.8813	9.9840	1.4847	11.4688	0.0000	5,981.4584	5,981.4584	1.1972	0.0000	6,000.5585
2023	21.4869	19.1800	22.7028	0.0593	2.1743	0.7147	2.8890	0.5857	0.6724	1.2580	0.0000	5,870.6915	5,870.6915	0.7343	0.0000	5,889.0492
Maximum	**21.4869**	**33.1344**	**23.4505**	**0.0604**	**18.2675**	**1.6138**	**19.8813**	**9.9840**	**1.4847**	**11.4688**	**0.0000**	**5,981.4584**	**5,981.4584**	**1.1972**	**0.0000**	**6,000.5585**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	3.2556	33.1344	23.4505	0.0604	8.3310	1.6138	9.9448	4.5222	1.4847	6.0069	0.0000	5,981.4584	5,981.4584	1.1972	0.0000	6,000.5585
2023	21.4869	19.1800	22.7028	0.0593	2.1743	0.7147	2.8890	0.5857	0.6724	1.2580	0.0000	5,870.6915	5,870.6915	0.7343	0.0000	5,889.0491
Maximum	**21.4869**	**33.1344**	**23.4505**	**0.0604**	**8.3310**	**1.6138**	**9.9448**	**4.5222**	**1.4847**	**6.0069**	**0.0000**	**5,981.4584**	**5,981.4584**	**1.1972**	**0.0000**	**6,000.5585**

	ROG	NOx	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**	**48.61**	**0.00**	**43.64**	**51.67**	**0.00**	**42.92**	**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	0.9406	3.5000e-004	0.0387	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		0.0831	0.0831	2.2000e-004		0.0885
Energy	0.0339	0.3082	0.2589	1.8500e-003		0.0234	0.0234		0.0234	0.0234		369.8048	369.8048	7.0900e-003	6.7800e-003	372.0024
Mobile	1.0008	24.2566	10.9141	0.1193	5.0641	0.0609	5.1250	1.3736	0.0578	1.4314		12,510.7562	12,510.7562	0.5761		12,525.1581
Total	**1.9753**	**24.5651**	**11.2117**	**0.1212**	**5.0641**	**0.0845**	**5.1486**	**1.3736**	**0.0814**	**1.4550**		**12,880.6441**	**12,880.6441**	**0.5834**	**6.7800e-003**	**12,897.2489**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.9406	3.5000e-004	0.0387	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		0.0831	0.0831	2.2000e-004		0.0885
Energy	0.0339	0.3082	0.2589	1.8500e-003		0.0234	0.0234		0.0234	0.0234		369.8048	369.8048	7.0900e-003	6.7800e-003	372.0024
Mobile	1.0008	24.2566	10.9141	0.1193	5.0641	0.0609	5.1250	1.3736	0.0578	1.4314		12,510.7562	12,510.7562	0.5761		12,525.1581
Total	**1.9753**	**24.5651**	**11.2117**	**0.1212**	**5.0641**	**0.0845**	**5.1486**	**1.3736**	**0.0814**	**1.4550**		**12,880.6441**	**12,880.6441**	**0.5834**	**6.7800e-003**	**12,897.2489**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/3/2022	1/28/2022	5	20	
2	Site Preparation	Site Preparation	1/29/2022	2/11/2022	5	10	
3	Grading	Grading	2/12/2022	3/11/2022	5	20	
4	Building Construction	Building Construction	3/12/2022	1/27/2023	5	230	
5	Paving	Paving	1/28/2023	2/24/2023	5	20	
6	Architectural Coating	Architectural Coating	2/25/2023	3/24/2023	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 7.9

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 52,970; Non-Residential Outdoor: 17,657; Striped Parking Area: 20,649 (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
Demolition	Excavators	3	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	1	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
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
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	3	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
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
Demolition	6	15.00	0.00	18.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	159.00	62.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	32.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1969	0.0000	0.1969	0.0298	0.0000	0.0298			0.0000			0.0000
Off-Road	2.6392	25.7194	20.5941	0.0388		1.2427	1.2427		1.1553	1.1553		3,746.7812	3,746.7812	1.0524		3,773.0920
Total	**2.6392**	**25.7194**	**20.5941**	**0.0388**	**0.1969**	**1.2427**	**1.4395**	**0.0298**	**1.1553**	**1.1851**		**3,746.7812**	**3,746.7812**	**1.0524**		**3,773.0920**

3.2 Demolition - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	5.0600e-003	0.1883	0.0308	6.9000e-004	0.0158	4.8000e-004	0.0162	4.3200e-003	4.6000e-004	4.7800e-003		73.4419	73.4419	3.8900e-003		73.5391
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	0.0712	0.0424	0.5705	1.5900e-003	0.1677	1.0400e-003	0.1687	0.0445	9.6000e-004	0.0454		158.1904	158.1904	4.1900e-003		158.2951
Total	**0.0762**	**0.2306**	**0.6013**	**2.2800e-003**	**0.1834**	**1.5200e-003**	**0.1849**	**0.0488**	**1.4200e-003**	**0.0502**		**231.6323**	**231.6323**	**8.0800e-003**		**231.8342**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0886	0.0000	0.0886	0.0134	0.0000	0.0134			0.0000			0.0000
Off-Road	2.6392	25.7194	20.5941	0.0388		1.2427	1.2427		1.1553	1.1553	0.0000	3,746.7812	3,746.7812	1.0524		3,773.0920
Total	**2.6392**	**25.7194**	**20.5941**	**0.0388**	**0.0886**	**1.2427**	**1.3312**	**0.0134**	**1.1553**	**1.1687**	**0.0000**	**3,746.7812**	**3,746.7812**	**1.0524**		**3,773.0920**

3.2 Demolition - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	5.0600e-003	0.1883	0.0308	6.9000e-004	0.0158	4.8000e-004	0.0162	4.3200e-003	4.6000e-004	4.7800e-003		73.4419	73.4419	3.8900e-003		73.5391
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	0.0712	0.0424	0.5705	1.5900e-003	0.1677	1.0400e-003	0.1687	0.0445	9.6000e-004	0.0454		158.1904	158.1904	4.1900e-003		158.2951
Total	**0.0762**	**0.2306**	**0.6013**	**2.2800e-003**	**0.1834**	**1.5200e-003**	**0.1849**	**0.0488**	**1.4200e-003**	**0.0502**		**231.6323**	**231.6323**	**8.0800e-003**		**231.8342**

3.3 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836		3,686.0619	3,686.0619	1.1922		3,715.8655
Total	**3.1701**	**33.0835**	**19.6978**	**0.0380**	**18.0663**	**1.6126**	**19.6788**	**9.9307**	**1.4836**	**11.4143**		**3,686.0619**	**3,686.0619**	**1.1922**		**3,715.8655**

3.3 Site Preparation - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0854	0.0508	0.6846	1.9100e-003	0.2012	1.2500e-003	0.2025	0.0534	1.1500e-003	0.0545		189.8284	189.8284	5.0300e-003		189.9541
Total	**0.0854**	**0.0508**	**0.6846**	**1.9100e-003**	**0.2012**	**1.2500e-003**	**0.2025**	**0.0534**	**1.1500e-003**	**0.0545**		**189.8284**	**189.8284**	**5.0300e-003**		**189.9541**

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					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836	0.0000	3,686.0619	3,686.0619	1.1922		3,715.8655
Total	**3.1701**	**33.0835**	**19.6978**	**0.0380**	**8.1298**	**1.6126**	**9.7424**	**4.4688**	**1.4836**	**5.9524**	**0.0000**	**3,686.0619**	**3,686.0619**	**1.1922**		**3,715.8655**

3.3 Site Preparation - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0854	0.0508	0.6846	1.9100e-003	0.2012	1.2500e-003	0.2025	0.0534	1.1500e-003	0.0545		189.8284	189.8284	5.0300e-003		189.9541
Total	**0.0854**	**0.0508**	**0.6846**	**1.9100e-003**	**0.2012**	**1.2500e-003**	**0.2025**	**0.0534**	**1.1500e-003**	**0.0545**		**189.8284**	**189.8284**	**5.0300e-003**		**189.9541**

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.9486	20.8551	15.2727	0.0297		0.9409	0.9409		0.8656	0.8656		2,872.0464	2,872.0464	0.9289		2,895.2684
Total	**1.9486**	**20.8551**	**15.2727**	**0.0297**	**6.5523**	**0.9409**	**7.4932**	**3.3675**	**0.8656**	**4.2331**		**2,872.0464**	**2,872.0464**	**0.9289**		**2,895.2684**

3.4 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0712	0.0424	0.5705	1.5900e-003	0.1677	1.0400e-003	0.1687	0.0445	9.6000e-004	0.0454		158.1904	158.1904	4.1900e-003		158.2951
Total	**0.0712**	**0.0424**	**0.5705**	**1.5900e-003**	**0.1677**	**1.0400e-003**	**0.1687**	**0.0445**	**9.6000e-004**	**0.0454**		**158.1904**	**158.1904**	**4.1900e-003**		**158.2951**

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					2.9486	0.0000	2.9486	1.5154	0.0000	1.5154			0.0000			0.0000
Off-Road	1.9486	20.8551	15.2727	0.0297		0.9409	0.9409		0.8656	0.8656	0.0000	2,872.0464	2,872.0464	0.9289		2,895.2684
Total	**1.9486**	**20.8551**	**15.2727**	**0.0297**	**2.9486**	**0.9409**	**3.8894**	**1.5154**	**0.8656**	**2.3810**	**0.0000**	**2,872.0464**	**2,872.0464**	**0.9289**		**2,895.2684**

3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0712	0.0424	0.5705	1.5900e-003	0.1677	1.0400e-003	0.1687	0.0445	9.6000e-004	0.0454		158.1904	158.1904	4.1900e-003		158.2951
Total	**0.0712**	**0.0424**	**0.5705**	**1.5900e-003**	**0.1677**	**1.0400e-003**	**0.1687**	**0.0445**	**9.6000e-004**	**0.0454**		**158.1904**	**158.1904**	**4.1900e-003**		**158.2951**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.1495	5.6706	1.0402	0.0166	0.3971	8.6100e-003	0.4057	0.1143	8.2300e-003	0.1226		1,750.3070	1,750.3070	0.1077		1,752.9982
Worker	0.7544	0.4490	6.0469	0.0168	1.7773	0.0110	1.7883	0.4713	0.0102	0.4815		1,676.8179	1,676.8179	0.0444		1,677.9281
Total	**0.9039**	**6.1196**	**7.0871**	**0.0334**	**2.1743**	**0.0197**	**2.1940**	**0.5857**	**0.0184**	**0.6041**		**3,427.1249**	**3,427.1249**	**0.1521**		**3,430.9262**

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	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.1495	5.6706	1.0402	0.0166	0.3971	8.6100e-003	0.4057	0.1143	8.2300e-003	0.1226		1,750.3070	1,750.3070	0.1077		1,752.9982
Worker	0.7544	0.4490	6.0469	0.0168	1.7773	0.0110	1.7883	0.4713	0.0102	0.4815		1,676.8179	1,676.8179	0.0444		1,677.9281
Total	**0.9039**	**6.1196**	**7.0871**	**0.0334**	**2.1743**	**0.0197**	**2.1940**	**0.5857**	**0.0184**	**0.6041**		**3,427.1249**	**3,427.1249**	**0.1521**		**3,430.9262**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**		**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.1129	4.3908	0.9065	0.0161	0.3971	4.2400e-003	0.4013	0.1143	4.0500e-003	0.1184		1,701.7108	1,701.7108	0.0867		1,703.8783
Worker	0.7058	0.4043	5.5524	0.0162	1.7773	0.0107	1.7880	0.4713	9.8800e-003	0.4812		1,613.7708	1,613.7708	0.0398		1,614.7648
Total	**0.8187**	**4.7952**	**6.4588**	**0.0323**	**2.1743**	**0.0150**	**2.1893**	**0.5857**	**0.0139**	**0.5996**		**3,315.4816**	**3,315.4816**	**0.1265**		**3,318.6431**

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	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**	**0.0000**	**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.1129	4.3908	0.9065	0.0161	0.3971	4.2400e-003	0.4013	0.1143	4.0500e-003	0.1184		1,701.7108	1,701.7108	0.0867		1,703.8783
Worker	0.7058	0.4043	5.5524	0.0162	1.7773	0.0107	1.7880	0.4713	9.8800e-003	0.4812		1,613.7708	1,613.7708	0.0398		1,614.7648
Total	**0.8187**	**4.7952**	**6.4588**	**0.0323**	**2.1743**	**0.0150**	**2.1893**	**0.5857**	**0.0139**	**0.5996**		**3,315.4816**	**3,315.4816**	**0.1265**		**3,318.6431**

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.7926					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.8253**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**		**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0666	0.0381	0.5238	1.5300e-003	0.1677	1.0100e-003	0.1687	0.0445	9.3000e-004	0.0454		152.2425	152.2425	3.7500e-003		152.3363
Total	**0.0666**	**0.0381**	**0.5238**	**1.5300e-003**	**0.1677**	**1.0100e-003**	**0.1687**	**0.0445**	**9.3000e-004**	**0.0454**		**152.2425**	**152.2425**	**3.7500e-003**		**152.3363**

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	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.7926					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.8253**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**	**0.0000**	**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0666	0.0381	0.5238	1.5300e-003	0.1677	1.0100e-003	0.1687	0.0445	9.3000e-004	0.0454		152.2425	152.2425	3.7500e-003		152.3363
Total	**0.0666**	**0.0381**	**0.5238**	**1.5300e-003**	**0.1677**	**1.0100e-003**	**0.1687**	**0.0445**	**9.3000e-004**	**0.0454**		**152.2425**	**152.2425**	**3.7500e-003**		**152.3363**

3.7 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	21.1532					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	**21.3449**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8690**

3.7 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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	0.1421	0.0814	1.1175	3.2600e-003	0.3577	2.1600e-003	0.3599	0.0949	1.9900e-003	0.0969		324.7841	324.7841	8.0000e-003		324.9841
Total	**0.1421**	**0.0814**	**1.1175**	**3.2600e-003**	**0.3577**	**2.1600e-003**	**0.3599**	**0.0949**	**1.9900e-003**	**0.0969**		**324.7841**	**324.7841**	**8.0000e-003**		**324.9841**

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	21.1532					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	**21.3449**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8690**

3.7 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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	0.1421	0.0814	1.1175	3.2600e-003	0.3577	2.1600e-003	0.3599	0.0949	1.9900e-003	0.0969		324.7841	324.7841	8.0000e-003		324.9841
Total	**0.1421**	**0.0814**	**1.1175**	**3.2600e-003**	**0.3577**	**2.1600e-003**	**0.3599**	**0.0949**	**1.9900e-003**	**0.0969**		**324.7841**	**324.7841**	**8.0000e-003**		**324.9841**

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	1.0008	24.2566	10.9141	0.1193	5.0641	0.0609	5.1250	1.3736	0.0578	1.4314		12,510.7562	12,510.7562	0.5761		12,525.1581
Unmitigated	1.0008	24.2566	10.9141	0.1193	5.0641	0.0609	5.1250	1.3736	0.0578	1.4314		12,510.7562	12,510.7562	0.5761		12,525.1581

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	511.69	511.69	511.69	2,265,885	2,265,885
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	511.69	511.69	511.69	2,265,885	2,265,885

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.533000	0.000000	0.000000	0.000000	0.103000	0.000000	0.027000	0.337000	0.000000	0.000000	0.000000	0.000000	0.000000
Other Asphalt Surfaces	0.555935	0.035798	0.180985	0.113549	0.015175	0.004939	0.018497	0.064736	0.001364	0.001528	0.005807	0.000803	0.000884
Other Non-Asphalt Surfaces	0.555935	0.035798	0.180985	0.113549	0.015175	0.004939	0.018497	0.064736	0.001364	0.001528	0.005807	0.000803	0.000884
Parking Lot	0.555935	0.035798	0.180985	0.113549	0.015175	0.004939	0.018497	0.064736	0.001364	0.001528	0.005807	0.000803	0.000884

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0339	0.3082	0.2589	1.8500e-003		0.0234	0.0234		0.0234	0.0234		369.8048	369.8048	7.0900e-003	6.7800e-003	372.0024
NaturalGas Unmitigated	0.0339	0.3082	0.2589	1.8500e-003		0.0234	0.0234		0.0234	0.0234		369.8048	369.8048	7.0900e-003	6.7800e-003	372.0024

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	3143.34	0.0339	0.3082	0.2589	1.8500e-003		0.0234	0.0234		0.0234	0.0234		369.8048	369.8048	7.0900e-003	6.7800e-003	372.0024
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
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		**0.0339**	**0.3082**	**0.2589**	**1.8500e-003**		**0.0234**	**0.0234**		**0.0234**	**0.0234**		**369.8048**	**369.8048**	**7.0900e-003**	**6.7800e-003**	**372.0024**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	3.14334	0.0339	0.3082	0.2589	1.8500e-003		0.0234	0.0234		0.0234	0.0234		369.8048	369.8048	7.0900e-003	6.7800e-003	372.0024
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
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		**0.0339**	**0.3082**	**0.2589**	**1.8500e-003**		**0.0234**	**0.0234**		**0.0234**	**0.0234**		**369.8048**	**369.8048**	**7.0900e-003**	**6.7800e-003**	**372.0024**

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	0.9406	3.5000e-004	0.0387	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		0.0831	0.0831	2.2000e-004		0.0885
Unmitigated	0.9406	3.5000e-004	0.0387	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		0.0831	0.0831	2.2000e-004		0.0885

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1159					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.8211					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.5900e-003	3.5000e-004	0.0387	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		0.0831	0.0831	2.2000e-004		0.0885
Total	**0.9406**	**3.5000e-004**	**0.0387**	**0.0000**		**1.4000e-004**	**1.4000e-004**		**1.4000e-004**	**1.4000e-004**		**0.0831**	**0.0831**	**2.2000e-004**		**0.0885**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1159					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.8211					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.5900e-003	3.5000e-004	0.0387	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		0.0831	0.0831	2.2000e-004		0.0885
Total	**0.9406**	**3.5000e-004**	**0.0387**	**0.0000**		**1.4000e-004**	**1.4000e-004**		**1.4000e-004**	**1.4000e-004**		**0.0831**	**0.0831**	**2.2000e-004**		**0.0885**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

OD Freight Fontana

San Bernardino-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	35.31	1000sqft	0.81	35,313.00	0
Parking Lot	144.87	1000sqft	3.33	144,867.00	0
Other Asphalt Surfaces	118.68	1000sqft	2.72	118,683.00	0
Other Non-Asphalt Surfaces	80.61	1000sqft	1.85	80,605.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	32
Climate Zone	10			**Operational Year**	2023
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 -

Demolition -

Fleet Mix - Per TIA

Construction Off-road Equipment Mitigation -

Vehicle Trips - Per TIA

Table Name	Column Name	Default Value	New Value
tblFleetMix	HHD	0.06	0.34
tblFleetMix	LDA	0.56	0.53
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.18	0.00
tblFleetMix	LHD1	0.02	0.10
tblFleetMix	LHD2	4.9390e-003	0.00
tblFleetMix	MCY	5.8070e-003	0.00
tblFleetMix	MDV	0.11	0.00
tblFleetMix	MH	8.8400e-004	0.00
tblFleetMix	MHD	0.02	0.03
tblFleetMix	OBUS	1.3640e-003	0.00
tblFleetMix	SBUS	8.0300e-004	0.00
tblFleetMix	UBUS	1.5280e-003	0.00
tblVehicleTrips	ST_TR	1.32	14.49
tblVehicleTrips	SU_TR	0.68	14.49
tblVehicleTrips	WD_TR	6.97	14.49

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	3.2560	33.1370	22.5367	0.0580	18.2675	1.6138	19.8813	9.9840	1.4847	11.4688	0.0000	5,740.4945	5,740.4945	1.1966	0.0000	5,759.7552
2023	21.4880	19.1410	21.8228	0.0570	2.1743	0.7149	2.8892	0.5857	0.6725	1.2582	0.0000	5,639.2868	5,639.2868	0.7385	0.0000	5,657.7501
Maximum	**21.4880**	**33.1370**	**22.5367**	**0.0580**	**18.2675**	**1.6138**	**19.8813**	**9.9840**	**1.4847**	**11.4688**	**0.0000**	**5,740.4945**	**5,740.4945**	**1.1966**	**0.0000**	**5,759.7552**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	3.2560	33.1370	22.5367	0.0580	8.3310	1.6138	9.9448	4.5222	1.4847	6.0069	0.0000	5,740.4945	5,740.4945	1.1966	0.0000	5,759.7552
2023	21.4880	19.1410	21.8228	0.0570	2.1743	0.7149	2.8892	0.5857	0.6725	1.2582	0.0000	5,639.2868	5,639.2868	0.7385	0.0000	5,657.7501
Maximum	**21.4880**	**33.1370**	**22.5367**	**0.0580**	**8.3310**	**1.6138**	**9.9448**	**4.5222**	**1.4847**	**6.0069**	**0.0000**	**5,740.4945**	**5,740.4945**	**1.1966**	**0.0000**	**5,759.7552**

	ROG	NOx	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**	**48.61**	**0.00**	**43.64**	**51.67**	**0.00**	**42.92**	**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	0.9406	3.5000e-004	0.0387	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		0.0831	0.0831	2.2000e-004		0.0885
Energy	0.0339	0.3082	0.2589	1.8500e-003		0.0234	0.0234		0.0234	0.0234		369.8048	369.8048	7.0900e-003	6.7800e-003	372.0024
Mobile	0.9797	24.1235	10.4810	0.1139	5.0641	0.0618	5.1258	1.3736	0.0586	1.4322		11,949.0462	11,949.0462	0.6206		11,964.5611
Total	**1.9542**	**24.4321**	**10.7786**	**0.1157**	**5.0641**	**0.0853**	**5.1494**	**1.3736**	**0.0822**	**1.4558**		**12,318.9341**	**12,318.9341**	**0.6279**	**6.7800e-003**	**12,336.6519**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.9406	3.5000e-004	0.0387	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		0.0831	0.0831	2.2000e-004		0.0885
Energy	0.0339	0.3082	0.2589	1.8500e-003		0.0234	0.0234		0.0234	0.0234		369.8048	369.8048	7.0900e-003	6.7800e-003	372.0024
Mobile	0.9797	24.1235	10.4810	0.1139	5.0641	0.0618	5.1258	1.3736	0.0586	1.4322		11,949.0462	11,949.0462	0.6206		11,964.5611
Total	**1.9542**	**24.4321**	**10.7786**	**0.1157**	**5.0641**	**0.0853**	**5.1494**	**1.3736**	**0.0822**	**1.4558**		**12,318.9341**	**12,318.9341**	**0.6279**	**6.7800e-003**	**12,336.6519**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/3/2022	1/28/2022	5	20	
2	Site Preparation	Site Preparation	1/29/2022	2/11/2022	5	10	
3	Grading	Grading	2/12/2022	3/11/2022	5	20	
4	Building Construction	Building Construction	3/12/2022	1/27/2023	5	230	
5	Paving	Paving	1/28/2023	2/24/2023	5	20	
6	Architectural Coating	Architectural Coating	2/25/2023	3/24/2023	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 7.9

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 52,970; Non-Residential Outdoor: 17,657; Striped Parking Area: 20,649 (Architectural Coating – sqft)

OffRoad Equipment

OD Freight Fontana - San Bernardino-South Coast County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Excavators	3	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	1	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
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
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	3	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
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
Demolition	6	15.00	0.00	18.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	159.00	62.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	32.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1969	0.0000	0.1969	0.0298	0.0000	0.0298			0.0000			0.0000
Off-Road	2.6392	25.7194	20.5941	0.0388		1.2427	1.2427		1.1553	1.1553		3,746.7812	3,746.7812	1.0524		3,773.0920
Total	**2.6392**	**25.7194**	**20.5941**	**0.0388**	**0.1969**	**1.2427**	**1.4395**	**0.0298**	**1.1553**	**1.1851**		**3,746.7812**	**3,746.7812**	**1.0524**		**3,773.0920**

3.2 Demolition - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	5.2900e-003	0.1886	0.0351	6.7000e-004	0.0158	4.9000e-004	0.0162	4.3200e-003	4.7000e-004	4.7900e-003		71.4966	71.4966	4.2200e-003		71.6021
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	0.0715	0.0445	0.4671	1.4200e-003	0.1677	1.0400e-003	0.1687	0.0445	9.6000e-004	0.0454		141.9219	141.9219	3.6800e-003		142.0139
Total	**0.0768**	**0.2331**	**0.5023**	**2.0900e-003**	**0.1834**	**1.5300e-003**	**0.1850**	**0.0488**	**1.4300e-003**	**0.0502**		**213.4185**	**213.4185**	**7.9000e-003**		**213.6160**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0886	0.0000	0.0886	0.0134	0.0000	0.0134			0.0000			0.0000
Off-Road	2.6392	25.7194	20.5941	0.0388		1.2427	1.2427		1.1553	1.1553	0.0000	3,746.7812	3,746.7812	1.0524		3,773.0920
Total	**2.6392**	**25.7194**	**20.5941**	**0.0388**	**0.0886**	**1.2427**	**1.3312**	**0.0134**	**1.1553**	**1.1687**	**0.0000**	**3,746.7812**	**3,746.7812**	**1.0524**		**3,773.0920**

3.2 Demolition - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	5.2900e-003	0.1886	0.0351	6.7000e-004	0.0158	4.9000e-004	0.0162	4.3200e-003	4.7000e-004	4.7900e-003		71.4966	71.4966	4.2200e-003		71.6021
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	0.0715	0.0445	0.4671	1.4200e-003	0.1677	1.0400e-003	0.1687	0.0445	9.6000e-004	0.0454		141.9219	141.9219	3.6800e-003		142.0139
Total	**0.0768**	**0.2331**	**0.5023**	**2.0900e-003**	**0.1834**	**1.5300e-003**	**0.1850**	**0.0488**	**1.4300e-003**	**0.0502**		**213.4185**	**213.4185**	**7.9000e-003**		**213.6160**

3.3 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836		3,686.0619	3,686.0619	1.1922		3,715.8655
Total	**3.1701**	**33.0835**	**19.6978**	**0.0380**	**18.0663**	**1.6126**	**19.6788**	**9.9307**	**1.4836**	**11.4143**		**3,686.0619**	**3,686.0619**	**1.1922**		**3,715.8655**

3.3 Site Preparation - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0858	0.0534	0.5606	1.7100e-003	0.2012	1.2500e-003	0.2025	0.0534	1.1500e-003	0.0545		170.3063	170.3063	4.4100e-003		170.4166
Total	**0.0858**	**0.0534**	**0.5606**	**1.7100e-003**	**0.2012**	**1.2500e-003**	**0.2025**	**0.0534**	**1.1500e-003**	**0.0545**		**170.3063**	**170.3063**	**4.4100e-003**		**170.4166**

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					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836	0.0000	3,686.0619	3,686.0619	1.1922		3,715.8655
Total	**3.1701**	**33.0835**	**19.6978**	**0.0380**	**8.1298**	**1.6126**	**9.7424**	**4.4688**	**1.4836**	**5.9524**	**0.0000**	**3,686.0619**	**3,686.0619**	**1.1922**		**3,715.8655**

3.3 Site Preparation - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0858	0.0534	0.5606	1.7100e-003	0.2012	1.2500e-003	0.2025	0.0534	1.1500e-003	0.0545		170.3063	170.3063	4.4100e-003		170.4166
Total	**0.0858**	**0.0534**	**0.5606**	**1.7100e-003**	**0.2012**	**1.2500e-003**	**0.2025**	**0.0534**	**1.1500e-003**	**0.0545**		**170.3063**	**170.3063**	**4.4100e-003**		**170.4166**

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.9486	20.8551	15.2727	0.0297		0.9409	0.9409		0.8656	0.8656		2,872.0464	2,872.0464	0.9289		2,895.2684
Total	**1.9486**	**20.8551**	**15.2727**	**0.0297**	**6.5523**	**0.9409**	**7.4932**	**3.3675**	**0.8656**	**4.2331**		**2,872.0464**	**2,872.0464**	**0.9289**		**2,895.2684**

3.4 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0715	0.0445	0.4671	1.4200e-003	0.1677	1.0400e-003	0.1687	0.0445	9.6000e-004	0.0454		141.9219	141.9219	3.6800e-003		142.0139
Total	**0.0715**	**0.0445**	**0.4671**	**1.4200e-003**	**0.1677**	**1.0400e-003**	**0.1687**	**0.0445**	**9.6000e-004**	**0.0454**		**141.9219**	**141.9219**	**3.6800e-003**		**142.0139**

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					2.9486	0.0000	2.9486	1.5154	0.0000	1.5154			0.0000			0.0000
Off-Road	1.9486	20.8551	15.2727	0.0297		0.9409	0.9409		0.8656	0.8656	0.0000	2,872.0464	2,872.0464	0.9289		2,895.2684
Total	**1.9486**	**20.8551**	**15.2727**	**0.0297**	**2.9486**	**0.9409**	**3.8894**	**1.5154**	**0.8656**	**2.3810**	**0.0000**	**2,872.0464**	**2,872.0464**	**0.9289**		**2,895.2684**

3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0715	0.0445	0.4671	1.4200e-003	0.1677	1.0400e-003	0.1687	0.0445	9.6000e-004	0.0454		141.9219	141.9219	3.6800e-003		142.0139
Total	**0.0715**	**0.0445**	**0.4671**	**1.4200e-003**	**0.1677**	**1.0400e-003**	**0.1687**	**0.0445**	**9.6000e-004**	**0.0454**		**141.9219**	**141.9219**	**3.6800e-003**		**142.0139**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.1588	5.6040	1.2217	0.0159	0.3971	8.8600e-003	0.4060	0.1143	8.4800e-003	0.1228		1,681.7888	1,681.7888	0.1195		1,684.7762
Worker	0.7580	0.4720	4.9516	0.0151	1.7773	0.0110	1.7883	0.4713	0.0102	0.4815		1,504.3721	1,504.3721	0.0390		1,505.3468
Total	**0.9168**	**6.0760**	**6.1733**	**0.0310**	**2.1743**	**0.0199**	**2.1942**	**0.5857**	**0.0186**	**0.6043**		**3,186.1609**	**3,186.1609**	**0.1585**		**3,190.1230**

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	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.1588	5.6040	1.2217	0.0159	0.3971	8.8600e-003	0.4060	0.1143	8.4800e-003	0.1228		1,681.7888	1,681.7888	0.1195		1,684.7762
Worker	0.7580	0.4720	4.9516	0.0151	1.7773	0.0110	1.7883	0.4713	0.0102	0.4815		1,504.3721	1,504.3721	0.0390		1,505.3468
Total	**0.9168**	**6.0760**	**6.1733**	**0.0310**	**2.1743**	**0.0199**	**2.1942**	**0.5857**	**0.0186**	**0.6043**		**3,186.1609**	**3,186.1609**	**0.1585**		**3,190.1230**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**		**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.1197	4.3312	1.0393	0.0155	0.3971	4.3900e-003	0.4015	0.1143	4.2000e-003	0.1185		1,636.1698	1,636.1698	0.0957		1,638.5634
Worker	0.7113	0.4248	4.5395	0.0145	1.7773	0.0107	1.7880	0.4713	9.8800e-003	0.4812		1,447.9071	1,447.9071	0.0349		1,448.7807
Total	**0.8310**	**4.7561**	**5.5788**	**0.0300**	**2.1743**	**0.0151**	**2.1895**	**0.5857**	**0.0141**	**0.5998**		**3,084.0769**	**3,084.0769**	**0.1307**		**3,087.3441**

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	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**	**0.0000**	**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.1197	4.3312	1.0393	0.0155	0.3971	4.3900e-003	0.4015	0.1143	4.2000e-003	0.1185		1,636.1698	1,636.1698	0.0957		1,638.5634
Worker	0.7113	0.4248	4.5395	0.0145	1.7773	0.0107	1.7880	0.4713	9.8800e-003	0.4812		1,447.9071	1,447.9071	0.0349		1,448.7807
Total	**0.8310**	**4.7561**	**5.5788**	**0.0300**	**2.1743**	**0.0151**	**2.1895**	**0.5857**	**0.0141**	**0.5998**		**3,084.0769**	**3,084.0769**	**0.1307**		**3,087.3441**

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.7926					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.8253**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**		**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0671	0.0401	0.4283	1.3700e-003	0.1677	1.0100e-003	0.1687	0.0445	9.3000e-004	0.0454		136.5950	136.5950	3.3000e-003		136.6774
Total	**0.0671**	**0.0401**	**0.4283**	**1.3700e-003**	**0.1677**	**1.0100e-003**	**0.1687**	**0.0445**	**9.3000e-004**	**0.0454**		**136.5950**	**136.5950**	**3.3000e-003**		**136.6774**

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	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.7926					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.8253**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**	**0.0000**	**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0671	0.0401	0.4283	1.3700e-003	0.1677	1.0100e-003	0.1687	0.0445	9.3000e-004	0.0454		136.5950	136.5950	3.3000e-003		136.6774
Total	**0.0671**	**0.0401**	**0.4283**	**1.3700e-003**	**0.1677**	**1.0100e-003**	**0.1687**	**0.0445**	**9.3000e-004**	**0.0454**		**136.5950**	**136.5950**	**3.3000e-003**		**136.6774**

3.7 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	21.1532					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	**21.3449**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8690**

3.7 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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	0.1432	0.0855	0.9136	2.9200e-003	0.3577	2.1600e-003	0.3599	0.0949	1.9900e-003	0.0969		291.4027	291.4027	7.0300e-003		291.5785
Total	**0.1432**	**0.0855**	**0.9136**	**2.9200e-003**	**0.3577**	**2.1600e-003**	**0.3599**	**0.0949**	**1.9900e-003**	**0.0969**		**291.4027**	**291.4027**	**7.0300e-003**		**291.5785**

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	21.1532					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	**21.3449**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8690**

3.7 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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	0.1432	0.0855	0.9136	2.9200e-003	0.3577	2.1600e-003	0.3599	0.0949	1.9900e-003	0.0969		291.4027	291.4027	7.0300e-003		291.5785
Total	**0.1432**	**0.0855**	**0.9136**	**2.9200e-003**	**0.3577**	**2.1600e-003**	**0.3599**	**0.0949**	**1.9900e-003**	**0.0969**		**291.4027**	**291.4027**	**7.0300e-003**		**291.5785**

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	0.9797	24.1235	10.4810	0.1139	5.0641	0.0618	5.1258	1.3736	0.0586	1.4322		11,949.0462	11,949.0462	0.6206		11,964.5611
Unmitigated	0.9797	24.1235	10.4810	0.1139	5.0641	0.0618	5.1258	1.3736	0.0586	1.4322		11,949.0462	11,949.0462	0.6206		11,964.5611

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	511.69	511.69	511.69	2,265,885	2,265,885
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	511.69	511.69	511.69	2,265,885	2,265,885

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.533000	0.000000	0.000000	0.000000	0.103000	0.000000	0.027000	0.337000	0.000000	0.000000	0.000000	0.000000	0.000000
Other Asphalt Surfaces	0.555935	0.035798	0.180985	0.113549	0.015175	0.004939	0.018497	0.064736	0.001364	0.001528	0.005807	0.000803	0.000884
Other Non-Asphalt Surfaces	0.555935	0.035798	0.180985	0.113549	0.015175	0.004939	0.018497	0.064736	0.001364	0.001528	0.005807	0.000803	0.000884
Parking Lot	0.555935	0.035798	0.180985	0.113549	0.015175	0.004939	0.018497	0.064736	0.001364	0.001528	0.005807	0.000803	0.000884

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0339	0.3082	0.2589	1.8500e-003		0.0234	0.0234		0.0234	0.0234		369.8048	369.8048	7.0900e-003	6.7800e-003	372.0024
NaturalGas Unmitigated	0.0339	0.3082	0.2589	1.8500e-003		0.0234	0.0234		0.0234	0.0234		369.8048	369.8048	7.0900e-003	6.7800e-003	372.0024

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	3143.34	0.0339	0.3082	0.2589	1.8500e-003		0.0234	0.0234		0.0234	0.0234		369.8048	369.8048	7.0900e-003	6.7800e-003	372.0024
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
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		**0.0339**	**0.3082**	**0.2589**	**1.8500e-003**		**0.0234**	**0.0234**		**0.0234**	**0.0234**		**369.8048**	**369.8048**	**7.0900e-003**	**6.7800e-003**	**372.0024**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	3.14334	0.0339	0.3082	0.2589	1.8500e-003		0.0234	0.0234		0.0234	0.0234		369.8048	369.8048	7.0900e-003	6.7800e-003	372.0024
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
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		**0.0339**	**0.3082**	**0.2589**	**1.8500e-003**		**0.0234**	**0.0234**		**0.0234**	**0.0234**		**369.8048**	**369.8048**	**7.0900e-003**	**6.7800e-003**	**372.0024**

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	0.9406	3.5000e-004	0.0387	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		0.0831	0.0831	2.2000e-004		0.0885
Unmitigated	0.9406	3.5000e-004	0.0387	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		0.0831	0.0831	2.2000e-004		0.0885

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1159					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.8211					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.5900e-003	3.5000e-004	0.0387	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		0.0831	0.0831	2.2000e-004		0.0885
Total	**0.9406**	**3.5000e-004**	**0.0387**	**0.0000**		**1.4000e-004**	**1.4000e-004**		**1.4000e-004**	**1.4000e-004**		**0.0831**	**0.0831**	**2.2000e-004**		**0.0885**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1159					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.8211					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.5900e-003	3.5000e-004	0.0387	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		0.0831	0.0831	2.2000e-004		0.0885
Total	**0.9406**	**3.5000e-004**	**0.0387**	**0.0000**		**1.4000e-004**	**1.4000e-004**		**1.4000e-004**	**1.4000e-004**		**0.0831**	**0.0831**	**2.2000e-004**		**0.0885**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation