AIR QUALITY AND GREENHOUSE GAS TECHNICAL STUDY

ORTEGA CONSTRUCTION YARD PROJECT

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GLOSSARY OF TERMS AND ACRONYMS

Acronym	Description
AB 2588	Air Toxics "Hot Spots" Information and Assessment Act
ACC	Advanced Clean Cars
ADT	Average Daily Trips
ALMS	Automatic Load Management System
APCD	Air Pollution Control District
APS	Alternate Planning Strategy
AQIA	Air Quality Impact Analysis
AQMP	Air Quality Management Plan
ARB	California Air Resources Board
BAAQMD	Bay Area Air Quality Management District
BAU	Business as Usual
CAA	Clean Air Act
CAAA	Clean Air Act Amendments
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CAP	Climate Action Plan
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CAT	Climate Action Team
CCAA	California Clean Air Act
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CEUS	California Commercial End Use Survey
CH_4	Methane
CO	Carbon Monoxide
CO_2	Carbon Dioxide
CO_2e	Carbon Dioxide Equivalents
DCFC	Direct Current Fast Charger
DPM	Diesel Particulate Matter
DWR	Department of Water Resources
EO	Executive Order
EPA	Environmental Protection Agency
EPIC	Energy Policy Initiatives Center
EV	Electric Vehicle
EVCS	Electric Vehicle Charging Station
EVSE	Electric Vehicle Supply Equipment
GHG	Greenhouse Gas
HAP	Hazardous Air Pollutants
HFC	Hydrofluorocarbon
HRA	Health Risk Assessment
lb/day	Pounds per Day
lb/yr	Pounds per Year

GLOSSARY OF TERMS AND ACRONYMS

Acronym	Description
LCFS	Low Carbon Fuel Standard
LEV	Low Emission Vehicle
LGOP	Local Government Operations Protocol
LMA	Local Mobility Analysis
LOS	Level of Service
MACT	Maximum Achievable Control Technologies
MMT	Million Metric Tons
MPO	Metropolitan Planning Organizations
MT	Metric Tons
N_2O	Nitrous Oxide
NAAQS	National Ambient Air Quality Standards
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO_2	Nitrogen Dioxide
NO_x	Oxides of Nitrogen
OEHHA	Office of Environmental Health Hazard Assessment
O_3	Ozone
OPR	Office of Planning and Research
Pb	Lead
PFC	Perfluorocarbons
PM	Particulate Matter
PM_{10}	Particulate Matter less than or equivalent to 10 microns in diameter
$PM_{2.5}$	Particulate Matter less than or equivalent to 2.5 microns in diameter
ppm	Parts Per Million
RAQS	Regional Air Quality Strategy
RASS	Residential Appliance Saturation Survey
RPS	Renewable Portfolio Standards
RTP	Regional Transportation Plan
SANDAG	San Diego Association of Governments
SCAQMD	South Coast Air Quality Management District
SCS	Sustainable Communities Strategy
SDAB	San Diego Air Basin
SDAPCD	San Diego Air Pollution Control District
SDAB	San Diego Air Basin
SDAPCD	San Diego County Air Pollution Control District
SDG&E	San Diego Gas and Electric
SF	Square Feet
SF_6	Sulfur Hexafluoride
SIP	State Implementation Plan
SLT	Screening Level Thresholds

GLOSSARY OF TERMS AND ACRONYMS

Acronym	Description
SO_2	Sulfur Dioxide
SO_x	Oxides of Sulfur
SP	Service Population
TACs	Toxic Air Contaminants
TPY	Tons Per Year
TSG	Transportation Study Guideline
US	United States
USEPA	United States Environmental Protection Agency
VMT	Vehicle Miles Traveled
VOC	Volatile Organic Compounds
yr	Year
ZEV	Zero Emission Vehicle

1.0 AIR QUALITY STUDY

This report provides an analysis of the potential air quality impacts associated with the proposed Ortega Construction Yard Project (Project), in the City of El Cajon. This report has been prepared by BlueScape Environmental, to support preparation of the environmental documentation pursuant to the California Environmental Quality Act (CEQA). This study analyzes the potential for permanent impacts associated with operation of the proposed Project and temporary impacts associated with construction activities in close proximity to the site.

1.1 Project Description

The Project parcels encompass approximately 5.49 acres, located at 15247 and 15229 Olde Highway 80, in the City of El Cajon within San Diego County. The Project site is currently vacant land, with a house previously removed under PDS2016-RESALT-006162.

The General Plan Land Use Designations are Medium and Limited Impact Industrial. The Zoning on both parcels is Industrial. The Site Plan reflects an earlier project for the eastern parcel, so this will be considered a Site Plan Modification, to include the westerly parcel. The easterly parcel will remain mostly undisturbed.

Site grading plans indicate approximately 10,000 cubic yards of fill material will be necessary along the western property line and will be imported to the site. On the westerly property, a 25,000 square feet (SF) building is proposed containing a 20,000 SF warehouse with 5,000 SF of office space, within the shell of a 25,000 SF footprint. Parking would be provided as 60 parking spaces for the warehouse and an additional 18 parking spaces for the office. The Site Plan Modification diagram, for Ortega Construction Yard, is provided in Appendix A.

2.0 AIR QUALITY REGULATORY SETTING

Air pollutants are regulated at the national, state, and air basin level; each agency has a different degree of control. The United States Environmental Protection Agency (USEPA) regulates at the national level; the California Air Resources Control Board (CARB) regulates at the state level; and the San Diego County Air Pollution Control District (SDAPCD) regulates air quality in San Diego County.

CARB establishes statewide air quality standards and is responsible for the control of mobile emission sources, while the local APCDs are responsible for enforcing standards and regulating stationary sources. CARB has established 15 air basins statewide. The County of San Diego is located in the San Diego Air Basin (SDAB), which is under the jurisdiction of the SDAPCD.

2.1 Federal

The federal and state governments have been empowered by respective federal and state Clean Air Acts to regulate the emission of airborne pollutants and have established ambient air quality standards for the protection of public health. The USEPA is the federal agency designated to administer national air quality regulations, while CARB is the state equivalent in the California Environmental Protection Agency (CalEPA). Local control over air quality management is provided by CARB through multi-county and county-level Air Pollution Control Districts (APCDs) (also referred to as Air Quality Management Districts). The federal and state standards are summarized in Table 1 (provided after Section 2.3). The federal "primary" standards have been established to protect the public health. The federal "secondary" standards are intended to protect the nation's welfare and account for air pollutant effects on soil, water, visibility, materials, vegetation, and other aspects of the general welfare.

2.2 State

CARB, which became part of the CalEPA in 1991, is responsible for ensuring implementation of the California Clean Air Act (CCAA), meeting state requirements of the federal Clean Air Act and establishing the California Ambient Air Quality Standards (CAAQS). It is also responsible for setting emission standards for vehicles sold in California and for other emission sources such as consumer products and certain off-road equipment. CARB also established passenger vehicle fuel specifications and oversees the functions of local air pollution control districts and air quality management districts, which in turn administer air quality activities at the regional and county level. The CCAA is administered by CARB at the state level and by the Air Quality Management Districts at the regional level.

2.3 Local

The SDAPCD was created to protect the public from the harmful effects of air pollution, achieve and maintain air quality standards, foster community involvement and develop and implement cost-effective programs that meet state and federal mandates while considering environmental and economic impacts. Specifically, the SDAPCD is responsible for monitoring air quality and planning, implementing, and enforcing programs designed to attain and maintain state and federal ambient air quality standards in the district. Programs developed include air quality rules and regulations that regulate stationary source emissions, including area sources, point sources, and certain mobile source emissions. The SDAPCD is also responsible for establishing permitting requirements for stationary sources and ensuring that new, modified or relocated stationary sources do not create net emissions increases; and thus, are consistent with the region's air quality goals. The SDAPCD provides significance thresholds in Regulation II, Rule 20.2, Table 20-2-1. "AQIA Trigger Levels." These trigger levels were established for stationary sources of air pollution and are commonly used for environmental evaluations. The SDAPCD enforces air quality rules and regulations through a variety of means, including inspections, educational or training programs, or fines, when necessary.

TABLE 1
NATIONAL AND STATE AMBIENT AIR QUALITY STANDARDS

Pollutant	Averaging Time	California Standards [1]		National 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	0.070 ppm (137 µg/m^3)		0.070 ppm (137 µg/m^3)		
Respirable Particulate Matter (PM10)[9]	24 Hour	50 µg/m^3	Gravimetric or Beta Attenuation	150 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m^3		—		
Fine Particulate Matter (PM2.5)[9]	24 Hour	—	—	35 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m^3	Gravimetric or Beta Attenuation	12.0 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 ppm (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 ppb (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)[11]	—	
	Annual Arithmetic Mean	—		0.030 ppm (for certain areas)[11]	—	
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 National 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			

See footnotes on next page …

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 $\mu g/m^3$ 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 $\mu g/m^3$ to 12.0 $\mu g/m^3$. The existing national 24-hour PM2.5 standards (primary and secondary) were retained at 35 $\mu g/m^3$, as was the annual secondary standard of 15 $\mu g/m^3$. The existing 24-hour PM10 standards (primary and secondary) of 150 $\mu g/m^3$ 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 SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 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 $\mu g/m^3$ 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.

2.4 State Implementation Plan / Regional Air Quality Strategy

The federal Clean Air Act Amendments (CAAA) mandate that states submit and implement a State Implementation Plan (SIP) for areas not meeting air quality standards. SIPs are comprehensive plans that describe how an area will attain national and state ambient air quality standards. SIPs are a compilation of new and previously submitted plans, programs (i.e., monitoring, modeling and permitting programs), district rules, state regulations and federal controls and include pollution control measures that demonstrate how the standards will be met through those measures.

State law makes CARB the lead agency for all purposes related to the SIP. Local air districts and other agencies prepare SIP elements and submit them to CARB for review and approval. CARB forwards SIP revisions to the USEPA for approval and publication in the Federal Register. The most recent SIP element for San Diego County was submitted in October 2020 (SDAPCD, 2020). The document defines the plan for attaining the NAAQS for ozone in San Diego County.

Thus, the Regional Air Quality Strategy (RAQS) and Air Quality Management Plan (AQMP) prepared by SDAPCD and referenced herein become part of the SIP as the material relates to efforts ongoing in San Diego to achieve the national and state ambient air quality standards. The San Diego RAQS was developed pursuant to California Clean Air Act (CCAA) requirements. The RAQS was initially adopted in 1991 and was updated in 1995, 1998, 2001, 2004, 2009 and 2016. The RAQS can be found at the following location:
www.sdapcd.org/content/dam/sdc/apcd/PDF/Air%20Quality%20Planning/2016%20RAQS.pdf

The RAQS identifies feasible emission control measures aimed at San Diego County's future attainment of the state ozone standard. The pollutants addressed in the RAQS are volatile organic compounds (VOC) and oxides of nitrogen (NO_x), precursors to the photochemical formation of ozone (the primary component of smog). The RAQS was initially adopted by the SDAPCD Board on June 30, 1992, and amended on March 2, 1993, in response to ARB comments. At present, no attainment plan for particulate matter less than 10 microns in diameter (PM_{10}) or particulate matter less than 2.5 microns in diameter ($PM_{2.5}$) is required by the state regulations; however, SDAPCD has adopted measures to reduce particulate matter in San Diego County. These measures range from regulation against open burning to incentive programs that introduce cleaner technology. These measures can be found in a report titled "*Measures to Reduce Particulate Matter in San Diego County"* December 2005 and can be found at:
www.sdapcd.org/content/dam/sdc/apcd/PDF/Air%20Quality%20Planning/PM-Measures.pdf.

The RAQS relies on information from CARB and San Diego Association of Governments (SANDAG), including mobile and area source emissions, as well as information regarding projected growth in the county, to estimate future emissions and then determine strategies necessary for the reduction of emissions through

regulatory controls. CARB mobile source emission projections and SANDAG growth projections are based on population and vehicle trends as well as land use plans developed by the cities and the county as part of the development of the individual General Plans. As such, projects that propose development consistent with the growth anticipated by the general plans would be consistent with the RAQS. If a project proposes development which is less dense than anticipated within the General Plan, the project would likewise be consistent with the RAQS. If a project proposes development that is greater than that anticipated in the General Plan and SANDAG's growth projections, the project might conflict with the RAQS and SIP; and thus, have a potentially significant impact on air quality.

Under state law, the SDAPCD is required to prepare an Air Quality Management Plan (AQMP) for pollutants for which the SDAB is designated non-attainment. Each iteration of the SDAPCD's AQMP is an update of the previous plan and has a 20-year horizon. The District prepared its *2020 PLAN FOR ATTAINING THE NATIONAL AMBIENT AIR QUALITY STANDARDS FOR OZONE IN SAN DIEGO COUNTY* (Attainment Plan), demonstrating how the region will further reduce air pollutant emissions in order to attain the current National Ambient Air Quality Standards for ozone in the future. Approved by the District Board on October 14, 2020, this Attainment Plan was submitted to the California Air Resources Board for approval. The plan was approved by CARB on November 19, 2020 and thereby would be incorporated in the SIP. The ozone plan was submitted to the USEPA for review prior to the close of calendar year 2020. Comments from the USEPA are pending. These plans are available for download on the ARB website located at the following URL: www.arb.ca.gov/planning/sip/planarea/sansip.htm.

2.4.1 Air Pollutants of Concern

2.4.1.1 Criteria Air Pollutants

The seven criteria air pollutants regulated under the National Ambient Air Quality Standards (NAAQS) are as follows: ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), respirable particulate matter (or particulate matter with an aerodynamic diameter of 10 microns or less, PM_{10}), fine particulate matter (or particulate matter with an aerodynamic diameter of 2.5 microns or less, $PM_{2.5}$), sulfur dioxide (SO_2), and lead (Pb). Primary standards are designed to protect human health with an adequate margin of safety. Secondary standards are designed to protect property and the public welfare from air pollutants in the atmosphere. Areas that do not meet the NAAQS for a particular pollutant are considered to be "non-attainment areas" for that pollutant.

CARB is the state regulatory agency with authority to enforce regulations to both achieve and maintain air quality in the state. CARB is responsible for the development, adoption, and enforcement of the state's motor vehicle emissions program, as well as the adoption of the California Ambient Air Quality Standards (CAAQS). The California Clean Air Act of 1988 (CCAA) provides the state with the ability to adopt ambient air quality standards and other regulations provided they are at least as stringent as federal standards, or more stringent.

Through the CAA, CARB has established the CAAQS for six criteria air pollutants also regulated by the NAAQS, and also has established CAAQS for additional pollutants, including sulfates, hydrogen sulfide, vinyl chloride and visibility-reducing particles. The SDAB is currently classified as a non-attainment area under the CAAQS for O_3, PM_{10}, and $PM_{2.5}$. It should be noted that CARB does not differentiate between attainment of the 1-hour and 8-hour CAAQS for O_3; therefore, if an air basin records an exceedance of either standard, the area is considered non-attainment for the CAAQS for O_3. The SDAB has recorded exceedances of both the 1-hour and 8-hour CAAQS for O_3.

The SDAPCD is required to monitor air pollutant levels to ensure that air quality standards are met and, if they are not met, to develop strategies to meet the standards. Depending on whether the standards are met or exceeded, the local air basin is classified as being in "attainment" or "non-attainment." San Diego County is listed as a federal non-attainment area for ozone (8-hour) and a state non-attainment area for ozone (1-hour and 8-hour standards), PM_{10} and $PM_{2.5}$. As shown in Table 2, the SDAB is in attainment for the state and federal standards for nitrogen dioxide, carbon monoxide, sulfur dioxide and lead.

TABLE 2 SUMMARY OF SAN DIEGO AIR BASIN (SDAB) FEDERAL AND STATE ATTAINMENT STATUS		
Criteria Pollutant	**Federal Designation**	**State Designation**
Ozone (8-Hour)	Non-attainment	Non-attainment
Ozone (1-Hour)	Attainment *	Non-attainment
Carbon Monoxide	Attainment	Attainment
PM_{10}	Unclassifiable **	Non-attainment
$PM_{2.5}$	Attainment	Non-attainment
Nitrogen Dioxide	Attainment	Attainment
Sulfur Dioxide	Attainment	Attainment
Lead	Attainment	Attainment
Sulfates	No Federal Standard	Attainment
Hydrogen Sulfide	No Federal Standard	Unclassified
Visibility	No Federal Standard	Unclassified

* The federal 1-hour standard of 12 ppm was in effect from 1979 through June 15, 2005. The revoked standard is referenced here because it was employed for such a long period and because this benchmark is addressed in state Implementation Plans.

** At the time of designation, if the available data does not support a designation of attainment or non-attainment, the area is designated as unclassifiable.

2.4.1.2 Toxic Air Contaminants

Toxic air contaminants (TACs) are controlled under a different regulatory process than criteria pollutants. Because no safe level of emissions can be established for TACs region-wide, the regulation of TACs is based on the levels of cancer risk and other health risks posed to persons who may be exposed.

Under federal law, 188 substances are listed as Hazardous Air Pollutants (HAPs) that are TACs. Major sources of specific HAPs are subject to the requirements of the National Emissions Standards for Hazardous Air Pollutants (NESHAP) program. The USEPA establishes regulatory schemes for specific source categories and requires implementation of Maximum Achievable Control Technologies (MACTs) for major sources of HAPs in each source category.

State law has established the framework for California's TAC identification and control program, which is generally more stringent than the federal program, and is aimed at HAPs that are a concern in California. The state has formally identified more than 200 substances as TACs, and has adopted appropriate control measures for each. Once adopted at the state level, each air district is required to adopt a measure that is equally or more stringent. In addition, the California Air Toxics "Hot Spots"

Information and Assessment Act (AB 2588) enacted in 1987 requires certain applicable facilities in San Diego County to quantify the emissions of TACs, and in some cases, conduct a health risk assessment (HRA), and to notify the public, while developing risk reduction strategies. In San Diego County, SDAPCD Rule 1210 implements the public notification and risk reduction requirements of AB 2588, and requires facilities to reduce risks to acceptable levels within 5 years. In addition, SDAPCD Rule 1200 establishes acceptable risk levels, and emission control requirements for new and modified facilities that may emit TACs.

An example of TAC emissions would be the proposed Project's generation of diesel exhaust emissions from construction-related vehicles and equipment and operational phases. Diesel exhaust is mainly composed of particulate matter and gases, which contain potential cancer-causing substances in addition to some noncancer hazards. On August 27, 1998, CARB and the Office of Environmental Health Hazard Assessment (OEHHA) identified particulate matter in diesel exhaust as a TAC, based on data linking diesel particulate emissions to increased risks of lung cancer and respiratory disease.

2.4.2 Background Air Quality

The SDAPCD monitors air quality conditions at locations throughout the SDAB. The purpose of the monitoring stations is to measure ambient concentrations of pollutants, to determine whether the CAAQS and the NAAQS are met. For this analysis, data from the El Cajon monitoring station, approximately 7 miles southwest of the Project site, were used to characterize existing ozone, PM_{10} and $PM_{2.5}$ conditions in the vicinity of the Project site. This is the closest monitoring location generally southwest of the site with a current and comprehensive data set. A summary of the data recorded at the El Cajon monitoring station for the SDAB non-attainment pollutants from 2017 through 2019 is presented in Table 3.

TABLE 3
AMBIENT AIR BACKGROUND POLLUTANT
CONCENTRATIONS/EXCEEDANCES/STANDARDS

Pollutant	2017	2018	2019
Ozone (O_3)			
State maximum 1-hour concentration (ppm)	**0.096**	**0.087**	0.094
National maximum 8-hour concentration (ppm)	**0.081**	**0.079**	**0.074**
State maximum 8-hour concentration (ppm)	**0.082**	**0.079**	**0.075**
Number of Days Standard Exceeded			
CAAQS 1-hour (>0.09 ppm)	1	0	0
CAAQS 8- hour (>0.070 ppm)/NAAQS 8-hour (>0.070 ppm)	9 / 9	2 / 2	2 / 2
Respirable Particulate Matter (PM_{10})			
National maximum 24-hour concentration (µg/m^3)	50.0	43.0	38.7
State maximum 24-hour concentration (µg/m^3)	49.4	44.7	37.4
State annual average concentration (µg/m^3)	23.0	23.0	-
Annual or Days Standard Exceeded *			
NAAQS 24-hour (>150 µg/m^3)	0	0	0
CAAQS 24-hour (>50 µg/m^3)/Annual (>20 µg/m^3)	0 / 0	0 / 0	0 / -
Fine Particulate Matter ($PM_{2.5}$)			
National Maximum 24-hour concentration (µg/m^3)	31.8	36.2	23.8
State maximum 24-hour concentration (µg/m^3)	35.6	42.0	25.7
Annual average concentration (µg/m^3)	9.5	9.6	8.5
Annual or Days Standard Exceeded *			
NAAQS 24-hour (>35 µg/m^3)/Annual (>12.0 µg/m^3)	0 / No	1 / No	0 / No
CAAQS Annual (>12 µg/m^3)	No	No	No

Notes:
µg/m^3 = micrograms per cubic meter; ppb = parts per billion; ppm = parts per million; N/A = Not available.
CAAQS = California Ambient Air Quality Standard; NAAQS = National Ambient Air Quality Standard.
BOLD value indicates greater than standard.
PM_{10}, O_3, and $PM_{2.5}$ measured at the El Cajon – Lexington Elementary School monitoring station (1155 Redwood Ave, approximately 7 miles southwest of the Project site)
State annual average, 2019 value was not available for PM_{10}.
* In the case of an Annual standard a No or Yes response is provided.
Sources: CARB 2020; https://www.arb.ca.gov/adam/topfour/topfourdisplay.php

3.0 SIGNIFICANCE CRITERIA AND ANALYSIS METHODOLOGY

3.1 Significance Criteria Methodology

Air quality emissions estimates were performed in general accordance with the methodologies outlined in the SDAPCD 2009 RAQS to identify both construction and operational emissions associated with the proposed Project. All emissions were calculated using the California Emissions Estimator Model (CalEEMod) software version 2016.3.2 which incorporates current air emission data, planning methods and protocol approved by CARB.

As referenced, construction activities would include site fill material, grading, construction of the buildings/utilities and related landscape improvements, as well as paving parking areas. Construction activities would require the use of equipment that would generate criteria air pollutant emissions. For calculation purposes, it was assumed that all construction equipment used would be diesel-powered. Construction emissions associated with development of the proposed Project were quantified by estimating the types of equipment, including the number of individual pieces of equipment, that would be used on-site during each of the construction phases as well as soil import haul trips.

Operational emissions include mobile source emissions, energy emissions and area source emissions. Mobile source emissions are generated by motor vehicle trips associated with operation of the Project. Emissions attributable to energy use include both indirect and direct emission sources. Electricity use emissions are considered an indirect source and natural gas consumption for space and water heating are considered a direct source. Area source emissions are generated by landscape maintenance equipment, use of consumer products and painting. To determine whether a regional air quality impact would occur, the increase in emissions would be compared with the SDAPCD-recommended regional thresholds for operational emissions.

3.1.1 Air Quality Thresholds of Significance

The air quality thresholds of significance are based on the checklist presented in Appendix G of the State CEQA Guidelines and regulatory standards of federal, state, and local agencies.

The following describes Project-related impacts from short-term construction activities and long-term operation of the project. The SDAPCD does not provide CEQA significance thresholds for any air pollutant source they do not directly regulate. The SDAPCD regulates emissions from stationary sources and not mobile sources under SDAPCD Regulation II, Rule 20.2, Table 20.2-1, Air Quality Impact Analysis (AQIA) Trigger Levels. Because the SDAPCD does not prescribe emissions thresholds for all air pollutants during construction and operation, air quality impacts of the proposed project were evaluated based on the County of San Diego's Guidelines for Determining Significance, Air Quality (2007), which are based on SDAPCD Regulation

II. For CEQA purposes, these screening level thresholds (SLTs) can be used to determine if a project's total emissions (e.g., stationary and fugitive emissions, as well as emissions from mobile sources) would result in a significant impact to air quality. The daily SLTs are most appropriately used for the standard construction and operational emissions. When project emissions have the potential to approach or exceed the SLTs listed below in Table 3.2-2, additional air quality modeling may need to be prepared to demonstrate that ground level concentrations resulting from project emissions (with background levels) will be below the NAAQS and CAAQS, which represent concentration limits of criteria air pollutants needed to adequately protect human health. The thresholds shown below in Table 4, are used herein to determine whether either construction or operational Project emissions would cause a significant air quality impact.

TABLE 4
SDAPCD AIR QUALITY SCREENING-LEVEL THRESHOLDS

Pollutant	Screening Level Threshold (lb/day)
Respirable Particulate Matter (PM_{10})	100
Fine Particulate Matter ($PM_{2.5}$)	55
Oxides of Nitrogen (NO_x)	250
Oxides of Sulfur (SO_x)	250
Carbon Monoxide (CO)	550
Volatile Organic Compounds (VOC)[a]	75

a. VOC threshold based on SCAQMD levels per South Coast Air Quality Management District, which has similar federal and state attainment status as San Diego.

To determine whether a project would result in a significant impact to air quality, Appendix G of the *CEQA Guidelines (CEQA 2021)* requires consideration of whether a project would:

a) Conflict with or obstruct implementation of the applicable air quality plan;

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard;

c) Expose sensitive receptors to substantial pollutant concentrations;

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

It should be noted that a previous version of the CEQA Guidelines Appendix G is incorporated into the County of San Diego Guidelines for Determining Significance. Therefore, the most recent version was used for this study.

3.2 Consistency with Air Quality Plans

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

The RAQS fulfills the CEQA goal of informing decision makers of the environmental efforts of the project under consideration at a stage early enough to ensure that air quality concerns are fully addressed. It also provides the local agency with ongoing information as to whether they are contributing to clean air goals in the RAQS. Only new or amended general plan elements, specific plans, and major projects need to undergo a consistency review. This is because the RAQS is based on projections from local general plans. Projects that are consistent with the local general plan or do not trigger the San Diego Association of Government's intergovernmental review criteria are considered consistent with the RAQS.

3.2.1 Construction Emissions

Project construction would generate temporary air pollutant emissions. These impacts are associated with fugitive dust (PM_{10} and $PM_{2.5}$) from soil disturbance and exhaust emissions (NO_x and CO) from heavy construction vehicles. For the purpose of estimating emissions, it was assumed that the 5.49-acre site would be disturbed and developed for overall construction. The number of haul trips to provide fill material were estimated based on cubic yards. As noted, construction would generally consist of site preparation, construction of the buildings and related improvements and the application of architectural coating (painting).

Site preparation and grading would involve the greatest concentration of heavy equipment use and the highest potential for fugitive dust emissions. The Project would be required to comply with SDAPCD Rule 55, which identify fugitive dust standards and is required to be implemented at all construction sites located within the SDAB. Therefore, the following conditions, which generally reduce fugitive dust emissions, were included in CalEEMod for site preparation and grading phases of construction.

1. Minimization of Disturbance. Construction contractors should minimize the area disturbed by clearing, grading, earth moving, or excavation operations to prevent excessive amounts of dust.

2. Soil Treatment. Construction contractors should treat all graded and excavated material, exposed soil areas and active portions of the construction site, including unpaved on-site roadways to minimize fugitive dust. Treatment shall include, but not necessarily be limited to, periodic watering, application of environmentally safe soil stabilization materials, and/or roll compaction as appropriate. Watering shall be done as often as necessary, and at least twice daily, preferably in the late morning and after work is done for the day. For modeling purposes, it was assumed that watering would occur twice daily, during the construction of this development.

3. Soil Stabilization. Construction contractors should monitor all graded and/or excavated inactive areas of the construction site at least weekly for dust stabilization. Soil stabilization methods, such as water and roll compaction, and environmentally

safe dust control materials shall be applied to portions of the construction site that are inactive for over four days. If no further grading or excavation operations are planned for the area, the area shall be seeded and watered until landscape growth is evident, or periodically treated with environmentally safe dust suppressants, to prevent excessive fugitive dust.

4. No Grading During High Winds. Construction contractors should stop all clearing, grading, earth moving, and excavation operations during periods of high winds (20 miles per hour or greater, as measured continuously over a one-hour period).

5. Street Sweeping. Construction contractors should sweep all on-site driveways and adjacent streets and roads at least once per day, preferably at the end of the day, if visible soil material is carried over to adjacent streets and roads.

Construction is assumed to begin in mid-2021, with completion by mid-2022. In addition to SDAPCD Rule 55 requirements, emissions modeling also accounts for the use of low-VOC paint (50 g/L for interior coatings and 100 g/L for exterior coatings) as required by SDAPCD Rule 67. Table 5 summarizes the estimated maximum daily emissions of pollutants occurring during the construction period. The CalEEMod emission estimates and assumptions for construction can be viewed in Appendix B. As shown in Table 5, construction of the proposed Project would not exceed the SDAPCD regional construction emission thresholds for daily emissions. As such, ai quality impacts from Project-related construction activities would be **less than significant**.

TABLE 5
ESTIMATED MAXIMUM DAILY CONSTRUCTION EMISSIONS

	Maximum Emissions (lbs/day)					
Construction Phase	**VOC**	**NOx**	**CO**	**SOx**	**PM_{10}**	**$PM_{2.5}$**
2021 Maximum Day	**2.22**	**39.0**	**13.7**	**0.08**	8.10	4.14
2022 Maximum Day	**9.89**	**13.4**	**13.5**	**0.03**	0.84	0.64
Screening Level Thresholds	**75**	**250**	**550**	**250**	*100*	55
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

See *Appendix B for CalEEMod ver. 2016.3.2 computer model output for the construction emission estimates for the proposed development; the higher value of summer or winter, daily mitigated emissions are shown.*

3.2.2 Operational (Regional) Emissions

Operational emissions include emissions from electricity consumption (energy sources), vehicle trips (mobile sources), area sources, landscape equipment and evaporative emissions as the structures are repainted over the life of the Project. The majority of operational emissions are associated with vehicle trips to and from the project site. As shown in Table 6, the associated emissions would not exceed the SDAPCD thresholds for ROG, NO_x, CO, SO_x, PM_{10} or $PM_{2.5}$. Therefore, the Project's regional air quality impacts (including impacts related to criteria pollutants, sensitive

receptors and violations of air quality standards) would be **less than significant**. Table 6 summarizes emissions associated with operation of the proposed Project. The CalEEMod emission estimates and assumptions for operations can be viewed in Appendix B.

TABLE 6
ESTIMATED OPERATIONAL EMISSIONS

	Estimated Emissions (lbs/day)					
	VOC	**NO_x**	**CO**	**SO_x**	**PM_{10}**	**$PM_{2.5}$**
Proposed Project						
Area	0.58	0.0001	0.011	0.0000	0.00004	0.00004
Energy	0.004	0.037	0.031	0.0002	0.003	0.003
Mobile	0.13	0.50	1.53	0.006	0.50	0.14
Daily Total	**0.72**	**0.54**	**1.57**	**0.006**	**0.50**	**0.14**
Screening Level Thresholds	*75*	*250*	*550*	*250*	*100*	55
Exceeds Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

See Appendix B for CalEEMod ver. 2016.3.2 computer model output; the higher value of summer or winter, daily mitigated emissions are shown.

The proposed Project is a warehouse with associated office space and would not conflict with housing, employment, and population projections in the San Diego region, which is the basis of the RAQS projections. Both construction emissions, shown in Table 5, and operational emissions, shown in Table 6, will be less than the significance thresholds. Therefore, the proposed Project would not conflict or obstruct implementation of air quality plans, and impacts are **less-than-significant** in this regard.

3.3 Cumulatively Considerable Net Increase

Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard **(including releasing emissions which exceed quantitative thresholds for O_3 precursors)*?***

The SDAB is designated under the California and National AAQS as non-attainment for O_3 and under the California AAQS as non-attainment for PM_{10} and $PM_{2.5}$ (CARB, 2013; SDAPCD, 2010). Any project that does not exceed or can be mitigated to less than the SDAPCD trigger levels, used as the threshold for determining major projects, does not significantly add to a cumulatively considerable net increase in emissions.

CalEEMod modeling results, shown in Section 3.2, demonstrate that construction of the Project would not result in regional emissions in excess of the threshold values. Operational phase emissions would be nominal due to the small scale and type of the

use proposed and also are below the threshold values. Therefore, the Project does not add significantly to any cumulative impact and would result in a **less than significant** impact.

3.4 Sensitive Receptor Exposure

Expose sensitive receptors to substantial pollutant concentrations?

3.4.1 Toxic Air Contaminants

The proposed Project does not propose specific stationary sources that would generate TACs that are not commonly associated with manufacturing development projects. If stationary sources with the potential to emit TACs were to be included as part of the Project, or at a later date, those sources would be subject to SDAPCD Rule 1200, and would be subject to New Source Review requirements.

The nearest sensitive receptor is a house located approximately 440 feet to the northwest of the Project. Due to the short-term construction duration, the limited construction emissions, and the industrial land use surrounding the project site, there is very low potential for fugitive dust or DPM to impact sensitive receptors during construction. The total Project construction DPM emissions are not of a magnitude and duration that could create significant air toxic risks to the nearest receptors during construction. Compliance with the SDAPCD rules and regulations would reduce the fugitive dust emissions during Project construction and associated impacts to sensitive receptors. The proposed Project's operating emissions would be negligible and would not have the potential to impact sensitive receptors. Therefore, the Project's construction and operation air pollutant emissions would not expose sensitive receptors to substantial pollutant concentrations and would result in a **less than significant** impact.

3.4.2 Local Carbon Monoxide Emissions and CO Hotspots

Carbon monoxide is a colorless and odorless gas that may be found in high concentrations near areas of high traffic volumes. CO emissions are a function of vehicle idling time, meteorological conditions, and traffic flow. The SDAB is in attainment of state and federal CO standards. The El Cajon monitoring site is the closest station to the Project site that provides CO data. The maximum 8-hour CO level recorded in 2019 was 1.0 part per million (ppm). Concentrations are below 9 ppm, the state and federal 8-hour standard. The maximum 1-hour CO level recorded in 2019 was 1.3 ppm. Concentrations are below 20 ppm and 35 ppm, the state and federal 1-hour standards, respectively.

Although CO is not a regional air quality concern in SDAB, elevated CO levels can occur at or near intersections that experience severe traffic congestion. A localized air quality impact is considered significant if the additional CO emissions resulting from the Project create a "hotspot" where the California 1-hour standard of 20.0 ppm or the 8-hour standard of 9 ppm is exceeded. This can occur at severely congested intersections during cold winter temperatures. Screening for elevated CO levels is

recommended for severely congested intersections experiencing levels of service (LOS) E or F with project traffic where a significant project traffic impact may occur. The potential for CO hotspots is based on the University of California Davis CO Protocol defined in the Transportation Project-Level Carbon Monoxide Protocol Revised December 1997 UCD-ITS-RR-97 (UC Davis, 1997). Section 4.7 of the protocol provides specific criteria for performing a screening level CO review for projects within a CO attainment area. Specifically, project-related traffic that would worsen the LOS at intersections operating at LOS E or F, would be subject to a detailed evaluation. If not, no further review is necessary.

Based on the Transportation Memo, prepared by Urban Systems Associates, dated March 31, 2021, nearby intersections would operate at LOS C or better with the addition of Project traffic (Urban 2021). Additionally, the Transportation Memo indicates the Project is screened out of performing additional VMT analysis because the Project falls under the 110 average daily trips threshold and is classified as a small project. So, the Project is anticipated to result in a **less than significant** impact. Receptors would not be exposed to substantial pollutant concentrations related to CO hotspots. No further evaluation with respect to CO hotspots is required.

3.5 Other Emission Sources

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

3.5.1 Other Emissions and Objectionable Odor Discussion

The proposed Project would involve the use of diesel-powered construction equipment. Some objectionable odors may be temporarily created during construction-related activities, such as from diesel exhaust and asphalt paving activities. However, these odors would dissipate quickly, would only occur proximate to the work areas for a short time, and would not affect a substantial number of people in the industrial-zoned project site area. The Project does not include manufacturing or agricultural uses that are typically associated with objectionable odors or other sources of emissions. Therefore, impacts associated with other emission sources adversely affecting a substantial number of people would be **less than significant**.

4.0 GREENHOUSE GAS STUDY

A greenhouse gas (GHG) analysis was performed to evaluate potential environmental impacts associated with the emissions of GHGs and the effects of global climate change with the proposed Project. This study analyzes the potential for climate change impacts associated with construction activity and operation of the proposed Project.

4.1 Greenhouse Gases

Gases that absorb and re-emit infrared radiation in the atmosphere are called greenhouse gases (GHGs). GHGs are present in the atmosphere naturally, are released by natural sources, or are formed from secondary reactions taking place in the atmosphere. The gases that are widely seen as the principal contributors to human-induced climate change include carbon dioxide (CO_2), methane (CH_4), nitrous oxides (N_2O), fluorinated gases such as hydrofluorocarbons (HFCs) and perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). California Health and Safety Code Section 38505(g) defines GHGs to include the following compounds: CO_2, CH_4, N_2O, chlorofluorocarbons (CFCs), HFCs, and SF_6.

Based upon the CARB California Greenhouse Gas Inventory, 2020 edition, (CARB, 2020), California produced 425.3 million metric tons (MMT) CO_2 equivalent (CO_2e) in 2018. The major source of GHGs in California is transportation, contributing 41 percent of the state's total GHG emissions. The industrial sector is the second largest source, contributing 24 percent of the state's GHG emissions (CARB, 2020).

California emissions result, in part, due to the geographic size and large population compared to other states. However, a factor that reduces California's per capita fuel use and GHG emissions, as compared to other states, is its relatively mild climate. CARB has projected statewide unregulated GHG emissions for the year 2020 is projected to be 509 MMT CO_2e (CARB, 2014). These projections are based on Business As Usual (BAU) conditions and represent the emissions that would be expected to occur in the absence of any GHG reduction actions.

4.2 California GHG Regulations

In 2005, former Governor Schwarzenegger issued Executive Order (EO) S-3-05, establishing statewide GHG emissions reduction targets. EO S-3-05 states that by 2020, emissions shall be reduced to 1990 levels; and by 2050, emissions shall be reduced to 80 percent of 1990 levels (CalEPA, 2006). In response to EO S-3-05, CalEPA created the Climate Action Team (CAT), which in March 2006 published the Climate Action Team Report (the "2006 CAT Report") (CalEPA, 2006). The 2006 CAT Report recommended various strategies that the state could pursue to reduce GHG emissions. These strategies could be implemented by various state agencies to ensure that the emission reduction targets in EO S-3-05 are met and can be met with existing authority of the state agencies. The strategies include the reduction of passenger and light duty truck emissions, the reduction of idling times for diesel trucks, an overhaul of shipping technology/infrastructure, increased use of alternative fuels, increased recycling, and landfill methane capture, etc.

California's major initiative for reducing GHG emissions is outlined in Assembly Bill 32 (AB 32), the "California Global Warming Solutions Act of 2006," signed into law in 2006. AB 32 codifies the statewide goal of reducing GHG emissions to 1990 levels by 2020 (essentially a 15% reduction below 2005 emission levels; the same requirement as under S-3-05), and requires CARB to prepare a Scoping Plan that outlines the main state strategies for reducing GHGs to meet the 2020 deadline. In addition, AB

32 requires CARB to adopt regulations to require reporting and verification of statewide GHG emissions. After completing a comprehensive review and update process, CARB approved a 1990 statewide GHG level and 2020 limit of 427 MMT CO_2e. The Scoping Plan was approved by CARB on December 11, 2008, and includes measures to address GHG emission reduction strategies related to energy efficiency, water use, and recycling and solid waste, among other measures. The Scoping Plan includes a range of GHG reduction actions that may include direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, and market-based mechanisms. Executive Order S-01-07 was enacted on January 18, 2007. The order mandates that a Low Carbon Fuel Standard (LCFS) for transportation fuels be established for California to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020.

Senate Bill 97 (SB 97) was adopted August 2007 and acknowledges that climate change is an environmental issue that requires analysis under CEQA. SB 97 directed the Governor's Office of Planning and Research (OPR), which is part of the State Natural Resources Agency, to prepare, develop, and transmit to CARB guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions, as required by CEQA, by July 1, 2009. The Natural Resources Agency was required to certify and adopt those guidelines by January 1, 2010. Pursuant to the requirements of SB 97 as stated above, on December 30, 2009 the Natural Resources Agency adopted amendments to the state CEQA guidelines that address GHG emissions. The CEQA Guidelines Amendments changed sections of the CEQA Guidelines and incorporated GHG language throughout the Guidelines. However, no GHG emissions thresholds of significance were provided and no specific mitigation measures were identified. The GHG emission reduction amendments went into effect on March 18, 2010 and are summarized below:

- Climate action plans and other greenhouse gas reduction plans can be used to determine whether a project has significant impacts, based upon its compliance with the plan.

- Local governments are encouraged to quantify the greenhouse gas emissions of proposed projects, noting that they have the freedom to select the models and methodologies that best meet their needs and circumstances. The section also recommends consideration of several qualitative factors that may be used in the determination of significance, such as the extent to which the given project complies with state, regional, or local GHG reduction plans and policies. OPR does not set or dictate specific thresholds of significance. Consistent with existing CEQA Guidelines, OPR encourages local governments to develop and publish their own thresholds of significance for GHG impacts assessment.

- When creating their own thresholds of significance, local governments may consider the thresholds of significance adopted or recommended by other public agencies, or recommended by experts.

- New amendments include guidelines for determining methods to mitigate the effects of greenhouse gas emissions in *Appendix F: Energy Conservation* of the CEQA Guidelines.

- OPR's emphasizes the advantages of analyzing GHG impacts on an institutional, programmatic level. OPR therefore approves tiering of environmental analyses and highlights some benefits of such an approach.

- Environmental impact reports (EIRs) must specifically consider a project's energy use and energy efficiency potential.

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

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

The Energy Commission adopted 2008 Standards on April 23, 2008 and Building Standards Commission approved them for publication on September 11, 2008. These updates became effective on August 1, 2009. The California Energy Commission updates the Building Energy Efficiency Standards every three years. The 2016 Building Energy Efficiency Standards apply to new construction of, and additions and alterations to, residential and nonresidential buildings and have been incorporated into the most recent CalEEMod model. All buildings for which an application for a building permit is submitted on or after January 1, 2020 must comply with the 2019 standards. The 2019 commercial standards are estimated to be 7 percent more efficient than the 2016 standards and include increased lighting efficiency and ventilation. Energy efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases greenhouse gas emissions.

27 CCR Title 24, Part 11: California Green Building Standards (Title 24) became effective in 2001 in response to continued efforts to reduce GHG emissions associated with energy consumption. CCR Title 24, Part 11 now require that new buildings reduce water consumption, employ building commissioning to increase building system efficiencies, divert construction waste from landfills, and install low pollutant-emitting finish materials. One focus of CCR Title 24, Part 11 is water conservation

measures, which reduce GHG emissions by reducing electrical consumption associated with pumping and treating water. CCR Title 24, Part 11 has approximately 52 nonresidential mandatory measures and an additional 130 provisions for optional use. Some key mandatory measures for commercial occupancies include specified parking for clean air vehicles, a 20 percent reduction of potable water use within buildings, a 50 percent construction waste diversion from landfills, use of building finish materials that emit low levels of volatile organic compounds, and commissioning for new, nonresidential buildings over 10,000 square feet.

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

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

On January 12, 2010, the State Building Standards Commission unanimously adopted updates to the California Green Building Standards Code, which went into effect on January 1, 2011. The Code is a comprehensive and uniform regulatory code for all residential, commercial and school buildings. The California Green Building Standards Code does not prevent a local jurisdiction from adopting a more stringent code as state law provides methods for local enhancements. The Code recognizes that many jurisdictions have developed existing construction and demolition ordinances, and defers to them as the ruling guidance provided, they provide a minimum 50 percent diversion requirement. The code also provides exemptions for areas not served by construction and demolition recycling infrastructure. State building code provides the minimum standard that buildings must meet for occupancy certification. Enforcement is generally through the local building official.

In April 2011, Governor Brown signed SB X1-2, known as the California Renewable Energy Resources Act, into law, which extended California's Renewable Portfolio Standard (RPS) mandate to 33% by 2020. In addition, this new RPS law applied to all electricity retailers (or load serving entities, LSEs) in the state. SB X1-2 directed

the California Energy Commission (CEC) to adopt regulations specifying procedures for enforcement of a RPS for POUs. The CEC adopted its final RPS regulations, which became effective on October 1, 2013 (CEC 2011). San Diego Gas and Electric (SDG&E) will provide electricity for the Project and must comply with SB X1-2, to reduce GHG intensity factors for residential electricity consumers.

The Zero Emission Vehicle (ZEV) and Low Emission Vehicle (LEV) programs of California's Advanced Clean Cars (ACC) regulations, originally enacted in 2012 for model years 2015 to 2025 for light-duty and medium-duty vehicles, have been effective policies for creating and growing the market for electric vehicles and reducing road transport greenhouse gas and criteria pollutant emission. California adopted the new Advanced Clean Cars II regulations (ACC II) in August 2022. The ACC II sets annual ZEV and plug-in hybrid vehicle (PHEV) sales requirements from model years 2026 to 2035 (ZEV program) and increasingly more stringent exhaust and evaporative emission standards (LEV program) to ensure automakers gradually phase out new sales of internal combustion engine vehicles.

Senate Bill 743 (SB 743) was signed into law in 2013, which initiated an update to the CEQA Guidelines to change how lead agencies evaluate transportation impacts under CEQA, with the goal of better measuring the actual transportation-related environmental impacts of any given project.

On April 29, 2015, Governor Brown issued Executive Order B-30-15 to establish a California greenhouse gas reduction target of 40 percent below 1990 levels by 2030 - the most aggressive benchmark enacted by any government in North America to reduce dangerous carbon emissions over the next decade and a half. This executive action set the stage for the important work being done on climate change by the Legislature. The Governor's executive order aligns California's GHG reduction targets with those of leading international governments.

California is on track to meet or exceed the current target of reducing GHG emissions to 1990 levels by 2020, as established in the California Global Warming Solutions Act of 2006 (AB 32). California's new emission reduction target of 40 percent below 1990 levels by 2030 will make it possible to reach the ultimate goal of reducing emissions 80 percent from 1990 levels by 2050.

SB 32 and AB 197 (enacted in 2016) are companion bills that set new statewide GHG reduction targets, make changes to CARB's membership, increase legislative oversight of CARB's climate change–based activities and expand dissemination of GHG and other air quality–related emissions data to enhance transparency and accountability. More specifically, SB 32 codified the 2030 emissions reduction goal of EO B-30-15 by requiring CARB to ensure that statewide GHG emissions are reduced to 40% below 1990 levels by 2030. AB 197 established the Joint Legislative Committee on Climate Change Policies which is comprised of at least three members of the Senate and three members of the Assembly that provide ongoing oversight over implementation of the state's climate policies. AB 197 added two members of the Legislature to CARB as nonvoting members; requires CARB to make available and update (at least annually via its website) emissions data for GHGs, criteria air

pollutants, and toxic air contaminants from reporting facilities; and requires CARB to identify specific information for GHG emissions reduction measures when updating the Scoping Plan.

SB 100, the 100 Percent Clean Energy Act of 2018, was passed in late 2018. SB 100 calls for the 100 percent of total retail sales of electricity in California to originate from eligible renewable energy resources and zero-carbon resources by December 31, 2045. The intention was to extend and expand policies of the California RPS Program (Article 16 (commencing with Section 399.11) of Chapter 2.3 of Part 1 of Division 1 of the Public Utilities Code), and to codify the policies established pursuant to Section 454.53 or the Public Utilities Code, and that both be included in long-term planning. A benefit seen by the legislator of SB100 includes meeting the state's climate change goals by reducing emissions of GHGs associated with electrical generation (CEC 2018).

On September 16, 2022, Governor Newsom approved AB 1279, The California Climate Crisis Act. AB 1279 codified the carbon neutrality target as 85 percent below 1990 levels by 2045. CARB approved the 2022 Final Scoping Plan for achieving carbon neutrality in December 2022. The 2022 Scoping Plan identifies strategies for achieving the states' GHG emission reduction targets and calls for measures such as all new commercial buildings to have all electric appliances by 2029 (CARB 2022).

4.3 Local GHG Regulations and CEQA Requirements

San Diego Association of Governments - San Diego Forward: The Regional Plan

The San Diego Association of Governments (SANDAG) is the Metropolitan Planning Organization (MPO) for the San Diego region. SANDAG completed and adopted its SCS, San Diego Forward, in October 2015. CARB's targets for the SANDAG region call for a 7 percent reduction in GHG emissions per capita from automobiles and light-duty trucks compared to 2005 levels by 2020, and a 13 percent reduction by 2035. The reduction targets are to be updated every eight years, but can be updated every four years if advancements in emissions technologies affect the reduction strategies to achieve the targets. As stated by SANDAG, the strategy set forth in San Diego Forward is to "focus housing and job growth in the urbanized areas where there is existing and planned infrastructure, protect sensitive habitat and open space, invest in a network that gives residents and workers transportation options that reduce GHG emissions, promote equity for all and implement the Plan through incentives and collaboration." In December 2015, CARB, by Executive Order G-15-075, accepted SANDAG's GHG emissions quantification analysis and determination that, if implemented, the SCS would achieve CARB's 2020 and 2035 GHG emission reduction targets for the region.

County General Plan

The San Diego County 2011 General Plan includes a plan to balance population growth and development with infrastructure needs and resource protection. The current General Plan is based on smart growth and land planning principles that will reduce vehicle miles traveled (VMT), and thus result in a reduction of GHGs. This will

be accomplished by locating future development within and near existing infrastructure. The General Plan includes a number of policies in the Conservation Element that encourage the design of new buildings that incorporate principles of sustainability and reduce vehicle and utility usage.

Climate Action Plan

The 2011 County General Plan EIR outlined a specific mitigation measure (Mitigation Measure CC-1.2) that called for the preparation of a Climate Action Plan (CAP). The County developed and adopted the CAP in 2012 to address the issues of climate change as it relates to growth in the County, and to protect the environment for visitors and residents alike (County, 2012). After the CAP was adopted by the county, a lawsuit was filed by the Sierra Club in April 2013, and the San Diego County Superior Court set aside the approval of the CAP. Subsequent to that decision, the County is now revising the CAP for expected adoption by 2023.

Transportation Study Guidelines

In accordance with SB 743, San Diego County adopted a Transportation Study Guideline (TSG) in September 2022 (SD County 2022). SB 743 changed the method of traffic analysis required through CEQA from using LOS to measuring vehicle miles traveled (VMT). The TSG established a VMT threshold using the regional average. Projects located within infill areas would not have to analyze VMT or propose mitigation for VMT but would require environmental review pursuant to CEQA for other topic areas. In addition to VMT analysis in accordance with CEQA, the TSG also provides guidance and identifies methodology to analyze traffic operations and safety, referred to as a Local Mobility Analysis (LMA), as part of the County's discretionary planning process.

Green Building Incentive Program

The county has a Green Building Incentive Program designed to promote the use of resource efficient construction materials, water conservation and energy efficiency in new and remodeled residential and commercial buildings. The program offers incentives of reduced plan check turnaround time and a 7.5-percent reduction in plan check and building permit fees for projects meeting minimum program requirements, which include options for natural resource conservation, water conservation, and energy conservation.

Construction and Demolition Recycling Ordinance

The county has adopted the construction and demolition recycling Ordinance 9840 Sections 68.508-518, that is designed to divert debris from construction and demolition projects away from landfill disposal in the unincorporated County of San Diego. The ordinance requires that 90 percent of inerts and 70 percent of all other materials from a project be recycled. In order to comply with the ordinance, applicants must submit a Construction and Demolition Debris Management Plan and a fully refundable Performance Guarantee prior to building permit issuance.

As referenced, pursuant to the requirements of SB 97, the Resources Agency has adopted amendments to the state CEQA Guidelines for the feasible mitigation of GHG

emissions or the effects of GHG emissions. The adopted CEQA Guidelines provide general regulatory guidance on the analysis and mitigation of GHG emissions in CEQA documents but contain no suggested thresholds of significance for GHG emissions. Instead, lead agencies are given the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHGs and climate change impacts. The general approach to developing a Threshold of Significance for GHG emissions is to identify the emissions level for which a project would not be expected to substantially conflict with existing California legislation adopted to reduce statewide GHG emissions needed to move the state towards climate stabilization. If a project would generate GHG emissions above the threshold level, its contribution to cumulative impacts would be considered significant.

4.4 Project Specific Guidelines and GHG Thresholds of Significance

Pursuant to the requirements of SB 97, the Resources Agency adopted amendments to the state CEQA Guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions in March 2010. Amendments to Appendix G of the CEQA Guidelines were finalized in December 2018. These guidelines are used in evaluating the cumulative significance of GHG emissions from the proposed Project. According to the adopted CEQA Guidelines, impacts related to GHG emissions from the proposed Project would be significant if the Project would:

a. *Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.*

b. *Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.*

For purposes of this analysis, the two Appendix G checklist questions set forth above are utilized as the thresholds of significance when evaluating the environmental effects of the Project's GHG emissions. In applying these thresholds, reference is made to CEQA Guidelines Section 15064.4(b)(1)-(3).

4.4.1 County of San Diego General Plan

A project's adherence to the County's General Plan can be determined through demonstrating consistency with General Plan land use assumption and policies. If a project would generate fewer GHG emissions than the maximum allowable buildout of the site under the General Plan land use designations, the project would be consistent with the estimated GHG emissions for that site. Further consistency with the General Plan can be demonstrated through compliance with applicable General Plan policies.

4.4.2 BAAQMD CEQA Thresholds for Evaluating GHG Impacts

Based on the specific characteristics of this Project, including its low VMT generation, current guidance provided by the Bay Area Air Quality Management District (BAAQMD) was used to evaluate GHG emissions. For land use development projects,

the BAAQMD recommends using the approach endorsed by the California Supreme Court in *Center for Biological Diversity v. Department of Fish & Wildlife* (2015) (62 Cal.4th 204), which evaluates a project based on its effect on California's efforts to meet the state's long-term climate goals. As the Supreme Court held in that case, a project that would be consistent with meeting those goals can be found to have a less than significant impact on climate change under CEQA. If a project would contribute its "fair share" of what would be required to achieve those long-term climate goals, then a reviewing agency can find that the impact would not be significant because the project would help to solve the problem of global climate change (62 Cal.4th 220–223). If a land use project incorporates each of the design elements necessary for it to be carbon neutral by 2045, then it would contribute its portion of what is needed to achieve the state's climate goals and would help to solve the cumulative problem. It can therefore be found to make a less than cumulatively-considerable climate impact. Because this guidance supports how a project would contribute its "fair share" of the statewide long-term GHG reduction goals, it is not specific to the BAAQMD region and can also be applied in the San Diego region. BAAQMD's *Justification Report: CEQA Thresholds for Evaluating the Significance of Climate Impacts from Land Use Projects and Plan* (Justification Report), adopted April 2022, will be utilized (BAAQMD 2022). The information provided in the Justification Report is intended to provide the substantial evidence that lead agencies need to support their determinations about significance using these thresholds.

The Justification Report analyzes what would be required of new land use development projects to achieve California's long-term climate goal of carbon neutrality by 2045. A new land use development project being built today needs to incorporate the following design elements to do its "fair share" of implementing the goal of carbon neutrality by 2045:

A) Projects must include, at a minimum, the following project design elements:

1) Buildings

    a) The project will not include natural gas appliances or natural gas plumbing (in both residential and nonresidential development).

    b) The project will not result in any wasteful, inefficient, or unnecessary energy usage as determined by the analysis required under CEQA Section 21100(b)(3) and Section 15126.2(b) of the State CEQA Guidelines.

2) Transportation

    a) Achieve a reduction in project-generated VMT below the regional average consistent with the current version of the California Climate Change Scoping Plan (currently 15 percent) or meet a locally adopted Senate Bill 743 VMT target, reflecting the recommendations provided in the Governor's Office of

Planning and Research's Technical Advisory on Evaluating Transportation Impacts in CEQA:

(i) Residential projects: 15 percent below the existing VMT per capita

(ii) Office projects: 15 percent below the existing VMT per employee

(iii) Retail projects: no net increase in existing VMT

b) Achieve compliance with off-street electric vehicle requirements in the most recently adopted version of CALGreen Tier 2.

Table A5.106.5.3.2 shall be used to determine the number of EV capable spaces required. Refer to Section 5.106.5.3 for design requirements. When EV capable spaces are provided with Electric Vehicle Supply Equipment (EVSE), to create Electric Vehicle Charging Stations (EVCS) per Table A5.106.5.3.1, refer to Section 5.105.5.3.2 for the allowed use of Level 2 or Direct Current Fast Charger (DCFC) and Section 5.106.5.3.3 for the allowed use of an Automatic Load Management System (ALMS).

TABLE A5.106.5.3.2

TOTAL NUMBER OF ACTUAL PARKING SPACES	TIER 2 NUMBER OF REQUIRED EV CAPABLE SPACES	TIER 2 NUMBER OF EVCS (EV CAPABLE SPACES PROVIDED WITH EVSE)[2]
0—9	3	0
10—25	8	3
26—50	17	6
51—75	28	9
76—100	40	13
101—150	57	19
151—200	79	26
201 and over	45 percent of total parking spaces[1]	33 percent of EV capable spaces[1]

1. Calculation for spaces shall be rounded up to the nearest whole number.

2. The number of required EVCS (EV capable spaces provided with EVSE) in column 3 count toward the total number of required EV capable spaces shown in column 2.

4.4.2.1 Building Energy Use

Energy use emissions are generated by activities within buildings that utilize electricity and natural gas as energy sources. GHGs are emitted during the generation of electricity from fossil fuels off-site in power plants. These emissions are considered indirect but are calculated in association with a building's overall operation. Natural gas usage emits GHGs directly when it is burned for space heating, cooking, hot water heating and similar uses, whereas electricity usage emits GHGs indirectly to the extent that it is generated by burning carbon-based fuels.

The Project would result in GHG emissions from energy used in the office and warehouse building. The facility would be designed to run on all electric energy sources, without the use of natural gas or propane fuels. The 2022 Scoping Plan calls for all new commercial buildings to have all electric appliances by 2029 (CARB 2022). By designing the Project to fully utilize electric energy within the office and warehouse, the Project would not conflict with the ultimate implementation of the Scoping Plan.

Construction and operation of the Project is not expected to result in the wasteful or inefficient use of energy. All new construction would be required to comply with the energy code in effect at the time of construction, which ensures efficient building construction. Additional measures such as efficient water usage, efficient outdoor lighting, carpooling, and recycling, would be employed by the project. GHG emissions associated with electricity use would be eliminated as California decarbonizes the electrical generation infrastructure as committed to by 2045 through SB 100, the 100 percent Clean Energy Act of 2018. Therefore, the Project would contribute its "fair share" of what is required to achieve carbon neutrality of buildings by 2045. As such, the construction and operation of the project is not expected to result in the wasteful or inefficient use of energy, and impacts would be less than significant.

4.4.2.2 Transportation

GHG emissions from vehicles come from the combustion of fossil fuels in vehicle engines. Decarbonization of the transportation infrastructure serving land use development will come from shifting the motor vehicle fleet to EVs, coupled with a shift to carbon-free electricity to power those vehicles. Land use projects cannot directly control whether and how fast these shifts are implemented, but they can, and do, have an important indirect influence on California's transition to a zero-carbon transportation system. The Justification Report states that "Motor vehicle transportation does not need to be eliminated entirely in order for the land use sector to achieve carbon neutrality, as carbon-free vehicle technology can be used (e.g., EVs powered by carbon-free electricity sources). But for that goal to be realistically implemented by 2045, California will need to reduce its per-capita VMT. How land use development is designed and sited can have a significant influence on how much VMT the project would generate." New land use development can influence transportation-related emissions in two areas related to how it is designed and built. First, new land use projects need to provide sufficient electric vehicle EV charging infrastructure to serve the needs of project users who would be driving EVs. Second,

new land use projects can influence transportation-related GHG emissions by reducing the amount of VMT associated with the project.

The 2022 CALGreen goes into effect on January 1, 2023, and the project would be subject to these requirements. The Project would meet the 2022 CALGreen Tier 2 mandatory requirements for EV parking detailed in Table 5.106.5.3.2 of the 2022 California Green Building Standards Code (Title 24, Part 11, CALGreen). Tier 2 also requires 50 percent of the total parking spaces to be designated for any combination of zero-emitting, fuel-efficient and carpool/van pool vehicles. As such, the Project would designate 50 percent of the total parking spaces for any combination of zero-emitting, fuel-efficient and carpool/van pool vehicles and spaces with EV charging would count toward this total. Therefore, the project would meet the 2022 CalGreen Tier 2 mandatory requirement of providing sufficient clean vehicle parking infrastructure.

Based on the Transportation Memo, prepared by Urban Systems Associates, dated March 31, 2021, the Project is expected to generate 80 average daily trips (ADT) (Urban 2021). Additionally, the Transportation Memo indicates that the Project is screened out of performing additional VMT analysis because the Project falls under the 110 ADT threshold and is classified as a small project. The proposed 20,000 square feet warehouse is not considered a trip generating land use. This is due in part to the existing land use acting as a warehouse with the storage of equipment and mobilizing and demobilizing for operations that is already generating traffic. This will remain the same once the new warehouse and offices are constructed. The trip generating will be mainly from the office use at the project site, since the Lakeside employees will be relocated to the Olde Highway 80 project site.

The Office of Planning and Research (OPR) has provided thresholds for evaluating transportation impacts based on VMT in a Technical Advisory (December 2018) for CEQA. The OPR recommend a 15% reduction for VMT. Vehicle miles traveled is a metric that takes the number of vehicle trips generated and the length/distance of those trips. VMT is a function of population or employment and is expressed as VMT per resident or VMT per employee. The Transportation Memo further defines the VMT project screening methodology. The County of San Diego requires that all land developments conduct VMT analysis unless the project meets any of the listed screening criteria provided by the County. Based on the screening criteria, the proposed project would be screened out of performing additional VMT analysis because the project would qualify as a "small employment project." A small employment project generates less than 110 ADT. The Project trip generation was determined to be 80 ADT. Therefore, the Project is screened out of further VMT analysis and is presumed to have less than significant VMT impacts.

The current and existing use on the Project site includes storage of equipment and office use on the east side of the site used by employees of the Ortega Construction company. Employees are currently traveling to the Olde Highway 80 Project site from their Lakeside office to mobilize and demobilize for operations on a daily basis. The existing office on the Project site will remain. The Project proposes to relocate the employees from the Lakeside office into the new proposed offices at Olde Highway

80 project site. The Project does not expect to expand the number of employees once the construction of the warehouse and corporate office are complete, the Project is simply relocating the employees and operations to the Project site. This will reduce the round-trip visits from the Lakeside office to the Olde Highway 80 project site. The Lakeside office is expected to discontinue its use once the new offices and warehouse are complete at the Olde Highway 80 project site.

Based on the stated Project background, it can be assumed that the proposed 20,000 SF warehouse land use is not a trip generating land use due to its existing land use acting as a warehouse with the storage of equipment and mobilizing and demobilizing for operations that is already generating traffic. This will remain the same once the new warehouse and offices are constructed. The trip generating will be mainly from the office use at the Project site since the Lakeside employees will be relocated to the Olde Highway 80 project site.

The Project is screened out of performing additional VMT analysis because the Project falls under the 110 ADT threshold and is classified as a small project. Therefore, no significant VMT impacts would occur and no traffic mitigation will be required. The Project's less than significant impact related to VMT demonstrates that the Project would not make a cumulatively considerable contribution to GHG emissions. Therefore, the Project would not generate GHG emissions, either directly or indirectly, that would have a significant impact on the environment, and impacts would be less than significant.

4.4.3 Project Specific Service Population Analysis

The GHG analysis related to significance for CEQA purposes in the report is through the BAAQMD approach. The efficiency metric analysis is provided for informational purposes only.

The proposed Project's significance determination used the BAAQMD CEQA thresholds for evaluating GHG impacts. However, individual projects may be approved using thresholds developed on a project-by-project basis. While lead agencies can adopt a significance threshold for general use pursuant to CEQA Guidelines§ 15064.7, they can alternately determine a threshold on a project-by project basis, which is specifically allowed pursuant to CEQA Guidelines § 15064.4(a), case law and several other expert sources. Under the CEQA Guidelines, lead agencies have the discretion to determine the appropriate method for evaluating GHG emissions, based to the extent possible on scientific and factual data.

A number of air districts in the State of California have recommended or adopted efficiency metrics or service population (SP) thresholds as a method for analyzing cumulative GHG emissions and significance of impacts under CEQA. For this Project, the Project's SP refers to a Project's employees that would be generated by the proposed Project's development. This efficiency metric is expressed as MT CO_2e per SP per year (MT CO_2e/SP/year).

Efficiency-metrics represent the GHG efficiency needed for development to achieve California's GHG emissions target established under AB 32. The intent of AB 32 is to

accommodate a population and economic growth in California, but in a way that achieves a lower rate of GHG emissions statewide. Typical efficiency metrics are based on the land use sector (residential and commercial uses) and only account for land use-related emissions and residential population and employment.

The efficiency metric analysis is included for informational purposes, since the efficiency metric will provide additional GHG data for this Project. Furthermore, the efficiency metric approach is one of the methods for analyzing GHG emissions discussed in the *Center for Biological Diversity et al. vs. California Department of Fish and Wildlife* 224 Cal.App.4th 1105 (Newhall Ranch case, 2015). Specifically, the Supreme Court noted that numeric approaches may be appropriate for determining significance of GHG emissions, and emphasized the consideration of GHG efficiency (62 Cal.4th at 220, 230). Therefore, the validity of using the efficiency metric approach is supported by the Supreme Court ruling in the Newhall Ranch case. While the Newhall Ranch decision did not specifically recommend the efficiency-based approach, the ruling did note that numerical efficiency metric approaches may be appropriate for determining significance of GHG emissions under particular circumstances.

At this time, the state has codified a target for reducing emissions to 40 percent below 1990 emissions levels by 2030 (SB 32) and has developed a Scoping Plan to demonstrate how the state will achieve the 2030 target and make substantial progress toward the 2050 goal of 80% reduction in 1990 GHG emissions levels set by EO S-3-05. In the recently signed EO B-55-18, which identifies a new goal of carbon neutrality by 2045 and supersedes the goal established by EO S-3-05, CARB has been tasked with including a pathway toward EO B-55-18 goals in the next Scoping Plan update. While state and regional regulatory of energy and transportation systems, along with the state's Cap and Trade Program, are designed to be set at limits to achieve most of the reductions needed to hit the state's long-term targets, local government can do their fair share toward meeting the state's targets by siting and approving projects that accommodate population growth with projects that are GHG-efficient.

In the Scoping Plan Update, CARB suggested substantial progress could be made if a regional or countywide GHG reduction plan targeted reducing emissions to 6 MT CO_2e per capita by 2030 and 2 MT CO_2e per capita by 2050, but do not necessarily need to be project-specific targets. We note that considering the overall statewide emissions in 1990 and 2014 and the projected statewide population in 2030 and 2050, these per-capita goals would be equivalent to reducing 2014 emissions by 40 percent by 2030. The per-capita targets were determined to be applicable to the county because the county seeks to achieve state goals and CARB's per-capita metrics provide the means to accomplish that. Local data should be used to establish an analytical path between the threshold and a project providing its fair share contribution towards meeting state targets using the project population's efficient generation of GHG.

4.4.4 Local Data and Service Population Analysis

Although the BAAQMD CEQA thresholds will be relied upon to demonstrate GHG significance for CEQA purposes, this data is provided as additional support for the Project's compliance with GHG impact metrics. The efficiency metric assesses the GHG efficiency of a project on a "service population (SP)" basis (where the efficiency metric equals project emissions divided by the sum of the number of jobs provided by a project). The metric represents the rate of emissions needed to achieve a fair share of the state's emissions mandate embodied in AB 32. One method for determining a fair share contribution quantitatively is to determine if a project's per service person (i.e., residents and employees of the project) GHG efficiency level is more or less than the GHG efficiency level that would be needed for a jurisdiction to achieve the goals mandated by AB 32 and SB 32.

A GHG inventory, with projections, was incorporated into the 2018 County of San Diego Climate Action Plan (CAP) (County 2018). The GHG inventory for San Diego County in 2014 was shown to be 3,211,505 MT CO_2e/year. A projection to 2020 with legislative reductions was shown to be 3,018,671 MT CO_2e and in 2030 with legislative reductions was shown to be 1,926,903 MT CO_2e. Legislative reductions in 2030 are anticipated to provide a 40% reduction from the 2014 baseline year. By interpolation of the data, the GHG inventory in 2023, the first year of operations for the Project, would be 2,691,141 MT CO_2e. The CAP defines the projected 2020 population as 493,604, with an employment value of 95,671. Similarly, the 2030 projected population is 551,712, with an employment value of 104,157. By interpolation, the 2023 population is projected as 534,280, with an employment value of 101,611. Thus, the 2023 service population would be 635,891. In order to achieve the projected 2023 emission levels, the efficiency target would be approximately **4.23 MT CO_2e/SP/year**.

4.5 Greenhouse Gas Study Methodology

GHG emissions associated with construction and operation of the proposed Project and existing development have been estimated using California Emissions Estimator Model (CalEEMod) version 2016.3.2.

4.5.1 Construction GHG Emissions Calculation Methodology

Construction of the proposed Project would generate temporary GHG emissions primarily associated with the operation of construction equipment and truck trips. Site preparation and grading typically generate the greatest emission quantities because the use of heavy equipment is greatest during this phase of construction. Emissions associated with the construction period were estimated based on the projected maximum amount of equipment that would be used onsite at one time. Air districts have recommended amortizing temporary construction-related emissions over a 30-year period to calculate annual emissions. Complete CalEEMod GHG modeling for construction, results and assumptions can be viewed in Appendix B.

4.5.2 Operational GHG Emissions Calculation Methodology

Default values used in CalEEMod version 2016.3.2 are based on the California Energy Commission (CEC) sponsored California Commercial End Use Survey (CEUS) and Residential Appliance Saturation Survey (RASS) studies. CalEEMod provides operational emissions of CO_2, N_2O and CH_4. This methodology has been subjected to peer review by numerous public and private stakeholders, and in particular by the CEC; and therefore, is considered reasonable and reliable for use in GHG impact analysis pursuant to CEQA.

Emissions associated with area sources (i.e., consumer products, landscape maintenance, and architectural coating) were calculated in CalEEMod based on standard emission rates from CARB, USEPA, and district supplied emission factor values (CalEEMod User Guide, 2017). Emissions from waste generation were also calculated in CalEEMod and are based on the IPCC's methods for quantifying GHG emissions from solid waste using the degradable organic content of waste (CalEEMod User Guide, 2017). Emissions from water and wastewater usage calculated in CalEEMod were based on the default electricity intensity from the CEC's 2006 Refining Estimates of Water-Related Energy Use in California using the average values for Northern and Southern California. Emissions from mobile sources were quantified based on trip generation estimates included in CalEEMod.

4.6 Estimate of GHG Emissions

4.6.1 Construction GHG Emissions

Construction activity is assumed to occur over a period of 11 months beginning in mid-2021 and concluding in mid-2022. Based on CalEEMod results, construction activity for the Project would generate an estimated 291.8 metric tons of CO_2e, as shown in Table 7. Amortized over a 30-year period (the assumed life of the Project), construction of the proposed Project would generate 9.73 metric tons of CO_2e per year.

TABLE 7
CONSTRUCTION GREENHOUSE GAS EMISSIONS

Year	Annual Emissions (metric tons CO_2e)
2021	212.1
2022	79.7
Total	291.8
Amortized over 30 years	**9.73**

See Appendix B for CalEEMod emission results files.

4.6.2 Operational GHG Emissions

Long-term emissions relate to energy use, solid waste, water use, and transportation. Each source is discussed below and includes the emissions associated with existing

development and the anticipated emissions that would result from the proposed Project.

For modeling purposes, it was assumed that 2019 Building Efficiency Standards under Title 24 and California Green Building Standards (CALGreen) would be incorporated to reduce GHG emissions.

Area Emissions

Emissions from landscaping equipment, architectural coatings, and household consumer products are considered area sources. Estimated annual GHG emissions from area sources for the Project would be less than 1 MT CO_2e.

Energy Use

Operation of the onsite development would consume electricity as the source of power, lighting, and building heat. No natural gas or propane will be utilized for the office and warehouse operations. The generation of electricity through combustion of fossil fuels typically yields CO_2, and to a smaller extent, N_2O and CH_4. Natural gas emissions can be calculated using default values from the CEC sponsored CEUS and RASS studies which are built into CalEEMod. CalEEMod default values were used to estimate energy use and emissions, however, emissions are considered conservative because the estimates include natural gas, which will not be utilized for this project. The overall net increase in energy use at the Project site would result in approximately 54.7 metric tons of CO_2e per year (see Appendix B for CalEEMod results).

Water Use Emissions

The CalEEMod results indicate that the Project would use approximately 18.2 million gallons of water per year. Based on the amount of electricity generated to supply and convey this amount of water, the Project would generate approximately 33.5 metric tons of CO_2e per year.

Solid Waste Emissions

For solid waste generated onsite, it was assumed that the Project would not achieve a 75% diversion rate at opening consistent with AB 341 (which amended the California Integrated Waste Management Act of 1989 [AB 939]). The CalEEMod results indicate that the Project would result in approximately 11.9 metric tons of CO_2e per year associated with solid waste disposed within landfills.

Mobile Source Emissions

Mobile source GHG emissions were estimated using the average daily trips calculated by CalEEMod for the proposed Project. Table 8 shows the estimated mitigated mobile emissions of GHGs for the Project based on the Project characteristics. As shown in Table 8, the Project would generate approximately 77.0 metric tons of CO_2e associated with new vehicle trips.

TABLE 8 OPERATIONAL GREENHOUSE GAS EMISSIONS	
Emission Source	**Annual Emissions (metric tons CO_2e/yr)**
Area	0.002
Energy	54.7
Water Use	33.5
Solid Waste	11.9
Mobile Source	77.0
Total Operational	**177.1**

See Appendix B for CalEEMod emission results files.

Total operational GHG emissions associated with the Project are estimated to be 177.1 MT CO_2e on an annual basis.

4.6.3 Combined Construction and Operational Emissions

Table 9 shows the combined net new construction, operational, and mobile GHG emissions associated with the proposed Project. As discussed above, temporary emissions associated with construction activity are amortized over 30 years (the anticipated life of the Project).

TABLE 9 COMBINED ANNUAL GREENHOUSE GAS EMISSIONS	
Year	**Annual Emissions (metric tons CO_2e)**
Construction (amortized)	9.73
Operational	177.1
Total	**186.8**

a. See Appendix B for CalEEMod emission results files.

Based on the potential for 78 total employees, the proposed Project would generate 2.39 MT CO_2e per SP in 2023 (186.8 MT CO_2e ÷ 78 employees). Based on this, the proposed Project would generate fewer emissions than the localized SB 32 efficiency metric of 4.23 MT CO_2e per SP. As the Project calculated 2.39 MT CO_2e SP is below the localized 4.23 MT CO_2e per SP metric, the Project would not impair the State's attainment of its SB 32 reduction target. This is consistent with the stated 2023 efficiency metric, so the Project would result in **less than significant GHG impacts**.

5.0 FINDINGS AND CONCLUSIONS

The Project-specific evaluation presented in the preceding analysis demonstrates that project short-term emissions from construction of the Project are below all applicable

County of San Diego daily thresholds of significance. Therefore, air quality emissions from Project construction, as well as cumulative impacts with Project construction, are considered **less than significant**.

Emissions of all criteria pollutants from Project operation are below all applicable daily thresholds of significance. Thus, the Project would not conflict with the SIP, RAQS or AQMP, violate an air quality standard or contribute to an existing or projected violation, result in a cumulatively considerable increase in ozone or particulate matter emissions or expose receptors to substantial pollutant concentrations. Therefore, air quality emissions from Project operation are considered **less than significant**.

Based on the significance criteria defined within the BAAQMD CEQA thresholds for evaluating GHG impacts, compliance with the building energy standards and transportation criteria will be achieved for the Project. The Project will not include natural gas appliances or natural gas plumbing and will not result in any wasteful, inefficient, or unnecessary energy usage. In addition, the Project will meet the CalGreen Tier 2 requirements by designating the required parking spaces for any combination of zero-emitting, fuel-efficient and carpool/van pool vehicles. Due to the screening definition as a small employment category with low ADT, the Project is screened out of further VMT analysis and is presumed to have less than significant VMT impacts. The Project will comply with the BAAQMD CEQA thresholds and therefore, the Project would result in **less than significant cumulative GHG impacts**.

Additional GHG data is included for information purposes to show that the Project would neither conflict nor interfere with the state's implementation of SB 32's target of reducing statewide GHG emissions to 40 percent below 1990 levels by 2030, or EO S-3-05's target of reducing statewide GHG emission to 80 percent below 1990 levels by 2050. The Project calculated 2.39 MT CO_2e SP is below the localized 4.1 MT CO_2e per SP metric, which is consistent with the stated 2023 efficiency metric.

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APPENDIX A

SITE PLAN MODIFICATION FOR ORTEGA CONSTRUCTION YARD

APPENDIX B

CALEEMOD AIR EMISSION MODEL RESULTS
ANNUAL AND DAILY EMISSIONS FOR CONSTRUCTION AND OPERATION

Ortega Construction Yard

San Diego Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	5.15	1000sqft	0.12	5,152.00	0
Unrefrigerated Warehouse-No Rail	20.16	1000sqft	0.46	20,160.00	0
Parking Lot	78.00	Space	0.70	31,200.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2023
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Default values for construction schedule, with up to 15 days for site prep.

Grading - 10,000 cu yd fill material import

Architectural Coating - 50 g/L interior paint, Exterior is stucco, so no exterior coating, 100 g/L parking lot paint

Area Coating - 50 g/L interior paint, Exterior is stucco, so no coating, 100 g/L parking lot paint

Construction Off-road Equipment Mitigation - Watering twice per day during construction

Energy Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	12,656.00	0.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	100
tblAreaCoating	Area_Nonresidential_Exterior	12656	0
tblConstructionPhase	NumDays	2.00	15.00
tblGrading	AcresOfGrading	7.50	5.49
tblGrading	MaterialImported	0.00	10,000.00
tblLandUse	LandUseSquareFeet	5,150.00	5,152.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1488	1.3094	1.0377	2.4100e-003	0.0808	0.0539	0.1347	0.0348	0.0517	0.0865			211.2520	0.0322	0.0000	212.0557
2022	0.1109	0.4775	0.4937	9.4000e-004	8.6600e-003	0.0214	0.0300	2.3500e-003	0.0206	0.0229			79.4005	0.0129	0.0000	79.7237
Maximum	**0.1488**	**1.3094**	**1.0377**	**2.4100e-003**	**0.0808**	**0.0539**	**0.1347**	**0.0348**	**0.0517**	**0.0865**			**211.2520**	**0.0322**	**0.0000**	**212.0557**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1488	1.3094	1.0377	2.4100e-003	0.0516	0.0539	0.1056	0.0198	0.0517	0.0716			211.2518	0.0322	0.0000	212.0555
2022	0.1109	0.4775	0.4937	9.4000e-004	8.6600e-003	0.0214	0.0300	2.3500e-003	0.0206	0.0229			79.4004	0.0129	0.0000	79.7236
Maximum	**0.1488**	**1.3094**	**1.0377**	**2.4100e-003**	**0.0516**	**0.0539**	**0.1056**	**0.0198**	**0.0517**	**0.0716**			**211.2518**	**0.0322**	**0.0000**	**212.0555**

	ROG	NOx	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**	**32.58**	**0.00**	**17.68**	**40.30**	**0.00**	**13.67**	**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	6-1-2021	8-31-2021	0.7253	0.7253
2	9-1-2021	11-30-2021	0.5374	0.5374
3	12-1-2021	2-28-2022	0.5030	0.5030
4	3-1-2022	5-31-2022	0.2686	0.2686
		Highest	0.7253	0.7253

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	0.1058	1.0000e-005	9.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000			1.8500e-003	0.0000	0.0000	1.9700e-003
Energy	7.4000e-004	6.7500e-003	5.6700e-003	4.0000e-005		5.1000e-004	5.1000e-004		5.1000e-004	5.1000e-004			57.5933	2.1600e-003	5.5000e-004	57.8122
Mobile	0.0196	0.0779	0.2323	8.3000e-004	0.0761	6.5000e-004	0.0768	0.0204	6.0000e-004	0.0210			76.8869	3.9000e-003	0.0000	76.9843
Waste						0.0000	0.0000		0.0000	0.0000			4.8190	0.2848	0.0000	11.9389
Water						0.0000	0.0000		0.0000	0.0000			27.5400	0.1828	4.5100e-003	33.4521
Total	**0.1261**	**0.0846**	**0.2389**	**8.7000e-004**	**0.0761**	**1.1600e-003**	**0.0773**	**0.0204**	**1.1100e-003**	**0.0215**			**166.8410**	**0.4736**	**5.0600e-003**	**180.1894**

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	0.1058	1.0000e-005	9.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000			1.8500e-003	0.0000	0.0000	1.9700e-003
Energy	7.4000e-004	6.7500e-003	5.6700e-003	4.0000e-005		5.1000e-004	5.1000e-004		5.1000e-004	5.1000e-004			54.4552	2.0400e-003	5.3000e-004	54.6632
Mobile	0.0196	0.0779	0.2323	8.3000e-004	0.0761	6.5000e-004	0.0768	0.0204	6.0000e-004	0.0210			76.8869	3.9000e-003	0.0000	76.9843
Waste						0.0000	0.0000		0.0000	0.0000			4.8190	0.2848	0.0000	11.9389
Water						0.0000	0.0000		0.0000	0.0000			27.5400	0.1828	4.5100e-003	33.4521
Total	**0.1261**	**0.0846**	**0.2389**	**8.7000e-004**	**0.0761**	**1.1600e-003**	**0.0773**	**0.0204**	**1.1100e-003**	**0.0215**			**163.7030**	**0.4735**	**5.0400e-003**	**177.0404**

	ROG	NOx	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**	**1.88**	**0.03**	**0.40**	**1.75**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	6/1/2021	6/21/2021	5	15	
2	Grading	Grading	6/22/2021	6/25/2021	5	4	
3	Building Construction	Building Construction	6/26/2021	4/1/2022	5	200	
4	Paving	Paving	4/2/2022	4/15/2022	5	10	
5	Architectural Coating	Architectural Coating	4/16/2022	4/29/2022	5	10	

Acres of Grading (Site Preparation Phase): 5.49

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0.7

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 37,968; Non-Residential Outdoor: 0; Striped Parking Area: 1,872 (Architectural Coating – sqft)

OffRoad Equipment

Ortega Construction Yard - San Diego Air Basin, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	1,250.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	23.00	9.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0431	0.0000	0.0431	0.0221	0.0000	0.0221			0.0000	0.0000	0.0000	0.0000
Off-Road	0.0117	0.1307	0.0567	1.3000e-004		5.7400e-003	5.7400e-003		5.2800e-003	5.2800e-003			11.3388	3.6700e-003	0.0000	11.4305
Total	**0.0117**	**0.1307**	**0.0567**	**1.3000e-004**	**0.0431**	**5.7400e-003**	**0.0489**	**0.0221**	**5.2800e-003**	**0.0274**			**11.3388**	**3.6700e-003**	**0.0000**	**11.4305**

3.2 Site Preparation - 2021

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	4.6900e-003	0.1632	0.0403	4.8000e-004	0.0107	4.9000e-004	0.0112	2.9400e-003	4.7000e-004	3.4100e-003			47.6013	4.3000e-003	0.0000	47.7087
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	2.1000e-004	1.5000e-004	1.5000e-003	0.0000	4.8000e-004	0.0000	4.8000e-004	1.3000e-004	0.0000	1.3000e-004			0.4203	1.0000e-005	0.0000	0.4206
Total	**4.9000e-003**	**0.1634**	**0.0418**	**4.8000e-004**	**0.0112**	**4.9000e-004**	**0.0117**	**3.0700e-003**	**4.7000e-004**	**3.5400e-003**			**48.0216**	**4.3100e-003**	**0.0000**	**48.1293**

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					0.0194	0.0000	0.0194	9.9600e-003	0.0000	9.9600e-003			0.0000	0.0000	0.0000	0.0000
Off-Road	0.0117	0.1307	0.0567	1.3000e-004		5.7400e-003	5.7400e-003		5.2800e-003	5.2800e-003			11.3388	3.6700e-003	0.0000	11.4305
Total	**0.0117**	**0.1307**	**0.0567**	**1.3000e-004**	**0.0194**	**5.7400e-003**	**0.0252**	**9.9600e-003**	**5.2800e-003**	**0.0152**			**11.3388**	**3.6700e-003**	**0.0000**	**11.4305**

3.2 Site Preparation - 2021

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	4.6900e-003	0.1632	0.0403	4.8000e-004	0.0107	4.9000e-004	0.0112	2.9400e-003	4.7000e-004	3.4100e-003			47.6013	4.3000e-003	0.0000	47.7087
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	2.1000e-004	1.5000e-004	1.5000e-003	0.0000	4.8000e-004	0.0000	4.8000e-004	1.3000e-004	0.0000	1.3000e-004			0.4203	1.0000e-005	0.0000	0.4206
Total	**4.9000e-003**	**0.1634**	**0.0418**	**4.8000e-004**	**0.0112**	**4.9000e-004**	**0.0117**	**3.0700e-003**	**4.7000e-004**	**3.5400e-003**			**48.0216**	**4.3100e-003**	**0.0000**	**48.1293**

3.3 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					9.8300e-003	0.0000	9.8300e-003	5.0500e-003	0.0000	5.0500e-003			0.0000	0.0000	0.0000	0.0000
Off-Road	2.5800e-003	0.0287	0.0127	3.0000e-005		1.2800e-003	1.2800e-003		1.1700e-003	1.1700e-003			2.4767	8.0000e-004	0.0000	2.4968
Total	**2.5800e-003**	**0.0287**	**0.0127**	**3.0000e-005**	**9.8300e-003**	**1.2800e-003**	**0.0111**	**5.0500e-003**	**1.1700e-003**	**6.2200e-003**			**2.4767**	**8.0000e-004**	**0.0000**	**2.4968**

3.3 Grading - 2021

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
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	6.0000e-005	4.0000e-005	4.0000e-004	0.0000	1.3000e-004	0.0000	1.3000e-004	3.0000e-005	0.0000	3.0000e-005			0.1121	0.0000	0.0000	0.1122
Total	**6.0000e-005**	**4.0000e-005**	**4.0000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**			**0.1121**	**0.0000**	**0.0000**	**0.1122**

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					4.4200e-003	0.0000	4.4200e-003	2.2700e-003	0.0000	2.2700e-003			0.0000	0.0000	0.0000	0.0000
Off-Road	2.5800e-003	0.0287	0.0127	3.0000e-005		1.2800e-003	1.2800e-003		1.1700e-003	1.1700e-003			2.4767	8.0000e-004	0.0000	2.4968
Total	**2.5800e-003**	**0.0287**	**0.0127**	**3.0000e-005**	**4.4200e-003**	**1.2800e-003**	**5.7000e-003**	**2.2700e-003**	**1.1700e-003**	**3.4400e-003**			**2.4767**	**8.0000e-004**	**0.0000**	**2.4968**

3.3 Grading - 2021

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
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	6.0000e-005	4.0000e-005	4.0000e-004	0.0000	1.3000e-004	0.0000	1.3000e-004	3.0000e-005	0.0000	3.0000e-005			0.1121	0.0000	0.0000	0.1122
Total	**6.0000e-005**	**4.0000e-005**	**4.0000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**			**0.1121**	**0.0000**	**0.0000**	**0.1122**

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1223	0.9204	0.8707	1.4900e-003		0.0462	0.0462		0.0446	0.0446			122.5447	0.0219	0.0000	123.0916
Total	**0.1223**	**0.9204**	**0.8707**	**1.4900e-003**		**0.0462**	**0.0462**		**0.0446**	**0.0446**			**122.5447**	**0.0219**	**0.0000**	**123.0916**

3.4 Building Construction - 2021

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
Vendor	1.8800e-003	0.0624	0.0167	1.6000e-004	4.0300e-003	1.3000e-004	4.1600e-003	1.1600e-003	1.3000e-004	1.2900e-003			15.8825	1.1800e-003	0.0000	15.9120
Worker	5.4000e-003	3.8500e-003	0.0388	1.2000e-004	0.0125	9.0000e-005	0.0125	3.3100e-003	8.0000e-005	3.3900e-003			10.8756	3.1000e-004	0.0000	10.8834
Total	**7.2800e-003**	**0.0663**	**0.0554**	**2.8000e-004**	**0.0165**	**2.2000e-004**	**0.0167**	**4.4700e-003**	**2.1000e-004**	**4.6800e-003**			**26.7581**	**1.4900e-003**	**0.0000**	**26.7954**

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	0.1223	0.9204	0.8707	1.4900e-003		0.0462	0.0462		0.0446	0.0446			122.5445	0.0219	0.0000	123.0914
Total	**0.1223**	**0.9204**	**0.8707**	**1.4900e-003**		**0.0462**	**0.0462**		**0.0446**	**0.0446**			**122.5445**	**0.0219**	**0.0000**	**123.0914**

3.4 Building Construction - 2021

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
Vendor	1.8800e-003	0.0624	0.0167	1.6000e-004	4.0300e-003	1.3000e-004	4.1600e-003	1.1600e-003	1.3000e-004	1.2900e-003			15.8825	1.1800e-003	0.0000	15.9120
Worker	5.4000e-003	3.8500e-003	0.0388	1.2000e-004	0.0125	9.0000e-005	0.0125	3.3100e-003	8.0000e-005	3.3900e-003			10.8756	3.1000e-004	0.0000	10.8834
Total	**7.2800e-003**	**0.0663**	**0.0554**	**2.8000e-004**	**0.0165**	**2.2000e-004**	**0.0167**	**4.4700e-003**	**2.1000e-004**	**4.6800e-003**			**26.7581**	**1.4900e-003**	**0.0000**	**26.7954**

3.4 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0536	0.4064	0.4136	7.2000e-004		0.0191	0.0191		0.0185	0.0185			59.0125	0.0103	0.0000	59.2695
Total	**0.0536**	**0.4064**	**0.4136**	**7.2000e-004**		**0.0191**	**0.0191**		**0.0185**	**0.0185**			**59.0125**	**0.0103**	**0.0000**	**59.2695**

3.4 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Vendor	8.4000e-004	0.0284	7.5900e-003	8.0000e-005	1.9400e-003	5.0000e-005	2.0000e-003	5.6000e-004	5.0000e-005	6.1000e-004			7.5747	5.5000e-004	0.0000	7.5885
Worker	2.4600e-003	1.6900e-003	0.0173	6.0000e-005	5.9900e-003	4.0000e-005	6.0400e-003	1.5900e-003	4.0000e-005	1.6300e-003			5.0445	1.4000e-004	0.0000	5.0479
Total	**3.3000e-003**	**0.0301**	**0.0249**	**1.4000e-004**	**7.9300e-003**	**9.0000e-005**	**8.0400e-003**	**2.1500e-003**	**9.0000e-005**	**2.2400e-003**			**12.6192**	**6.9000e-004**	**0.0000**	**12.6363**

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	0.0536	0.4064	0.4136	7.2000e-004		0.0191	0.0191		0.0185	0.0185			59.0124	0.0103	0.0000	59.2694
Total	**0.0536**	**0.4064**	**0.4136**	**7.2000e-004**		**0.0191**	**0.0191**		**0.0185**	**0.0185**			**59.0124**	**0.0103**	**0.0000**	**59.2694**

3.4 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Vendor	8.4000e-004	0.0284	7.5900e-003	8.0000e-005	1.9400e-003	5.0000e-005	2.0000e-003	5.6000e-004	5.0000e-005	6.1000e-004			7.5747	5.5000e-004	0.0000	7.5885
Worker	2.4600e-003	1.6900e-003	0.0173	6.0000e-005	5.9900e-003	4.0000e-005	6.0400e-003	1.5900e-003	4.0000e-005	1.6300e-003			5.0445	1.4000e-004	0.0000	5.0479
Total	**3.3000e-003**	**0.0301**	**0.0249**	**1.4000e-004**	**7.9300e-003**	**9.0000e-005**	**8.0400e-003**	**2.1500e-003**	**9.0000e-005**	**2.2400e-003**			**12.6192**	**6.9000e-004**	**0.0000**	**12.6363**

3.5 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.4400e-003	0.0339	0.0440	7.0000e-005		1.7400e-003	1.7400e-003		1.6000e-003	1.6000e-003			5.8848	1.8700e-003	0.0000	5.9315
Paving	9.2000e-004					0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Total	**4.3600e-003**	**0.0339**	**0.0440**	**7.0000e-005**		**1.7400e-003**	**1.7400e-003**		**1.6000e-003**	**1.6000e-003**			**5.8848**	**1.8700e-003**	**0.0000**	**5.9315**

3.5 Paving - 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
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	2.1000e-004	1.5000e-004	1.5100e-003	0.0000	5.2000e-004	0.0000	5.2000e-004	1.4000e-004	0.0000	1.4000e-004			0.4387	1.0000e-005	0.0000	0.4390
Total	**2.1000e-004**	**1.5000e-004**	**1.5100e-003**	**0.0000**	**5.2000e-004**	**0.0000**	**5.2000e-004**	**1.4000e-004**	**0.0000**	**1.4000e-004**			**0.4387**	**1.0000e-005**	**0.0000**	**0.4390**

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	3.4400e-003	0.0339	0.0440	7.0000e-005		1.7400e-003	1.7400e-003		1.6000e-003	1.6000e-003			5.8848	1.8700e-003	0.0000	5.9314
Paving	9.2000e-004					0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Total	**4.3600e-003**	**0.0339**	**0.0440**	**7.0000e-005**		**1.7400e-003**	**1.7400e-003**		**1.6000e-003**	**1.6000e-003**			**5.8848**	**1.8700e-003**	**0.0000**	**5.9314**

3.5 Paving - 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
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	2.1000e-004	1.5000e-004	1.5100e-003	0.0000	5.2000e-004	0.0000	5.2000e-004	1.4000e-004	0.0000	1.4000e-004			0.4387	1.0000e-005	0.0000	0.4390
Total	**2.1000e-004**	**1.5000e-004**	**1.5100e-003**	**0.0000**	**5.2000e-004**	**0.0000**	**5.2000e-004**	**1.4000e-004**	**0.0000**	**1.4000e-004**			**0.4387**	**1.0000e-005**	**0.0000**	**0.4390**

3.6 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0483					0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Off-Road	1.0200e-003	7.0400e-003	9.0700e-003	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004			1.2766	8.0000e-005	0.0000	1.2787
Total	**0.0494**	**7.0400e-003**	**9.0700e-003**	**1.0000e-005**		**4.1000e-004**	**4.1000e-004**		**4.1000e-004**	**4.1000e-004**			**1.2766**	**8.0000e-005**	**0.0000**	**1.2787**

3.6 Architectural Coating - 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
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	8.0000e-005	6.0000e-005	5.8000e-004	0.0000	2.0000e-004	0.0000	2.0000e-004	5.0000e-005	0.0000	5.0000e-005			0.1687	0.0000	0.0000	0.1688
Total	**8.0000e-005**	**6.0000e-005**	**5.8000e-004**	**0.0000**	**2.0000e-004**	**0.0000**	**2.0000e-004**	**5.0000e-005**	**0.0000**	**5.0000e-005**			**0.1687**	**0.0000**	**0.0000**	**0.1688**

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	0.0483					0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Off-Road	1.0200e-003	7.0400e-003	9.0700e-003	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004			1.2766	8.0000e-005	0.0000	1.2787
Total	**0.0494**	**7.0400e-003**	**9.0700e-003**	**1.0000e-005**		**4.1000e-004**	**4.1000e-004**		**4.1000e-004**	**4.1000e-004**			**1.2766**	**8.0000e-005**	**0.0000**	**1.2787**

3.6 Architectural Coating - 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
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	8.0000e-005	6.0000e-005	5.8000e-004	0.0000	2.0000e-004	0.0000	2.0000e-004	5.0000e-005	0.0000	5.0000e-005			0.1687	0.0000	0.0000	0.1688
Total	**8.0000e-005**	**6.0000e-005**	**5.8000e-004**	**0.0000**	**2.0000e-004**	**0.0000**	**2.0000e-004**	**5.0000e-005**	**0.0000**	**5.0000e-005**			**0.1687**	**0.0000**	**0.0000**	**0.1688**

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	0.0196	0.0779	0.2323	8.3000e-004	0.0761	6.5000e-004	0.0768	0.0204	6.0000e-004	0.0210			76.8869	3.9000e-003	0.0000	76.9843
Unmitigated	0.0196	0.0779	0.2323	8.3000e-004	0.0761	6.5000e-004	0.0768	0.0204	6.0000e-004	0.0210			76.8869	3.9000e-003	0.0000	76.9843

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	56.80	12.67	5.41	103,135	103,135
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	33.87	33.87	33.87	98,880	98,880
Total	90.67	46.54	39.28	202,015	202,015

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	9.50	7.30	7.30	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.602700	0.040134	0.179939	0.104242	0.014985	0.005435	0.016642	0.024350	0.001934	0.001888	0.005938	0.000757	0.001056
Parking Lot	0.602700	0.040134	0.179939	0.104242	0.014985	0.005435	0.016642	0.024350	0.001934	0.001888	0.005938	0.000757	0.001056
Unrefrigerated Warehouse-No Rail	0.602700	0.040134	0.179939	0.104242	0.014985	0.005435	0.016642	0.024350	0.001934	0.001888	0.005938	0.000757	0.001056

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000			47.1077	1.9000e-003	3.9000e-004	47.2721
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000			50.2458	2.0200e-003	4.2000e-004	50.4211
NaturalGas Mitigated	7.4000e-004	6.7500e-003	5.6700e-003	4.0000e-005		5.1000e-004	5.1000e-004		5.1000e-004	5.1000e-004			7.3475	1.4000e-004	1.3000e-004	7.3911
NaturalGas Unmitigated	7.4000e-004	6.7500e-003	5.6700e-003	4.0000e-005		5.1000e-004	5.1000e-004		5.1000e-004	5.1000e-004			7.3475	1.4000e-004	1.3000e-004	7.3911

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 Office Building	104019	5.6000e-004	5.1000e-003	4.2800e-003	3.0000e-005		3.9000e-004	3.9000e-004		3.9000e-004	3.9000e-004			5.5508	1.1000e-004	1.0000e-004	5.5838
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
Unrefrigerated Warehouse-No Rail	33667.2	1.8000e-004	1.6500e-003	1.3900e-003	1.0000e-005		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004			1.7966	3.0000e-005	3.0000e-005	1.8073
Total		**7.4000e-004**	**6.7500e-003**	**5.6700e-003**	**4.0000e-005**		**5.2000e-004**	**5.2000e-004**		**5.2000e-004**	**5.2000e-004**			**7.3475**	**1.4000e-004**	**1.3000e-004**	**7.3911**

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 Office Building	104019	5.6000e-004	5.1000e-003	4.2800e-003	3.0000e-005		3.9000e-004	3.9000e-004		3.9000e-004	3.9000e-004			5.5508	1.1000e-004	1.0000e-004	5.5838
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
Unrefrigerated Warehouse-No Rail	33667.2	1.8000e-004	1.6500e-003	1.3900e-003	1.0000e-005		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004			1.7966	3.0000e-005	3.0000e-005	1.8073
Total		**7.4000e-004**	**6.7500e-003**	**5.6700e-003**	**4.0000e-005**		**5.2000e-004**	**5.2000e-004**		**5.2000e-004**	**5.2000e-004**			**7.3475**	**1.4000e-004**	**1.3000e-004**	**7.3911**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	69242.9	22.6292	9.1000e-004	1.9000e-004	22.7081
Parking Lot	10920	3.5688	1.4000e-004	3.0000e-005	3.5812
Unrefrigerated Warehouse-No Rail	73584	24.0479	9.7000e-004	2.0000e-004	24.1318
Total		**50.2458**	**2.0200e-003**	**4.2000e-004**	**50.4211**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	66298.5	21.6669	8.7000e-004	1.8000e-004	21.7425
Parking Lot	9282	3.0334	1.2000e-004	3.0000e-005	3.0440
Unrefrigerated Warehouse-No Rail	68564.2	22.4074	9.0000e-004	1.9000e-004	22.4855
Total		**47.1077**	**1.8900e-003**	**4.0000e-004**	**47.2721**

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	0.1058	1.0000e-005	9.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000			1.8500e-003	0.0000	0.0000	1.9700e-003
Unmitigated	0.1058	1.0000e-005	9.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000			1.8500e-003	0.0000	0.0000	1.9700e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	4.8300e-003					0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1009					0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Landscaping	9.0000e-005	1.0000e-005	9.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000			1.8500e-003	0.0000	0.0000	1.9700e-003
Total	**0.1058**	**1.0000e-005**	**9.5000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**			**1.8500e-003**	**0.0000**	**0.0000**	**1.9700e-003**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	4.8300e-003					0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1009					0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Landscaping	9.0000e-005	1.0000e-005	9.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000			1.8500e-003	0.0000	0.0000	1.9700e-003
Total	**0.1058**	**1.0000e-005**	**9.5000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**			**1.8500e-003**	**0.0000**	**0.0000**	**1.9700e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	27.5400	0.1828	4.5100e-003	33.4521
Unmitigated	27.5400	0.1828	4.5100e-003	33.4521

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	0.915329 / 0.561008	6.2224	0.0301	7.5000e-004	7.1986
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	4.662 / 0	21.3176	0.1527	3.7500e-003	26.2535
Total		**27.5400**	**0.1828**	**4.5000e-003**	**33.4521**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	0.915329 / 0.561008	6.2224	0.0301	7.5000e-004	7.1986
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	4.662 / 0	21.3176	0.1527	3.7500e-003	26.2535
Total		**27.5400**	**0.1828**	**4.5000e-003**	**33.4521**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	4.8190	0.2848	0.0000	11.9389
Unmitigated	4.8190	0.2848	0.0000	11.9389

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	4.79	0.9723	0.0575	0.0000	2.4089
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	18.95	3.8467	0.2273	0.0000	9.5300
Total		**4.8190**	**0.2848**	**0.0000**	**11.9389**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	4.79	0.9723	0.0575	0.0000	2.4089
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	18.95	3.8467	0.2273	0.0000	9.5300
Total		**4.8190**	**0.2848**	**0.0000**	**11.9389**

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

Ortega Construction Yard

San Diego Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	5.15	1000sqft	0.12	5,152.00	0
Unrefrigerated Warehouse-No Rail	20.16	1000sqft	0.46	20,160.00	0
Parking Lot	78.00	Space	0.70	31,200.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2023
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Default values for construction schedule, with up to 15 days for site prep.

Grading - 10,000 cu yd fill material import

Architectural Coating - 50 g/L interior paint, Exterior is stucco, so no exterior coating, 100 g/L parking lot paint

Area Coating - 50 g/L interior paint, Exterior is stucco, so no coating, 100 g/L parking lot paint

Construction Off-road Equipment Mitigation - Watering twice per day during construction

Energy Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	12,656.00	0.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	100
tblAreaCoating	Area_Nonresidential_Exterior	12656	0
tblConstructionPhase	NumDays	2.00	15.00
tblGrading	AcresOfGrading	7.50	5.49
tblGrading	MaterialImported	0.00	10,000.00
tblLandUse	LandUseSquareFeet	5,150.00	5,152.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	2.2021	38.7993	13.7430	0.0821	7.2730	0.8310	8.1040	3.3691	0.7669	4.1360			8,779.0084	1.1634	0.0000	8,808.0927
2022	9.8877	13.4163	13.5149	0.0263	0.2499	0.5918	0.8417	0.0677	0.5716	0.6393			2,441.7440	0.4141	0.0000	2,451.0358
Maximum	**9.8877**	**38.7993**	**13.7430**	**0.0821**	**7.2730**	**0.8310**	**8.1040**	**3.3691**	**0.7669**	**4.1360**			**8,779.0084**	**1.1634**	**0.0000**	**8,808.0927**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	2.2021	38.7993	13.7430	0.0821	4.1099	0.8310	4.9409	1.7452	0.7669	2.5121			8,779.0084	1.1634	0.0000	8,808.0927
2022	9.8877	13.4163	13.5149	0.0263	0.2499	0.5918	0.8417	0.0677	0.5716	0.6393			2,441.7440	0.4141	0.0000	2,451.0358
Maximum	**9.8877**	**38.7993**	**13.7430**	**0.0821**	**4.1099**	**0.8310**	**4.9409**	**1.7452**	**0.7669**	**2.5121**			**8,779.0084**	**1.1634**	**0.0000**	**8,808.0927**

	ROG	NOx	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**	**42.05**	**0.00**	**35.36**	**47.25**	**0.00**	**34.01**	**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	0.5802	1.0000e-004	0.0106	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005			0.0226	6.0000e-005		0.0241
Energy	4.0700e-003	0.0370	0.0311	2.2000e-004		2.8100e-003	2.8100e-003		2.8100e-003	2.8100e-003			44.3791	8.5000e-004	8.1000e-004	44.6428
Mobile	0.1336	0.4854	1.5297	5.5500e-003	0.4975	4.1300e-003	0.5016	0.1330	3.8400e-003	0.1368			565.1620	0.0276		565.8530
Total	**0.7178**	**0.5225**	**1.5713**	**5.7700e-003**	**0.4975**	**6.9800e-003**	**0.5045**	**0.1330**	**6.6900e-003**	**0.1396**			**609.5637**	**0.0286**	**8.1000e-004**	**610.5199**

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	0.5802	1.0000e-004	0.0106	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005			0.0226	6.0000e-005		0.0241
Energy	4.0700e-003	0.0370	0.0311	2.2000e-004		2.8100e-003	2.8100e-003		2.8100e-003	2.8100e-003			44.3791	8.5000e-004	8.1000e-004	44.6428
Mobile	0.1336	0.4854	1.5297	5.5500e-003	0.4975	4.1300e-003	0.5016	0.1330	3.8400e-003	0.1368			565.1620	0.0276		565.8530
Total	**0.7178**	**0.5225**	**1.5713**	**5.7700e-003**	**0.4975**	**6.9800e-003**	**0.5045**	**0.1330**	**6.6900e-003**	**0.1396**			**609.5637**	**0.0286**	**8.1000e-004**	**610.5199**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	6/1/2021	6/21/2021	5	15	
2	Grading	Grading	6/22/2021	6/25/2021	5	4	
3	Building Construction	Building Construction	6/26/2021	4/1/2022	5	200	
4	Paving	Paving	4/2/2022	4/15/2022	5	10	
5	Architectural Coating	Architectural Coating	4/16/2022	4/29/2022	5	10	

Acres of Grading (Site Preparation Phase): 5.49

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0.7

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 37,968; Non-Residential Outdoor: 0; Striped Parking Area: 1,872 (Architectural Coating – sqft)

OffRoad Equipment

Ortega Construction Yard - San Diego Air Basin, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	1,250.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	23.00	9.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.7512	0.0000	5.7512	2.9526	0.0000	2.9526			0.0000			0.0000
Off-Road	1.5558	17.4203	7.5605	0.0172		0.7654	0.7654		0.7041	0.7041			1,666.5174	0.5390		1,679.9920
Total	**1.5558**	**17.4203**	**7.5605**	**0.0172**	**5.7512**	**0.7654**	**6.5165**	**2.9526**	**0.7041**	**3.6567**			**1,666.5174**	**0.5390**		**1,679.9920**

3.2 Site Preparation - 2021

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	0.6186	21.3611	5.2258	0.0643	1.4561	0.0652	1.5213	0.3991	0.0624	0.4614			7,047.3357	0.6225		7,062.8989
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
Worker	0.0277	0.0180	0.2122	6.5000e-004	0.0657	4.5000e-004	0.0662	0.0174	4.2000e-004	0.0179			65.1553	1.8600e-003		65.2018
Total	**0.6463**	**21.3791**	**5.4380**	**0.0649**	**1.5219**	**0.0656**	**1.5875**	**0.4165**	**0.0628**	**0.4793**			**7,112.4910**	**0.6244**		**7,128.1007**

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					2.5880	0.0000	2.5880	1.3287	0.0000	1.3287			0.0000			0.0000
Off-Road	1.5558	17.4203	7.5605	0.0172		0.7654	0.7654		0.7041	0.7041			1,666.5174	0.5390		1,679.9920
Total	**1.5558**	**17.4203**	**7.5605**	**0.0172**	**2.5880**	**0.7654**	**3.3534**	**1.3287**	**0.7041**	**2.0328**			**1,666.5174**	**0.5390**		**1,679.9920**

3.2 Site Preparation - 2021

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	0.6186	21.3611	5.2258	0.0643	1.4561	0.0652	1.5213	0.3991	0.0624	0.4614			7,047.3357	0.6225		7,062.8989
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
Worker	0.0277	0.0180	0.2122	6.5000e-004	0.0657	4.5000e-004	0.0662	0.0174	4.2000e-004	0.0179			65.1553	1.8600e-003		65.2018
Total	**0.6463**	**21.3791**	**5.4380**	**0.0649**	**1.5219**	**0.0656**	**1.5875**	**0.4165**	**0.0628**	**0.4793**			**7,112.4910**	**0.6244**		**7,128.1007**

3.3 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.9143	0.0000	4.9143	2.5256	0.0000	2.5256			0.0000			0.0000
Off-Road	1.2884	14.3307	6.3314	0.0141		0.6379	0.6379		0.5869	0.5869			1,365.0648	0.4415		1,376.1020
Total	**1.2884**	**14.3307**	**6.3314**	**0.0141**	**4.9143**	**0.6379**	**5.5522**	**2.5256**	**0.5869**	**3.1125**			**1,365.0648**	**0.4415**		**1,376.1020**

3.3 Grading - 2021

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
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
Worker	0.0277	0.0180	0.2122	6.5000e-004	0.0657	4.5000e-004	0.0662	0.0174	4.2000e-004	0.0179			65.1553	1.8600e-003		65.2018
Total	**0.0277**	**0.0180**	**0.2122**	**6.5000e-004**	**0.0657**	**4.5000e-004**	**0.0662**	**0.0174**	**4.2000e-004**	**0.0179**			**65.1553**	**1.8600e-003**		**65.2018**

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					2.2114	0.0000	2.2114	1.1365	0.0000	1.1365			0.0000			0.0000
Off-Road	1.2884	14.3307	6.3314	0.0141		0.6379	0.6379		0.5869	0.5869			1,365.0648	0.4415		1,376.1020
Total	**1.2884**	**14.3307**	**6.3314**	**0.0141**	**2.2114**	**0.6379**	**2.8493**	**1.1365**	**0.5869**	**1.7234**			**1,365.0648**	**0.4415**		**1,376.1020**

3.3 Grading - 2021

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
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
Worker	0.0277	0.0180	0.2122	6.5000e-004	0.0657	4.5000e-004	0.0662	0.0174	4.2000e-004	0.0179			65.1553	1.8600e-003		65.2018
Total	**0.0277**	**0.0180**	**0.2122**	**6.5000e-004**	**0.0657**	**4.5000e-004**	**0.0662**	**0.0174**	**4.2000e-004**	**0.0179**			**65.1553**	**1.8600e-003**		**65.2018**

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8125	13.6361	12.8994	0.0221		0.6843	0.6843		0.6608	0.6608			2,001.2200	0.3573		2,010.1517
Total	**1.8125**	**13.6361**	**12.8994**	**0.0221**		**0.6843**	**0.6843**		**0.6608**	**0.6608**			**2,001.2200**	**0.3573**		**2,010.1517**

3.4 Building Construction - 2021

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
Vendor	0.0272	0.9165	0.2336	2.4400e-003	0.0609	1.9200e-003	0.0629	0.0175	1.8400e-003	0.0194			262.2168	0.0187		262.6852
Worker	0.0796	0.0517	0.6101	1.8800e-003	0.1889	1.3100e-003	0.1902	0.0501	1.2000e-003	0.0513			187.3214	5.3500e-003		187.4551
Total	**0.1068**	**0.9682**	**0.8436**	**4.3200e-003**	**0.2499**	**3.2300e-003**	**0.2531**	**0.0677**	**3.0400e-003**	**0.0707**			**449.5382**	**0.0241**		**450.1402**

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	1.8125	13.6361	12.8994	0.0221		0.6843	0.6843		0.6608	0.6608			2,001.2200	0.3573		2,010.1517
Total	**1.8125**	**13.6361**	**12.8994**	**0.0221**		**0.6843**	**0.6843**		**0.6608**	**0.6608**			**2,001.2200**	**0.3573**		**2,010.1517**

3.4 Building Construction - 2021

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
Vendor	0.0272	0.9165	0.2336	2.4400e-003	0.0609	1.9200e-003	0.0629	0.0175	1.8400e-003	0.0194			262.2168	0.0187		262.6852
Worker	0.0796	0.0517	0.6101	1.8800e-003	0.1889	1.3100e-003	0.1902	0.0501	1.2000e-003	0.0513			187.3214	5.3500e-003		187.4551
Total	**0.1068**	**0.9682**	**0.8436**	**4.3200e-003**	**0.2499**	**3.2300e-003**	**0.2531**	**0.0677**	**3.0400e-003**	**0.0707**			**449.5382**	**0.0241**		**450.1402**

3.4 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6487	12.5031	12.7264	0.0221		0.5889	0.5889		0.5689	0.5689			2,001.5429	0.3486		2,010.2581
Total	**1.6487**	**12.5031**	**12.7264**	**0.0221**		**0.5889**	**0.5889**		**0.5689**	**0.5689**			**2,001.5429**	**0.3486**		**2,010.2581**

3.4 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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
Vendor	0.0253	0.8661	0.2212	2.4100e-003	0.0609	1.6600e-003	0.0626	0.0175	1.5800e-003	0.0191			259.7524	0.0182		260.2065
Worker	0.0752	0.0471	0.5673	1.8100e-003	0.1889	1.2800e-003	0.1902	0.0501	1.1800e-003	0.0513			180.4487	4.9000e-003		180.5713
Total	**0.1005**	**0.9132**	**0.7885**	**4.2200e-003**	**0.2499**	**2.9400e-003**	**0.2528**	**0.0677**	**2.7600e-003**	**0.0704**			**440.2011**	**0.0231**		**440.7777**

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	1.6487	12.5031	12.7264	0.0221		0.5889	0.5889		0.5689	0.5689			2,001.5429	0.3486		2,010.2581
Total	**1.6487**	**12.5031**	**12.7264**	**0.0221**		**0.5889**	**0.5889**		**0.5689**	**0.5689**			**2,001.5429**	**0.3486**		**2,010.2581**

3.4 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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
Vendor	0.0253	0.8661	0.2212	2.4100e-003	0.0609	1.6600e-003	0.0626	0.0175	1.5800e-003	0.0191			259.7524	0.0182		260.2065
Worker	0.0752	0.0471	0.5673	1.8100e-003	0.1889	1.2800e-003	0.1902	0.0501	1.1800e-003	0.0513			180.4487	4.9000e-003		180.5713
Total	**0.1005**	**0.9132**	**0.7885**	**4.2200e-003**	**0.2499**	**2.9400e-003**	**0.2528**	**0.0677**	**2.7600e-003**	**0.0704**			**440.2011**	**0.0231**		**440.7777**

3.5 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6877	6.7738	8.8060	0.0135		0.3474	0.3474		0.3205	0.3205			1,297.3789	0.4113		1,307.6608
Paving	0.1834					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.8711**	**6.7738**	**8.8060**	**0.0135**		**0.3474**	**0.3474**		**0.3205**	**0.3205**			**1,297.3789**	**0.4113**		**1,307.6608**

3.5 Paving - 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
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
Worker	0.0425	0.0266	0.3206	1.0200e-003	0.1068	7.2000e-004	0.1075	0.0283	6.6000e-004	0.0290			101.9928	2.7700e-003		102.0620
Total	**0.0425**	**0.0266**	**0.3206**	**1.0200e-003**	**0.1068**	**7.2000e-004**	**0.1075**	**0.0283**	**6.6000e-004**	**0.0290**			**101.9928**	**2.7700e-003**		**102.0620**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6877	6.7738	8.8060	0.0135		0.3474	0.3474		0.3205	0.3205			1,297.3789	0.4113		1,307.6608
Paving	0.1834					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.8711**	**6.7738**	**8.8060**	**0.0135**		**0.3474**	**0.3474**		**0.3205**	**0.3205**			**1,297.3789**	**0.4113**		**1,307.6608**

3.5 Paving - 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
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
Worker	0.0425	0.0266	0.3206	1.0200e-003	0.1068	7.2000e-004	0.1075	0.0283	6.6000e-004	0.0290			101.9928	2.7700e-003		102.0620
Total	**0.0425**	**0.0266**	**0.3206**	**1.0200e-003**	**0.1068**	**7.2000e-004**	**0.1075**	**0.0283**	**6.6000e-004**	**0.0290**			**101.9928**	**2.7700e-003**		**102.0620**

3.6 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	9.6668					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817			281.4481	0.0183		281.9062
Total	**9.8713**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**			**281.4481**	**0.0183**		**281.9062**

3.6 Architectural Coating - 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
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
Worker	0.0164	0.0103	0.1233	3.9000e-004	0.0411	2.8000e-004	0.0414	0.0109	2.6000e-004	0.0112			39.2280	1.0700e-003		39.2546
Total	**0.0164**	**0.0103**	**0.1233**	**3.9000e-004**	**0.0411**	**2.8000e-004**	**0.0414**	**0.0109**	**2.6000e-004**	**0.0112**			**39.2280**	**1.0700e-003**		**39.2546**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	9.6668					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817			281.4481	0.0183		281.9062
Total	**9.8713**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**			**281.4481**	**0.0183**		**281.9062**

3.6 Architectural Coating - 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
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
Worker	0.0164	0.0103	0.1233	3.9000e-004	0.0411	2.8000e-004	0.0414	0.0109	2.6000e-004	0.0112			39.2280	1.0700e-003		39.2546
Total	**0.0164**	**0.0103**	**0.1233**	**3.9000e-004**	**0.0411**	**2.8000e-004**	**0.0414**	**0.0109**	**2.6000e-004**	**0.0112**			**39.2280**	**1.0700e-003**		**39.2546**

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	0.1336	0.4854	1.5297	5.5500e-003	0.4975	4.1300e-003	0.5016	0.1330	3.8400e-003	0.1368			565.1620	0.0276		565.8530
Unmitigated	0.1336	0.4854	1.5297	5.5500e-003	0.4975	4.1300e-003	0.5016	0.1330	3.8400e-003	0.1368			565.1620	0.0276		565.8530

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	56.80	12.67	5.41	103,135	103,135
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	33.87	33.87	33.87	98,880	98,880
Total	90.67	46.54	39.28	202,015	202,015

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	9.50	7.30	7.30	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.602700	0.040134	0.179939	0.104242	0.014985	0.005435	0.016642	0.024350	0.001934	0.001888	0.005938	0.000757	0.001056
Parking Lot	0.602700	0.040134	0.179939	0.104242	0.014985	0.005435	0.016642	0.024350	0.001934	0.001888	0.005938	0.000757	0.001056
Unrefrigerated Warehouse-No Rail	0.602700	0.040134	0.179939	0.104242	0.014985	0.005435	0.016642	0.024350	0.001934	0.001888	0.005938	0.000757	0.001056

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	4.0700e-003	0.0370	0.0311	2.2000e-004		2.8100e-003	2.8100e-003		2.8100e-003	2.8100e-003			44.3791	8.5000e-004	8.1000e-004	44.6428
NaturalGas Unmitigated	4.0700e-003	0.0370	0.0311	2.2000e-004		2.8100e-003	2.8100e-003		2.8100e-003	2.8100e-003			44.3791	8.5000e-004	8.1000e-004	44.6428

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 Office Building	284.983	3.0700e-003	0.0279	0.0235	1.7000e-004		2.1200e-003	2.1200e-003		2.1200e-003	2.1200e-003			33.5274	6.4000e-004	6.1000e-004	33.7267
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
Unrefrigerated Warehouse-No Rail	92.2389	9.9000e-004	9.0400e-003	7.6000e-003	5.0000e-005		6.9000e-004	6.9000e-004		6.9000e-004	6.9000e-004			10.8516	2.1000e-004	2.0000e-004	10.9161
Total		**4.0600e-003**	**0.0370**	**0.0311**	**2.2000e-004**		**2.8100e-003**	**2.8100e-003**		**2.8100e-003**	**2.8100e-003**			**44.3791**	**8.5000e-004**	**8.1000e-004**	**44.6428**

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 Office Building	0.284983	3.0700e-003	0.0279	0.0235	1.7000e-004		2.1200e-003	2.1200e-003		2.1200e-003	2.1200e-003			33.5274	6.4000e-004	6.1000e-004	33.7267
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
Unrefrigerated Warehouse-No Rail	0.0922389	9.9000e-004	9.0400e-003	7.6000e-003	5.0000e-005		6.9000e-004	6.9000e-004		6.9000e-004	6.9000e-004			10.8516	2.1000e-004	2.0000e-004	10.9161
Total		**4.0600e-003**	**0.0370**	**0.0311**	**2.2000e-004**		**2.8100e-003**	**2.8100e-003**		**2.8100e-003**	**2.8100e-003**			**44.3791**	**8.5000e-004**	**8.1000e-004**	**44.6428**

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	0.5802	1.0000e-004	0.0106	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005			0.0226	6.0000e-005		0.0241
Unmitigated	0.5802	1.0000e-004	0.0106	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005			0.0226	6.0000e-005		0.0241

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	0.0265					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.5527					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.8000e-004	1.0000e-004	0.0106	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005			0.0226	6.0000e-005		0.0241
Total	**0.5802**	**1.0000e-004**	**0.0106**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**			**0.0226**	**6.0000e-005**		**0.0241**

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	0.0265					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.5527					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.8000e-004	1.0000e-004	0.0106	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005			0.0226	6.0000e-005		0.0241
Total	**0.5802**	**1.0000e-004**	**0.0106**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**			**0.0226**	**6.0000e-005**		**0.0241**

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

Ortega Construction Yard

San Diego Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	5.15	1000sqft	0.12	5,152.00	0
Unrefrigerated Warehouse-No Rail	20.16	1000sqft	0.46	20,160.00	0
Parking Lot	78.00	Space	0.70	31,200.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2023
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Default values for construction schedule, with up to 15 days for site prep.

Grading - 10,000 cu yd fill material import

Architectural Coating - 50 g/L interior paint, Exterior is stucco, so no exterior coating, 100 g/L parking lot paint

Area Coating - 50 g/L interior paint, Exterior is stucco, so no coating, 100 g/L parking lot paint

Construction Off-road Equipment Mitigation - Watering twice per day during construction

Energy Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	12,656.00	0.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	100
tblAreaCoating	Area_Nonresidential_Exterior	12656	0
tblConstructionPhase	NumDays	2.00	15.00
tblGrading	AcresOfGrading	7.50	5.49
tblGrading	MaterialImported	0.00	10,000.00
tblLandUse	LandUseSquareFeet	5,150.00	5,152.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	2.2229	38.9858	13.7329	0.0810	7.2730	0.8324	8.1054	3.3691	0.7682	4.1373			8,653.2580	1.1837	0.0000	8,682.8511
2022	9.8899	13.4191	13.5048	0.0261	0.2499	0.5919	0.8417	0.0677	0.5717	0.6393			2,423.9361	0.4139	0.0000	2,433.2485
Maximum	**9.8899**	**38.9858**	**13.7329**	**0.0810**	**7.2730**	**0.8324**	**8.1054**	**3.3691**	**0.7682**	**4.1373**			**8,653.2580**	**1.1837**	**0.0000**	**8,682.8511**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	2.2229	38.9858	13.7329	0.0810	4.1099	0.8324	4.9423	1.7452	0.7682	2.5134			8,653.2580	1.1837	0.0000	8,682.8511
2022	9.8899	13.4191	13.5048	0.0261	0.2499	0.5919	0.8417	0.0677	0.5717	0.6393			2,423.9361	0.4139	0.0000	2,433.2485
Maximum	**9.8899**	**38.9858**	**13.7329**	**0.0810**	**4.1099**	**0.8324**	**4.9423**	**1.7452**	**0.7682**	**2.5134**			**8,653.2580**	**1.1837**	**0.0000**	**8,682.8511**

	ROG	NOx	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**	**42.05**	**0.00**	**35.35**	**47.25**	**0.00**	**34.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.5802	1.0000e-004	0.0106	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005			0.0226	6.0000e-005		0.0241
Energy	4.0700e-003	0.0370	0.0311	2.2000e-004		2.8100e-003	2.8100e-003		2.8100e-003	2.8100e-003			44.3791	8.5000e-004	8.1000e-004	44.6428
Mobile	0.1292	0.4989	1.5033	5.2700e-003	0.4975	4.1500e-003	0.5016	0.1330	3.8700e-003	0.1368			536.1649	0.0278		536.8590
Total	**0.7135**	**0.5360**	**1.5450**	**5.4900e-003**	**0.4975**	**7.0000e-003**	**0.5045**	**0.1330**	**6.7200e-003**	**0.1397**			**580.5666**	**0.0287**	**8.1000e-004**	**581.5258**

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	0.5802	1.0000e-004	0.0106	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005			0.0226	6.0000e-005		0.0241
Energy	4.0700e-003	0.0370	0.0311	2.2000e-004		2.8100e-003	2.8100e-003		2.8100e-003	2.8100e-003			44.3791	8.5000e-004	8.1000e-004	44.6428
Mobile	0.1292	0.4989	1.5033	5.2700e-003	0.4975	4.1500e-003	0.5016	0.1330	3.8700e-003	0.1368			536.1649	0.0278		536.8590
Total	**0.7135**	**0.5360**	**1.5450**	**5.4900e-003**	**0.4975**	**7.0000e-003**	**0.5045**	**0.1330**	**6.7200e-003**	**0.1397**			**580.5666**	**0.0287**	**8.1000e-004**	**581.5258**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	6/1/2021	6/21/2021	5	15	
2	Grading	Grading	6/22/2021	6/25/2021	5	4	
3	Building Construction	Building Construction	6/26/2021	4/1/2022	5	200	
4	Paving	Paving	4/2/2022	4/15/2022	5	10	
5	Architectural Coating	Architectural Coating	4/16/2022	4/29/2022	5	10	

Acres of Grading (Site Preparation Phase): 5.49

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0.7

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 37,968; Non-Residential Outdoor: 0; Striped Parking Area: 1,872 (Architectural Coating – sqft)

OffRoad Equipment

Ortega Construction Yard - San Diego Air Basin, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	1,250.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	23.00	9.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.7512	0.0000	5.7512	2.9526	0.0000	2.9526			0.0000			0.0000
Off-Road	1.5558	17.4203	7.5605	0.0172		0.7654	0.7654		0.7041	0.7041			1,666.5174	0.5390		1,679.9920
Total	**1.5558**	**17.4203**	**7.5605**	**0.0172**	**5.7512**	**0.7654**	**6.5165**	**2.9526**	**0.7041**	**3.6567**			**1,666.5174**	**0.5390**		**1,679.9920**

3.2 Site Preparation - 2021

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	0.6357	21.5453	5.5548	0.0632	1.4561	0.0666	1.5227	0.3991	0.0637	0.4628			6,925.5769	0.6430		6,941.6514
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
Worker	0.0314	0.0202	0.1995	6.1000e-004	0.0657	4.5000e-004	0.0662	0.0174	4.2000e-004	0.0179			61.1638	1.7600e-003		61.2077
Total	**0.6671**	**21.5655**	**5.7543**	**0.0638**	**1.5219**	**0.0670**	**1.5889**	**0.4165**	**0.0641**	**0.4806**			**6,986.7407**	**0.6447**		**7,002.8591**

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					2.5880	0.0000	2.5880	1.3287	0.0000	1.3287			0.0000			0.0000
Off-Road	1.5558	17.4203	7.5605	0.0172		0.7654	0.7654		0.7041	0.7041			1,666.5174	0.5390		1,679.9920
Total	**1.5558**	**17.4203**	**7.5605**	**0.0172**	**2.5880**	**0.7654**	**3.3534**	**1.3287**	**0.7041**	**2.0328**			**1,666.5174**	**0.5390**		**1,679.9920**

3.2 Site Preparation - 2021

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	0.6357	21.5453	5.5548	0.0632	1.4561	0.0666	1.5227	0.3991	0.0637	0.4628			6,925.5769	0.6430		6,941.6514
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
Worker	0.0314	0.0202	0.1995	6.1000e-004	0.0657	4.5000e-004	0.0662	0.0174	4.2000e-004	0.0179			61.1638	1.7600e-003		61.2077
Total	**0.6671**	**21.5655**	**5.7543**	**0.0638**	**1.5219**	**0.0670**	**1.5889**	**0.4165**	**0.0641**	**0.4806**			**6,986.7407**	**0.6447**		**7,002.8591**

3.3 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.9143	0.0000	4.9143	2.5256	0.0000	2.5256			0.0000			0.0000
Off-Road	1.2884	14.3307	6.3314	0.0141		0.6379	0.6379		0.5869	0.5869			1,365.0648	0.4415		1,376.1020
Total	**1.2884**	**14.3307**	**6.3314**	**0.0141**	**4.9143**	**0.6379**	**5.5522**	**2.5256**	**0.5869**	**3.1125**			**1,365.0648**	**0.4415**		**1,376.1020**

3.3 Grading - 2021

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
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
Worker	0.0314	0.0202	0.1995	6.1000e-004	0.0657	4.5000e-004	0.0662	0.0174	4.2000e-004	0.0179			61.1638	1.7600e-003		61.2077
Total	**0.0314**	**0.0202**	**0.1995**	**6.1000e-004**	**0.0657**	**4.5000e-004**	**0.0662**	**0.0174**	**4.2000e-004**	**0.0179**			**61.1638**	**1.7600e-003**		**61.2077**

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					2.2114	0.0000	2.2114	1.1365	0.0000	1.1365			0.0000			0.0000
Off-Road	1.2884	14.3307	6.3314	0.0141		0.6379	0.6379		0.5869	0.5869			1,365.0648	0.4415		1,376.1020
Total	**1.2884**	**14.3307**	**6.3314**	**0.0141**	**2.2114**	**0.6379**	**2.8493**	**1.1365**	**0.5869**	**1.7234**			**1,365.0648**	**0.4415**		**1,376.1020**

3.3 Grading - 2021

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
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
Worker	0.0314	0.0202	0.1995	6.1000e-004	0.0657	4.5000e-004	0.0662	0.0174	4.2000e-004	0.0179			61.1638	1.7600e-003		61.2077
Total	**0.0314**	**0.0202**	**0.1995**	**6.1000e-004**	**0.0657**	**4.5000e-004**	**0.0662**	**0.0174**	**4.2000e-004**	**0.0179**			**61.1638**	**1.7600e-003**		**61.2077**

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8125	13.6361	12.8994	0.0221		0.6843	0.6843		0.6608	0.6608			2,001.2200	0.3573		2,010.1517
Total	**1.8125**	**13.6361**	**12.8994**	**0.0221**		**0.6843**	**0.6843**		**0.6608**	**0.6608**			**2,001.2200**	**0.3573**		**2,010.1517**

3.4 Building Construction - 2021

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
Vendor	0.0287	0.9140	0.2601	2.3800e-003	0.0609	2.0000e-003	0.0629	0.0175	1.9200e-003	0.0195			255.4374	0.0199		255.9349
Worker	0.0902	0.0580	0.5735	1.7600e-003	0.1889	1.3100e-003	0.1902	0.0501	1.2000e-003	0.0513			175.8459	5.0500e-003		175.9722
Total	**0.1189**	**0.9721**	**0.8335**	**4.1400e-003**	**0.2499**	**3.3100e-003**	**0.2532**	**0.0677**	**3.1200e-003**	**0.0708**			**431.2833**	**0.0250**		**431.9071**

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	1.8125	13.6361	12.8994	0.0221		0.6843	0.6843		0.6608	0.6608			2,001.2200	0.3573		2,010.1517
Total	**1.8125**	**13.6361**	**12.8994**	**0.0221**		**0.6843**	**0.6843**		**0.6608**	**0.6608**			**2,001.2200**	**0.3573**		**2,010.1517**

3.4 Building Construction - 2021

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
Vendor	0.0287	0.9140	0.2601	2.3800e-003	0.0609	2.0000e-003	0.0629	0.0175	1.9200e-003	0.0195			255.4374	0.0199		255.9349
Worker	0.0902	0.0580	0.5735	1.7600e-003	0.1889	1.3100e-003	0.1902	0.0501	1.2000e-003	0.0513			175.8459	5.0500e-003		175.9722
Total	**0.1189**	**0.9721**	**0.8335**	**4.1400e-003**	**0.2499**	**3.3100e-003**	**0.2532**	**0.0677**	**3.1200e-003**	**0.0708**			**431.2833**	**0.0250**		**431.9071**

3.4 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6487	12.5031	12.7264	0.0221		0.5889	0.5889		0.5689	0.5689			2,001.5429	0.3486		2,010.2581
Total	**1.6487**	**12.5031**	**12.7264**	**0.0221**		**0.5889**	**0.5889**		**0.5689**	**0.5689**			**2,001.5429**	**0.3486**		**2,010.2581**

3.4 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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
Vendor	0.0267	0.8632	0.2462	2.3500e-003	0.0609	1.7300e-003	0.0627	0.0175	1.6500e-003	0.0192			252.9924	0.0193		253.4740
Worker	0.0855	0.0529	0.5321	1.7000e-003	0.1889	1.2800e-003	0.1902	0.0501	1.1800e-003	0.0513			169.4009	4.6300e-003		169.5165
Total	**0.1122**	**0.9161**	**0.7783**	**4.0500e-003**	**0.2499**	**3.0100e-003**	**0.2529**	**0.0677**	**2.8300e-003**	**0.0705**			**422.3932**	**0.0239**		**422.9905**

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	1.6487	12.5031	12.7264	0.0221		0.5889	0.5889		0.5689	0.5689			2,001.5429	0.3486		2,010.2581
Total	**1.6487**	**12.5031**	**12.7264**	**0.0221**		**0.5889**	**0.5889**		**0.5689**	**0.5689**			**2,001.5429**	**0.3486**		**2,010.2581**

3.4 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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
Vendor	0.0267	0.8632	0.2462	2.3500e-003	0.0609	1.7300e-003	0.0627	0.0175	1.6500e-003	0.0192			252.9924	0.0193		253.4740
Worker	0.0855	0.0529	0.5321	1.7000e-003	0.1889	1.2800e-003	0.1902	0.0501	1.1800e-003	0.0513			169.4009	4.6300e-003		169.5165
Total	**0.1122**	**0.9161**	**0.7783**	**4.0500e-003**	**0.2499**	**3.0100e-003**	**0.2529**	**0.0677**	**2.8300e-003**	**0.0705**			**422.3932**	**0.0239**		**422.9905**

3.5 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6877	6.7738	8.8060	0.0135		0.3474	0.3474		0.3205	0.3205			1,297.3789	0.4113		1,307.6608
Paving	0.1834					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.8711**	**6.7738**	**8.8060**	**0.0135**		**0.3474**	**0.3474**		**0.3205**	**0.3205**			**1,297.3789**	**0.4113**		**1,307.6608**

3.5 Paving - 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
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
Worker	0.0483	0.0299	0.3008	9.6000e-004	0.1068	7.2000e-004	0.1075	0.0283	6.6000e-004	0.0290			95.7483	2.6100e-003		95.8137
Total	**0.0483**	**0.0299**	**0.3008**	**9.6000e-004**	**0.1068**	**7.2000e-004**	**0.1075**	**0.0283**	**6.6000e-004**	**0.0290**			**95.7483**	**2.6100e-003**		**95.8137**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6877	6.7738	8.8060	0.0135		0.3474	0.3474		0.3205	0.3205			1,297.3789	0.4113		1,307.6608
Paving	0.1834					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.8711**	**6.7738**	**8.8060**	**0.0135**		**0.3474**	**0.3474**		**0.3205**	**0.3205**			**1,297.3789**	**0.4113**		**1,307.6608**

3.5 Paving - 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
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
Worker	0.0483	0.0299	0.3008	9.6000e-004	0.1068	7.2000e-004	0.1075	0.0283	6.6000e-004	0.0290			95.7483	2.6100e-003		95.8137
Total	**0.0483**	**0.0299**	**0.3008**	**9.6000e-004**	**0.1068**	**7.2000e-004**	**0.1075**	**0.0283**	**6.6000e-004**	**0.0290**			**95.7483**	**2.6100e-003**		**95.8137**

3.6 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	9.6668					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817			281.4481	0.0183		281.9062
Total	**9.8713**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**			**281.4481**	**0.0183**		**281.9062**

3.6 Architectural Coating - 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
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
Worker	0.0186	0.0115	0.1157	3.7000e-004	0.0411	2.8000e-004	0.0414	0.0109	2.6000e-004	0.0112			36.8263	1.0100e-003		36.8514
Total	**0.0186**	**0.0115**	**0.1157**	**3.7000e-004**	**0.0411**	**2.8000e-004**	**0.0414**	**0.0109**	**2.6000e-004**	**0.0112**			**36.8263**	**1.0100e-003**		**36.8514**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	9.6668					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817			281.4481	0.0183		281.9062
Total	**9.8713**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**			**281.4481**	**0.0183**		**281.9062**

3.6 Architectural Coating - 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
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
Worker	0.0186	0.0115	0.1157	3.7000e-004	0.0411	2.8000e-004	0.0414	0.0109	2.6000e-004	0.0112			36.8263	1.0100e-003		36.8514
Total	**0.0186**	**0.0115**	**0.1157**	**3.7000e-004**	**0.0411**	**2.8000e-004**	**0.0414**	**0.0109**	**2.6000e-004**	**0.0112**			**36.8263**	**1.0100e-003**		**36.8514**

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	0.1292	0.4989	1.5033	5.2700e-003	0.4975	4.1500e-003	0.5016	0.1330	3.8700e-003	0.1368			536.1649	0.0278		536.8590
Unmitigated	0.1292	0.4989	1.5033	5.2700e-003	0.4975	4.1500e-003	0.5016	0.1330	3.8700e-003	0.1368			536.1649	0.0278		536.8590

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	56.80	12.67	5.41	103,135	103,135
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	33.87	33.87	33.87	98,880	98,880
Total	90.67	46.54	39.28	202,015	202,015

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	9.50	7.30	7.30	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.602700	0.040134	0.179939	0.104242	0.014985	0.005435	0.016642	0.024350	0.001934	0.001888	0.005938	0.000757	0.001056
Parking Lot	0.602700	0.040134	0.179939	0.104242	0.014985	0.005435	0.016642	0.024350	0.001934	0.001888	0.005938	0.000757	0.001056
Unrefrigerated Warehouse-No Rail	0.602700	0.040134	0.179939	0.104242	0.014985	0.005435	0.016642	0.024350	0.001934	0.001888	0.005938	0.000757	0.001056

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	4.0700e-003	0.0370	0.0311	2.2000e-004		2.8100e-003	2.8100e-003		2.8100e-003	2.8100e-003			44.3791	8.5000e-004	8.1000e-004	44.6428
NaturalGas Unmitigated	4.0700e-003	0.0370	0.0311	2.2000e-004		2.8100e-003	2.8100e-003		2.8100e-003	2.8100e-003			44.3791	8.5000e-004	8.1000e-004	44.6428

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 Office Building	284.983	3.0700e-003	0.0279	0.0235	1.7000e-004		2.1200e-003	2.1200e-003		2.1200e-003	2.1200e-003			33.5274	6.4000e-004	6.1000e-004	33.7267
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
Unrefrigerated Warehouse-No Rail	92.2389	9.9000e-004	9.0400e-003	7.6000e-003	5.0000e-005		6.9000e-004	6.9000e-004		6.9000e-004	6.9000e-004			10.8516	2.1000e-004	2.0000e-004	10.9161
Total		**4.0600e-003**	**0.0370**	**0.0311**	**2.2000e-004**		**2.8100e-003**	**2.8100e-003**		**2.8100e-003**	**2.8100e-003**			**44.3791**	**8.5000e-004**	**8.1000e-004**	**44.6428**

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 Office Building	0.284983	3.0700e-003	0.0279	0.0235	1.7000e-004		2.1200e-003	2.1200e-003		2.1200e-003	2.1200e-003			33.5274	6.4000e-004	6.1000e-004	33.7267
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
Unrefrigerated Warehouse-No Rail	0.0922389	9.9000e-004	9.0400e-003	7.6000e-003	5.0000e-005		6.9000e-004	6.9000e-004		6.9000e-004	6.9000e-004			10.8516	2.1000e-004	2.0000e-004	10.9161
Total		**4.0600e-003**	**0.0370**	**0.0311**	**2.2000e-004**		**2.8100e-003**	**2.8100e-003**		**2.8100e-003**	**2.8100e-003**			**44.3791**	**8.5000e-004**	**8.1000e-004**	**44.6428**

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	0.5802	1.0000e-004	0.0106	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005			0.0226	6.0000e-005		0.0241
Unmitigated	0.5802	1.0000e-004	0.0106	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005			0.0226	6.0000e-005		0.0241

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	0.0265					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.5527					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.8000e-004	1.0000e-004	0.0106	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005			0.0226	6.0000e-005		0.0241
Total	**0.5802**	**1.0000e-004**	**0.0106**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**			**0.0226**	**6.0000e-005**		**0.0241**

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	0.0265					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.5527					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.8000e-004	1.0000e-004	0.0106	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005			0.0226	6.0000e-005		0.0241
Total	**0.5802**	**1.0000e-004**	**0.0106**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**			**0.0226**	**6.0000e-005**		**0.0241**

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