AIR QUALITY & GREENHOUSE GAS STUDY

PIXIOR DISTRIBUTION CENTER
HESPERIA, CALIFORNIA

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GLOSSARY OF TERMS AND ACRONYMS

Acronym	Description
APCD	Air Pollution Control District
ARB	California Air Resources Board
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CARB	California Air Resources Board
CCAA	California Clean Air Act
CEQA	California Environmental Quality Act
CFC	Chlorofluorocarbons
CH_4	Methane
CO	Carbon Monoxide
CO_2	Carbon Dioxide
EPA	Environmental Protection Agency
HAP	Hazardous Air Pollutants
HFC	Hydrofluorocarbons
lb/day	Pounds per Day
MDAB	Mojave Desert Air Basin
MDAQMD	Mojave Desert Air Quality Management District
NAAQS	National Ambient Air Quality Standards
N_2O	Nitrous Oxide
NO_2	Nitrogen Dioxide
NO_x	Oxides of Nitrogen
O_3	Ozone
Pb	Lead
PFC	Perfluorocarbon
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
ROG	Reactive Organic Gases (ROG)
sf	Square Feet
SF_6	Sulfur Hexafluoride
SIP	State Implementation Plan
SO_2	Sulfur Dioxide
SO_x	Oxides of Sulfur
TACs	Toxic Air Contaminants
TPY	Tons Per Year
US	United States
VOC	Volatile Organic Compounds
yr	Year

1.0 AIR QUALITY AND GREENHOUSE GAS STUDY

This study provides an analysis of the potential air quality impacts associated with the proposed Pixior Distribution Center (Project), within the City of Hesperia and County of San Bernardino. 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 activity, within proximity of the construction area.

1.1 Project Description

The proposed Project site encompasses approximately 20.84 acres of vacant land and is located at 55555 Amargosa Road in the City of Hesperia, California. The site lies in Section 14, Township 4 North, Range 5 West, San Bernardino Base and Meridian.

The Project site is in the General Plan Area, which designates the site as commercial/industrial business park and zoning designation of CIBP. The proposed use of the Project site would be compatible with the land use and zoning designations. The Project is anticipated to be developed within a single phase, with an anticipated full operational year in 2023.

The Pixior Distribution Center proposes redevelopment of the existing vacant land as a warehouse distribution center, with associated parking. The Project will include a 444,000 square foot (sf) warehouse/distribution building, with 16,500 sf of office space within the warehouse building. There will be 81 parking spaces for trucks and 258 parking spaces for employee and visitor vehicles.

2.0 AIR QUALITY 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 Mojave Desert Air Quality Management District (MDAQMD) regulates air quality in San Bernardino County.

The federal and state governments have been empowered by the 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). 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 Bernardino is located in the Mojave Desert Air Basin (MDAB), which is under the jurisdiction of the MDAQMD.

2.1 California Air Resources Board

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. Both state and federal standards are summarized in Table 2-1 below. 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 Mojave Desert Air Quality Management District

The Project site is located in the portion of the County of San Bernardino, California, that is part of the Mojave Desert Air Basin (MDAB) and is under the jurisdiction of the MDAQMD. The air quality assessment for the proposed Project includes estimating emissions associated with short-term construction and long-term operation of the proposed Project. A number of air quality modeling tools are available to assess the air quality impacts of projects. In addition, certain air districts, such as the MDAQMD, have created guidelines and requirements to conduct air quality analyses. The MDAQMD's current guidelines, included in its California Environmental Quality Act and Federal Conformity Guidelines, dated February 2020 (MDAQMD 2020), were adhered to in the assessment of air quality impacts for the proposed Project.

TABLE 2-1
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.

2.3 Air Pollutants of Concern

2.3.1 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). The U.S. EPA uses the term VOC and the CARB's Emission Inventory Branch (EIB) uses the term Reactive Organic Gases (ROG) to essentially define the same thing. 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.

The California Air Resources Board (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). CARB also reviews operations and programs of the local air districts, and requires each air district with jurisdiction over a non-attainment area to develop its own strategy for achieving the NAAQS and CAAQS. The California Clean Air Act of 1988 (CAA) 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.

2.3.2 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. Joint federal, state and local regulations aimed at lessening public exposure to TACs are constantly revisited and updated.

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.

As an example of TAC emissions from the proposed Project, development projects generate diesel emissions from construction vehicles during the construction and operational phases. Diesel exhaust is mainly composed of particulate matter and gases.

2.3.3 Greenhouse Gases

Greenhouse Gases (GHG) are gases that trap heat in the atmosphere, analogous to the way a greenhouse retains heat. Common GHGs include water vapor, carbon dioxide (CO_2), methane (CH_4), nitrous oxides (N_2O), chlorofluorocarbons (CFCs), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF_6), and aerosols.

Individual GHGs have varying potential to contribute to global warming and atmospheric lifetimes. The effect each GHG has on climate change is measured as a combination of the mass of its emissions and the potential of a gas or aerosol to trap heat in the atmosphere, known as its global warming potential (GWP). The Intergovernmental Panel on Climate Change (IPCC) identifies the GWP and atmospheric lifetimes of basic GHGs. The CO_2 equivalent (CO_2e) is a unit used for comparing GHG emissions since it normalizes various GHG emissions to a consistent measure. The reference gas for GWP is CO_2; therefore, CO_2 has a GWP of one (1). By comparison, the GWP of CH_4 is 21 and the GWP of N_2O is 310. This means that CH_4 has a greater global warming effect than CO_2 on a molecule per molecule basis. The mass emission of CO_2e is the mass emissions of an individual GHG multiplied by its GWP.

2.3.4 Regional Air Quality

Air pollution contributes to a wide variety of adverse health effects. The EPA has established NAAQS for six of the most common air pollutants: O_3, PM_{10}, $PM_{2.5}$, CO, NO_2, SO_2 and Pb which are known as criteria pollutants. The MDAQMD monitors levels of various criteria pollutants at six (6) permanent monitoring stations throughout the air district.

Attainment status for a pollutant means that the Air District meets the standards set by the United State Environmental Protection Agency (EPA) or the California EPA (CalEPA). Conversely, nonattainment means that an area has monitored air quality that does not meet the NAAQS or CAAQS standards. In order to improve air quality in nonattainment areas, a State Implementation Plan (SIP) is drafted. The SIP outlines the measures that the state will take to improve air quality. Once nonattainment areas meet the standards and additional redesignation requirements, the EPA will designate the area as a maintenance area. Table 2-2 defines the attainment designations within the Mojave Desert AQMD.

TABLE 2-2
SUMMARY OF MOJAVE DESERT AQMD
FEDERAL AND STATE ATTAINMENT STATUS

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

* Southwest corner of desert portion of San Bernardino County only.
** San Bernardino County portion only.
*** Searles Valley (Northwest corner of San Bernardino County) only.

2.3.5 Local Air Quality

Existing air quality is measured at established MDAQMD air quality monitoring stations. The purpose of the monitoring stations is to measure ambient concentrations of pollutants, including criteria pollutants, ozone precursors and TACs, and to determine whether the CAAQS and the NAAQS are met. Monitored air quality is evaluated in the context of ambient air quality standards. These standards are the levels of air quality that are considered safe, with an adequate margin of safety, to protect the public health and welfare.

Relative to the Project site, the nearest long-term air quality monitoring site for O_3 and PM_{10} was obtained from the MDAQMD Hesperia-Olive Street monitoring station, located approximately 2 miles southeast of the Project site in Hesperia. Data for CO, NO_2, and $PM_{2.5}$ was obtained from the MDAQMD Victorville-Park Avenue, located approximately 7 miles northeast of the Project site in Victorville. The most recent three (3) years of data available is shown in Table 2-3 and identifies the number of days ambient air quality standards were exceeded for the study area, which is considered to be representative of the local air quality at the Project site. Data for CO and SO_2 has been omitted as attainment is regularly met and few monitoring stations in the area measure CO or SO_2 concentrations.

TABLE 2-3
AMBIENT AIR BACKGROUND POLLUTANT CONCENTRATIONS/EXCEEDANCES/STANDARDS

Pollutant	2017	2018	2019
Ozone (O_3)			
State maximum 1-hour concentration (ppm)	**0.114**	**0.113**	**0.108**
National maximum 8-hour concentration (ppm)	**0.094**	**0.100**	**0.088**
State maximum 8-hour concentration (ppm)	**0.094**	**0.100**	**0.088**
Number of Days Standard Exceeded			
CAAQS 1-hour (>0.09 ppm)	18	9	9
CAAQS 8- hour (>0.070 ppm)/NAAQS 8-hour (>0.070 ppm)	78 / 75	73 / 71	52 / 47
Respirable Particulate Matter (PM_{10})			
National maximum 24-hour concentration ($\mu g/m^3$)	**163.6**	138.9	**157.7**
State maximum 24-hour concentration ($\mu g/m^3$)	*	*	*
Annual federal average concentration ($\mu g/m^3$)	26.9	27.8	24.5
Annual or Days Standard Exceeded			
NAAQS 24-hour (>150 $\mu g/m^3$)	2	0	1
Fine Particulate Matter ($PM_{2.5}$)			
National Maximum 24-hour concentration ($\mu g/m^3$)	27.2	32.7	17.8
State maximum 24-hour concentration ($\mu g/m^3$)	29.3	33.2	20.0
Annual average concentration ($\mu g/m^3$)	8.7	7.9	7.0
Annual or Days Standard Exceeded			
NAAQS 24-hour (>35 $\mu g/m^3$)/Annual (>12.0 $\mu g/m^3$)	0 / No	0 / No	0 / No
CAAQS Annual (>12 $\mu g/m^3$)	No	No	No
Nitrogen Dioxide (NO_2)			
National Maximum 24-hour concentration ($\mu g/m^3$)	57.3	51.4	56.0
State maximum 24-hour concentration ($\mu g/m^3$)	57	51	56
Annual average concentration ($\mu g/m^3$)	12	11	11

Notes:
$\mu g/m^3$ = 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} and O_3 measured at the Hesperia-Olive Street Monitoring Station (approx. 2 miles SE of the Project)
$PM_{2.5}$ and NO_2 measured at the Victorville Park Ave. Monitoring Station (approx. 7 miles NE of the Project)
* Insufficient data available to determine the value.
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 AIR QUALITY IMPACT

3.1 Significance Criteria Methodology

Air quality modeling was performed in general accordance with the methodologies outlined in the MDAQMD CEQA Guidelines to identify both construction and operational emissions associated with the proposed Project. 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. The purpose of this model is to calculate construction-source and operational-source criteria pollutant (VOC, NO_X, CO, SO_X, PM_{10}, $PM_{2.5}$) and GHG emissions from direct and indirect sources; and quantify applicable air quality and GHG reductions achieved from best management practices and project design features. Accordingly, the latest version of CalEEMod has been used for this Project to determine construction and operational air quality emissions. Output from the model runs for both construction and operational activity are provided in Appendix A.

As referenced, construction activities would include site preparation, grading, construction of the buildings/utilities and related improvements as well as paving parking areas. Construction activities would require the use of equipment that would generate criteria air pollutant emissions. For modeling 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. Construction emissions are analyzed using the regional thresholds established by the MDAQMD.

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 electricity and natural gas consumption for space and water heating. 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, emissions are compared with the regional thresholds for operational emissions.

3.1.1 Determination of Significance

The criteria used to determine the significance of potential Project-related air quality impacts are taken from the MDAQMD CEQA and Federal Conformity Guidelines (MDAQMD 2020). Based on these thresholds, a project would result in a significant impact related to air quality if it would (referred to herein as MD thresholds 1 through 4):

1) *Generates total emissions (direct and indirect) in excess of the thresholds (shown below in Table 3-1).*
2) *Generates a violation of any ambient air quality standard when added to the local background.*

3) *Does not conform with the applicable attainment or maintenance plan(s).*

4) *Exposes sensitive receptors to substantial pollutant concentrations, including those resulting in a cancer risk greater than or equal to 10 in a million and/or a Hazard Index (HI) (non-cancerous) greater than or equal to 1.*

In addition, the MDAQMD CEQA Guidelines state that the District will clarify upon request which threshold is most appropriate for a given project, but in general, the emissions comparison to the thresholds is sufficient to define significance.

3.1.2 Significance Thresholds

The MDAQMD has developed regional significance thresholds for regulated pollutants, shown below in Table 3-1. The MDAQMD's Guidelines indicate that any projects in the MDAB with daily regional emissions that exceed any of the indicated thresholds may be considered as having an individually and cumulatively significant air quality impact. The daily construction and operational emission thresholds for pollutants evaluated are as follows:

TABLE 3-1
SIGNIFICANT EMISSIONS THRESHOLDS

Criteria Pollutant	Annual Threshold (tons)	Daily Threshold (pounds)
Carbon Monoxide (CO)	100	548
Oxides of Nitrogen (NO_x)	25	137
Volatile Organic Compounds (VOC)	25	137
Sulfur Oxides (SO_x)	25	137
Particulate Matter (PM_{10})	15	82
Particulate Matter ($PM_{2.5}$)	12	65

3.2 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 20.84-acre site would be disturbed and graded for overall site development. The number of haul trips to import material was based on 18,000 cy of material imported for the dock high building design. Construction phases would generally consist of site preparation and grading, construction of the warehouse building, parking lot paving, and the application of architectural coating (painting).

Construction is anticipated to begin in Fall 2021, with completion by mid-2022. Construction duration by phase is shown in Table 3-2. The duration of construction activity and associated equipment represents a reasonable approximation of the expected construction fleet as required per CEQA Guidelines. Construction equipment

associated with the Project was based on CalEEMod standard default fleet sets, for each phase. Site specific construction fleet may vary due to specific project needs at the time of construction.

TABLE 3-2
CONSTRUCTION SCHEDULE AND DURATION

Phase Name	Start Date	End Date	Days
Site Preparation	1-Sep-2021	14-Oct-2021	32
Grading	15-Oct-2021	5-Nov-2021	16
Building Construction	6-Nov-2021	5-May-2021	129
Architectural Coating	6-May-2022	16-Jun-2022	30
Paving	5-Jun-2022	1-Jul-2022	20

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 MDAQMD Rule 403, which identifies fugitive dust standards and is required to be implemented at non-residential construction sites with a disturbed surface area of at least 5 acres. Therefore, the following conditions, which generally reduce fugitive dust emissions, were included in CalEEMod for site preparation and grading phases of construction. In addition to these conditions, the Project will be required to obtain a MDAQMD approved Dust Control Plan. The following are conditions for construction, defined in Rule 403:

a) *Use periodic watering for short-term stabilization of Disturbed Surface Area to minimize visible fugitive dust emissions. For the purposes of this Rule, use of a water truck to maintain moist disturbed surfaces and actively spread water during visible dusting episodes shall be considered sufficient to maintain compliance;*
b) *Take actions sufficient to prevent project-related Trackout onto paved surfaces;*
c) *Cover loaded haul Vehicles while operating on Publicly Maintained paved surfaces;*
d) *Stabilize graded site surfaces upon completion of grading when subsequent development is delayed or expected to be delayed more than thirty days, except when such delay is due to precipitation that dampens the disturbed surface sufficiently to eliminate Visible Fugitive Dust emissions;*
e) *Cleanup project-related Trackout or spills on Publicly Maintained paved surfaces within twenty-four hours;*
f) *Reduce non-essential Earth-Moving Activity under High Wind conditions. For purposes of this Rule, a reduction in Earth-Moving Activity when visible dusting occurs from moist and dry surfaces due to wind erosion shall be considered sufficient to maintain compliance;*
g) *Maintain the natural topography to the extent possible during grading and other earth movement;*
h) *Provide a construction schedule that specifies construction of parking lots and paved roads first, where feasible, and upwind structures prior to downwind structures;*
i) *Cover or otherwise contain Bulk Material carried on haul trucks operating on paved roads;*
j) *Remove Bulk Material tracked onto paved road surfaces;*
k) *Provide Stabilized access route(s) to the project site as soon as is feasible;*

l) Maintain natural topography to the extent possible;
m) Construct parking lots and paved roads first, where feasible; and
n) Construct upwind portions of project first, where feasible.

In addition to MDAQMD Rule 403 conditions above, emissions modeling also includes the use of low-VOC paint (50 g/L for interior and exterior coatings, with 100 g/L for parking lot paint) as required by MDAQMD Rule 1113.

3.2.1 Construction Emissions Summary

Table 3-3 summarizes the maximum daily construction emissions, including dust control measures. Based on the emissions shown, construction of the proposed Project would not exceed the MDAQMD regional construction emission thresholds for daily emissions. Thus, the Project construction would not violate an air quality standard or result in a cumulatively considerable increase in ozone or particulate matter emissions or expose receptors to substantial pollutant concentrations (MD thresholds 1 and 2).

TABLE 3-3
MAXIMUM DAILY CONSTRUCTION EMISSIONS WITH CONTROL MEASURES

Construction Phase	Maximum Emissions (lbs/day)					
	VOC	NO_x	CO	SO_2	PM_{10}	$PM_{2.5}$
Summer Daily Maximum	71.7	55.9	31.6	0.097	11.6	6.77
Winter Daily Maximum	71.7	55.8	31.4	0.095	11.6	6.77
Significance Thresholds	*13*	*137*	*548*	*137*	*82*	*65*
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

See *Appendix for CalEEMod ver. 2016.3.2 computer model output for construction emissions, daily emissions shown.*

Table 3-4 summarizes the maximum annual construction emissions, including dust control measures. Based on the emissions shown, construction of the proposed Project would not exceed the MDAQMD regional construction emission thresholds for annual emissions. Thus, the Project construction would not violate an air quality standard or result in a cumulatively considerable increase in ozone or particulate matter emissions or expose receptors to substantial pollutant concentrations (MD thresholds 1 and 2).

TABLE 3-4
MAXIMUM ANNUAL CONSTRUCTION EMISSIONS WITH CONTROL MEASURES

Construction Phase	Maximum Emissions (tons/year)					
	VOC	NO_x	CO	SO_2	PM_{10}	$PM_{2.5}$
Annual Maximum	1.16	1.81	1.03	0.003	0.267	0.159
Significance Thresholds	*25*	*25*	*100*	*25*	*15*	*12*
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

See *Appendix for CalEEMod ver. 2016.3.2 computer model output for construction emissions, annual emissions.*

3.3 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.

3.3.1 Area Source Emissions

Architectural Coatings
Over a period of time the buildings that are part of this Project will be subject to emissions resulting from the evaporation of solvents contained in paints, varnishes, primers, and other surface coatings as part of Project maintenance. The emissions associated with architectural coatings were calculated using CalEEMod default parameters, defined as 10% of surfaces will require reapplication of paint on an annual basis. Emission factors for architectural coating were adjusted to demonstrate compliance with MDAQMD Rule 1113, which defines a VOC concentration of 50 grams per liter (g/L) VOC for flat and non-flat coatings, effective 1/1/2022. Parking lot paints will meet the VOC concentration of 100 g/L VOC for traffic marking coatings.

Consumer Products
Consumer products include, but are not limited to detergents, cleaning compounds, polishes, personal care products, and lawn and garden products. Many of these products contain organic compounds, which when released in the atmosphere, can react to form O_3 and other photochemically reactive pollutants. The emissions associated with use of consumer products were calculated based on assumptions provided in CalEEMod. In the case of the commercial uses proposed by the Project, no substantive on-site use of consumer products is anticipated. However, low VOC cleaning supplies will be utilized if available.

Landscaping Equipment
Landscape maintenance equipment would generate emissions from fuel combustion and evaporation of unburned fuel. Equipment in this category would include lawnmowers, shedders/grinders, blowers, trimmers, chain saws, and hedge trimmers used to maintain landscaping of the Project. The emissions associated with landscape maintenance equipment were calculated based on assumptions provided in CalEEMod. It is estimated that 25% of the total landscaping equipment will be electric or battery operated for this Project.

3.3.2 Energy Source Emissions

Combustion Emissions Associated with Natural Gas and Electricity
Criteria pollutant emissions are emitted through the generation of electricity and consumption of natural gas. However, because electrical generating facilities for the Project area are located either outside the region (state) or offset through the use of pollution credits (Regional Clean Air Incentives Market Program (RECLAIM)) for generation within the MDAB, criteria pollutant emissions from offsite generation of electricity is generally excluded from the evaluation of significance and only natural

gas use is considered. The emissions associated with natural gas use were calculated using CalEEMod default parameters, for both the office land use type and the warehouse land use type. The use of solar power as an onsite renewable energy source will be incorporated into the Project and will be further discussed as a mitigation measure for greenhouse gas emissions, in Section 4.

Title 24 Energy Efficiency Standards

California's Energy Efficiency Standards for Residential and Nonresidential Buildings was first adopted 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 efficient technologies and methods. Energy efficient buildings require less electricity. The 2019 Title 24 was adopted by the CEC and became effective on January 1, 2020. The CEC anticipates that nonresidential buildings will use approximately 30% less energy than the 2016 energy efficiency standards (CEC 2019). Since CalEEMod incorporates 2016 building standards, the model includes a 30% improvement over the existing Title 24 standards and 15% increase in lighting efficiency.

3.3.3 Mobile Source Emissions

Vehicle Exhaust

Project-related operational air quality impacts are derived from vehicle trips generated by the Project. Trip characteristics were obtained from the Focused Traffic Impact Study (TIS) Report for the Pixior Distribution Center, prepared by David Evans and Associates, dated January 15, 2021 (DEA 2021). TIS report Table 3-1 defines the daily trip generation rate as 783 vehicles, which was incorporated into the CalEEMod model for this Project. The percentage of passenger cars will be 79.57%, which were included in the CalEEMod model as a ratio mixture of LDA/LDT1/LDT2 vehicle types. The percentage of 2-axle trucks will be 3.46%, 3-axle trucks will be 4.64%, and 4-axle trucks will be 12.33%, which were modeled in CalEEMod as LHD1, MHD, and HHD truck types, respectively.

Fugitive Dust Related to Vehicle Travel

Vehicles traveling on paved roads would be a source of fugitive emissions due to the generation of road dust inclusive of break and tire wear particulates. The emission estimates for travel on paved roads were calculated using CalEEMod.

3.3.4 Operational Emissions Summary

CalEEMod utilizes summer and winter EMFAC2017 emission factors in order to derive vehicle emissions associated with Project operational activities, which vary by season. As such, operational activities for summer and winter scenarios are presented in Appendix A, but since summer emissions are generally higher, they will be used for comparison with the thresholds. The operational emissions are shown with the Project design conditions incorporated, which are shown below with control measures. Appendix A includes the CalEEMod modeled scenarios which show unmitigated emissions without project control measures and mitigated emissions with project control measures. Table 3-5 summarizes daily emissions associated with operation

of the proposed Project. Table 3-6 summarizes annual emissions associated with operation of the proposed Project.

TABLE 3-5
MAXIMUM DAILY OPERATIONAL EMISSIONS WITH CONTROL MEASURES

	Estimated Emissions (lbs/day)					
	ROG	**NO_x**	**CO**	**SO_x**	**PM_{10}**	**$PM_{2.5}$**
Proposed Project						
Area	9.42	0.001	0.072	<0.001	<0.001	<0.001
Energy	0.019	0.175	0.147	0.001	0.013	0.013
Mobile	1.24	14.3	13.0	0.085	4.98	1.37
Maximum Daily	**10.7**	**14.5**	**13.2**	**0.086**	**5.00**	**1.38**
MDAQMD Thresholds	*137*	*137*	*548*	*137*	*82*	*65*
Exceeds Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

See Appendix for CalEEMod ver. 2016.3.2 computer model output. Summer emissions shown as they are slightly higher than Winter emissions. Project conditions are defined as mitigated emissions in CalEEMod.

TABLE 3-6
MAXIMUM ANNUAL OPERATIONAL EMISSIONS WITH CONTROL MEASURES

	Estimated Emissions (tons/year)					
	ROG	**NO_x**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Proposed Project						
Area	1.72	<0.001	0.006	<0.001	<0.001	<0.001
Energy	0.004	0.032	0.027	<0.001	0.002	0.002
Mobile	0.187	2.62	2.14	0.015	0.891	0.245
Maximum Annual	**1.91**	**2.65**	**2.18**	**0.015**	**0.894**	**0.248**
MDAQMD Thresholds	*25*	*25*	*100*	*25*	*15*	*12*
Exceeds Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

See Appendix for CalEEMod ver. 2016.3.2 computer model output. Project conditions are defined as mitigated emissions in CalEEMod.

As shown in Table 3-5 and Table 3-6, the emissions associated with operation of the proposed Project would not exceed the MDAQMD 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, and defined by MD thresholds 1, 2, and 4) would be less than significant.

3.4 Objectionable Odors

The proposed Project would involve the use of diesel-powered construction equipment. Diesel exhaust may be noticeable temporarily at adjacent properties; however, construction activities would be temporary. The Project does not include industrial or agricultural uses that are typically associated with objectionable odors. Therefore, impacts associated with objectionable odors would be less than significant.

3.5 Local Carbon Monoxide Emissions and CO Hotspots

Carbon monoxide 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 MDAB is in attainment of state and federal CO standards.

Although CO is not a regional air quality concern in MDAB, 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 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 David 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.

The Traffic Impact Study prepared for the Project (DEA 2021) indicated that the intersections within the Project analysis area would be LOS D or better, so the Project is calculated to result in less-than-significant transportation impact. Receptors would not be exposed to substantial pollutant concentrations (MD threshold 2 and 4) related to CO hotspots. No further evaluation with respect to CO hotspots is required.

3.6 Conformance with Plans

The Federal Particulate Matter Attainment Plan and Ozone Attainment Plan for the Mojave Desert set forth a comprehensive set of programs that will lead the MDAB into compliance with federal and state air quality standards. The control measures and related emission reduction estimates within the Federal Particulate Matter Attainment Plan and Ozone Attainment Plan are based upon emissions projections for a future development scenario derived from land use, population, and employment characteristics defined in consultation with local governments. Accordingly, conformance with these attainment plans for development projects is determined by demonstrating compliance with Air Quality management Plans.

The proposed Project site has a general plan land use designation of commercial/industrial business park and zoning designation of CIBP. The proposed Project will be a warehouse distribution center. The Project applicant proposes land uses that are consistent with development anticipated under the site's existing General Plan designation. The Project would therefore conform to local use plans (MD threshold 3).

The Project would be required to comply with all applicable MDAQMD Rules and Regulations, including, but not limited to Rules 401 (Visible Emissions), 402 (Nuisance), 403 (Fugitive Dust), and Rule 1113 (Architectural Coatings).

Since the Project would conform to local land use plans and would comply with all applicable MDAQMD Rules and Regulations, impacts related to MD threshold 3 would be less than significant.

4.0 GREENHOUSE GAS IMPACTS

4.1 Significance Criteria Methodology

The Project has been evaluated to determine if it will result in a significant GHG impact. Land uses such as the Project affect GHGs through construction-source and operational-source emissions, which were defined in detail in Section 3.

The significance of these potential impacts is described in the following section.

4.1.1 Determination of Significance

The criteria used to determine the significance of potential Project-related GHG impacts are taken from the Initial Study Checklist in Appendix G of the State CEQA Guidelines. Based on these thresholds, a project would result in a significant impact related to GHG if it would (CEQA 2021):

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

2) *Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs?*

4.1.2 Significance Thresholds

The MDAQMD has established 100,000 tons of CO_2e per annum or 548,000 pounds per day as the District's significant emissions threshold for greenhouse gases.

4.2 Construction Emissions

Project construction activities would generate CO_2 and CH_4 emissions. Emissions of N_2O from construction equipment are considered to be negligible. As discussed in

Section 3, construction related emissions are expected mainly from the exhaust of heavy construction vehicles.

4.2.1 Construction Emissions Summary

For construction Project emissions, GHGs are quantified and amortized over the life of the Project. MDAQMD follows the South Coast Air Quality Management District (SCAQMD) recommendation in calculating the total GHG emissions for construction activities by amortizing the emissions over the life of the Project by dividing it by a 30-year project life then adding that number to the annual operational phase GHG emissions (SCAQMD 2008). As such, construction emissions were amortized over a 30-year period and added to the annual operational phase GHG emissions. Since the construction schedule is less than 12 months in duration, the construction emissions for 2021 and 2022 are combined to demonstrate the worst-case scenario. The amortized construction emissions are presented in Table 4-1.

TABLE 4-1
AMORTIZED ANNUAL CONSTRUCTION GHG EMISSIONS

Year	GHG Emissions (MT/year)			
	CO_2	CH_4	N_2O	CO_2e
2021	290	0.053	0	291
2022	257	0.042	0	258
Construction Total	547	0.095	0	549
Amortized Emissions (CO_2e)	18.2	0.003	0	18.3

4.3 Operational Emissions

Project operations would generate CO_2, CH_4, and N_2O emissions. Primary emissions sources would include:

- Area Source (landscape and site maintenance activities)
- Energy Source (natural gas and electricity emissions)
- Mobile Source (vehicles)
- Solid Waste
- Water Supply, Treatment, and Distribution

4.3.1 Area Source Emissions

Landscaping Equipment
Landscape maintenance equipment would generate emissions from fuel combustion and evaporation of unburned fuel. Equipment in this category would include lawnmowers, shedders/grinders, blowers, trimmers, chain saws, and hedge trimmers used to maintain landscaping of the Project. The emissions associated with landscape

maintenance equipment were calculated based on assumptions provided in CalEEMod. It is estimated that 25% of the total landscaping equipment will be electric or battery operated for this Project.

4.3.2 Energy Source Emissions

Combustion Emissions Associated with Natural Gas and Electricity
GHGs are emitted from buildings as a result of activities for which electricity and natural gas are typically used as energy sources. Combustion of any type of fuel emits CO_2 and other GHGs directly into the atmosphere; these emissions are considered direct emissions associated with a building. GHGs are also emitted during the generation of electricity from fossil fuels; these emissions are considered to be indirect emissions. GHG emissions associated with the natural gas and electricity usage associated with the Project were calculated by CalEEMod using default parameters. The use of solar power as an onsite renewable energy source will be incorporated into the Project and will be considered a mitigation measure for greenhouse gas emissions. The Project will install solar panels on the rooftop to provide 100% of the building's electrical power supply.

Title 24 Energy Efficiency Standards
The CalEEMod defaults for Title 24 energy efficiency standards incorporate the 2016 building standards. Therefore, the model includes a 30% improvement over the existing Title 24 standards and 15% increase in lighting efficiency.

4.3.3 Mobile Source

Vehicle Exhaust
Project-related GHG impacts are derived primarily from vehicle trips generated by the Project. Trip characteristics available from the report, Focused Traffic Impact Study were used to analyze vehicle emissions (DEA 2021).

4.3.4 Solid Waste

Industrial land uses will result in the generation and disposal of solid waste. A large percentage of this waste will be diverted from landfills by a variety of means, such as reducing the amount of waste generated, recycling, and/or composting. The remainder of the waste not diverted will be disposed of at a landfill. GHG emissions from landfills are associated with the anaerobic breakdown of material. GHG emissions associated with the disposal of solid waste associated with the Project were calculated by CalEEMod using default parameters, with the assumption that at least 50% of the waste would be diverted through recycling and composting.

4.3.5 Water Supply, Treatment, and Distribution

Indirect GHG emissions result from the production of electricity used to convey, treat and distribute water and wastewater. The amount of electricity required to convey, treat and distribute water depends on the volume of water as well as the sources of

the water. Values were based on the defaults in CalEEMod for general office space and warehouse land uses. The Project includes a 20% reduction in indoor and outdoor water usage. Reduction of 20% indoor and outdoor water usage is consistent with the current CALGreen Code performance standards for residential and non-residential land uses. Per CALGreen, the reduction shall be based on the maximum allowable water use per plumbing fixture and fittings as required by the California Building Standards Code (CALGreen 2019).

4.3.6 Emissions Summary

Impacts Prior to Control Measures

As shown in Table 4-2, the Project would result in 2,872 tons CO_2e per year, without accounting for applicable regulatory requirements and renewable energy. GHG emission impacts before regulatory requirements are well below the MDAQMD significance threshold.

TABLE 4-2
PROJECT GHG EMISSIONS SUMMARY – PRIOR TO CONTROL MEASURES

Emission Source	GHG Emissions (MT/year)			
	CO_2	CH_4	N_2O	CO_2e
Amortized Construction Emissions	18.2	0.003	0	18.3
Area Source	0.014	<0.001	0	0.015
Energy Source	436	0.017	0.004	438
Mobile Source	1,368	0.071	0	1,370
Waste Generation	84.7	5.00	0	210
Water Usage	461	3.33	0.082	569
Total $MTCO_2e$	2,605			
Total tons CO_2e	2,872			
Significance Threshold (tons/year)	100,000			

As shown in Table 4-3 below, after implementation of applicable regulatory requirements and renewable energy mitigation with solar power implementation, the Project would result in 2,129 tons CO_2e per year, a reduction of 34.9%.

TABLE 4-3
PROJECT GHG EMISSIONS SUMMARY – AFTER CONTROL MEASURES

Emission Source	GHG Emissions (MT/year)			
	CO_2	CH_4	N_2O	CO_2e
Amortized Construction Emissions	18.2	0.003	0	18.3
Area Source	0.012	<0.001	0	0.013
Energy Source	34.8	<0.001	<0.001	35.0
Mobile Source	1,368	0.071	0	1,370
Waste Generation	21.2	1.25	0	52.5
Water Usage	369	2.67	0.066	455
Total $MTCO_2e$	1,931			
Total tons CO_2e	2,129			
Significance Threshold (tons/year)	100,000			

The annual GHG emissions associated with the proposed Project, after control measures are considered, are estimated to be 2,129 tons CO_2e per year. Direct and indirect operational emissions associated with the Project are compared with the screening threshold of 100,000 tons CO_2e per year. As such, the proposed Project would result in a less than significant impact with respect to GHG emissions for GHG Impact #1.

4.4 Conformance with Plans

On July 20, 2010, the City of Hesperia adopted a Climate Action Plan (CAP), which provides a framework for reducing GHG emissions and managing resources to best prepare for a changing climate (City 2010). The CAP recommends GHG emission targets that are consistent with the reduction targets of the State of California and presents a number of strategies that will make it possible for the City to meet the recommended targets. Strategy CAP-1 specifies that "projects that are consistent with this CAP could result in less than significant impacts regarding climate change. This is because emissions from these projects are generally accounted for in this CAP and would be consistent with this CAP reduction target. To be consistent with this CAP, CEQA projects must implement the applicable CAP implementation strategies listed in Section 4.2". Per CAP Implementation Action 1.5 (CAP-1.5), projects that require a discretionary approval shall reduce operational GHG emissions by at least 12%, without accounting for regulations discussed in the CAP. By incorporating regulatory requirements, control measures, and renewable energy as solar power, the overall reduction in GHG emissions will exceed 12%. Therefore, the proposed Project would result in a less than significant impact with respect to GHG emissions for GHG Impact #2.

The Project's consistency with SB 32 (2017 Scoping Plan) has also been reviewed. It should be noted that the Project's consistency with the 2017 Scoping Plan also

satisfies consistency with AB 32 since the 2017 Scoping Plan is based on the overall targets established by AB 32. Consistency with the 2008 Scoping Plan is not necessary, since the target year for the 2008 Scoping Plan was 2020, and the Project's buildout year is 2022. As such the 2008 Scoping Plan does not apply and consistency with the 2017 Scoping Plan is relevant. The 2017 Scoping Plan Update reflects the 2030 target of a 40% reduction below 1990 levels, set by Executive Order B-30-15 and codified by SB 32. The Project would not conflict with any of the 2017 Scoping Plan elements as any regulations adopted would apply directly or indirectly to the Project. Therefore, the proposed Project would result in a less than significant impact with respect to GHG emissions for GHG Impact #2.

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 MDAQMD daily and annual thresholds of significance. Therefore, emissions from Project construction are considered less than significant.

Emissions of all criteria pollutants and GHG emissions from Project operation are below all applicable daily thresholds of significance. Additionally, no CO hot spots will be created as a result of Project operation. Therefore, emissions from Project operation are considered less than significant.

The proposed Project will not conflict with any air quality or GHG plans and will incorporate solar power to yield greater than 12% reduction in GHG as defined by CAP -1.5. Therefore, the proposed Project would result in less than significant impact.

6.0 REFERENCES

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APPENDIX A

CALEEMOD AIR EMISSION MODEL RESULTS

Daily Summer Emissions for Construction and Operation
Daily Winter Emissions for Construction and Operation
Annual Emissions for Construction and Operation

Pixior Distribution Center

Mojave Desert Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	16.50	1000sqft	0.38	16,500.00	0
Unrefrigerated Warehouse-No Rail	427.50	1000sqft	9.81	427,500.00	0
Parking Lot	81.00	Space	0.73	32,400.00	0
Parking Lot	258.00	Space	2.32	103,200.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	31
Climate Zone	10			**Operational Year**	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Estimated construction schedule provided for this project.

Trips and VMT - Construction phases were estimated as an average of 20 workers, so default values are used for site prep, grading, and paving. Building construction phase is adjusted to 30 and architectural coating is adjusted to 20.

Grading - 18,000 cu yards imported during site prep. Total acres for grading: 20.84

Architectural Coating - MDAQMD Rule 1113: 50 g/L VOC interior and exterior, with 100 g/L for parking lot paint

Vehicle Trips - Traffic Study, Table 3-1 indicates 783 daily trips. Trips will be applied to the overall warehouse building, which incorporates an office.

Area Coating - MDAQMD Rule 1113 for paint VOC.

Construction Off-road Equipment Mitigation - Watering exposed areas at least twice per day. Vehicle speeds at cnstruction site limited to 15 mph.

Mobile Commute Mitigation -

Area Mitigation - Assume up to 25% of landscaping equipment is electric. Use of low VOC cleaning supplies.

Energy Mitigation - 2019 Code is 30% more efficient than 2016. LED lighting will yield at least 15% energy reduction. Onsite renewable energy will be applied as 100% electricity generated from solar power.

Water Mitigation - Apply water conservation strategy to yield 20% water reduction.

Waste Mitigation - At least 50% reduction in waste from recycling and composting.

Fleet Mix - Fleet mix based on traffic study

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	100
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	10.00	32.00
tblConstructionPhase	NumDays	30.00	16.00

tblConstructionPhase	NumDays	300.00	129.00
tblConstructionPhase	NumDays	20.00	30.00
tblFleetMix	HHD	0.10	0.12
tblFleetMix	LDA	0.55	0.58
tblFleetMix	LDT1	0.03	0.04
tblFleetMix	LDT2	0.17	0.18
tblFleetMix	LHD1	0.02	0.03
tblFleetMix	LHD2	5.1000e-003	0.00
tblFleetMix	MCY	8.1070e-003	0.00
tblFleetMix	MDV	0.10	0.00
tblFleetMix	MH	9.9200e-004	0.00
tblFleetMix	MHD	0.01	0.05
tblFleetMix	OBUS	1.6200e-003	0.00
tblFleetMix	SBUS	8.6800e-004	0.00
tblFleetMix	UBUS	1.9490e-003	0.00
tblGrading	AcresOfGrading	40.00	20.84
tblGrading	MaterialImported	0.00	18,000.00
tblTripsAndVMT	WorkerTripNumber	242.00	30.00
tblTripsAndVMT	WorkerTripNumber	48.00	20.00
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	ST_TR	1.68	1.83
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	1.68	1.83
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	1.68	1.83

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	4.3434	55.8792	31.5500	0.0968	19.5264	2.0829	21.6092	10.3202	1.9176	12.2378	0.0000	9,836.7106	9,836.7106	1.9481	0.0000	9,875.5306
2022	71.7090	24.5125	19.0146	0.0580	0.8907	0.8225	1.7132	0.2509	0.7740	1.0249	0.0000	5,793.1341	5,793.1341	0.8525	0.0000	5,814.4475
Maximum	**71.7090**	**55.8792**	**31.5500**	**0.0968**	**19.5264**	**2.0829**	**21.6092**	**10.3202**	**1.9176**	**12.2378**	**0.0000**	**9,836.7106**	**9,836.7106**	**1.9481**	**0.0000**	**9,875.5306**

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	4.3434	55.8792	31.5500	0.0968	9.5465	2.0829	11.6293	4.8517	1.9176	6.7694	0.0000	9,836.7106	9,836.7106	1.9481	0.0000	9,875.5306
2022	71.7090	24.5125	19.0146	0.0580	0.8907	0.8225	1.7132	0.2509	0.7740	1.0249	0.0000	5,793.1341	5,793.1341	0.8525	0.0000	5,814.4475
Maximum	**71.7090**	**55.8792**	**31.5500**	**0.0968**	**9.5465**	**2.0829**	**11.6293**	**4.8517**	**1.9176**	**6.7694**	**0.0000**	**9,836.7106**	**9,836.7106**	**1.9481**	**0.0000**	**9,875.5306**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**48.88**	**0.00**	**42.79**	**51.73**	**0.00**	**41.23**	**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	10.1312	7.3000e-004	0.0799	1.0000e-005		2.8000e-004	2.8000e-004		2.8000e-004	2.8000e-004		0.1714	0.1714	4.5000e-004		0.1826
Energy	0.0273	0.2485	0.2087	1.4900e-003		0.0189	0.0189		0.0189	0.0189		298.1724	298.1724	5.7100e-003	5.4700e-003	299.9443
Mobile	1.2362	14.2741	12.9860	0.0849	4.9396	0.0409	4.9805	1.3285	0.0383	1.3668		8,718.0895	8,718.0895	0.4143		8,728.4477
Total	**11.3947**	**14.5234**	**13.2747**	**0.0864**	**4.9396**	**0.0600**	**4.9997**	**1.3285**	**0.0575**	**1.3860**		**9,016.4333**	**9,016.4333**	**0.4205**	**5.4700e-003**	**9,028.5746**

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	9.4197	6.5000e-004	0.0715	1.0000e-005		2.4000e-004	2.4000e-004		2.4000e-004	2.4000e-004		0.1516	0.1516	3.8000e-004		0.1612
Energy	0.0193	0.1750	0.1470	1.0500e-003		0.0133	0.0133		0.0133	0.0133		209.9608	209.9608	4.0200e-003	3.8500e-003	211.2085
Mobile	1.2362	14.2741	12.9860	0.0849	4.9396	0.0409	4.9805	1.3285	0.0383	1.3668		8,718.0895	8,718.0895	0.4143		8,728.4477
Total	**10.6751**	**14.4498**	**13.2045**	**0.0860**	**4.9396**	**0.0544**	**4.9940**	**1.3285**	**0.0519**	**1.3804**		**8,928.2020**	**8,928.2020**	**0.4187**	**3.8500e-003**	**8,939.8174**

	ROG	NOx	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	6.31	0.51	0.53	0.51	0.00	9.36	0.11	0.00	9.78	0.41	0.00	0.98	0.98	0.42	29.62	0.98

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	9/1/2021	10/14/2021	5	32	
2	Grading	Grading	10/15/2021	11/5/2021	5	16	
3	Building Construction	Building Construction	11/6/2021	5/5/2022	5	129	
4	Architectural Coating	Architectural Coating	5/6/2022	6/16/2022	5	30	
5	Paving	Paving	6/5/2022	7/1/2022	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 20.84

Acres of Paving: 3.05

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 666,000; Non-Residential Outdoor: 222,000; Striped Parking Area: 8,136 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38

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	7	18.00	0.00	2,250.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	30.00	95.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

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					18.1453	0.0000	18.1453	9.9427	0.0000	9.9427			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.1453**	**2.0445**	**20.1898**	**9.9427**	**1.8809**	**11.8236**		**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

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	0.3738	15.3328	1.8540	0.0573	1.2332	0.0375	1.2707	0.3383	0.0358	0.3742		6,003.7559	6,003.7559	0.3561		6,012.6574
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0814	0.0494	0.6044	1.4800e-003	0.1479	9.5000e-004	0.1488	0.0392	8.7000e-004	0.0401		147.2978	147.2978	4.7200e-003		147.4159
Total	**0.4552**	**15.3821**	**2.4584**	**0.0588**	**1.3811**	**0.0384**	**1.4195**	**0.3776**	**0.0367**	**0.4143**		**6,151.0537**	**6,151.0537**	**0.3608**		**6,160.0733**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.1654	0.0000	8.1654	4.4742	0.0000	4.4742			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**8.1654**	**2.0445**	**10.2099**	**4.4742**	**1.8809**	**6.3551**	**0.0000**	**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

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	0.3738	15.3328	1.8540	0.0573	1.2332	0.0375	1.2707	0.3383	0.0358	0.3742		6,003.7559	6,003.7559	0.3561		6,012.6574
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0814	0.0494	0.6044	1.4800e-003	0.1479	9.5000e-004	0.1488	0.0392	8.7000e-004	0.0401		147.2978	147.2978	4.7200e-003		147.4159
Total	**0.4552**	**15.3821**	**2.4584**	**0.0588**	**1.3811**	**0.0384**	**1.4195**	**0.3776**	**0.0367**	**0.4143**		**6,151.0537**	**6,151.0537**	**0.3608**		**6,160.0733**

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					7.4034	0.0000	7.4034	3.4594	0.0000	3.4594			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265		6,007.0434	6,007.0434	1.9428		6,055.6134
Total	**4.1912**	**46.3998**	**30.8785**	**0.0620**	**7.4034**	**1.9853**	**9.3887**	**3.4594**	**1.8265**	**5.2859**		**6,007.0434**	**6,007.0434**	**1.9428**		**6,055.6134**

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		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0904	0.0549	0.6716	1.6400e-003	0.1643	1.0500e-003	0.1654	0.0436	9.7000e-004	0.0446		163.6642	163.6642	5.2500e-003		163.7955
Total	**0.0904**	**0.0549**	**0.6716**	**1.6400e-003**	**0.1643**	**1.0500e-003**	**0.1654**	**0.0436**	**9.7000e-004**	**0.0446**		**163.6642**	**163.6642**	**5.2500e-003**		**163.7955**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3315	0.0000	3.3315	1.5567	0.0000	1.5567			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265	0.0000	6,007.0434	6,007.0434	1.9428		6,055.6134
Total	**4.1912**	**46.3998**	**30.8785**	**0.0620**	**3.3315**	**1.9853**	**5.3169**	**1.5567**	**1.8265**	**3.3832**	**0.0000**	**6,007.0434**	**6,007.0434**	**1.9428**		**6,055.6134**

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		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0904	0.0549	0.6716	1.6400e-003	0.1643	1.0500e-003	0.1654	0.0436	9.7000e-004	0.0446		163.6642	163.6642	5.2500e-003		163.7955
Total	**0.0904**	**0.0549**	**0.6716**	**1.6400e-003**	**0.1643**	**1.0500e-003**	**0.1654**	**0.0436**	**9.7000e-004**	**0.0446**		**163.6642**	**163.6642**	**5.2500e-003**		**163.7955**

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

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		0.0000
Vendor	0.2825	9.3601	1.9163	0.0290	0.6443	0.0147	0.6589	0.1855	0.0140	0.1996		3,024.6774	3,024.6774	0.2470		3,030.8522
Worker	0.1356	0.0823	1.0074	2.4700e-003	0.2464	1.5800e-003	0.2480	0.0654	1.4600e-003	0.0668		245.4963	245.4963	7.8700e-003		245.6932
Total	**0.4182**	**9.4424**	**2.9236**	**0.0314**	**0.8907**	**0.0162**	**0.9069**	**0.2509**	**0.0155**	**0.2664**		**3,270.1737**	**3,270.1737**	**0.2549**		**3,276.5454**

Mitigated Construction On-Site

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

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		0.0000
Vendor	0.2825	9.3601	1.9163	0.0290	0.6443	0.0147	0.6589	0.1855	0.0140	0.1996		3,024.6774	3,024.6774	0.2470		3,030.8522
Worker	0.1356	0.0823	1.0074	2.4700e-003	0.2464	1.5800e-003	0.2480	0.0654	1.4600e-003	0.0668		245.4963	245.4963	7.8700e-003		245.6932
Total	**0.4182**	**9.4424**	**2.9236**	**0.0314**	**0.8907**	**0.0162**	**0.9069**	**0.2509**	**0.0155**	**0.2664**		**3,270.1737**	**3,270.1737**	**0.2549**		**3,276.5454**

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

3.4 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		0.0000
Vendor	0.2610	8.8231	1.7330	0.0287	0.6443	0.0119	0.6562	0.1855	0.0114	0.1970		3,002.1666	3,002.1666	0.2336		3,008.0059
Worker	0.1261	0.0737	0.9181	2.3800e-003	0.2464	1.5300e-003	0.2480	0.0654	1.4100e-003	0.0668		236.6339	236.6339	7.0200e-003		236.8094
Total	**0.3870**	**8.8968**	**2.6512**	**0.0311**	**0.8907**	**0.0135**	**0.9042**	**0.2509**	**0.0128**	**0.2637**		**3,238.8005**	**3,238.8005**	**0.2406**		**3,244.8153**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.4 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		0.0000
Vendor	0.2610	8.8231	1.7330	0.0287	0.6443	0.0119	0.6562	0.1855	0.0114	0.1970		3,002.1666	3,002.1666	0.2336		3,008.0059
Worker	0.1261	0.0737	0.9181	2.3800e-003	0.2464	1.5300e-003	0.2480	0.0654	1.4100e-003	0.0668		236.6339	236.6339	7.0200e-003		236.8094
Total	**0.3870**	**8.8968**	**2.6512**	**0.0311**	**0.8907**	**0.0135**	**0.9042**	**0.2509**	**0.0128**	**0.2637**		**3,238.8005**	**3,238.8005**	**0.2406**		**3,244.8153**

3.5 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	69.8550					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	**70.0596**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.9062**

3.5 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		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0840	0.0491	0.6121	1.5800e-003	0.1643	1.0200e-003	0.1653	0.0436	9.4000e-004	0.0445		157.7560	157.7560	4.6800e-003		157.8729
Total	**0.0840**	**0.0491**	**0.6121**	**1.5800e-003**	**0.1643**	**1.0200e-003**	**0.1653**	**0.0436**	**9.4000e-004**	**0.0445**		**157.7560**	**157.7560**	**4.6800e-003**		**157.8729**

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	69.8550					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	0.0000	281.4481	281.4481	0.0183		281.9062
Total	**70.0596**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.9062**

3.5 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		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0840	0.0491	0.6121	1.5800e-003	0.1643	1.0200e-003	0.1653	0.0436	9.4000e-004	0.0445		157.7560	157.7560	4.6800e-003		157.8729
Total	**0.0840**	**0.0491**	**0.6121**	**1.5800e-003**	**0.1643**	**1.0200e-003**	**0.1653**	**0.0436**	**9.4000e-004**	**0.0445**		**157.7560**	**157.7560**	**4.6800e-003**		**157.8729**

3.6 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.3996					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.5024**	**11.1249**	**14.5805**	**0.0228**		**0.5679**	**0.5679**		**0.5225**	**0.5225**		**2,207.6603**	**2,207.6603**	**0.7140**		**2,225.5104**

3.6 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		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0630	0.0369	0.4591	1.1900e-003	0.1232	7.7000e-004	0.1240	0.0327	7.1000e-004	0.0334		118.3170	118.3170	3.5100e-003		118.4047
Total	**0.0630**	**0.0369**	**0.4591**	**1.1900e-003**	**0.1232**	**7.7000e-004**	**0.1240**	**0.0327**	**7.1000e-004**	**0.0334**		**118.3170**	**118.3170**	**3.5100e-003**		**118.4047**

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	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.3996					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.5024**	**11.1249**	**14.5805**	**0.0228**		**0.5679**	**0.5679**		**0.5225**	**0.5225**	**0.0000**	**2,207.6603**	**2,207.6603**	**0.7140**		**2,225.5104**

3.6 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		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0630	0.0369	0.4591	1.1900e-003	0.1232	7.7000e-004	0.1240	0.0327	7.1000e-004	0.0334		118.3170	118.3170	3.5100e-003		118.4047
Total	**0.0630**	**0.0369**	**0.4591**	**1.1900e-003**	**0.1232**	**7.7000e-004**	**0.1240**	**0.0327**	**7.1000e-004**	**0.0334**		**118.3170**	**118.3170**	**3.5100e-003**		**118.4047**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.2362	14.2741	12.9860	0.0849	4.9396	0.0409	4.9805	1.3285	0.0383	1.3668		8,718.0895	8,718.0895	0.4143		8,728.4477
Unmitigated	1.2362	14.2741	12.9860	0.0849	4.9396	0.0409	4.9805	1.3285	0.0383	1.3668		8,718.0895	8,718.0895	0.4143		8,728.4477

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	782.33	782.33	782.33	2,284,007	2,284,007
Total	782.33	782.33	782.33	2,284,007	2,284,007

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
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	0.545862	0.034394	0.171599	0.103299	0.016338	0.005100	0.010433	0.099439	0.001620	0.001949	0.008107	0.000868	0.000992
Parking Lot	0.545862	0.034394	0.171599	0.103299	0.016338	0.005100	0.010433	0.099439	0.001620	0.001949	0.008107	0.000868	0.000992
Unrefrigerated Warehouse-No Rail	0.577694	0.036400	0.181606	0.000000	0.034600	0.000000	0.046400	0.123300	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Install High Efficiency Lighting

Percent of Electricity Use Generated with Renewable Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0193	0.1750	0.1470	1.0500e-003		0.0133	0.0133		0.0133	0.0133		209.9608	209.9608	4.0200e-003	3.8500e-003	211.2085
NaturalGas Unmitigated	0.0273	0.2485	0.2087	1.4900e-003		0.0189	0.0189		0.0189	0.0189		298.1724	298.1724	5.7100e-003	5.4700e-003	299.9443

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	156.863	1.6900e-003	0.0154	0.0129	9.0000e-005		1.1700e-003	1.1700e-003		1.1700e-003	1.1700e-003		18.4545	18.4545	3.5000e-004	3.4000e-004	18.5641
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	2377.6	0.0256	0.2331	0.1958	1.4000e-003		0.0177	0.0177		0.0177	0.0177		279.7180	279.7180	5.3600e-003	5.1300e-003	281.3802
Total		**0.0273**	**0.2485**	**0.2087**	**1.4900e-003**		**0.0189**	**0.0189**		**0.0189**	**0.0189**		**298.1724**	**298.1724**	**5.7100e-003**	**5.4700e-003**	**299.9443**

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	0.109804	1.1800e-003	0.0108	9.0400e-003	6.0000e-005		8.2000e-004	8.2000e-004		8.2000e-004	8.2000e-004		12.9181	12.9181	2.5000e-004	2.4000e-004	12.9949
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	1.67486	0.0181	0.1642	0.1379	9.9000e-004		0.0125	0.0125		0.0125	0.0125		197.0427	197.0427	3.7800e-003	3.6100e-003	198.2136
Total		**0.0192**	**0.1750**	**0.1470**	**1.0500e-003**		**0.0133**	**0.0133**		**0.0133**	**0.0133**		**209.9608**	**209.9608**	**4.0300e-003**	**3.8500e-003**	**211.2085**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Electric Lawnmower

Use Electric Leafblower

Use Electric Chainsaw

Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	9.4197	6.5000e-004	0.0715	1.0000e-005		2.4000e-004	2.4000e-004		2.4000e-004	2.4000e-004		0.1516	0.1516	3.8000e-004		0.1612
Unmitigated	10.1312	7.3000e-004	0.0799	1.0000e-005		2.8000e-004	2.8000e-004		2.8000e-004	2.8000e-004		0.1714	0.1714	4.5000e-004		0.1826

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	0.5742					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	9.5496					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.4000e-003	7.3000e-004	0.0799	1.0000e-005		2.8000e-004	2.8000e-004		2.8000e-004	2.8000e-004		0.1714	0.1714	4.5000e-004		0.1826
Total	**10.1312**	**7.3000e-004**	**0.0799**	**1.0000e-005**		**2.8000e-004**	**2.8000e-004**		**2.8000e-004**	**2.8000e-004**		**0.1714**	**0.1714**	**4.5000e-004**		**0.1826**

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	0.5742					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	8.8392					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.3400e-003	6.5000e-004	0.0715	1.0000e-005		2.4000e-004	2.4000e-004		2.4000e-004	2.4000e-004		0.1516	0.1516	3.8000e-004		0.1612
Total	**9.4197**	**6.5000e-004**	**0.0715**	**1.0000e-005**		**2.4000e-004**	**2.4000e-004**		**2.4000e-004**	**2.4000e-004**		**0.1516**	**0.1516**	**3.8000e-004**		**0.1612**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Pixior Distribution Center

Mojave Desert Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	16.50	1000sqft	0.38	16,500.00	0
Unrefrigerated Warehouse-No Rail	427.50	1000sqft	9.81	427,500.00	0
Parking Lot	81.00	Space	0.73	32,400.00	0
Parking Lot	258.00	Space	2.32	103,200.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	31
Climate Zone	10			**Operational Year**	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data