AIR QUALITY AND GREENHOUSE GAS REPORT

DEVELOPMENT AT CORDOVA

Apple Valley, San Bernardino County, California

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ES EXECUTIVE SUMMARY

This Air Quality and Greenhouse Gas Report was prepared to accompany the Addendum to the Apple Valley General Plan and Annexations 2008-001 & 2008-002 Environmental Impact Report (EIR) for the proposed Development at Cordova (referred to as the Project). The purpose of this report is to assess the potential air quality and greenhouse gas (GHG) impacts associated with the construction and operation of the proposed Project in accordance with Appendix G of the California Environmental Quality Act (CEQA) Guidelines.

Section 1 of this report introduces the proposed Project. Sections 2 and 4 provide background information on air quality and climate change. Sections 3 and 5 analyze the potential impacts of the Project on air quality and greenhouse gas emissions, respectively.

ES.1 Air Quality

The Project is located in the Mojave Desert Air Basin, within the jurisdictional boundary of the Mojave Desert Air Quality Management District (MDAQMD). The Project would comply with the strategies and rules established in the MDAQMD's applicable air quality plans.

The emissions of criteria air pollutants expected to result from the Project were calculated using the California Emissions Estimator Model (CalEEMod) Version 2022.1. Analysis found that criteria pollutant emissions from construction and operation of the Project would not exceed the thresholds established by the MDAQMD. This report also determined that the Project would not expose sensitive receptors to substantial pollutant concentrations, nor would it result in other emissions (such as odors) that would adversely affect sensitive receptors. Overall, the Project's impacts on air quality were determined to be less than significant, and no mitigation measures were required.

ES.2 Greenhouse Gases

The Project's GHG emissions are subject to the MDAQMD as well as the Town of Apple Valley's 2019 Climate Action Plan (CAP) Update. CalEEMod Version 2022.1 was used to project the GHG emissions expected to result from construction and operation of the proposed Project. The combined emissions were found to be within the MDAQMD's GHG emissions threshold of 100,000 MTCO2e per year. Based on the Project's compliance with the Town's CAP, the proposed development was also found the comply with the South Coast Air Quality Management District's Tier 2 significance criterion (see Section 5 of this document), which requires compliance with a GHG reduction plan consistent with the goals of Assembly Bill 32.

Overall, this report determined that the Project's impacts on GHG emissions would be less than significant with the implementation of mitigation measures from the Town's CAP. Specifically, the Project must establish an employee carpooling program and provide employees with free or discounted public transit passes.

1 INTRODUCTION

1.1 Site Location

The Project proposes the development of an approximately 90-acre parcel of land in the Town of Apple Valley (Exhibit 1). The site is bounded by Quarry Road to the north, vacant lands to the east, Cordova Road to the south, and Dachshund Avenue to the west (Exhibit 2). The site is currently surrounded by vacant lands, with scattered single-family residences a quarter mile to the north, south and west. Further south, about 0.5 miles, is a Walmart warehouse and distribution center The subject property is within the boundary of the 2006 North Apple Valley Industrial Specific Plan (NAVISP).

1.2 Project Description

The Project proposes 1.37 million square feet of distribution warehouse on 90± acres of currently vacant, undeveloped land located at the northeast corner of Cordova Road and Dachshund Road. The Project proposes on building consisting of 1,319,390 square feet of warehouse space and 53,760 square feet of office space for a total of 1,373,150 square feet of building space. The building includes a 26,880 square foot mezzanine with a maximum building height of 50 feet. The building has been designed to include 224 docks with roll-up doors, and 4 man-doors. The site will provide 1,422 parking stalls that includes 28 accessible stalls, and 739 trailer stalls. The trailer stalls would be utilized for temporary parking of semi-truck trailers between distribution trips. Landscaping is proposed along the perimeter of the site on all sides, as well as in the vehicular parking areas. The landscaped area totals 819,232± square feet, or 20 percent of the site. A stormwater detention basin is proposed at the southern boundary of the site, approximately 3.10 acres in size.

Table 1
Proposed Project Summary

Acres	90.15 AC
Building Footprint	1,346,270 SF
Building Square Footage	1,373,150 SF
Warehouse	*1,319,390 SF*
Office	*53,760 SF*
Parking Stalls	1,422 stalls
Trailer Parking	739 stalls
Landscaping	819,232 SF/ 18.81 AC
Retention Basin	135,036 SF/ 3.10 AC
Off-Site Paving Improvements	124,800 SF/ 2.87 AC

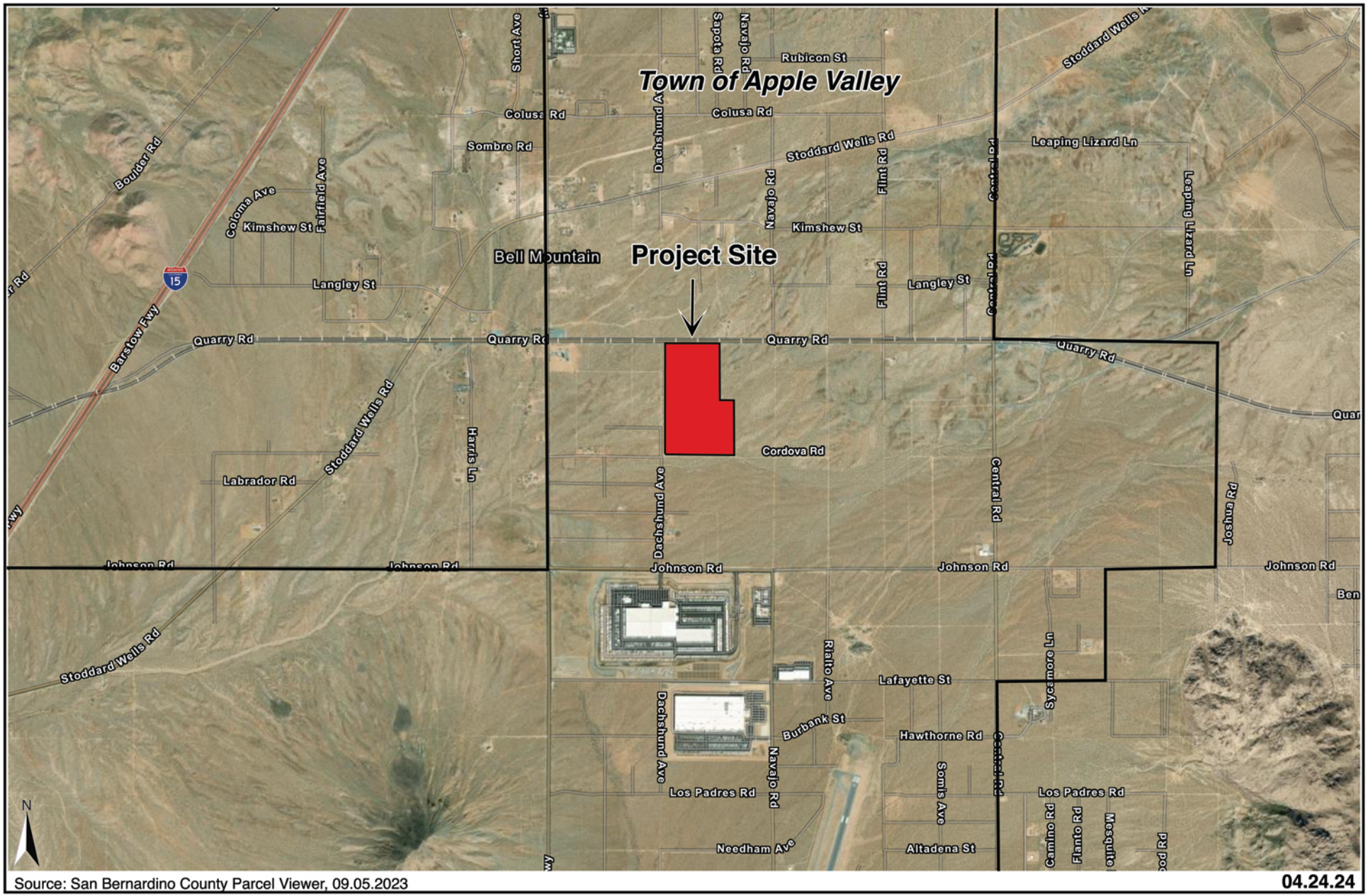
The Project will include six points of access including four on Dachshund and two on Cordova. Three of the driveways (two on Dachshund and one on Cordova) are truck accessible, and the other three are access for vehicles only.

A specific user has not been identified, but it is expected that the ultimate use will consist of warehousing and distribution. In order to provide a conservative (worst-case) analysis, it has been assumed that up to 15 percent of the building's square footage, or about 206,000 square feet, could be occupied by cold storage.

Both Dachshund Road and Cordova Road exist as unpaved roadways currently. The Project will be required to improve Dachshund Road to a General Plan build out half-width of 40 feet, and Cordova Road to its build out half-width of 44 feet along the project boundary. These improvements will include parkway, sidewalk, curb and gutter in addition to roadway paving.

- Cordova Road from Dachshund Road to Dale Evans Parkway, 24-foot-wide paving; no curb and gutter, a distance of approximately 2,600 linear feet.
- Dachshund Road from Cordova Road to Johnson Road, 24-foot-wide paving, no curb and gutter, a distance of approximately 2,600 linear feet.

Internal water, sanitary sewer, electric power lines, and natural gas connections to the building will also be constructed. Additional improvements will be required off-site, including the extension of electrical, natural gas, sewer lines and water lines. All off-site improvements are proposed in existing, paved and unpaved roadways.



Source: San Bernardino County Parcel Viewer, 09.05.2023

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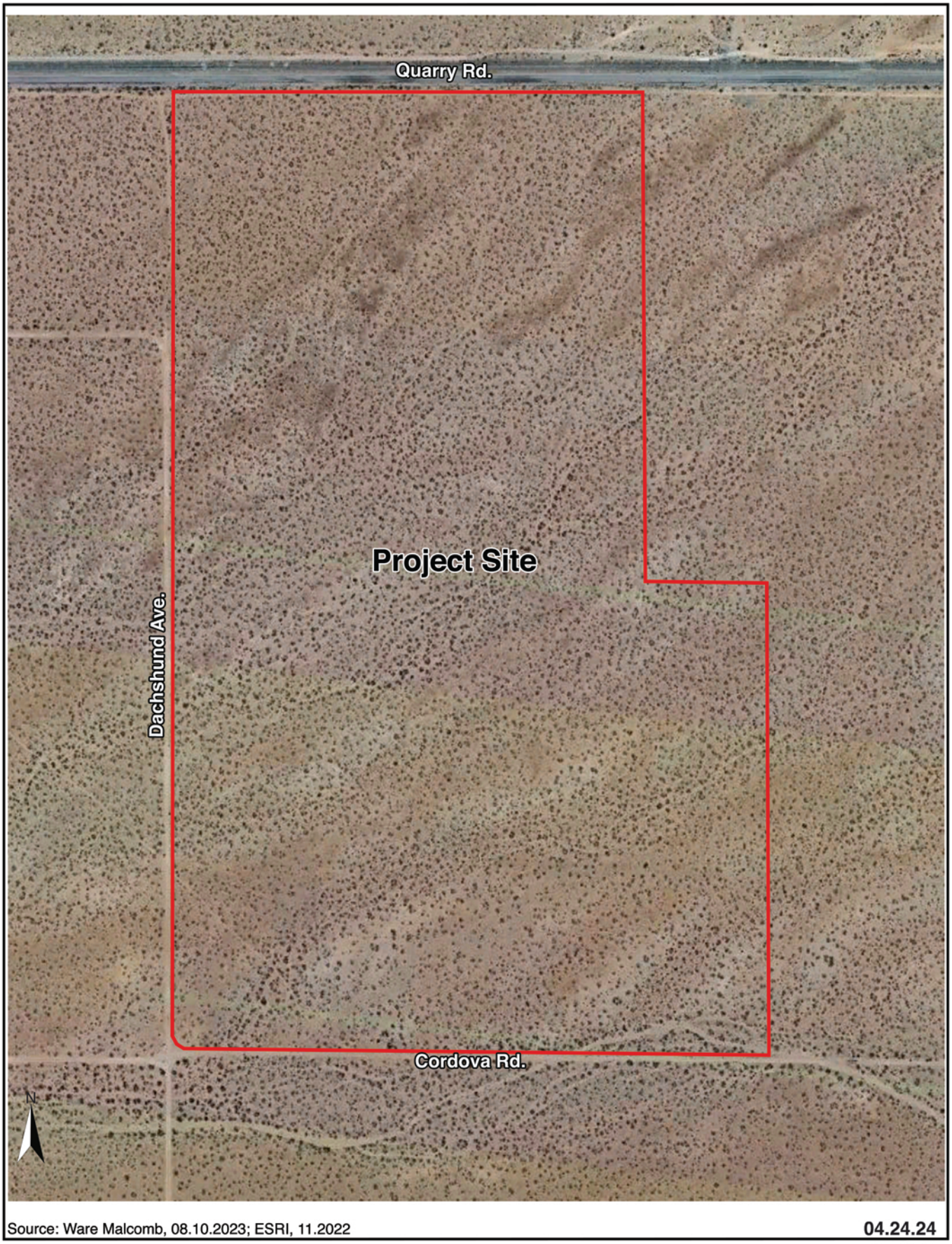
The Development at Cordova
Vicinity Map
Apple Valley, California

Exhibit
1-1



Source: Ware Malcomb, 08.10.2023; ESRI, 11.2022

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TERRA NOVA®
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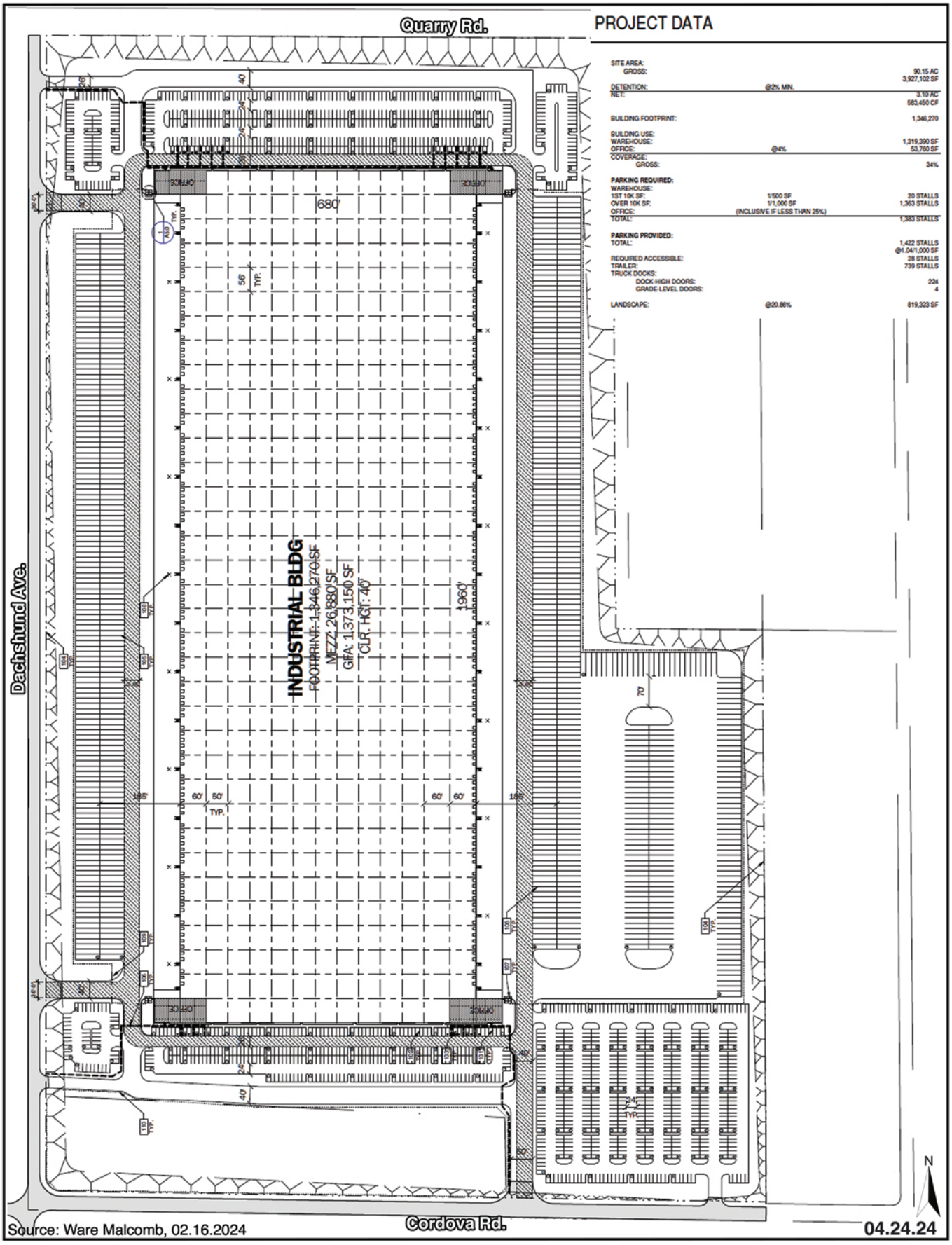
The Development at Cordova
Project Location Map
Apple Valley, California

Exhibit

1-2



Source: Ware Malcomb, 02.16.2024

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The Development at Cordova
Project Site Plan
Apple Valley, California

Exhibit
1-3

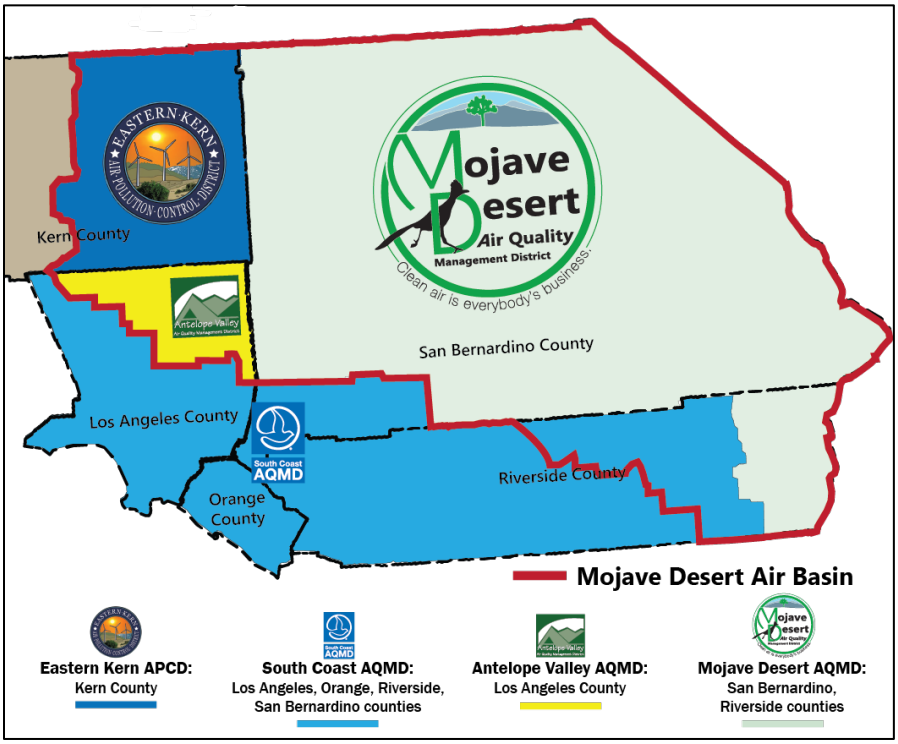
2 AIR QUALITY SETTING

2.1 Atmospheric Setting

The Project site is within the Mojave Desert Air Basin (MDAB). As shown in Figure 1, the MDAB encompasses the high desert portion of San Bernardino County, as well as portions of eastern Kern County, northeastern Los Angeles County, and eastern Riverside County. The basin reaches from the Cajon Pass and Palo Verde Valley, in the southwest and southeast, respectively, north to the unincorporated community of Trona and the state border with Nevada. The topography of the MDAB is defined by a series of mountain ranges and long broad valleys. Mountain ranges with elevations of up to 10,000 feet separate the MDAB from central California and coastal southern California.

Prevailing winds in the basin area are from the west and southwest, channeled from the coast and through the MDAB by the mountains. The high desert receives infrequent moisture from warm and moist air masses from the south. It averages between three and seven inches of precipitation per year.[1] The MDAB is mostly classified as a dry-hot desert climate, with portions classified as very-dry hot, with temperatures averaging over 100.4° F during at least three months of the year.[2]

Figure 2-1: Boundaries of the Mojave Desert Air Basin



Source: Mojave Desert Air Quality Management District, https://www.mdaqmd.ca.gov/about-us

[1] San Bernardino Countywide Plan Draft PEIR, Environmental Analysis, Air Quality (June 2019).
[2] Mojave Desert Air Quality Management District CEQA Guidelines (February 2020).

2.2 Criteria Pollutants

Criteria air pollutants are air pollutants for which acceptable levels of exposure have been determined, and which regulated by Ambient Air Quality Standards (AAQS). The AAQS were established through the federal Clean Air Act (first enacted in 1963) and the California Clean Air Act (1988). The current criteria air pollutants are: ozone (O_3), carbon monoxide (CO), particulate matter (PM_{10}), fine particulate matter ($PM_{2.5}$), nitrogen dioxide (NO_2), lead (Pb), sulfur dioxide (SO_2), and hydrogen sulfide (H_2S).

Air pollution contributes to a wide variety of health impacts, including heart and lung illnesses, chronic health conditions, increased cancer rates, and premature death. For example, $PM_{2.5}$ pollution is linked with hundreds of emergency room visits for respiratory and cardiovascular disease annually, as well as brain health and adverse birth outcomes. Elevated ozone levels in California are also associated with hospitalizations, lost school days, and premature death.[3] These health impacts disproportionately impact residents of low-income and disadvantaged communities.

Table 2-1 below outlines the primary human-caused emissions sources of criteria pollutants, as well as the effects of these pollutants on human health.

Table 2-1
Criteria Pollutants and Health Impacts

Criteria Pollutant	Source	Health Effects
Ozone (O_3)	A secondary pollutant resulting from hydrocarbons and oxides of nitrogen, emitted by cars, solvents, factories and pesticides, reacting in the presence of sunlight.	Difficulty breathing, chest pains, aggravate lung diseases such as asthma, emphysema, and chronic bronchitis. Shortness of breath, coughing, and lung damage with prolonged and chronic exposure.
Carbon Monoxide (CO)	Fossil fuel combustion by vehicles, as well as household sources such as some appliances, fireplaces, portable generators, charcoal grills.	Headaches, dizziness, vomiting, and nausea. Risk of loss of unconsciousness or death.
Particulate Matter (PM_{10}) and Fine Particulate Matter ($PM_{2.5}$)	Fugitive dust from construction projects and vehicles on unpaved roads. Industrial smokestacks and wildfires. Atmospheric formation from SO_2 and NO_x.	Coughs, asthma, cancer, lung damage, heart attacks, and premature death.

[3] California Air Resources Board Proposed 2022 State SIP Strategy (August 2022).

Table 2-1
Criteria Pollutants and Health Impacts

Criteria Pollutant	Source	Health Effects
Nitrogen Dioxide (NO_2)	Fossil fuel combustion by vehicles, off road equipment, power generation, and household appliances such as furnaces, clothes dryers, ovens, fireplaces.	Lung damage and irritation.
Lead (Pb)	Lead smelters, ore and metals processing, combustion of leaded aviation fuel, waste incinerators, utilities, and lead-acid battery manufacturing facilities.	Damage to nervous system, kidney function, immune system, reproductive and developmental systems, and cardiovascular systems.
Sulfur Dioxide (SO_2)	Combustion of fossil fuels by power plants and industries, refineries, and diesel engines.	Irritates the nose, throat, and airways. Coughing, shortness of breath, tightness of chest. Individuals with asthma at high risk for developing issues.
Hydrogen Sulfide (H_2S)	Geothermal power plants, petroleum production, sewer gas.	Rotten egg smell, headache, skin complications, respiratory damage.

Sources: CARB 2022 Scoping Plan Update, Environmental and Regulatory Setting, Table 3; MDAQMD Air Quality & Health, https://www.mdaqmd.ca.gov/air-quality/air-quality-health (Accessed April 2024)

2.2.1 Toxic Air Contaminants

According to §39655 of the California Health and Safety Code, a toxic air contaminant (TAC) is "an air pollutant which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health." The Health and Safety Code definition of TACs also covers substances listed as hazardous air pollutants pursuant to §7412 of Title 42 of the United States Code. TACs are identified and controlled by the California Air Resources Board (CARB) in conjunction with the Office of Environmental Health Hazard Assessment (OEHHA). As an exception, TACs used in pesticides are regulated by the Department of Pesticide Regulation.

Notable TACs include asbestos, benzene, chloroform, as well as inorganic lead and arsenic. The particulate matter emitted by diesel-fueled engines is also identified by CARB as a TAC.[4]

[4] California Air Resources Board, Toxic Air Contaminant Identification Reports https://ww2.arb.ca.gov/resources/documents/toxic-air-contaminant-identification-reports (accessed April 2024).

2.3 Current Conditions

The National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) establish thresholds to determine whether the contaminant levels in the air are considered unhealthy. The current federal and state standards are shown in Table 2-2.

Table 2-2
Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards	National Standards	
		Concentrations[1]	Primary	Secondary
Ozone (O_3)	1 Hour	0.09 ppm	--	
	8 Hour	0.070 ppm	0.070 ppm	
Particulate Matter (PM_{10})	24 Hour	50 µg/m^3	150 µg/m^3	
	AAM[2]	20 µg/m^3	--	
Fine Particulate Matter ($PM_{2.5}$)	24 Hour	--	35 µg/m^3	
	AAM	12 µg/m^3	12.0 µg/m^3	15 µg/m^3
Carbon Monoxide	1 Hour	20 ppm	35 ppm	--
	8 Hour	9.0 ppm	9 ppm	--
Nitrogen Dioxide (NO_2)	1 Hour	0.18 ppm	100 ppb	--
	AAM	0.030 ppm	0.053 ppm	
Sulfur Dioxide (SO_2)	1 Hour	0.25 ppm	75 ppb	--
	3 Hour	--	--	0.5 ppm
	24 Hour	0.04 ppm	0.14 ppm	--
	AAM	--	0.030 ppm	--
Lead	30 Day Average	1.5 µg/m^3	--	--
	Calendar Quarter	--	1.5 µg/m^3	
	Rolling 3-Month Average	--	0.15 µg/m^3	
Visibility Reducing Particles	8 Hour	--	No National Standards	
Sulfates	24 Hour	25 µg/m^3		
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m^3)		
Vinyl Chloride	24 Hour	0.01 ppm (26 µg/m^3)		

[1] µg/m^3 = micrograms per cubic meter of air
[2] AAM = Annual Arithmetic Mean
Source: California Air Resources Board https://ww2.arb.ca.gov/sites/default/files/2020-07/aaqs2.pdf (May 2016)

The air quality of an area is in attainment if the measure ambient air pollutant levels, for the pollutants in the above table, are not exceeded and all other standards are not exceeded at any time in any consecutive three-year period. Attainment also assumes the national standards (other than O_3, PM_{10}, and those based on annual averages or arithmetic mean) are not exceeded more than once per year. The ozone standard is in attainment when the fourth highest 8-hour concentration in a year, averaged over three years, is equal to or less than the standard. For PM_{10},

the 24-hour standard is attained when 99% of the daily concentrations, averaged over three years, are equal to or less than the standard.

Pursuant to the Federal Clean Air Act, areas that do not meet these standards must prepare State Implementation Plans (SIPs) establishing strategies and deadlines for attainment of the NAAQS and CAAQS. Additionally, air quality districts with non-attainment areas under their jurisdiction must prepare attainment plans providing steps for the implementation, maintenance, and enforcement of the air quality standard within the required timeframe.

2.3.1 Regional Air Quality – Air Basin

The Project is located in the Western Mojave Desert region within the Mojave Desert Air Basin (MDAB). The MDAB is under the jurisdiction of the Mojave Desert Air Quality Management District (MDAQMD) and the Antelope Valley AQMD. The Project site is within the jurisdictional boundaries of the MDAQMD.

Air quality in the MDAB is impacted not just by emissions sources within the basin, but also by activity in the broader region. The primary contributor to air pollution in California is the burning of fossil fuels for transportation, power and heat generation, and industrial processes.[5] The MDQAMD encompasses major roadways, such as the Interstate 40, State Route 58 and Interstate 395, which carry a substantial amount of heavy-duty truck traffic. Likewise, the Interstate 15 carries a substantial amount of commuter traffic connecting to the Los Angeles area, pollutant emissions from which may affect air quality in the MBAD.[6] Fine particulate matter and ozone, two of the pollutants that have the greatest potential public health impacts, are also emitted by fuel and wood combustion, as well as indirectly by chemical reactions resulting from motor vehicle and industrial activity.[7]

Table 2-3 shows the West Mojave Desert's attainment status for the criteria air pollutants, as designated by the EPA. The West Mojave Desert is designated as being in nonattainment for regional levels of particulate matter (PM_{10}) and ozone (O_3). Under the federal Clean Air Act, the MDAB is designated as being in "moderate" ozone non-attainment.

Table 2-3
Regional Attainment Status – West Mojave Desert

Criteria Pollutant	Attainment Status
Ozone (O_3)	Nonattainment
Carbon Monoxide (CO)	Attainment
Fine Particulate Matter ($PM_{2.5}$)	Attainment
Particulate Matter (PM_{10})	Nonattainment (moderate)

[5] Town of Apple Valley 2019 Climate Action Plan Update, p. 8.
[6] MDAQMD Federal 8-hour Ozone Attainment Plan (June 2008).
[7] California Air Resources Board, Sources of Air Pollution, https://ww2.arb.ca.gov/resources/sources-air-pollution (Accessed April 2024).

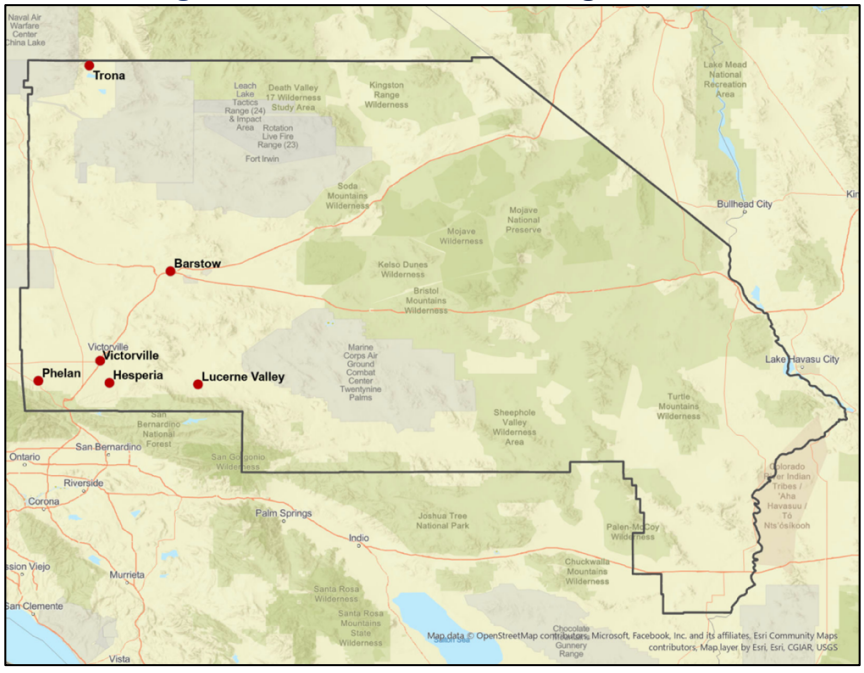
Table 2-3 Regional Attainment Status – West Mojave Desert	
Criteria Pollutant	**Attainment Status**
Nitrogen Dioxide (NO_2)	Attainment
Lead (Pb)	Attainment
Sulfur Dioxide (SO_2)	Attainment
Source: EPA Green Book (September 2022)	

Given the dispersing nature of air pollutants, the MDAB is subject to the aggregate impacts of neighboring jurisdictions. For example, fugitive dust in the MDAB results from both local sources and periodic region-wide high wind events.[8] Additionally, the MDAB receives prevailing winds which blow ozone from the Los Angeles and San Joaquin Valley basins during the summer. While activity in the MDAQMD contributes to ozone emissions, modeling conducted by the South Coast Air Quality Management District and California Air Resources Board indicate that the MDAB would be in attainment for ozone if not for the air pollution transported from upwind regions.[9]

2.3.2 Local Air Quality

Air quality is measured at monitoring stations operated by the air quality management district. The MDAQMD operates six air monitoring stations distributed across its jurisdiction in Trona, Barstow, Victorville, Hesperia, Phelan, Lucerne Valley. The nearest monitoring station to the Project is the Victorville Monitoring Station located at 14036 Park Avenue. The station is located approximately 10.3 miles southwest of the Project site.

Figure 2-2: MDAQMD Monitoring Stations



[8] MDAQMD Federal Particulate Matter (PM_{10}) Attainment Plan (July 1995).
[9] MDAQMD Federal 8-hour Ozone Attainment Plan (June 2008).

The following tables show the maximum concentration and number of days annually that ambient air quality measured at the Victorville Monitoring Station exceeded state and national standards for ozone and particulate matter (PM_{10}) from 2016 to 2022.

Table 2-4 shows the ozone monitoring data for the Victorville Park Avenue monitoring station. The data for both maximum concentrations and number of days exceeding standards fluctuates over the seven-year period, and there is no clear trend indicating worsening or improving ozone concentrations.

Table 2-4
Ozone Monitoring Data

Monitoring Station	Year	Maximum Concentration		Number of Days Standard Exceeded		
				Federal	State	
		1 Hour ppm	8 Hour ppm[1]	8 Hour[2]	1 Hour	8 Hour
Victorville Park Avenue	2016	0.100	0.085	33	4	35
	2017	0.088	0.081	17	0	19
	2018	0.107	0.096	55	5	56
	2019	0.104	0.081	29	3	34
	2020	0.112	0.094	35	4	38
	2021	0.112	0.098	34	8	35
	2022	0.100	0.090	44	3	49

Source: iAdam: Air Quality Data Statistics, California Air Resources Board; www.arb.ca.gov/adam. Accessed April 2024.
[1] 8-Hour Average National 0.07 ppm Standard Maximum
[2] Days Exceeding National 0.070 ppm Standard

Table 2-5 shows the PM_{10} data for the Victorville monitoring station. The data indicates fluctuations in PM_{10} concentrations over the seven-year period. Insufficient data was collected for the maximum concentration and number of days exceeding the state standard.

Table 2-5
Particulate Matter 10 Monitoring Data

Monitoring Station	Year	Maximum Concentration (µg/m³/24 hours)		Number of Days Standard Exceeded		Annual Arithmetic Mean[2]
		Federal	State[1]	Federal	State	
Victorville Park Avenue	2016	226.5	*	1.9	*	29.2
	2017	182.5	*	1.0	*	30.1
	2018	165.2	*	1.0	*	29.8
	2019	170.0	*	1.9	*	27.2
	2020	261.4	*	1.9	*	34.0
	2021	591.6	*	1.0	*	33.9

	2022	372.1	*	2.1	*	33.6

Source: iAdam: Air Quality Data Statistics, California Air Resources Board; www.arb.ca.gov/adam. Accessed April 2024.
[1] * = There was insufficient (or no) data available to determine the value.
[2] Federal Annual Average Standard AAM exceeding 50 µg/m^3

2.4 Regulatory Background

Federal, state, and local policies aim to reduce air pollution by regulating air quality and the sources of pollution emissions. The following section describes relevant air quality policies and regulations.

2.4.1 Federal Regulations

Federal Clean Air Act (FCAA) - 42 U.S.C. §7401 et seq.
The Federal Clean Air Act, which was first enacted in 1970 and last amended in 1990, remains the federal government's primary air quality law regulating air emissions from stationary and mobile sources. There are several regulatory programs bought about by FCAA amendments, including National Ambient Air Quality Standards (NAAQS), National Emissions Standards for Hazardous Air Pollutants (NESHAPs), New Source Performance Standards (NSPS), the Acid Rain Program (APP), and the CAA ozone program consistent with the Montreal Protocol. Notably, the FCAA gives the Environmental Protection Agency (EPA) that authority to establish the National Air Quality Standards.

National Ambient Air Quality Standards (NAAQS)
The FCAA authorizes the EPA to establish National Ambient Air Quality Standards (40 CFR Part 50) for six criteria air pollutants which are potentially harmful to the public and to the environment. The NAAQS define what qualifies as clean air by identifying the maximum amount of a pollutant, averaged over a specified timeframe, that can be present without harming public health.[10] The EPA reviews the NAAQS at five-year intervals, and makes revisions as needed. The six criteria air pollutants currently covered by the NAAQS are: particulate matter (PM_{10} and $PM_{2.5}$), ozone (O_3), nitrogen oxides (NO_X), sulfur oxides (SO_X), carbon monoxide (CO), and lead. Under the FCAA, nonattainment areas (areas that exceed that maximum standard for one or more of the criteria pollutants) must prepare State Implementation Plans (SIPs) describing the actions the area will take to meet the NAAQS by the applicable attainment deadlines.

2.4.2 State Regulations

California Clean Air Act
The California Clean Air Act (CCAA) was passed into law in 1988, establishing ambient air quality standards for the State of California that exceed NAAQS, as well as accelerated attainment dates

[10] California Air Resources Board, National Ambient Air Quality Standards https://ww2.arb.ca.gov/resources/national-ambient-air-quality-standards (Accessed April 2024).

for criteria pollutants established in the FCAA. The CCAA establishes requirements for district air quality plans to ensure that the state standards for criteria pollutants are met.

Title 24 Energy Efficiency Standards & California Green Building Standards
The Building Energy Efficiency Standards (Energy Code) were first adopted by the California Energy Commission in 1976 and have since been updated regularly. The Energy Code establishes indoor air quality requirements, in addition to energy and water efficiency requirements, for all newly construction buildings as well as additions and alterations to existing buildings.

2.4.3 Air Quality Management

California Air Resource Board
The California Air Resources Board (CARB) is part of the California Environmental Protection Agency and is responsible for preparation the SIP for submission to the EPA, as well as for overseeing air quality districts and approving district air quality plans. Established in 1967, the CARB regulates vehicle emissions standards and sets area designation for criteria pollutants.

Mojave Desert Air Quality Management District (MDAQMD)
The California Air Resources Board is responsible for regulating mobile emissions sources, while the air quality management districts, such as MDAQMD, are responsible for controlling stationary sources and enforcing regulations.

The MDAQMD regulates stationary source of air pollution within its jurisdiction, which covers 20,000 square miles including the High Desert in San Bernardino County and Palo Verde Valley in Riverside County. The District covers a large portion of the Mojave Desert Air Basin, which also overlaps with parts of the Eastern Kern Air Pollution Control District, the Antelope Valley AQMD, and the South Coast AQMD.

In response to designations of non-attainment for several air pollutants within the MDAB, the MDAQMD adopted ozone and particulate matter attainment plans. The Mojave Desert Planning Area Federal Particulate Matter Attainment Plan was adopted in 1995, in order to bring the Mojave Desert non-attainment area into attainment for NAAQS. The MDAQMD State and Federal Ozone Attainment Plan was adopted in 2004 and the MDAQMD Western Mojave Desert Non-attainment Area Ozone Attainment Plan was adopted in 2008 in an effort to bring the MDAB in attainment for Ozone federal NAAQS.

MDAQMD Federal Particulate Matter (PM_{10}) Attainment Plan (July 1995): This plan was adopted to comply with the federal requirements associated with PM_{10} attainment planning, including a strategy for the adoption and implementation of reasonably available control measures. The plan was to demonstrate PM_{10} attainment, in accordance with the NAAQS, by the end of December, 2000.

MDAQMD State and Federal Ozone Attainment Plan (April 2004): This plan provided the MDAQMD's strategy for the implementation, maintenance, and enforcement of the

NAAQS for ozone by the end of 2007, as well as for progress towards meeting the State Ambient Air Quality Standards for ozone. It contains emissions limits, a monitoring program, a permit program, contingency measures, and air quality monitoring.

MDAQMD Western Mojave Desert Non-Attainment Area Ozone Attainment Plan (State and Federal) (June 2008): This plan provides the District's strategy for achieving the federal 8-hour ozone standard in the West Mojave Desert non-attainment area by 2021.

The MDAQMD has established thresholds for certain criteria pollutants and monitors daily pollutant levels and meteorological conditions throughout the District. Based on the District's emission thresholds for criteria pollutants, any project would be considered to have significant impacts to air quality if the daily emissions exceed the values shown in the table below during construction or operation:

Table 2-6
MDAQMD Significant Emissions Thresholds

Criteria Pollutant	Annual Thresholds (short tons)	Daily Thresholds (pounds)
Greenhouse Gases (CO_2e)	100,000	548,000
Carbon Monoxide (CO)	100	548
Oxides of Nitrogen (NO_x)	25	137
Volatile Organize Compounds (VOC)	25	137
Oxides of Sulfur (SO_x)	25	137
Particulate Matter (PM_{10})	15	82
Particulate Matter ($PM_{2.5}$)	12	65
Hydrogen Sulfide (H_2S)	10	54
Lead (Pb)	0.6	3
Source: MDAQMD CEQA Guidelines (February 2020)		

2.4.3.1 Air Basin Regulations

The MDAQMD has adopted rules and regulations to improve and maintain air quality in the district. The rules and regulations also implement state and federal policies, such as the Clean Air Act. The current MDAQMA rule book contains 18 regulations and associated rules. Excerpts of applicable regulations to the Project are listed below. The complete list and full text of the current rule book is available on the MDAQMD website.[11]

Regulation II – Permits

Rule 201: Permits to Construct: *A person shall not build, erect, install, alter, or replace any equipment, the use of which may cause the issuance of air contaminants or the use of which may eliminate, reduce or control the issuance of air contaminants without first obtaining written authorization for such construction from the Air Pollution Control Officer.*

[11] MDAQMD Rule Book, https://www.mdaqmd.ca.gov/rules/rule-book (Accessed April 2024).

A permit to construct shall remain in effect until the permit to operate the equipment for which the application was filed is granted or denied, or the application is canceled.

Regulation IV – Prohibitions

Rule 402: Nuisance: *A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.*

Rule 403: Fugitive Dust Control: *Purpose - The purpose of this rule is to reduce the amount of PM10 entrained in the ambient air from anthropogenic Fugitive Dust sources within the District by requiring actions to prevent, reduce, or mitigate Fugitive Dust.*

Rule 404: Particulate Matter Concentration: *A person shall not discharge into the atmosphere from any source, particulate matter except liquid sulfur compounds, in excess of the concentration at standard conditions, shown in Table 404(a). Where the volume discharged is between figures listed in the table, the exact concentration permitted to be discharged shall be determined by linear interpolation.*

Regulation IX – Standards of Performance for New Stationary Sources

Rule 900: Standards of Performance for New Stationary Sources (NSPS): *This rule is enacted to adopt by reference all the applicable provisions regarding standards of performance for new stationary sources as set forth in 40 Code of Federal Regulations, Part 60 (40 CFR 60).*

Regulation XI – Source Specific Standards

Rule 1103: Cutback and Emulsified Asphalt: *To reduce emissions of volatile organic compounds (VOC) from the use of cutback and emulsified asphalts. The provisions of this rule apply to the manufacture, mixing, storage, use, and application of cutback and emulsified asphalts.*

Rule 1113: Architectural Coatings: *The purpose of this rule is to limit the quantity of Volatile Organic Compounds (VOC) in Architectural Coatings. Except as provided in subsection (A)(3), this Rule is applicable to any person who supplies, sells, offers for sale, manufactures, blends or repackages any Architectural Coating for use within the Mojave Desert Air Quality Management District as well as any person who applies or Solicits the application of any Architectural Coating within the District.*

Regulation XII – Federal Operating Permits

Rule 1200: General: *The purpose of Regulation XII is to implement the operating permit requirements of Title V of the Federal Clean Air Act (42 U.S.C. §§7661-7661f). This rule is also intended to comply with the requirements promulgated by the USEPA and set forth in 40 C.F.R. Part 70.*

Regulation XIII – New Source Review

Rule 1300: New Source Review General: *The purpose of this regulation is to set forth the requirements for the preconstruction review of all new or modified Facilities; ensure that the Construction or Modification of Facilities subject to this Regulation does not interfere with the attainment and maintenance of Ambient Air Quality Standards; and ensure that there is no net increase in the emissions of any Nonattainment Air Pollutants from new or modified Major Facilities which emit or have the Potential to Emit any Nonattainment Air Pollutant in an amount greater than or equal to the amounts set forth in District Rule 1303(B)(1).*

3 PROJECT AIR QUALITY IMPACT

3.1 Introduction

The following section analyzes the potential impacts associated with buildout of the proposed Project in conformance with the California Environmental Quality Act (CEQA).

3.2 Standards of Significance

The following thresholds are from the significance criteria listed in the CEQA Environmental Checklist included in Appendix G of the CEQA Guidelines. The Project would have a significant effect on air quality if the proposed Project were to:

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 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?

3.3 Methodology

The following analysis is based on proposed land uses and traffic trip information provided by Urban Crossroads, Inc. (2023). The Project proposes the development of a 1,373,150 square foot warehouse distribution center on a 90.1 ± acre site. The Project also requires off-site improvements including the extension of roadways and utility connections. It is assumed, for analysis purposes, that 85% of the building will be used for dry warehousing, and 15% for cold storage. The Project will emit criteria air pollutants during both the construction and operational phases. In particular, the Project, as a warehouse distribution center, will generate emissions through distribution truck trips to and from the facility.

Construction and operational emissions were calculated using California Emissions Estimator Model (CalEEMod) Version 2022.1. CalEEMod is a computer program that can be used to estimate anticipated emissions associated with land development projects in California. The model calculates criteria pollutant emissions, including CO, PM_{10}, $PM_{2.5}$ and the ozone precursors ROG and $NO_{x,}$). CalEEMod detailed output tables are provided in Appendix A of this report.

The following provides a summary of the land use assumptions entered into the model:

Table 3-1 Land Use Summary for CalEEMod			
Land Use	**Acreage**	**Size**	**Landscape**
Unrefrigerated Warehouse	36.0	1,167,177 sf	Landscaping: 819,232 SF Retention: 135,036 SF
Refrigerated Warehouse	4.65	205,973 sf	---
Parking Lot	19.5	2,161 spaces (1,422 standard, 739 trailer)	---
Hardscape (Other Asphalt Surfaces)	32.87	Internal Roadways: 30 AC Off-Site Roadway Improv.: 2.87 AC	---
Source: Project plan set dated February 15, 2024. Second submittal for site plan review.			

3.4 Construction Emissions

For analysis purposes, it is assumed that the Project will require a two-year buildout, concluding in 2024. Final grading plans have not been prepared, however it is assumed there will be a net balance of cut and fill materials on-site, with not import or export of materials required. The construction phase includes site preparation, grading, paving, building construction, and application of architectural coatings. It is also assumed that building construction, paving, and architectural coating will occur in staggered, but overlapping phases.

The following provides the construction phasing assumptions entered into the model:

- Construction phasing:
  - Site Preparation: 1/1/2025 – 3/25/2025 (60 days)
  - Grading: 3/26/2025 – 11/7/2024 (163 days)
  - Building Construction: 11/10/2025 – 11/27/2026 (275 days)
  - Paving: 2/2/2026 – 11/27/2026 (215 days)
  - Architectural Coating: 7/1/2026 – 12/31/2026 (132 days)

Table 3-2 shows that the emissions generated by the Project construction activities will not exceed the MDAQMD thresholds for any criteria air pollutants. The data in Table 3-2 represents maximum daily unmitigated emissions over the 2-year construction period.

Table 3-2 Maximum Daily Construction-Related Emissions Summary (pounds per day)						
Construction Emissions	CO	NO_x	ROG	SO_2	PM_{10}	$PM_{2.5}$
Daily Maximum	81.6	31.7	59.3	0.09	12.0	5.25
MDAQMD Threshold	548	137	137	137	82	65
Exceeds?	No	No	No	No	No	No

Source: Appendix A: CalEEMod Outputs.

4.5 Operational Emissions

Operational Emissions refer to the ongoing emissions over the life of a project. They include area source emissions, emissions from energy demand (e.g. electricity) and mobile source emissions (e.g. vehicles).

The proposed Project is estimated to generate 2,864 daily trips according to the Traffic Impact Analysis and is based on ITE Land Use Codes 157 for High-Cube Warehouse and High-Cube Cold Storage Warehouse[12]. The total of 2,864 daily trips is comprised of 1,994 passenger car trips and 870 truck trips. For warehouse uses, two CalEEMod runs were conducted. The first run modeled passenger vehicle trips associated with the warehouse uses and assumed CalEEMod default trip lengths and purposes. The second modeling run modeled truck trips associated with the warehouse uses. Assuming that warehouse developments generate longer truck trips associated with product delivery/distribution, trip lengths for long-haul truck trips assumed a 40-mile trip length derived from the Southern California Association of Government's (SCAG) estimation of average truck trip length in its 2016 Regional Transportation Plan.[13]

Table 3-3 shows the assumed fleet mix for the passenger vehicle run and the truck trip run for warehouse developments.

Table 3-3
Fleet Mix – For Passenger Vehicle Run and Truck

Vehicle Type	Passenger Vehicle Model Run	Truck Model Run
HHD	0	60%
LDA	62%	0
LDT1	4%	0
LDT2	21%	0
LDH1	0	17%
LDH2	0	0
MCY	0	0
MDV	31%	0
MH	0	0
MHD	0	23%
OBUS	0	0
SBUS	0	0
UBUS	0	0

Source: Moreno Valley Trade Center (Warehouse Scenario) Air Quality, GHG, & HRA Evaluation prepared by UXR (October 2020)

[12] Institute of Transportation Engineers (ITE), Trip Generation Manual, 11th Edition (2021).

[13] South Coast Air Quality Management District, Preliminary Draft Staff Report: Proposed Rule 2305 – Warehouse Indirect Source Rule – Warehouse Actions and Investments to Reduce.

CalEEMod defaults were assumed for electricity and natural gas demand. Southern California Edison 2027 forecasted intensity factors (as provided in CalEEMod) were applied, assuming an operational year of 2027. Based on CalEEMod default factors, the Project would generate a demand for 10,644,805 kWh/yr and 27,615,029 kBTU/yr.

CalEEMod defaults for water demand were updated based on the approved WSA. Water demand for the Project is estimated to be 65.13 acre-feet per year, which assumed 85 percent of indoor water use would be for unrefrigerated warehouse use, and 15 percent would be for refrigerated warehouse use.

As shown in Table 3-4, projected emissions during the Project's operational life will not exceed the MDAQMD thresholds for any criteria air pollutants. Impacts related to operational emissions can thus be assumed to be less than significant.

Table 3-4
Maximum Daily Operational-Related Emissions Summary (pounds per day)

Operational Emissions	CO	NO_x	ROG	SO_2	PM_{10}	$PM_{2.5}$
Daily Max (w/o mobile)	65.93	7.92	41.71	0.04	0.67	0.64
Mobile (Passenger Car)[1]	97.80	5.26	5.40	0.28	27.5	6.98
Mobile (Trucks)[1]	26.50	92.4	2.35	0.90	31.9	9.77
Daily Max. (Total)	**190.23**	**105.58**	**49.46**	**1.22**	**60.07**	**17.39**
MDAQMD Threshold	548	137	137	137	82	65
Exceeds?	No	No	No	No	No	No

Source: Appendix A: CalEEMod Outputs.

4.6 Localized Impacts

The MDAQMD considers residences, schools, daycare centers, playground, and medical facilities as sensitive receptor land uses. According to the MDAQMD CEQA Guidelines, projects within a specified distance of a sensitive receptor must be evaluated using significance threshold criteria number 4:

> *(4) [A project is significant if it] 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.*

The threshold distances from sensitive receptors, as specified by the MDAQMD are as follows:

- Any industrial project within 1000 feet;
- A distribution center (40 or more trucks per day) within 1000 feet;
- A major transportation project (50,000 or more vehicle per day) within 1000 feet;
- A dry cleaner using perchloroethylene within 500 feet;

- A gasoline dispensing facility within 300 feet.[14]

The proposed Project is considered an industrial land use and proposes a distribution center with more than 40 truck trips projected per day. The Project is located within the North Apple Valley Industrial Specific Plan area and is not within 1,000 feet of any sensitive receptor land uses. The nearest sensitive receptor land uses are scattered residences located approximately 1,400 feet west of the Project site.

Given that the Project is well beyond the specified distance from any sensitive receptor land uses, it does not need to be evaluated using significance criteria number 4, stated above.

3.7 Air Quality Management Plan Consistency

The Project is located within the MDAB, which is governed by the MDAQMD. MDAQMD is responsible for monitoring criteria air pollutant concentrations and establishing management policies for the MDAB. All development within the MDAB, including the proposed Project, is subject to all applicable air quality management plans that establish control strategies and guidance on regional emission reductions for air pollutants, including but not limited to ozone attainment plans and PM_{10} reduction plans.

According to the MDAQMD CEQA Guidelines, a project is considered non-conforming if it conflicts with or may delay the implementation of any applicable attainment or maintenance plan. According to the guidelines, a project is considered conforming if it "complies with all proposed control measures that are not yet adopted from the applicable plan(s) and is consistent with the growth forecasts in the applicable plan(s)."

The MDAQMD works directly with the Southern California Association of Governments (SCAG), county transportation commissions, and local governments, and cooperates actively with all state and federal government agencies. SCAG adopted the 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (2020 RTP/SCS) to comply with metropolitan planning organization (MPO) requirements under the Sustainable Communities and Climate Protection Act. The Growth Management chapter of the RTP/SCS forms the basis of land use and transportation controls of air quality plans. The 2020 SCAG RTP/SCS forecasts that by 2045, the Town of Apple Valley will have 37,400 households and a population 101,400.[15] According to the Town's 2009 General Plan, Apple Valley has the potential to accommodate 31,716 additional dwelling units and 96,829 additional residents in the Town boundaries through buildout of the General Plan.[16]

[14] MDAQMD California Environmental Quality Act (CEQA) and Federal Conformity Guidelines (February 2020).
[15] SCAG 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy, Demographics and Growth Forecast Technical Report, Jurisdiction-Level Growth Forecast.
[16] Town of Apple Valley General Plan (2009), page II-2.

MDAQMD states that conformity with growth forecasts can be established by demonstrating that the project is consistent with the land use plan that was used to generate the growth forecast.[17] The Project site is located in the planning area of the North Apple Valley Industrial Specific Plan (NAVISP). According to the NAVISP, the Project property is designated as Industrial – Specific Plan, which allows for "a broad range of clean manufacturing and warehousing uses… [including] warehouse distribution facilities." [18] The Project, which proposes the development of a warehouse distribution facility, is consistent with the land use and zoning designation established in the NAVISP and will comply with the policies and regulations applicable to this designation. According to the MDAQMD CEQA Guidelines, given that the Project is consistent with the land use plan used to generate the growth forecast, it can be assumed that the Project is conforms with the growth forecast itself.

The MDAQMD CEQA Guidelines also state that a project is considered conforming if it complies with all proposed control measures. According to the Apple Valley General Plan, the Town is subject to the provisions of the MDAQMD Rule Book, which establishes policies and other measures designed to help the District reach federal and state attainment standards. [19] In accordance with the Towns policies, the proposed Project shall comply with the provisions of the MDAQMD Rule Book. These actions include the implementation of fugitive dust control measures (Rule 403) and the use of low VOC content architectural coatings (Rule 1113). Furthermore, the Project will be subject to Rule 201, which requires a permit from the Air Pollution Control Office prior to any construction activities, and Rule XIII, which requires preconstruction review of all new facilities to ensure they don't interfere with the attainment and maintenance of ambient air quality standards. Compliance with the MDAQMD's requirements will ensure that the Project does not conflict with applicable air quality plans.

3.8 Odors

Land uses which are likely to generate odors, other than agricultural operations which are exempted, include chemical plants, composting operations, dairies, fiberglass molding, landfills, refineries, rail yards, and wastewater treatment plants.[20]

The Project proposes the development of a distribution warehouse facility, which will not include any industrial production or processing activity onsite. While the proposed warehouse may produce some odors, it is not anticipated to produce any objectionable odors long term. While some odors may be generated on site during the construction process, their production will be short term. Any odors generated on site during construction or operations are expected to disperse quickly with distances.

3.9 Cumulative Impacts

[17] MDAQMD California Environmental Quality Act (CEQA) and Federal Conformity Guidelines (February 2020).
[18] North Apple Valley Industrial Specific Plan (2006), p. I-2.
[19] Town of Apple Valley General Plan (2009) Air Quality Element, p. III-70.
[20] SCAQMD Guidance Document, Chapter 2: Air Quality Issues Regarding Land Use.

Given the dispersing nature of pollutant emissions and aggregate impacts from nearby jurisdictions, cumulative air quality is evaluated on a regional scale. As previously mentioned, the West Mojave Desert portion of the Mojave Desert Air Basin is a designated non-attainment region for PM_{10} and ozone. Any development resulting in emissions of PM_{10}, ozone, or ozone precursors will, to some extent, contribute to the existing regional non-attainment.

The MDAQMD does not currently provide thresholds of significance for the cumulative emissions of multiple projects. A project's potential cumulative contributions can instead be analyzed using the criteria for project-specific impacts, assuming that if an individual development generates less than significant construction and operational emissions, then it would not generate a cumulatively considerable increase in non-attainment criteria pollutants.

The Project is located in a non-attainment area for PM_{10} as well as ozone, for which precursors include CO, NO_x, and ROG. As shown in Tables 3-3 and 3-4, Project emissions will fall below threshold of what MDAQMD considers to be cumulatively considerable. Emissions of PM_{10}, CO, NO_x and ROG related to the Project are also projected to be below the MDAQMD thresholds.

Standard best practices will be applied during construction, including dust control measures in accordance with MDAQMD Rule 403, as well as the use of low VOC content architectural coatings per MDAQMD Rule 1113. Therefore, while the Project will contribute to incremental increases in emissions, the impacts on regional PM_{10} and ozone levels are not anticipated to be cumulatively considerable.

3.10 CEQA Determination

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

The Project conforms with the growth forecasts used in the MDAQMD's plans and will comply with all control measures proposed in the District's air quality plans. Based on this evidence, it can be concluded that the Project will not conflict with or obstruct implementation of the applicable air quality plan, and that impacts will therefore be less than significant.

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

Both the construction and operation of the proposed Project will result in emissions that are below the MDAQMD significance thresholds. The Project is not anticipated to make substantial contributions to an existing regional air quality violation. Overall, Project-specific impacts will be less than significant and Project-related impacts to non-attainment will not be cumulatively considerable.

c) Expose sensitive receptors to substantial pollutant concentrations?

Given that there are currently no sensitive receptors in the Project vicinity, the proposed development is not anticipated to expose sensitive receptors to substantial pollutant concentrations, and impacts can be considered less than significant.

Potential Health Impacts

According to the MDAQMD CEQA Guidelines, the District does not currently have a methodology to correlate the expected air quality emissions of a project to the likely health consequences of those emissions consistently and meaningfully. There are several factors that make it scientifically impossible with the technology available today to calculate the degree to which an individual's health would be impacted by exposure to various levels of criteria pollutant emissions:

- Differing medical histories mean that not all individuals would be affected equally. Some individuals may have medical pre-dispositions, and diet and exercise levels vary across a population.
- Due to the dispersing nature of pollutants, it is difficult to local and identify which individuals will be impacted, either directly or indirectly.
- There are currently no agreed upon methodologies or studies upon which to base assumptions, such as baseline health levels or emissions level-to-health risk ratios.

While the air district, and the field of study in general, do not have methodologies available to analyze the specific health consequences of a project's emissions, MDAQMD does recommend the use of tools such as CalEEMod for the purposes of project evaluation.

Given these limitations, the extent to which the proposed Project poses a health risk is uncertain, but unavoidable. However, the results of the CalEEMod projections indicate that the Project's emissions are below the MDAQMD thresholds, and the application of the MDAQMD sensitive receptor guidelines also indicate that the Project is not within the threshold distance. Based on these findings, it is therefore anticipated that the Project's impacts and associated health effects resulting from criteria pollutants will overall be less than significant.

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

The Project does not propose land uses likely to generate objectionable odors. While the proposed warehouse may produce some odors, it is not anticipated to produce any objectionable odors long term. There are no sensitive receptors in the immediate vicinity of the proposed Project. There are therefore no land uses nearby that are likely to be impacted by any nuisance related to odors. As such, impacts from objectionable odors are expected to be less than significant.

3.11 Air Quality Mitigation Measures

Analysis of the Project's emissions and conformance with applicable air quality attainment and maintenance plans found that impacts are expected to be less than significant. Given that impacts will be less than significant, mitigation measures will not be necessary.

4 CLIMATE CHANGE SETTING

4.1 Introduction to Greenhouse Gases and Climate Change

Greenhouse gases, or GHG, are gases that absorb infrared radiation in the atmosphere. They are named after their role in the greenhouse effect, which refers to the trapping of heat in the atmosphere, near the earth's surface. Like the function of the walls of a greenhouse, as heat flows towards space from the earth's surface, GHGs absorb it and re-radiate it back towards the earth's surface.[21] Greenhouse gases play an essential role in insulating the earth and thereby maintaining climatic conditions amenable to life as we know it.[22]

While GHGs are vital, maintaining balance in the system is also crucial. Over the last two centuries, human activity, such as the burning of fossil fuels, industrial activity, deforestation, and land use changes, began to intensify the natural greenhouse effect. While the combustion of fossil fuels produces and emits greenhouse gases into the atmosphere at levels elevated far beyond the natural production of these gases, the removal of trees and other vegetation reduce the earth's ability to sequester CO_2.[23] As the concentrations of these gases increase, so too does the amount of heat that they trap in the atmosphere. The resulting warming of the earth's climate is known as climate change.

4.1.1 Greenhouse Gases

According to the Intergovernmental Panel on Climate Change (IPCC) Sixth Assessment Report (AR6), atmospheric concentrations of CO_2 have increased by 50 percent since the industrial revolution and continue to increase at a rate of two parts per million each year. At this rate, the world will exceed 1.5°C above pre-industrial levels by the 2030s.[24] This level of global warming is associated with global mean sea level rise as well as regional climatic changes such as extreme temperatures, increases in the frequency and intensity of heavy precipitation in some regions, and increases in the intensity and frequency of droughts in some regions.[25]

Greenhouse gas is a broad term referring to chemicals and substances found to cause changes in the atmosphere and the changing of the earth's climate. While these are not the only greenhouse gases, the California Air Resources Board is required to monitor and regulate seven GHGs: carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), sulfur hexafluoride (SF_6), nitrogen trifluoride (NF_3), perfluorocarbons (PFCs), and hydrofluorocarbons (HFCs).[26] The latter four gases, all of

[21] United Nations Framework Convention on Climate Change – GHG Inventories.
[22] Town of Apple Valley 2019 Climate Action Plan Update.
[23] California Air Resources Board 2022 Scoping Plan, Environmental and Regulatory Setting.
[24] IPCC Climate Change 2021: The Physical Science Basis. Contribution of Working Group 1 to the Sixth Assessment Report of the IPCC (2021).
[25] IPCC Special Report: Global Warming of 1.5°C – Summary for Policymakers (2018).
[26] California Health and Safety Code § 38505 (g).

which contain fluorine, are sometimes collectively referred to as high global warming potential greenhouse gases (high-GWP gases).

Global warming potential (GWP) is a metric used to convert all GHGs into carbon dioxide equivalents. Carbon dioxide equivalents (CO_2e), and specifically metric tons of carbon dioxide equivalents ($MTCO_2e$), are units of measure used to compare emissions of various greenhouse gases. Carbon equivalent refers to the mass of carbon dioxide that would produce the same estimated radiative force as that of another greenhouse gas.[27] These metrics facilitate the development of multi-gas frameworks and policies which are crucial to action addressing climate change.

Table 4-1 describes the primary GHGs, the contribution of each gas to California's total GHG emissions, and the main sources of emissions. The transportation sector is the largest emitter of GHGs in California, followed by the generation of electricity.[28]

Table 4-1
Sources of GHGs from Human Activities

GHG	% of California's 2020 GHG emissions [1]	Description	Sources[2]
Carbon Dioxide (CO_2)	80.2%	Odorless and colorless gas that is naturally emitted by the decomposition of dead organic matter, oceans, and volcanoes, as well as the respiration of plants, animals and fungus. CO_2 is naturally sequestered in trees and other vegetation, oceans, soils, and ice caps.	Fossil fuel combustion for transportation, electricity, and industry. Other sources include burning solid waste, trees and other biological materials, as well specific chemical processes for the industrial production of materials such as cement.
Methane (CH_4)	10.5%[3]	A natural byproduct of biological processes in low oxygen environments such as bogs or at the roots of rice crops, as well as in cattle raising. CH_4 absorbs more radiation than CO_2 but has a lower atmospheric concentration.	Fugitive emissions from fossil fuel operations and transport. Off-gassing from agricultural practices and landfills.

[27] California Air Resources Board.
[28] California Air Resources Board 2022 Scoping Plan Update, Environmental and Regulatory Setting.

Table 4-1
Sources of GHGs from Human Activities

GHG	% of California's 2020 GHG emissions [1]	Description	Sources[2]
Nitrous Oxide (N_2O)	3.5%[3]	Colloquially known as laughing gas, a colorless gas that can cause dizziness and euphoria in small doses.	Agricultural practices, particularly nitrogen-base fertilizers. Soil management, wastewater treatment, and solid waste from land use and industrial activity.
High-GWP gases	5.8%[3]	Hydrofluorocarbons (HFCs): Synthetic gases that have the highest GWP of all GHGs, though they represent a small proportion of emissions. Perfluorocarbons (PFCs): Synthetic gases stable molecular structures and very long lifetimes in the atmosphere.	PFCs and HFCs: Used as substitutes for chlorofluorocarbons (CFCs), ozone-depleting substances used in refrigeration, air conditioning, solvents, and aerosol products.
		Sulfur Hexafluoride (SF_6): A synthetic, odorless, colorless, nontoxic and nonflammable gas.	SF_6: Electricity transmission and distribution and in semiconductor manufacturing.
		Nitrogen trifluoride (NF_3): A synthetic, colorless, toxic gas with a musty odor.	NF_3: Semiconductor manufacturing.

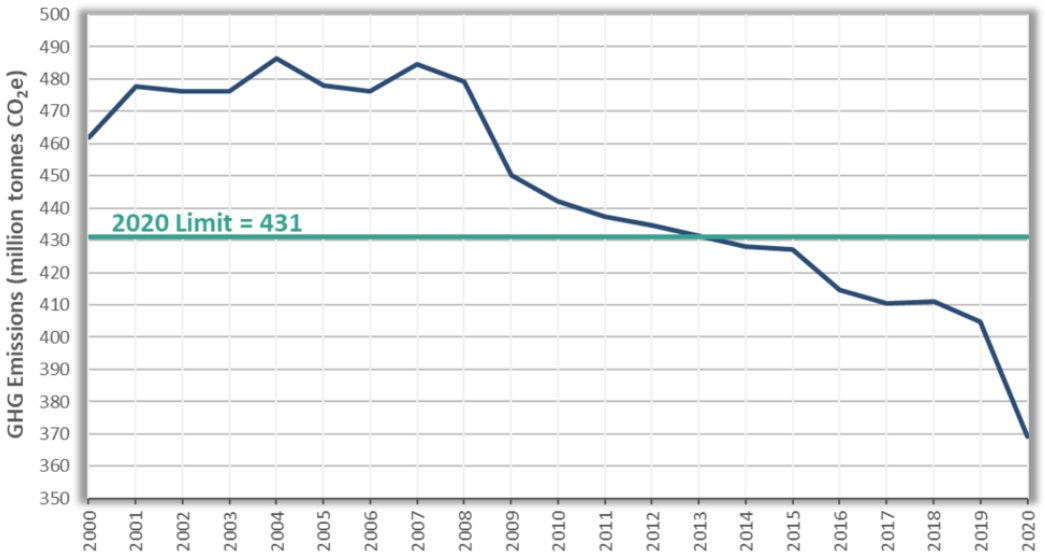
[1] Source: California Air Resources Board.
[2] Sources: California Air Resources Board 2022 Scoping Plan Update, Environmental and Regulatory Setting; U.S. EPA, Overview of Greenhouse Gases, https://www.epa.gov/ghgemissions/overview-greenhouse-gases (accessed October 2022).
[3] In carbon dioxide equivalent units.

4.1.2 Climate Change in California

California is the second largest greenhouse gas producing state in the U.S., and the 16th largest contributor in the world.[29] In 2020, emissions from GHG emitting activities in California were 369.2 $MMTCO_2e$, 35.3 $MMTCO_2e$ below 2019 levels and 61.8 $MMTCO_2e$ below the 2020 GHG Limit. While emissions data for 2020 is likely distorted by impacts of the 2020 COVID-19 pandemic, Figure 3 shows that the state's success in reducing GHG emissions since 2000.

[29] Town of Apple Valley 2019 Climate Action Plan.

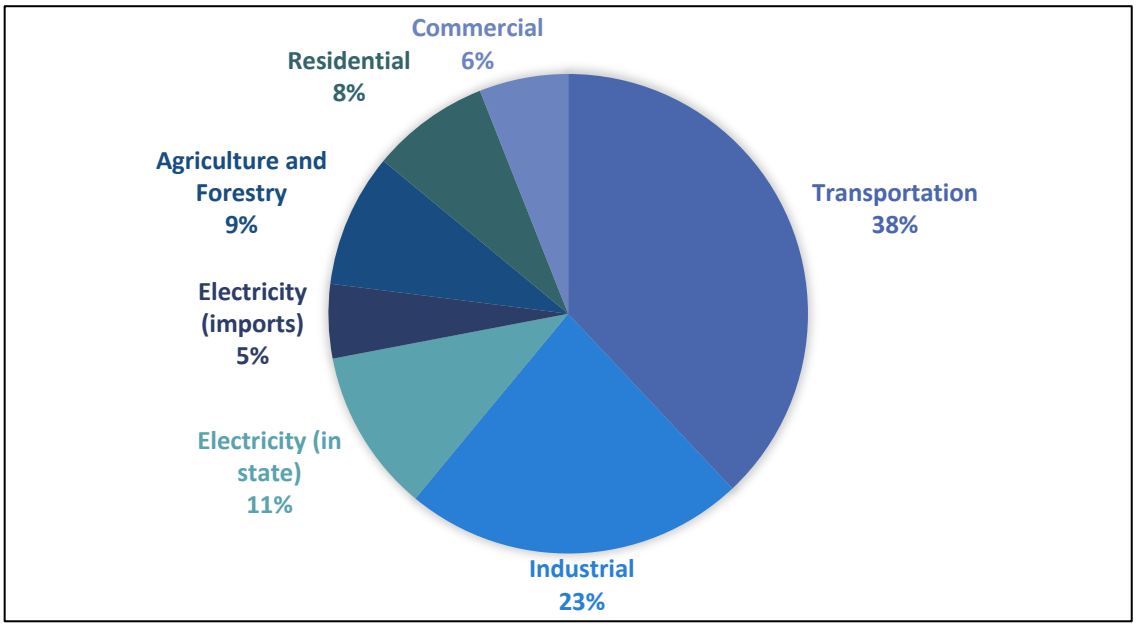
Figure 4-1: Annual Statewide GHG Emissions Compared to the 2020 GHG Limit



Source: California Greenhouse Gas 2000-2020 Emissions Trends and Indicators Report

Carbon dioxide is the primary greenhouse gas emitted in California. It accounted for 83% of total GHG emissions in the state in 2019.[30] Transportation, particularly on-road travel, is the predominant source of carbon dioxide emissions in California, and as shown in Figure 4, accounted for 38% of MMT CO_2e in the state in 2020.[31]

Figure 4-2: 2020 GHG emissions by economic sector (% of total California emissions)0



Source: California Air Resources Board, Current California GHG Emission Inventory Data.

[30] California Air Resources Board, 2022 Scoping Plan for Achieving Carbon Neutrality (November 2022), p.32.
[31] Ibid.

While research into the effects of climate change continues to evolve, such as determining the severity of impacts at specific temperature increases, current and emerging impacts are becoming increasingly evident in climatic events globally. The impacts of climate change are apparent in California in effects such as the increasing frequency and severity of wildfires, droughts, and extreme heat.

Extreme Heat: California's daily maximum average temperature, an indicator of extreme temperature trends, is expected to increase to 4.4°F - 5.8°F by 2050 and 5.6°F - 8.8°F by 2100.[32] Many regions in the state broke their previous records for hottest measured temperature, and as a whole California had its hottest summer on record in 2021.[33] Heat waves are occurring more frequently and are enduring longer, resulting in deadly public health crises, particularly in cities, across the state. Like many other effects of climate change and air pollution, the adverse impacts of heat waves are felt most acutely by vulnerable communities, including people with sensitive health conditions and low-income populations. Higher temperatures can also exacerbate natural disasters such as storms, heat waves, floods, and droughts.[34]

Drought: According to CARB, 87% of California was in severe drought, and 100% of California was in at least moderate drought, as of March 2022. While droughts are a natural phenomenon, it is estimated that human-caused climate change accounts for 19% of drought severity and 42% of the soil moisture deficit in the state since 2000. Severe and enduring drought is harmful to both wildlife and California's agricultural industry, which is responsible for growing more than half of the country's produce.[35] Combined, drought and extreme heat contribute to worsening wildfires in California.

Wildfires: Large wildfires are occurring more frequently in California: of the twenty largest wildfires recorded in the state's history, almost half of them occurred in 2020 and 2021.[36] In addition to the damage and lives lost directly from these fires, wildfire impacts compound with other impacts and causes of climate change. For example, wildfires in California result in severe air quality hazards and substantially harm wildlife populations, and the fires also result in the further emission of massive quantities of CO_2 into the atmosphere.

Beyond these three hazards, climate change is expected to have wide ranging effects to California's water and energy supply, sea level, and ecosystems. The California Energy Commission published a report on the impacts of climate change on the region encompassed by the Mojave and Sonoran Deserts.[37] It found that the region's already extreme heat will increase

[32] California Air Resources Board, 2022 Scoping Plan for Achieving Carbon Neutrality (November 2022), p.5.
[33] Ibid., p.5.
[34] Town of Apple Valley Climate Action Plan (2019).
[35] California Air Resources Board, 2022 Scoping Plan for Achieving Carbon Neutrality (November 2022), p.4.
[36] Ibid.
[37] California Energy Commission, California's Fourth Climate Change Assessment (2018) Inland Deserts Region Report.

by up to 8 to 14 degrees Fahrenheit by the end of the century, and that low and highly variable rainfall rates will be even more variable over coming decades. Increasingly extreme weather conditions will increase both the risk of flash flooding and wildfire. High temperatures and changing water supplies will exacerbate existing public health challenges and threaten vital industries such as agriculture and tourism.

4.1.3 GHGs and Health Impacts

While some greenhouse gases are hazardous to human health if encountered in high concentrations in confined areas, the public health impacts associated with GHGs are primarily those associated with their combined influence on climate change. Climate change and its effects are responsible for a wide range of potential hazards to public health, both direct and indirect. Direct health impacts resulting from climate change include heat-related illnesses, such as heat stroke, as well as injuries and death from natural disasters and extreme weather, such as wildfires. Climate change is also associated with indirect adverse health impacts, such as:

- Exacerbation of cardiovascular and respiratory disease due to increased smog and wildfire smoke.
- Increased rates and expanding geographic ranges of vector-borne and fungal diseases.
- Nutrition consequences associated with food insecurity worsened by decreased agricultural production.
- Mental trauma related to extreme weather disasters and other mental health impacts due to climate change-related unemployment, income loss, home loss, or displacement.[38]

According to the California Air Resources Board, while climate change is one of the greatest public health threats of the twenty-first century, action to address climate change presents one of the most significant opportunities to improve public health, both globally and in California.[39]

4.2 Regulatory Setting

The following section outlines regulatory actions being taken to address climate change and reduce GHG emissions at the international, federal, state, and regional levels.

4.2.1 International

Intergovernmental Panel on Climate Change (IPCC)
The IPCC was founded in 1988 by the World Meteorological Organization (WMO) and the United Nations Environment Programme (UNEP). The organization is comprised of member governments of the WMO and UN. The mission of the IPCC is to provide scientific research to governments in order to inform climate policies.

[38] California Air Resources Board, Draft 2022 Scoping Plan Update (May 2022), p.127.
[39] California Air Resources Board, Draft 2022 Scoping Plan Update Appendix G: Public Health.

United Nation's Framework Convention on Climate Change (UNFCCC)
The UNFCCC was signed by 154 member nations in 1992, and now has 198 members. The Convention guides the global response to climate change with the objective of stabilizing greenhouse gas concentrations at a level that would mitigate the dangerous consequences of climate change. The UNFCCC defines climate change as: "a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods."[40]

The UNFCCC is the parent treaty of the Kyoto Protocol and Paris Agreement. While the UNFCC sets targets for GHG concentrations, the 1997 Kyoto Protocol established binding targets for the 192 signatory parties. The Paris Agreement was adopted in 2015 as a legally binding international treaty signed by 196 parties. It aims to limit global warming to less than 2 degrees Celsius above pre-industrial levels by setting nationally determined contributions (NDCs) of increasingly ambitious climate action on 5-year cycles.[41]

4.2.2 Federal

GHG Endangerment Finding
Under section 202(a) of the Clean Air Act, the EPA determined that GHGs threaten public health and welfare, and that GHG emissions from motor vehicles contribute to this threat. The two distinct findings, signed by the EPA Administrator in December 2009, found that:

1. The Endangerment Finding: Concentrations of six greenhouse gases (carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride) in atmosphere constitute air pollution and threaten the health and welfare of the public.
2. The Cause or Contribute Finding: Emissions from new motor vehicles and motor vehicle emissions contribute to GHG concentrations in the atmosphere and thus to climate change.[42]

Mandatory Reporting of GHGs (40 CFR Parts 86, 87, 89 et al.)
The Mandatory Reporting of Greenhouses Gases rule requires reporting of greenhouse gas emissions from major fossil fuel suppliers, industrial gas suppliers, direct greenhouse gas emitters and manufacturers of heavy-duty and off-road vehicles and engines. The rule requires facilities that emit 25,000 tons per year (MT/yr) of GHGs or more to submit annual reports to the EPA.[43]

[40] United Nations Framework Convention on Climate Change, Article 1 (2).
[41] United Nations Climate Change, UNFCCC Process, The Paris Agreement https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement (Accessed April 2024).
[42] United States Environmental Protection Agency, EPA's Endangerment Finding.
[43] Federal Register, Part II Environmental Protection Agency (October 30, 2009).

New Source Review (NSR)
The New Source Review Permitting program was established by Congress in 1977 as part of the Clean Air Act Amendments. The program requires new industrial facilities, or facilities making changes that will increase emissions significantly, to obtain permits limiting air emissions prior to construction. Permits are issues by state or local air pollution control agencies, and sometimes the EPA. The program requires that new sources meet the requirements for one or more of the following permits: Prevention of Significant Deterioration (PSD) permits, Nonattainment NSR permits, and minor source permits.

4.2.3 State

Assembly Bill 32 (AB 32)
The California Global Warming Solutions Act of 2006 (AB 32) required California to adopt regulations in order to reduce their GHG emissions to 1990 levels by 2020. This represents reductions of approximately 15 percent below the emissions projected in a "business as usual" scenario. The California Air Resources Board (CARB) prepared a Scoping Plan (2008) and Update (2014) to establish the state's strategy to meet the targets set forth by AB 32. Moving forward, AB 32 requires California to maintain and continue reductions beyond 2020 and continues to require CARB to update the Scoping Plan every 5 years.

Senate Bill 32 (SB 32)
The California Global Warming Solutions Act of 2016: emissions limit (SB 32) requires California to adopt regulations to reduce GHG emissions to 40% of 1990 levels by 2030.

CARB 2022 Scoping Plan Update
The 2022 Scoping Plan provides CARB's update to the 2017 Plan. Pursuant to SB 32, the plan sets forth the state's plan to stay on track towards reducing GHG emission by at least 40% below 1990 levels by 2030. Additionally, the 2022 Plan Update establishes a path for the state to achieve carbon neutrality by 2045 through technologically feasible, cost-effective means.[44]

Senate Bill 375 (SB 375)
SB 375 directs CARB to set regional GHG emissions reduction targets. The intent of the bill is to ensure local and regional governments are involved in efforts to meet the reduction targets set forth by AB 32 and SB 32. Alignment between state and local emission reduction efforts is important particularly because regional transportation planning and housing needs allocation, factors that have a major impact on GHG emissions in California, are overseen by local elected officials. The bill encourages an integrated approach by requiring the inclusion of Sustainable Communities Strategies in regional transportation plans, synchronizing the General Plan Housing Elements update schedule to align with regional transportation planning cycles, and adding CEQA incentives for projects that align with regional plans and reduce GHG emissions.

[44] California Air Resources Board, 2022 Scoping Plan for Achieving Carbon Neutrality (November 2022).

Clean Energy and Pollution Reduction Act of 2015 (SB 350)
SB 350 establishes a state renewable energy procurement goal, increasing from 33% by 2020 to 50% by 2030. It is implemented by the California Energy Commission in conjunction with state agencies including the Public Utilities Commission and CARB. The bill also requires large utilities companies to prepare integrated resource plans (IRPs) establishing how the utilities will meet customer demands while reducing GHG emissions and increasing the use of clean energy sources.

4.2.3.2 California Regulations and Building Codes

Title 24 of the California Code of Regulations
The California Building Standards Code covers a broad set of regulations regarding the construction, maintenance, fire safety, and accessibility of buildings, as well as the integration of energy conservation practices and green design.

Adopted in 1978, Part 6 of Title 24 establishes energy efficiency standards for residential and non -residential buildings constructed in the state. With the aim of continuing to reduce energy demand and consumption, Part 6 is updated as needed to reflect new energy efficiency technologies and methodologies.

Part 11 of Title 24 of the CCR The California Green Building Standards Code, or CALGreen, established mandatory minimum environmental performance standards addressing energy and water efficiency, material and water conservation, and environmental quality. CALGreen took effect in January 2022 and applies to all new commercial, low-rise residential, state-owned buildings, schools, and hospitals constructed in California. CALGreen was developed to help California meet the emissions reductions targets set forth in AB 32 and SB 32.

CARB Refrigerant Management Program
Administered by the California Air Resources Board, the Refrigerant Management Program requires periodic leak inspections, prompt leak repairs, as well as reporting and maintenance of on-site service records, for all facilities with refrigeration systems containing more than 50 pounds of high-global warming potential (GWP) refrigerant. CARB adopted the program in 2009 as part of AB 32.

Senate Bill 97 (SB 97)
SB 97 recognized the need for state agencies to analyze GHG emissions as part of the California Environmental Quality Act process. The bill updated CEQA to require the Office of Planning and Research (OPR) to develop guidelines for the feasible mitigation of GHG emissions, of the effects of GHG emissions, to be transmitted to the California Air Resources Board for approval. The adopted guidelines apply to effects associated with transportation and energy consumption.

4.2.4 Local

Air Quality Management Districts

According to §15064.7(b) of the CEQA Guidelines, for a threshold of significance to be used as part of a legal agency's environmental review process, it must be adopted by ordinance, resolution, rule, or regulation. While the Project is located within the MDAQMD jurisdiction, the MDAQMD threshold for greenhouse gas emissions has not been formally adopted. For analysis purposes, Project impacts will be assessed against GHG thresholds from both MDAQMD and *South Coast Air Quality Management District (SCAQMD)*. The SCAQMD is immediately adjacent to the MDAQMD jurisdictional area and has a formally adopted absolute threshold for stationary sources of 10,000 MTCO2e for industrial projects. Furthermore, the SCAQMD quantitative thresholds for GHG emissions are more conservative than the threshold currently in use by MDAQMD. Therefore, in order ensure that analysis of the Project's impacts related to GHG is sufficient under CEQA, emissions will be evaluated against both the MDAQMD and SCAQMD thresholds.

The GHG emission significance thresholds for the MDAQMD and SCAQMD are discussed, below:

MDAQMD Significance Thresholds

According to the MDAQMD, any project is significant if it triggers or exceeds the most appropriate evaluation criteria. The District will clarify upon request which threshold is most appropriate for a given project; in general, the emissions comparison (criteria number 1) is sufficient:

1. Generates total emissions (direct and indirect) in excess of the MDAQMD thresholds
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) 1;
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.[45]

Table 4-2
MDAQMD Significance Thresholds

Criteria Pollutant	Annual Threshold (short tons)
Greenhouse Gases (CO2e)	100,000

Source: MDAQMD CEQA Guidelines (February 2020).

SCAQMD GHG Significance Thresholds

On December 5, 2008, the SCAQMD formally adopted a greenhouse gas significance threshold for stationary sources of 10,000 MTCO2e per year for industrial projects and 3,000 MTCO2e per year for residential and commercial projects where SCAQMD is the lead agency (SCAQMD Resolution No. 08-31). This threshold was adopted based upon a December 2008 staff report and

[45] MDAQMD California Environmental Quality Act (CEQA) and Federal Conformity Guidelines (February 2020).

draft interim guidance document that also recommended a threshold for all projects using a tiered approach.[46]

It was recommended by SCAQMD staff that a project's greenhouse gas emissions would be considered significant if it could not comply with at least one of the following "tiered" tests:

- Tier 1: Is there an applicable exemption?
- Tier 2: Is the project compliant with a greenhouse gas reduction plan that is, at a minimum, consistent with the goals of AB 32?
- Tier 3: Is the project below an absolute threshold (10,000 MTCO2e/yr for industrial projects; 3,000 MTCO2e/yr for residential and commercial projects)?
- Tier 4: Is the project below a (yet to be set) performance threshold?
- Tier 5: Would the project achieve a screening level with off-site mitigation?

San Bernardino County Regional Greenhouse Gas Reduction Plan

The 2021 San Bernardino County Regional Greenhouse Gas Reduction Plan identifies state GHG reduction measures applicable to participating jurisdictions, as well as local measures selected by each jurisdiction that could reduce future GHG emissions within jurisdictional boundaries. The reduction plan has individual sections for each jurisdiction that detail the jurisdiction's 2016 GHG emissions inventory, 2030 GHG emissions forecast, reduction goal, jurisdiction-selected (or consultant-identified) GHG reduction measures, and related General Plan policies or other ongoing programs in the jurisdiction. The purpose of the plan is to provide participating jurisdictions with relevant information to complete and adopt their own Climate Action Plan (CAP).

Town of Apple Valley Climate Action Plan 2019 Update

Apple Valley's Climate Action Plan (CAP) Update is a comprehensive GHG emissions reduction strategy, representing the third update to the Town's CAP. Apple Valley originally adopted the CAP in 2010, with the intent of revisions every 3 years in response to policy changes, technological advances, and to build on the Town's successes in emissions reduction.

Pursuant to Senate Bill 32 (SB 32), the CAP Update aims to ensure that the Town continues to meet its GHG emissions reductions targets of 15% below 2005 levels by 2020 and 40% below 2005 levels by 2030.[47] The CAP Update also provides guidance to meet VMT reduction targets established by the California Air Resources Board (CARB): 7% below projected VMT levels in 2030 to meet 40% below VMT levels in 1990. As shown in Table 4-3, the Town met its emissions target of 15% below the 2005 baseline in 2020. With implementation of the measures provided in the CAP, the Town expects to be on track to meet its emissions target in 2030.

[46] SCAQMD, Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans (December 2008).
[47] Town of Apple Valley 2019 Climate Action Plan Update (May 2021).

Table 4-3
Apple Valley CAP Emissions Reduction Targets

Target/Scenario	Town-wide Emissions	Per Capita
2005 Baseline	**748,912**	**11.75**
2020: 15% Below Baseline Target	636,575	8.59
2020: 2019 GHG Inventory	**597,681**	**8.06**
2030: 40% Below Baseline Target	449,347	5.32
2030: 40% Below, Forecast BAU [1]	533,103	6.31
2030: 40% Below, Forecast w/CAP Measures	410,922	4.86

Source: Town of Apple Valley 2019 Climate Action Plan Update, Table 1.
[1] BAU = Business as usual.

5 PROJECT GREENHOUSE GAS IMPACT

5.1 Introduction

The following section analyzes the greenhouse gas emission impacts associated with buildout of the proposed Project.

5.2 Standards of Significance

According to the 2022 CEQA Guidelines (*Appendix G: Environmental Checklist*), the project would have a significant effect on greenhouse gases if the Proposed Project were to:

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.

5.3 Methodology

The same methodology used in the air quality impacts discussion was used for greenhouse gas emissions impacts discussion. The analysis is based on proposed land uses and traffic trip information provided by Urban Crossroads, Inc. (2023). The Project proposes the development of a 1,373,150 square foot warehouse distribution center on a 90.1 ± acre site. The Project also requires off-site improvements including the extension of roadways and utility connections. It is assumed, for analysis purposes, that 85% of the building will be used for dry warehousing, and 15% for cold storage.

Construction and operational emissions were calculated using California Emissions Estimator Model (CalEEMod) Version 2022.1. CalEEMod is a computer program that can be used to estimate anticipated emissions associated with land development projects in California. The model calculates criteria pollutant emissions, including CO, PM_{10}, $PM_{2.5}$ and the ozone precursors ROG and $NO_{x,}$). CalEEMod detailed output tables are provided in Appendix A of this report.

Please refer to Table 3-1 for a summary of the land use assumptions entered into the model.

5.4 Construction Emissions

Construction activities will result in short-term GHG emissions associated with the operation of construction equipment, vehicle emissions from construction employee commutes, material hauling, and other ground disturbing activities. Table 5-1 shows that the Project is projected to generate 3,085 metric tons of CO_2e over the two-year construction period.

There are currently no construction related GHG emissions thresholds for projects of this nature. As such, construction-related GHG emissions were amortized over a 30-year period, added to annual operational emissions, and compared to the MDAQMD threshold, in order to determine if construction emissions will result in a cumulatively considerable impact. Table 16 shows the combined amortized construction emissions and operational emissions.

5.5 Operational Emissions

Once the Project reaches the operational phase, five categories of emissions will contribute to its annual GHG emissions either directly or indirectly: area emissions (e.g. pavement and architectural coating off-gassing), energy use, mobile source emissions, solid waste disposal, and water use. As stated above, GHG emissions from construction of the Project were amortized over a 30-year period and added to the operational emissions total. Table 16 shows a summary of the total annual construction and operational GHG emissions projected for buildout of the Project.

Table 5-1
Projected GHG Emissions Summary (Metric Tons)

Phase	CO_2e (MT/YR)
Construction	
2025	958
2026	2,127
Construction Total	3,085
Operational	
Area	20.1
Energy	3,151
Mobile (Passenger)	*4,290*
Mobile (Truck)	*16,357*
Mobile (Total)	20,647
Waste	403
Water	24.4
Refrigerants	909
Construction: 30-Year Amortized[1]	102.83
Total Operational	25,257.33
MDAQMD Annual Threshold	100,000.00
Exceeds?	**No**

[1] Buildout Construction GHG emissions were amortized over 30-years then added to buildout operational GHG emissions. 3,085/30=102.83

5.6 CAP Consistency

According to the CAP, the Town aims to meet the GHG emissions reduction target of 40% below 2005 levels by 2030. Based on growth forecasts in the SCAG 2020-2045 Regional Transportation Plan/SCS, the CAP forecasts that the Town will have a population of 84,535 in 2030. To meet the 40% below baseline target, the Town-wide GHG emissions in 2030 would need to be 449,347 MTCO2e, or 5.32 per capita.

As demonstrated in Table 5-1, above, based on projections made using CalEEMod Version 2022.1, the Project is expected to generate 25,257.33metric tons of CO_2e per year. As described in greater detail under Land Use, Population and Housing, at a density factor of 1,195 square feet per employee for logistics land uses, the proposed 1,373,150 square foot warehouse distribution facility would generate approximately 1,150 jobs.[48] Given the existing demand for jobs in the Town, it is likely that all of the jobs created by the Project would be filled by existing residents of Apple Valley. It is therefore assumed that the Town's 2030 population, including buildout of the Project, would be 84,535 as analyzed in the CAP.

Based on a population of 84,535, Table 5-2 shows that in order for the Town to meet the 2030 emissions reduction target, it would have to meet 5.32 tons per capita. The table also shows that with implementation of the CAP reduction measures, the Town expects to go beyond the established emissions target, reducing forecasted emissions to 410,922 $MTCO_2e$ per year or 4.86 tons per capita. The 2030 emissions forecast with CAP measures accounts for community emissions, including industrial projects. It is therefore likely that the Project's estimated annual emissions of 25,257.33 MTCO2e would already be covered by the 2030 emissions forecast. However, assuming an industrial development like the proposed Project was not accounted for in the CAP 2030 forecast, and to ensure a conservative analysis, the Project's emissions were added to the existing forecast. As shown in Table 5-2, the total annual emissions from the Project and existing 2030 forecast would be 436,179.33 MTCO2e, or 5.16 tons per capita. Both the total and per capita emissions meet the CAP target for 2030 of 40% below the 2005 baseline. The Town-wide emissions in 2030, including the Project, would therefore meet the CAP greenhouse gas emissions reduction target.

[48] Urban Crossroads, Inc., Cordova Logistics Facility VMT Analysis (December 2023).

Table 5-2 Project emissions and CAP reduction target			
Target/Scenario	**Forecast ($MTCO_2e$)**	**Population**	**Per Capita**
CAP 2030 forecast w/CAP measures	410,922.00	84,535	4.86
Project emissions (per year)	25,257.33	84,535	--
Total	436,179.33	**84,535**	**5.16**
CAP 2030 target (40% below baseline)	449,347.00[1]	84,535	5.32
		Exceeds?	
[1] Forecasted town-wide emissions for 2030.			

In order to ensure that the Project's GHG emissions are reduced to the greatest extent possible, the Project will be subject to applicable reduction measures from the CAP. The Project's consistency with applicable reduction measures is shown in the following table.

Table 5-3 Project consistency with CAP reduction measures	
Reduction Measure	**Consistency**
CO-4: Establish an employee carpooling program, including incentives (preferred parking, flex time incentives, etc.) for participating employees.	**Consistent**: Per mitigation measure GHG-1, the Project will establish an employee carpooling program, including incentives for participating employees.
CO-5: Provide employees with free or discounted public transit passes.	**Consistent**: Per mitigation measure GHG-2, the Project will provide employees with free or discounted public transit passes.
ND-6: For projects within the North Apple Valley Industrial Specific Plan, develop employee housing within one mile of the industrial project.	**Consistent**: The area adjacent to the Project site, on the northern side of Quarry, is designated for Low Density Housing. Development of these sites would provide housing within one mile of the Project site.
ND-12: Building and site plan designs shall ensure that the project energy efficiencies meet applicable California Title 24 Energy Efficiency Standards.	**Consistent**: The Project design will comply with all requirements in the California Building Code, including the Title 24 Energy Efficiency Standards.
Source: Town of Apple Valley 2019 Climate Action Plan Update	

5.7 Cumulative Impacts

Due to their dispersing nature and aggregate regional impacts, greenhouse gases are analyzed in terms of their cumulative impacts. The above analysis considered the potential cumulative impacts of the Project on greenhouse gas emissions in the Mojave Desert Air Basin using

significance criteria from both the Mojave Desert Air Quality Management District and the South Coast Air Quality Management District. The analysis also considered emissions in relation to local and state greenhouse gas reduction plans and targets.

Overall, while the Project will contribute to cumulative greenhouse gas impacts, conformance to the MDAQMD significance thresholds as well as with the emissions reductions targets in the Town of Apple Valley's 2019 CAP Update indicate that impacts would be less than significant. The Project's impacts are thus not anticipated to be cumulatively considerable.

5.8 CEQA Determination

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

According to the MDAQMD CEQA Guidelines, a project's impact is considered significant if it generates total emissions (direct or indirect) that exceed the applicable threshold. As shown in Table 5-1, the Project's annual CO_2e emissions will not exceed the MDAQMD's significance threshold of 100,000 metric tons of CO_2e per year.

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

The California Air Resources Board (CARB) 2022 Scoping Plan puts forward the bold target of achieving carbon neutrality in state-wide emissions by 2045 or earlier. This plan builds on the efforts of the three previous scoping plans, which established goals to meet 1990 levels by 2020 and 40 percent below 1990 levels by 2030, in compliance with Senate Bill 32 (SB 32). The 2022 Scoping Plan Update aims to further reduce anthropogenic emissions in California to 85 percent below 1990 levels by 2045.[49] According to Apple Valley's General Plan (2009), at buildout the Town was estimated to contribute approximately 0.756% of the total California emissions limit for 2020, as established by the CARB.[50]

The Town's 2019 Climate Action Plan Update (CAP) provides Apple Valley's comprehensive strategy to meet the SB 32 emission targets by reducing the Town's emissions 15% below 2005 levels by 2020 and 40% below 2005 levels by 2030.[51] According to the MDAQMD CEQA Guidelines, a project is deemed to conform with an emissions plan if it is consistent with the existing land use plan. As described under the Air Quality discussion, the Project is located in the North Apple Valley Industrial Specific Plan (NAVISP) area, on a site designated and zoned as Industrial – Specific Plan. This designation permits clean industrial uses such as warehouse distribution facilities. The Project proposes a warehouse distribution facility that aligns with the permitted uses for the site. It also complies with all development standards for the I-SP zone, including

[49] California Air Resources Board 2022 Scoping Plan Update.
[50] Apple Valley General Plan (2009) EIR, p. III-29.
[51] Town of Apple Valley 2019 Climate Action Plan Update.

maximum building coverage, maximum building height, and water efficient landscape requirements pursuant to the Town's Water Conservation/Landscaping Regulations.[52]

Given that the Apple Valley Climate Action Plan (CAP) is based on the growth projected from buildout of the Town's General Plan, the Project's conformance with the NAVISP implies compliance with the CAP. Furthermore, while the provisions of the CAP are mostly directed towards regulating emissions at the Town-wide scale, some policies are applicable to individual projects. For example, policy ND-12 in the CAP states that building and site plans must ensure that the project will meet the applicable Title 24 Energy Efficiency Standards. The Title 24 standards include performance standards for space heating and cooling, water heater design improvements, integration of solar control in building designs, use of efficient lighting, and application of the Town's landscaping guidelines. The Project will be required to comply with all applicable energy efficiency standards as provided in Title 24 and as enforced by the Town. Site plan review by the Town prior to the issuance of development permits will ensure that these standards are met.

The Project, including all components of construction and operation, will also be subject to the current MDAQMD Rules as applicable to greenhouse gases. Compliance will be ensured through MDAQMD Rule 201, which requires preconstruction plan review prior to issuance of a construction permit from the Air Pollution Control Officer.

In conclusion, conformance with the land use plan and implementation of applicable policies in the CAP ensure that the Project will not conflict with applicable plans, policies or regulations adopted for the purpose of reducing the emissions of greenhouse gases. Project impacts are therefore anticipated to be less than significant.

5.9 GHG Mitigation Measures

Consistent with and to reinforce existing Climate Action Plan reduction measures, the following mitigation measures shall apply to the Project:

1. Establish an employee carpooling program, including incentives (preferred parking, flex time incentives, etc.) for participating employees.
2. Provide employees with free or discounted public transit passes.

[52] Town of Apple Valley Municipal Code Chapter 9.75 – Water Conservation/Landscaping Regulations.

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7 APPENDICES

"The Development at Cordova Outputs," CalEEMod, Version 2022.1, prepared by Terra Nova Planning & Research, Inc., April 23, 2024.

RW Cordova - Project Buildout (Passenger Vehicle Trips) Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	RW Cordova - Project Buildout (Passenger Vehicle Trips)
Construction Start Date	1/1/2025
Operational Year	2027
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	5.00
Precipitation (days)	12.4
Location	34.61219478545679, -117.19616437039846
County	San Bernardino-Mojave Desert
City	Apple Valley
Air District	Mojave Desert AQMD
Air Basin	Mojave Desert
TAZ	5160
EDFZ	10
Electric Utility	Southern California Edison
Gas Utility	Southwest Gas Corp.
App Version	2022.1.1.22

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description

Unrefrigerated Warehouse-No Rail	1,167	1000sqft	36.0	1,167,177	819,232	135,036	—	—
Refrigerated Warehouse-No Rail	206	1000sqft	4.65	205,973	0.00	—	—	—
Parking Lot	2,161	Space	19.5	0.00	0.00	—	—	—
Other Asphalt Surfaces	32.9	Acre	32.9	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10T	PM2.5T	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Unmit.	59.3	29.8	81.6	0.09	12.0	3.46	52.0	21,647
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Unmit.	58.9	31.7	63.4	0.09	12.0	5.25	1.35	20,439
Average Daily (Max)	—	—	—	—	—	—	—	—
Unmit.	22.7	20.7	41.2	0.06	7.25	2.32	13.8	12,847
Annual (Max)	—	—	—	—	—	—	—	—
Unmit.	4.15	3.78	7.52	0.01	1.32	0.42	2.29	2,127
Exceeds (Daily Max)	—	—	—	—	—	—	—	—
Threshold	137	137	548	137	82.0	65.0	—	—
Unmit.	No	No	No	No	No	No	—	—
Exceeds (Average Daily)	—	—	—	—	—	—	—	—

Threshold	137	137	548	137	82.0	65.0	—	—
Unmit.	No	No	No	No	No	No	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	CO	SO2	PM10T	PM2.5T	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—
2025	3.31	29.8	30.0	0.06	5.09	2.62	1.07	6,918
2026	59.3	28.0	81.6	0.09	12.0	3.46	52.0	21,647
Daily - Winter (Max)	—	—	—	—	—	—	—	—
2025	3.96	31.7	48.4	0.08	10.00	5.25	1.31	17,411
2026	58.9	28.7	63.4	0.09	12.0	3.46	1.35	20,439
Average Daily	—	—	—	—	—	—	—	—
2025	2.43	20.7	23.6	0.04	4.80	2.32	2.49	5,785
2026	22.7	17.9	41.2	0.06	7.25	2.10	13.8	12,847
Annual	—	—	—	—	—	—	—	—
2025	0.44	3.78	4.32	0.01	0.88	0.42	0.41	958
2026	4.15	3.27	7.52	0.01	1.32	0.38	2.29	2,127

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10T	PM2.5T	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Unmit.	47.1	12.7	164	0.33	28.1	7.63	5,573	55,757
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Unmit.	36.7	12.7	71.4	0.29	28.0	7.55	5,491	52,243

Average Daily (Max)	—	—	—	—	—	—	—	—
Unmit.	41.6	13.2	109	0.30	27.8	7.53	5,525	53,132
Annual (Max)	—	—	—	—	—	—	—	—
Unmit.	7.60	2.40	19.9	0.05	5.08	1.37	915	8,797
Exceeds (Daily Max)	—	—	—	—	—	—	—	—
Threshold	137	137	548	137	82.0	65.0	—	—
Unmit.	No	No	No	No	No	No	—	—
Exceeds (Average Daily)	—	—	—	—	—	—	—	—
Threshold	137	137	548	137	82.0	65.0	—	—
Unmit.	No	No	No	No	No	No	—	—
Exceeds (Annual)	—	—	—	—	—	—	—	—
Threshold	—	—	—	—	—	—	—	100,000
Unmit.	—	—	—	—	—	—	—	No

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	ROG	NOx	CO	SO2	PM10T	PM2.5T	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Mobile	5.40	4.75	97.8	0.28	27.5	6.98	83.8	28,410
Area	41.3	0.50	59.7	< 0.005	0.11	0.08	—	246
Energy	0.41	7.42	6.23	0.04	0.56	0.56	—	19,030
Water	—	—	—	—	—	—	—	147
Waste	—	—	—	—	—	—	—	2,434
Refrig.	—	—	—	—	—	—	5,489	5,489
Total	47.1	12.7	164	0.33	28.1	7.63	5,573	55,757
Daily, Winter (Max)	—	—	—	—	—	—	—	—

Mobile	4.86	5.26	65.2	0.25	27.5	6.98	2.17	25,143
Area	31.5	—	—	—	—	—	—	—
Energy	0.41	7.42	6.23	0.04	0.56	0.56	—	19,030
Water	—	—	—	—	—	—	—	147
Waste	—	—	—	—	—	—	—	2,434
Refrig.	—	—	—	—	—	—	5,489	5,489
Total	36.7	12.7	71.4	0.29	28.0	7.55	5,491	52,243
Average Daily	—	—	—	—	—	—	—	—
Mobile	4.91	5.51	73.1	0.25	27.2	6.93	36.2	25,910
Area	36.3	0.25	29.5	< 0.005	0.05	0.04	—	122
Energy	0.41	7.42	6.23	0.04	0.56	0.56	—	19,030
Water	—	—	—	—	—	—	—	147
Waste	—	—	—	—	—	—	—	2,434
Refrig.	—	—	—	—	—	—	5,489	5,489
Total	41.6	13.2	109	0.30	27.8	7.53	5,525	53,132
Annual	—	—	—	—	—	—	—	—
Mobile	0.90	1.01	13.3	0.05	4.97	1.26	5.99	4,290
Area	6.63	0.05	5.37	< 0.005	0.01	0.01	—	20.1
Energy	0.07	1.35	1.14	0.01	0.10	0.10	—	3,151
Water	—	—	—	—	—	—	—	24.4
Waste	—	—	—	—	—	—	—	403
Refrig.	—	—	—	—	—	—	909	909
Total	7.60	2.40	19.9	0.05	5.08	1.37	915	8,797

3. Construction Emissions Details

3.1. Site Preparation (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10T	PM2.5T	R	CO2e
Onsite	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Off-Road Equipment	3.31	31.6	30.2	0.05	1.37	1.26	—	5,314
Dust From Material Movement	—	—	—	—	7.67	3.94	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—
Off-Road Equipment	0.54	5.20	4.96	0.01	0.22	0.21	—	873
Dust From Material Movement	—	—	—	—	1.26	0.65	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.95	0.91	< 0.005	0.04	0.04	—	145
Dust From Material Movement	—	—	—	—	0.23	0.12	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Worker	0.08	0.09	0.98	0.00	0.23	0.05	0.02	229
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—
Worker	0.01	0.02	0.18	0.00	0.04	0.01	0.07	38.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.01	< 0.005	0.01	6.42
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Grading (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10T	PM2.5T	R	CO2e
Onsite	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Off-Road Equipment	3.20	29.7	28.3	0.06	1.23	1.14	—	6,622
Dust From Material Movement	—	—	—	—	3.59	1.42	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Off-Road Equipment	3.20	29.7	28.3	0.06	1.23	1.14	—	6,622
Dust From Material Movement	—	—	—	—	3.59	1.42	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—
Off-Road Equipment	1.43	13.3	12.6	0.03	0.55	0.51	—	2,957
Dust From Material Movement	—	—	—	—	1.60	0.64	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—
Off-Road Equipment	0.26	2.42	2.31	< 0.005	0.10	0.09	—	490
Dust From Material Movement	—	—	—	—	0.29	0.12	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Worker	0.11	0.10	1.66	0.00	0.26	0.06	1.07	296
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Worker	0.09	0.11	1.11	0.00	0.26	0.06	0.03	262
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—
Worker	0.04	0.05	0.56	0.00	0.12	0.03	0.21	120
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.10	0.00	0.02	< 0.005	0.03	19.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Building Construction (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10T	PM2.5T	R	CO2e
Onsite	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Off-Road Equipment	1.13	10.4	13.0	0.02	0.43	0.40	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—

Off-Road Equipment	0.11	1.06	1.33	< 0.005	0.04	0.04	—	245
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.19	0.24	< 0.005	0.01	0.01	—	40.5
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Worker	2.58	3.06	32.1	0.00	7.54	1.77	0.80	7,542
Vendor	0.26	7.70	3.24	0.06	2.03	0.63	0.51	7,464
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—
Worker	0.27	0.34	3.66	0.00	0.76	0.18	1.35	791
Vendor	0.03	0.78	0.33	0.01	0.20	0.06	0.86	760
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—
Worker	0.05	0.06	0.67	0.00	0.14	0.03	0.22	131
Vendor	0.01	0.14	0.06	< 0.005	0.04	0.01	0.14	126
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10T	PM2.5T	R	CO2e
Onsite	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	9.85	13.0	0.02	0.38	0.35	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	9.85	13.0	0.02	0.38	0.35	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—
Off-Road Equipment	0.69	6.38	8.40	0.02	0.25	0.23	—	1,558
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	1.16	1.53	< 0.005	0.04	0.04	—	258
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Worker	2.76	2.54	44.5	0.00	7.54	1.77	27.9	8,367
Vendor	0.28	7.01	2.95	0.06	2.03	0.63	17.7	7,334
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Worker	2.44	2.80	29.6	0.00	7.54	1.77	0.72	7,390
Vendor	0.26	7.43	3.06	0.06	2.03	0.63	0.46	7,324
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—
Worker	1.61	1.96	21.6	0.00	4.84	1.13	7.80	4,934
Vendor	0.17	4.78	1.96	0.04	1.30	0.41	4.97	4,746
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—
Worker	0.29	0.36	3.95	0.00	0.88	0.21	1.29	817
Vendor	0.03	0.87	0.36	0.01	0.24	0.07	0.82	786
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Paving (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10T	PM2.5T	R	CO2e
Onsite	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Off-Road Equipment	0.76	7.12	9.94	0.01	0.32	0.29	—	1,516
Paving	0.64	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Off-Road Equipment	0.76	7.12	9.94	0.01	0.32	0.29	—	1,516
Paving	0.64	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—
Off-Road Equipment	0.45	4.19	5.85	0.01	0.19	0.17	—	893
Paving	0.38	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.77	1.07	< 0.005	0.03	0.03	—	148
Paving	0.07	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Worker	0.07	0.07	1.16	0.00	0.20	0.05	0.73	218
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Worker	0.06	0.07	0.77	0.00	0.20	0.05	0.02	192

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—
Worker	0.04	0.05	0.51	0.00	0.11	0.03	0.18	117
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.09	0.00	0.02	< 0.005	0.03	19.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Architectural Coating (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10T	PM2.5T	R	CO2e
Onsite	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.86	1.13	< 0.005	0.02	0.02	—	134
Architectural Coatings	53.0	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.86	1.13	< 0.005	0.02	0.02	—	134
Architectural Coatings	53.0	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.31	0.41	< 0.005	0.01	0.01	—	48.4

Architectural Coatings	19.2	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.06	0.07	< 0.005	< 0.005	< 0.005	—	8.02
Architectural Coatings	3.50	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Worker	0.55	0.51	8.90	0.00	1.51	0.35	5.58	1,673
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Worker	0.49	0.56	5.93	0.00	1.51	0.35	0.14	1,478
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—
Worker	0.18	0.22	2.42	0.00	0.54	0.13	0.87	551
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—
Worker	0.03	0.04	0.44	0.00	0.10	0.02	0.14	91.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10T	PM2.5T	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	4.62	4.06	83.6	0.24	23.5	5.97	71.6	24,278
Refrigerated Warehouse-No Rail	0.79	0.69	14.2	0.04	3.99	1.02	12.2	4,132
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	5.40	4.75	97.8	0.28	27.5	6.98	83.8	28,410
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	4.15	4.49	55.7	0.21	23.5	5.97	1.86	21,486
Refrigerated Warehouse-No Rail	0.71	0.76	9.48	0.04	3.99	1.02	0.32	3,657
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	4.86	5.26	65.2	0.25	27.5	6.98	2.17	25,143
Annual	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.77	0.86	11.4	0.04	4.25	1.08	5.12	3,666
Refrigerated Warehouse-No Rail	0.13	0.15	1.94	0.01	0.72	0.18	0.87	624
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Total	0.90	1.01	13.3	0.05	4.97	1.26	5.99	4,290

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10T	PM2.5T	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	5,143
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	4,302
Parking Lot	—	—	—	—	—	—	—	710
Other Asphalt Surfaces	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	10,155
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	5,143
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	4,302
Parking Lot	—	—	—	—	—	—	—	710
Other Asphalt Surfaces	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	10,155
Annual	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	851
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	712

Parking Lot	—	—	—	—	—	—	—	118
Other Asphalt Surfaces	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	1,681

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10T	PM2.5T	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.33	5.96	5.01	0.04	0.45	0.45	—	7,131
Refrigerated Warehouse-No Rail	0.08	1.46	1.22	0.01	0.11	0.11	—	1,744
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	0.41	7.42	6.23	0.04	0.56	0.56	—	8,875
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.33	5.96	5.01	0.04	0.45	0.45	—	7,131
Refrigerated Warehouse-No Rail	0.08	1.46	1.22	0.01	0.11	0.11	—	1,744
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	0.41	7.42	6.23	0.04	0.56	0.56	—	8,875
Annual	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.06	1.09	0.91	0.01	0.08	0.08	—	1,181
Refrigerated Warehouse-No Rail	0.01	0.27	0.22	< 0.005	0.02	0.02	—	289

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	0.07	1.35	1.14	0.01	0.10	0.10	—	1,469

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	ROG	NOx	CO	SO2	PM10T	PM2.5T	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Consumer Products	29.6	—	—	—	—	—	—	—
Architectural Coatings	1.92	—	—	—	—	—	—	—
Landscape Equipment	9.81	0.50	59.7	< 0.005	0.11	0.08	—	246
Total	41.3	0.50	59.7	< 0.005	0.11	0.08	—	246
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Consumer Products	29.6	—	—	—	—	—	—	—
Architectural Coatings	1.92	—	—	—	—	—	—	—
Total	31.5	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—
Consumer Products	5.40	—	—	—	—	—	—	—
Architectural Coatings	0.35	—	—	—	—	—	—	—
Landscape Equipment	0.88	0.05	5.37	< 0.005	0.01	0.01	—	20.1
Total	6.63	0.05	5.37	< 0.005	0.01	0.01	—	20.1

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10T	PM2.5T	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	134
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	13.1
Parking Lot	—	—	—	—	—	—	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	147
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	134
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	13.1
Parking Lot	—	—	—	—	—	—	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	147
Annual	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	22.2
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	2.17
Parking Lot	—	—	—	—	—	—	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	0.00

Total	—	—	—	—	—	—	—	24.4

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10T	PM2.5T	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	2,069
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	365
Parking Lot	—	—	—	—	—	—	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	2,434
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	2,069
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	365
Parking Lot	—	—	—	—	—	—	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	2,434
Annual	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	343
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	60.4

Parking Lot	—	—	—	—	—	—	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	403

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10T	PM2.5T	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	5,489	5,489
Total	—	—	—	—	—	—	5,489	5,489
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	5,489	5,489
Total	—	—	—	—	—	—	5,489	5,489
Annual	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	909	909
Total	—	—	—	—	—	—	909	909

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10T	PM2.5T	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10T	PM2.5T	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10T	PM2.5T	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	CO	SO2	PM10T	PM2.5T	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10T	PM2.5T	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	CO	SO2	PM10T	PM2.5T	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	1/1/2025	3/25/2025	5.00	60.0	—
Grading	Grading	3/26/2025	11/7/2025	5.00	163	—
Building Construction	Building Construction	11/10/2025	11/27/2026	5.00	275	—
Paving	Paving	2/2/2026	11/27/2026	5.00	215	—
Architectural Coating	Architectural Coating	7/1/2026	12/31/2026	5.00	132	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42

Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	577	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	225	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT

Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	115	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	2,059,725	686,575	136,874

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	—	90.0	0.00	—
Grading	—	—	489	0.00	—
Paving	0.00	0.00	0.00	0.00	52.4

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Unrefrigerated Warehouse-No Rail	0.00	0%
Refrigerated Warehouse-No Rail	0.00	0%
Parking Lot	19.5	100%
Other Asphalt Surfaces	32.9	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	0.00	349	0.03	< 0.005
2026	0.00	346	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Unrefrigerated Warehouse-No Rail	1,704	1,704	1,704	621,946	33,737	33,737	33,737	12,314,124
Refrigerated Warehouse-No Rail	290	290	290	105,846	5,742	5,742	5,742	2,095,684
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	2,059,725	686,575	136,874

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Unrefrigerated Warehouse-No Rail	5,390,844	346	0.0330	0.0040	22,188,828
Refrigerated Warehouse-No Rail	4,509,869	346	0.0330	0.0040	5,426,201
Parking Lot	744,092	346	0.0330	0.0040	0.00
Other Asphalt Surfaces	0.00	346	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Unrefrigerated Warehouse-No Rail	5,412,066	14,855,567
Refrigerated Warehouse-No Rail	955,071	0.00
Parking Lot	0.00	0.00
Other Asphalt Surfaces	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Unrefrigerated Warehouse-No Rail	1,097	—
Refrigerated Warehouse-No Rail	194	—
Parking Lot	0.00	—
Other Asphalt Surfaces	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Refrigerated Warehouse-No Rail	Cold storage	R-404A	3,922	7.50	7.50	7.50	25.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	34.1	annual days of extreme heat
Extreme Precipitation	0.90	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.80	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A

Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	80.0
AQ-PM	7.52
AQ-DPM	21.9
Drinking Water	34.9
Lead Risk Housing	27.7
Pesticides	0.00
Toxic Releases	37.1
Traffic	59.7
Effect Indicators	—
CleanUp Sites	52.1
Groundwater	44.8
Haz Waste Facilities/Generators	16.6
Impaired Water Bodies	51.2
Solid Waste	84.7
Sensitive Population	—
Asthma	88.0
Cardio-vascular	89.5
Low Birth Weights	91.9
Socioeconomic Factor Indicators	—
Education	26.9
Housing	11.6
Linguistic	—
Poverty	52.5
Unemployment	90.6

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	44.97626075
Employed	30.46323624
Median HI	35.0442705
Education	—
Bachelor's or higher	42.93596818
High school enrollment	100
Preschool enrollment	39.79212113
Transportation	—
Auto Access	85.40998332
Active commuting	24.00872578
Social	—
2-parent households	51.18696266
Voting	75.34967278
Neighborhood	—
Alcohol availability	88.37418196
Park access	16.65597331
Retail density	8.469138971
Supermarket access	2.399589375
Tree canopy	0.71859361
Housing	—
Homeownership	62.60746824
Housing habitability	64.39112024
Low-inc homeowner severe housing cost burden	17.8108559

Low-inc renter severe housing cost burden	77.19748492
Uncrowded housing	68.66418581
Health Outcomes	—
Insured adults	64.22430386
Arthritis	4.4
Asthma ER Admissions	7.6
High Blood Pressure	8.9
Cancer (excluding skin)	9.1
Asthma	30.0
Coronary Heart Disease	6.8
Chronic Obstructive Pulmonary Disease	13.3
Diagnosed Diabetes	35.6
Life Expectancy at Birth	34.2
Cognitively Disabled	41.3
Physically Disabled	11.3
Heart Attack ER Admissions	2.7
Mental Health Not Good	48.5
Chronic Kidney Disease	20.1
Obesity	46.5
Pedestrian Injuries	48.3
Physical Health Not Good	39.9
Stroke	15.1
Health Risk Behaviors	—
Binge Drinking	57.0
Current Smoker	46.7
No Leisure Time for Physical Activity	58.0
Climate Change Exposures	—

Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	58.1
Elderly	16.8
English Speaking	81.5
Foreign-born	11.0
Outdoor Workers	47.0
Climate Change Adaptive Capacity	—
Impervious Surface Cover	90.2
Traffic Density	37.9
Traffic Access	23.0
Other Indices	—
Hardship	32.7
Other Decision Support	—
2016 Voting	75.3

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	65.0
Healthy Places Index Score for Project Location (b)	46.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Project proposes 1,373,150 sf warehouse, with 819,232 sf landscaped area, 135,036 sf detention area, 1,422 parking spaces and 739 trailer parking spaces. Asphalt surfaces includes off-site roadway improvements totaling 2.87 acres. Assumes 15% of building is refrigerated warehouse.Water detention area assumed to be special landscape area for analysis purposes.
Construction: Construction Phases	Assumes 2 year buildout for analysis purposes. No demolition will be required, site is currently vacant. Assumes building construction, paving, and architectural coating will occur as staggered, overlapping phases.
Operations: Vehicle Data	Trip lengths for passenger vehicles only, based on TIA prepared for the Project by UXR. Per TIA, 1,994 passenger trips.
Operations: Fleet Mix	Fleet mix for passenger vehicle trips only. Mix based on Moreno Valley Trade Center (Warehouse Scenario) Air Quality, GHG, & HRA Evaluation prepared by UXR (October 2020).
Operations: Water and Waste Water	Water demand based on Project-specific WSA. Total water demand projected to be 21,222,703.44 gallons/year (65.13 AFY).

RW Cordova - Project Buildout (Truck Trips Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	RW Cordova - Project Buildout (Truck Trips
Construction Start Date	1/1/2025
Operational Year	2027
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	5.00
Precipitation (days)	12.4
Location	34.61219478545679, -117.19616437039846
County	San Bernardino-Mojave Desert
City	Apple Valley
Air District	Mojave Desert AQMD
Air Basin	Mojave Desert
TAZ	5160
EDFZ	10
Electric Utility	Southern California Edison
Gas Utility	Southwest Gas Corp.
App Version	2022.1.1.22

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description

Unrefrigerated Warehouse-No Rail	1,167	1000sqft	36.0	1,167,177	819,232	135,036	—	—
Refrigerated Warehouse-No Rail	206	1000sqft	4.65	205,973	0.00	—	—	—
Parking Lot	2,161	Space	19.5	0.00	0.00	—	—	—
Other Asphalt Surfaces	32.9	Acre	32.9	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10T	PM2.5T	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Unmit.	59.3	29.8	81.6	0.09	12.0	3.46	52.0	21,647
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Unmit.	58.9	31.7	63.4	0.09	12.0	5.25	1.35	20,439
Average Daily (Max)	—	—	—	—	—	—	—	—
Unmit.	22.7	20.7	41.2	0.06	7.25	2.32	13.8	12,847
Annual (Max)	—	—	—	—	—	—	—	—
Unmit.	4.15	3.78	7.52	0.01	1.32	0.42	2.29	2,127
Exceeds (Daily Max)	—	—	—	—	—	—	—	—
Threshold	137	137	548	137	82.0	65.0	—	—
Unmit.	No	No	No	No	No	No	—	—
Exceeds (Average Daily)	—	—	—	—	—	—	—	—

Threshold	137	137	548	137	82.0	65.0	—	—
Unmit.	No	No	No	No	No	No	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	CO	SO2	PM10T	PM2.5T	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—
2025	3.31	29.8	30.0	0.06	5.09	2.62	1.07	6,918
2026	59.3	28.0	81.6	0.09	12.0	3.46	52.0	21,647
Daily - Winter (Max)	—	—	—	—	—	—	—	—
2025	3.96	31.7	48.4	0.08	10.00	5.25	1.31	17,411
2026	58.9	28.7	63.4	0.09	12.0	3.46	1.35	20,439
Average Daily	—	—	—	—	—	—	—	—
2025	2.43	20.7	23.6	0.04	4.80	2.32	2.49	5,785
2026	22.7	17.9	41.2	0.06	7.25	2.10	13.8	12,847
Annual	—	—	—	—	—	—	—	—
2025	0.44	3.78	4.32	0.01	0.88	0.42	0.41	958
2026	4.15	3.27	7.52	0.01	1.32	0.38	2.29	2,127

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10T	PM2.5T	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Unmit.	44.1	95.7	92.5	0.95	32.6	10.4	5,742	126,269
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Unmit.	34.1	99.8	32.7	0.95	32.5	10.3	5,496	125,817

Average Daily (Max)	—	—	—	—	—	—	—	—
Unmit.	39.0	101	62.0	0.95	32.3	10.3	5,598	126,021
Annual (Max)	—	—	—	—	—	—	—	—
Unmit.	7.12	18.4	11.3	0.17	5.90	1.88	927	20,864
Exceeds (Daily Max)	—	—	—	—	—	—	—	—
Threshold	137	137	548	137	82.0	65.0	—	—
Unmit.	No	No	No	No	No	No	—	—
Exceeds (Average Daily)	—	—	—	—	—	—	—	—
Threshold	137	137	548	137	82.0	65.0	—	—
Unmit.	No	No	No	No	No	No	—	—
Exceeds (Annual)	—	—	—	—	—	—	—	—
Threshold	—	—	—	—	—	—	—	100,000
Unmit.	—	—	—	—	—	—	—	No

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	ROG	NOx	CO	SO2	PM10T	PM2.5T	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Mobile	2.35	87.7	26.5	0.90	31.9	9.77	252	98,923
Area	41.3	0.50	59.7	< 0.005	0.11	0.08	—	246
Energy	0.41	7.42	6.23	0.04	0.56	0.56	—	19,030
Water	—	—	—	—	—	—	—	147
Waste	—	—	—	—	—	—	—	2,434
Refrig.	—	—	—	—	—	—	5,489	5,489
Total	44.1	95.7	92.5	0.95	32.6	10.4	5,742	126,269
Daily, Winter (Max)	—	—	—	—	—	—	—	—

Mobile	2.24	92.4	26.5	0.90	31.9	9.77	6.55	98,716
Area	31.5	—	—	—	—	—	—	—
Energy	0.41	7.42	6.23	0.04	0.56	0.56	—	19,030
Water	—	—	—	—	—	—	—	147
Waste	—	—	—	—	—	—	—	2,434
Refrig.	—	—	—	—	—	—	5,489	5,489
Total	34.1	99.8	32.7	0.95	32.5	10.3	5,496	125,817
Average Daily	—	—	—	—	—	—	—	—
Mobile	2.28	93.3	26.3	0.90	31.7	9.72	109	98,799
Area	36.3	0.25	29.5	< 0.005	0.05	0.04	—	122
Energy	0.41	7.42	6.23	0.04	0.56	0.56	—	19,030
Water	—	—	—	—	—	—	—	147
Waste	—	—	—	—	—	—	—	2,434
Refrig.	—	—	—	—	—	—	5,489	5,489
Total	39.0	101	62.0	0.95	32.3	10.3	5,598	126,021
Annual	—	—	—	—	—	—	—	—
Mobile	0.42	17.0	4.80	0.16	5.78	1.77	18.0	16,357
Area	6.63	0.05	5.37	< 0.005	0.01	0.01	—	20.1
Energy	0.07	1.35	1.14	0.01	0.10	0.10	—	3,151
Water	—	—	—	—	—	—	—	24.4
Waste	—	—	—	—	—	—	—	403
Refrig.	—	—	—	—	—	—	909	909
Total	7.12	18.4	11.3	0.17	5.90	1.88	927	20,864

3. Construction Emissions Details

3.1. Site Preparation (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10T	PM2.5T	R	CO2e
Onsite	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Off-Road Equipment	3.31	31.6	30.2	0.05	1.37	1.26	—	5,314
Dust From Material Movement	—	—	—	—	7.67	3.94	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—
Off-Road Equipment	0.54	5.20	4.96	0.01	0.22	0.21	—	873
Dust From Material Movement	—	—	—	—	1.26	0.65	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.95	0.91	< 0.005	0.04	0.04	—	145
Dust From Material Movement	—	—	—	—	0.23	0.12	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Worker	0.08	0.09	0.98	0.00	0.23	0.05	0.02	229
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—
Worker	0.01	0.02	0.18	0.00	0.04	0.01	0.07	38.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.01	< 0.005	0.01	6.42
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Grading (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10T	PM2.5T	R	CO2e
Onsite	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Off-Road Equipment	3.20	29.7	28.3	0.06	1.23	1.14	—	6,622
Dust From Material Movement	—	—	—	—	3.59	1.42	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Off-Road Equipment	3.20	29.7	28.3	0.06	1.23	1.14	—	6,622
Dust From Material Movement	—	—	—	—	3.59	1.42	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—
Off-Road Equipment	1.43	13.3	12.6	0.03	0.55	0.51	—	2,957
Dust From Material Movement	—	—	—	—	1.60	0.64	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—
Off-Road Equipment	0.26	2.42	2.31	< 0.005	0.10	0.09	—	490
Dust From Material Movement	—	—	—	—	0.29	0.12	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Worker	0.11	0.10	1.66	0.00	0.26	0.06	1.07	296
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Worker	0.09	0.11	1.11	0.00	0.26	0.06	0.03	262
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—
Worker	0.04	0.05	0.56	0.00	0.12	0.03	0.21	120
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.10	0.00	0.02	< 0.005	0.03	19.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Building Construction (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10T	PM2.5T	R	CO2e
Onsite	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Off-Road Equipment	1.13	10.4	13.0	0.02	0.43	0.40	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—

Off-Road Equipment	0.11	1.06	1.33	< 0.005	0.04	0.04	—	245
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.19	0.24	< 0.005	0.01	0.01	—	40.5
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Worker	2.58	3.06	32.1	0.00	7.54	1.77	0.80	7,542
Vendor	0.26	7.70	3.24	0.06	2.03	0.63	0.51	7,464
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—
Worker	0.27	0.34	3.66	0.00	0.76	0.18	1.35	791
Vendor	0.03	0.78	0.33	0.01	0.20	0.06	0.86	760
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—
Worker	0.05	0.06	0.67	0.00	0.14	0.03	0.22	131
Vendor	0.01	0.14	0.06	< 0.005	0.04	0.01	0.14	126
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10T	PM2.5T	R	CO2e
Onsite	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	9.85	13.0	0.02	0.38	0.35	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	9.85	13.0	0.02	0.38	0.35	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—
Off-Road Equipment	0.69	6.38	8.40	0.02	0.25	0.23	—	1,558
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	1.16	1.53	< 0.005	0.04	0.04	—	258
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Worker	2.76	2.54	44.5	0.00	7.54	1.77	27.9	8,367
Vendor	0.28	7.01	2.95	0.06	2.03	0.63	17.7	7,334
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Worker	2.44	2.80	29.6	0.00	7.54	1.77	0.72	7,390
Vendor	0.26	7.43	3.06	0.06	2.03	0.63	0.46	7,324
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—
Worker	1.61	1.96	21.6	0.00	4.84	1.13	7.80	4,934
Vendor	0.17	4.78	1.96	0.04	1.30	0.41	4.97	4,746
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—
Worker	0.29	0.36	3.95	0.00	0.88	0.21	1.29	817
Vendor	0.03	0.87	0.36	0.01	0.24	0.07	0.82	786
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Paving (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10T	PM2.5T	R	CO2e
Onsite	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Off-Road Equipment	0.76	7.12	9.94	0.01	0.32	0.29	—	1,516
Paving	0.64	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Off-Road Equipment	0.76	7.12	9.94	0.01	0.32	0.29	—	1,516
Paving	0.64	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—
Off-Road Equipment	0.45	4.19	5.85	0.01	0.19	0.17	—	893
Paving	0.38	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.77	1.07	< 0.005	0.03	0.03	—	148
Paving	0.07	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Worker	0.07	0.07	1.16	0.00	0.20	0.05	0.73	218
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Worker	0.06	0.07	0.77	0.00	0.20	0.05	0.02	192

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—
Worker	0.04	0.05	0.51	0.00	0.11	0.03	0.18	117
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.09	0.00	0.02	< 0.005	0.03	19.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Architectural Coating (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10T	PM2.5T	R	CO2e
Onsite	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.86	1.13	< 0.005	0.02	0.02	—	134
Architectural Coatings	53.0	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.86	1.13	< 0.005	0.02	0.02	—	134
Architectural Coatings	53.0	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.31	0.41	< 0.005	0.01	0.01	—	48.4

Architectural Coatings	19.2	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.06	0.07	< 0.005	< 0.005	< 0.005	—	8.02
Architectural Coatings	3.50	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Worker	0.55	0.51	8.90	0.00	1.51	0.35	5.58	1,673
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Worker	0.49	0.56	5.93	0.00	1.51	0.35	0.14	1,478
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—
Worker	0.18	0.22	2.42	0.00	0.54	0.13	0.87	551
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—
Worker	0.03	0.04	0.44	0.00	0.10	0.02	0.14	91.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10T	PM2.5T	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	1.98	73.8	22.3	0.76	26.8	8.22	212	83,230
Refrigerated Warehouse-No Rail	0.37	13.9	4.21	0.14	5.06	1.55	40.1	15,693
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	2.35	87.7	26.5	0.90	31.9	9.77	252	98,923
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	1.89	77.8	22.3	0.76	26.8	8.22	5.51	83,056
Refrigerated Warehouse-No Rail	0.36	14.7	4.21	0.14	5.06	1.55	1.04	15,660
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	2.24	92.4	26.5	0.90	31.9	9.77	6.55	98,716
Annual	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.35	14.3	4.04	0.14	4.87	1.49	15.2	13,762
Refrigerated Warehouse-No Rail	0.07	2.70	0.76	0.03	0.92	0.28	2.86	2,595
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Total	0.42	17.0	4.80	0.16	5.78	1.77	18.0	16,357

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10T	PM2.5T	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	5,143
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	4,302
Parking Lot	—	—	—	—	—	—	—	710
Other Asphalt Surfaces	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	10,155
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	5,143
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	4,302
Parking Lot	—	—	—	—	—	—	—	710
Other Asphalt Surfaces	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	10,155
Annual	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	851
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	712

Parking Lot	—	—	—	—	—	—	—	118
Other Asphalt Surfaces	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	1,681

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10T	PM2.5T	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.33	5.96	5.01	0.04	0.45	0.45	—	7,131
Refrigerated Warehouse-No Rail	0.08	1.46	1.22	0.01	0.11	0.11	—	1,744
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	0.41	7.42	6.23	0.04	0.56	0.56	—	8,875
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.33	5.96	5.01	0.04	0.45	0.45	—	7,131
Refrigerated Warehouse-No Rail	0.08	1.46	1.22	0.01	0.11	0.11	—	1,744
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	0.41	7.42	6.23	0.04	0.56	0.56	—	8,875
Annual	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.06	1.09	0.91	0.01	0.08	0.08	—	1,181
Refrigerated Warehouse-No Rail	0.01	0.27	0.22	< 0.005	0.02	0.02	—	289

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	0.07	1.35	1.14	0.01	0.10	0.10	—	1,469

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	ROG	NOx	CO	SO2	PM10T	PM2.5T	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Consumer Products	29.6	—	—	—	—	—	—	—
Architectural Coatings	1.92	—	—	—	—	—	—	—
Landscape Equipment	9.81	0.50	59.7	< 0.005	0.11	0.08	—	246
Total	41.3	0.50	59.7	< 0.005	0.11	0.08	—	246
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Consumer Products	29.6	—	—	—	—	—	—	—
Architectural Coatings	1.92	—	—	—	—	—	—	—
Total	31.5	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—
Consumer Products	5.40	—	—	—	—	—	—	—
Architectural Coatings	0.35	—	—	—	—	—	—	—
Landscape Equipment	0.88	0.05	5.37	< 0.005	0.01	0.01	—	20.1
Total	6.63	0.05	5.37	< 0.005	0.01	0.01	—	20.1

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10T	PM2.5T	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	134
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	13.1
Parking Lot	—	—	—	—	—	—	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	147
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	134
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	13.1
Parking Lot	—	—	—	—	—	—	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	147
Annual	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	22.2
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	2.17
Parking Lot	—	—	—	—	—	—	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	0.00

Total	—	—	—	—	—	—	—	24.4

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10T	PM2.5T	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	2,069
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	365
Parking Lot	—	—	—	—	—	—	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	2,434
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	2,069
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	365
Parking Lot	—	—	—	—	—	—	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	2,434
Annual	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	343
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	60.4

Parking Lot	—	—	—	—	—	—	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	403

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10T	PM2.5T	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	5,489	5,489
Total	—	—	—	—	—	—	5,489	5,489
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	5,489	5,489
Total	—	—	—	—	—	—	5,489	5,489
Annual	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	909	909
Total	—	—	—	—	—	—	909	909

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10T	PM2.5T	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10T	PM2.5T	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10T	PM2.5T	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	CO	SO2	PM10T	PM2.5T	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10T	PM2.5T	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	CO	SO2	PM10T	PM2.5T	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	1/1/2025	3/25/2025	5.00	60.0	—
Grading	Grading	3/26/2025	11/7/2025	5.00	163	—
Building Construction	Building Construction	11/10/2025	11/27/2026	5.00	275	—
Paving	Paving	2/2/2026	11/27/2026	5.00	215	—
Architectural Coating	Architectural Coating	7/1/2026	12/31/2026	5.00	132	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42

Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	577	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	225	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT

Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	115	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	2,059,725	686,575	136,874

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	—	90.0	0.00	—
Grading	—	—	489	0.00	—
Paving	0.00	0.00	0.00	0.00	52.4

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Unrefrigerated Warehouse-No Rail	0.00	0%
Refrigerated Warehouse-No Rail	0.00	0%
Parking Lot	19.5	100%
Other Asphalt Surfaces	32.9	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	0.00	349	0.03	< 0.005
2026	0.00	346	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Unrefrigerated Warehouse-No Rail	732	732	732	267,114	29,273	29,273	29,273	10,684,572
Refrigerated Warehouse-No Rail	138	138	138	50,363	5,519	5,519	5,519	2,014,527
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	2,059,725	686,575	136,874

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Unrefrigerated Warehouse-No Rail	5,390,844	346	0.0330	0.0040	22,188,828
Refrigerated Warehouse-No Rail	4,509,869	346	0.0330	0.0040	5,426,201
Parking Lot	744,092	346	0.0330	0.0040	0.00
Other Asphalt Surfaces	0.00	346	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Unrefrigerated Warehouse-No Rail	5,412,066	14,855,567
Refrigerated Warehouse-No Rail	955,071	0.00
Parking Lot	0.00	0.00
Other Asphalt Surfaces	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Unrefrigerated Warehouse-No Rail	1,097	—
Refrigerated Warehouse-No Rail	194	—
Parking Lot	0.00	—
Other Asphalt Surfaces	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Refrigerated Warehouse-No Rail	Cold storage	R-404A	3,922	7.50	7.50	7.50	25.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	34.1	annual days of extreme heat
Extreme Precipitation	0.90	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.80	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A

Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	80.0
AQ-PM	7.52
AQ-DPM	21.9
Drinking Water	34.9
Lead Risk Housing	27.7
Pesticides	0.00
Toxic Releases	37.1
Traffic	59.7
Effect Indicators	—
CleanUp Sites	52.1
Groundwater	44.8
Haz Waste Facilities/Generators	16.6
Impaired Water Bodies	51.2
Solid Waste	84.7
Sensitive Population	—
Asthma	88.0
Cardio-vascular	89.5
Low Birth Weights	91.9
Socioeconomic Factor Indicators	—
Education	26.9
Housing	11.6
Linguistic	—
Poverty	52.5
Unemployment	90.6

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	44.97626075
Employed	30.46323624
Median HI	35.0442705
Education	—
Bachelor's or higher	42.93596818
High school enrollment	100
Preschool enrollment	39.79212113
Transportation	—
Auto Access	85.40998332
Active commuting	24.00872578
Social	—
2-parent households	51.18696266
Voting	75.34967278
Neighborhood	—
Alcohol availability	88.37418196
Park access	16.65597331
Retail density	8.469138971
Supermarket access	2.399589375
Tree canopy	0.71859361
Housing	—
Homeownership	62.60746824
Housing habitability	64.39112024
Low-inc homeowner severe housing cost burden	17.8108559

Low-inc renter severe housing cost burden	77.19748492
Uncrowded housing	68.66418581
Health Outcomes	—
Insured adults	64.22430386
Arthritis	4.4
Asthma ER Admissions	7.6
High Blood Pressure	8.9
Cancer (excluding skin)	9.1
Asthma	30.0
Coronary Heart Disease	6.8
Chronic Obstructive Pulmonary Disease	13.3
Diagnosed Diabetes	35.6
Life Expectancy at Birth	34.2
Cognitively Disabled	41.3
Physically Disabled	11.3
Heart Attack ER Admissions	2.7
Mental Health Not Good	48.5
Chronic Kidney Disease	20.1
Obesity	46.5
Pedestrian Injuries	48.3
Physical Health Not Good	39.9
Stroke	15.1
Health Risk Behaviors	—
Binge Drinking	57.0
Current Smoker	46.7
No Leisure Time for Physical Activity	58.0
Climate Change Exposures	—

Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	58.1
Elderly	16.8
English Speaking	81.5
Foreign-born	11.0
Outdoor Workers	47.0
Climate Change Adaptive Capacity	—
Impervious Surface Cover	90.2
Traffic Density	37.9
Traffic Access	23.0
Other Indices	—
Hardship	32.7
Other Decision Support	—
2016 Voting	75.3

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	65.0
Healthy Places Index Score for Project Location (b)	46.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Project proposes 1,373,150 sf warehouse, with 819,232 sf landscaped area, 135,036 sf detention area, 1,422 parking spaces and 739 trailer parking spaces. Assumes 15% of total building space is refrigerated warehouse. Water detention area assumed to be special landscape area for analysis purposes. Asphalt land use includes off-site roadway improvements, totaling 2.87 AC.
Construction: Construction Phases	Assumes 2 year buildout for analysis purposes. No demolition will be required, site is currently vacant. Assumes building construction, paving, and architectural coating will occur as staggered, overlapping phases.
Operations: Vehicle Data	Trip generation for truck trips only, based on trip rates provided in TIA prepared for the Project by UXR. Assumes truck trips are 100% primary trips and 100% work-other trips. Assumes 40 mile trip length per SCAQMD.
Operations: Fleet Mix	Fleet mix for truck trips only. Mix based on Moreno Valley Trade Center (Warehouse Scenario) Air Quality, GHG, & HRA Evaluation prepared by UXR (October 2020).
Operations: Water and Waste Water	Water demand based on Project-specific WSA. Total water demand projected to be 21,222,703.44 gallons/year (65.13 AFY).