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MEMORANDUM

DATE: June 22, 2022

TO: Michael Goodwin, Principal, First Industrial, L.P.

FROM: Ronald Brugger, Senior Air Quality Specialist, LSA Associates, Inc.

SUBJECT: Air Quality, Greenhouse Gas Emissions, and Energy Impact Analysis for the First Tamarind II Logistics Project in Fontana, California (LSA Project No. FRT2202)

INTRODUCTION

This air quality, greenhouse gas (GHG) emissions, and energy impact analysis for the proposed First Tamarind II Logistics Project (project) in Fontana, California, has been prepared using methods and assumptions recommended in the South Coast Air Quality Management District's (SCAQMD) *CEQA Air Quality Handbook* (SCAQMD 1993). This analysis includes a description of existing regulatory framework, an assessment of project operational air quality emissions, and an assessment of GHG emissions.

PROJECT LOCATION

The proposed project site is located on the west side of Tamarind Avenue, between Slover Avenue and Santa Ana Avenue as shown on Figure 1 in Attachment B.

PROJECT DESCRIPTION

The project will consist of one light industrial warehouse building totaling 60,900 square feet (sf) on a 4.35-acre (ac) site. Figure 2 in Attachment B illustrates the conceptual site plan for the project. The project would consist of a 57,900 sf warehouse, a 3,000 sf mezzanine/office space on the eastern side of the warehouse building, 82 parking spots for standard cars and clean air cars, an electric vehicle charging station, Americans with Disabilities Act of 1990 (ADA) compliant cars, and five truck parking spots. The truck parking is located on the very south portion of the project site, and a docking area is attached to the south side of the warehouse building. The standard parking area is directly adjacent to the east of the warehouse building.

The site is zoned M-1 (Light Industrial) with an I-L (Light Industrial) land use designation in the City of Fontana General Plan. Therefore, the project conforms to the City of Fontana's (City's) anticipated development of the area. Additionally, the proposed project is on an infill site that is substantially surrounded by existing industrial uses and roadways.

The site would be accessed by two driveways, one at the southeast corner of the site onto a private road and the other at the southwest corner of the site onto Tamarind Avenue. The project would

include 8 ft high and 13 ft high screen walls that surround the proposed truck docking area. Additionally, the walls, hedges, and fences will be compatible with the main warehouse structure in terms of design and materials. Streetlights will also be provided by the proposed project, including utility undergrounding, and full off-site improvements. Construction is planned to start in August 2022 and last about 1 year.

Sensitive Receptors and Land Uses in the Project Vicinity

Sensitive receptors include residences, schools, hospitals, and similar uses that are sensitive to air quality. The nearest sensitive receptors are identified as the single-family homes located east along Tamarind Court and south along Tamarind Avenue, with the closest approximately 80 feet (ft) from the project site. The project site is otherwise surrounded by commercial land uses consistent with the site zoning designation.

Climate/Meteorology

Air quality in the planning area is affected not only by various emissions sources (e.g., mobile and industry) but also by atmospheric conditions (e.g., wind speed, wind direction, temperature, and rainfall). The combination of topography, low mixing height, abundant sunshine, and emissions from the second-largest urban area in the United States gives the South Coasts Air Basin (Basin) some of the worst air pollution problems in the nation.

The annual average temperature varies little throughout the Basin, ranging from the low to middle 60s, measured in degrees Fahrenheit (°F). The climatological station closest to the site with the most current available climate data is the Fontana Kaiser Monitoring Station (Western Regional Climate Center 2022). The monthly average maximum temperature recorded at this station ranged from 66.8°F in January to 95.0°F in July, with an annual average maximum of 79.4°F. The monthly average minimum temperature recorded at this station ranged from 44.0°F in January to 62.9°F in August, with an annual average minimum of 52.3°F. January is typically the coldest month, and July and August are typically the warmest months in this area of the Basin.

The majority of annual rainfall in the Basin occurs between November and March. Summer rainfall is minimal and is generally limited to scattered thundershowers in coastal regions and slightly heavier showers in the eastern portion of the Basin and along the coastal side of the mountains. Fontana Kaiser's Monitoring Station recorded precipitation average monthly rainfall from 3.65 inches in January to 0.01 inch in July, with an annual total of 15.32 inches. Patterns in monthly and yearly rainfall totals are unpredictable due to fluctuations in the weather.

The Basin experiences a persistent temperature inversion (increasing temperature with increasing altitude) as a result of the Pacific high. This inversion limits the vertical dispersion of air contaminants, holding them relatively near the ground. As the sun warms the ground and the lower air layer, the temperature of the lower air layer approaches the temperature of the base of the inversion (upper) layer until the inversion layer finally breaks, allowing vertical mixing with the lower layer. This phenomenon is observed in midafternoon to late afternoon on hot summer days, when the smog appears to clear up suddenly. Winter inversions frequently break by midmorning.

Winds in the project area blow predominantly from the south-southwest with relatively low velocities. Wind speeds in the project area average about 5 miles per hour (mph). Summer wind speeds average slightly higher than winter wind speeds. Low average wind speeds, together with a persistent temperature inversion, limit the vertical dispersion of air pollutants throughout the Basin. Strong, dry, north, or northeasterly winds, known as Santa Ana winds, occur during the fall and winter months, dispersing air contaminants. The Santa Ana conditions tend to last for several days at a time.

The combination of stagnant wind conditions and low inversions produces the greatest pollutant concentrations. On days of no inversion or high wind speeds, ambient air pollutant concentrations are the lowest. During periods of low inversions and low wind speeds, air pollutants generated in urbanized areas are transported predominantly onshore into Riverside and San Bernardino Counties. In the winter, the greatest pollution problems are carbon monoxide (CO) and nitrogen oxides (NO_X) because of extremely low inversions and air stagnation during the night and early morning hours. In the summer, the longer daylight hours and the brighter sunshine combine to cause a reaction between hydrocarbons and NO_X to form photochemical smog.

REGIONAL CLIMATE AND AIR QUALITY

The project site is located in Fontana, San Bernardino County, California, which is part of the Basin and is under the jurisdiction of SCAQMD. Both the State of California (State) and the federal government have established health-based ambient air quality standards (AAQS) for seven air pollutants. As detailed in Table A, these pollutants include ozone (O_3), CO, nitrogen dioxide (NO_2), sulfur dioxide (SO_2), particulate matter less than 10 microns in size (PM_{10}), particulate matter less than 2.5 microns in size ($PM_{2.5}$), and lead. In addition, the State has set standards for sulfates, hydrogen sulfide (H_2S), vinyl chloride, and visibility-reducing particles. These standards are designed to protect the health and welfare of the populace with a reasonable margin of safety.

Table B summarizes the most common health and environmental effects for each of the air pollutants for which there is a National and/or California AAQS (NAAQS and/or CAAQS), as well as for toxic air contaminants. Because the concentration standards were set at a level that protects public health with an adequate margin of safety (by the United States Environmental Protection Agency [EPA]), these health effects would not occur unless the standards are exceeded by a large margin or for a prolonged period of time. CAAQS are typically more stringent than NAAQS. Among the pollutants, O_3 and particulate matter ($PM_{2.5}$ and PM_{10}) are considered pollutants with regional effects, while the others have more localized effects.

The California Clean Air Act (CCAA) provides the SCAQMD and other air districts with the authority to manage transportation activities at indirect sources. Indirect sources of pollution include any facility, building, structure, or installation, or combination thereof, that attracts or generates mobile-source emissions of any pollutant. In addition, area-source emissions that are generated when minor sources collectively emit a substantial amount of pollution are also managed by the local air districts. Examples of this would be the motor vehicles at an intersection, at a mall, and on highways. The SCAQMD also regulates stationary sources of pollution throughout its jurisdictional area. The California Air Resources Board (CARB) regulates direct emissions from motor vehicles.

Table A: Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[1]		National Standards[2]		
		Concentration[3]	Method[4]	Primary[3,5]	Secondary[3,6]	Method[7]
O_3[8]	1-Hour	0.09 ppm (180 µg/m³)	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry
	8-Hour	0.070 ppm (137 µg/m³)		0.070 ppm (137 µg/m³)		
Respirable Particulate Matter (PM_{10})[9]	24-Hour	50 µg/m³	Gravimetric or Beta Attenuation	150 µg/m³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m³		—		
Fine Particulate Matter ($PM_{2.5}$)[9]	24-Hour	—	—	35 µg/m³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m³	Gravimetric or Beta Attenuation	12.0 µg/m³	15 µg/m³	
CO	1-Hour	20 ppm (23 mg/m³)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m³)	—	Non-Dispersive Infrared Photometry (NDIR)
	8-Hour	9.0 ppm (10 mg/m³)		9 ppm (10 mg/m³)	—	
	8-Hour (Lake Tahoe)	6 ppm (7 mg/m³)		—	—	
NO_2[10]	1-Hour	0.18 ppm (339 µg/m³)	Gas Phase Chemiluminescence	100 ppb (188 µg/m³)	—	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m³)		0.053 ppm (100 µg/m³)	Same as Primary Standard	
SO_2[11]	1-Hour	0.25 ppm (655 µg/m³)	Ultraviolet Fluorescence	75 ppb (196 µg/m³)	—	Ultraviolet Fluorescence; Spectrophotometry (Pararosaniline Method)
	3-Hour	—		—	0.5 ppm (1,300 µg/m³)	
	24-Hour	0.04 ppm (105 µg/m³)		0.14 ppm (for certain areas)[11]	—	
	Annual Arithmetic Mean	—		0.030 ppm (for certain areas)[11]	—	
Lead[12,13]	30-Day Average	1.5 µg/m³	Atomic Absorption	—	—	High-Volume Sampler and Atomic Absorption
	Calendar Quarter	—		1.5 µg/m³ (for certain areas)[13]	Same as Primary Standard	
	Rolling 3-Month Average[11]	—		0.15 µg/m³		
Visibility-Reducing Particles[14]	8-Hour	See footnote 14	Beta Attenuation and Transmittance through Filter Tape	No National Standards		
Sulfates	24-Hour	25 µg/m³	Ion Chromatography			
Hydrogen Sulfide	1-Hour	0.03 ppm (42 µg/m³)	Ultraviolet Fluorescence			
Vinyl Chloride[12]	24-Hour	0.01 ppm (26 µg/m³)	Gas Chromatography			

Source: California Air Resources Board. 2016. *Ambient Air Quality Standards*. May. Website: www.arb.ca.gov/sites/default/files/2020-07/aaqs2.pdf (accessed June 2022).

Footnotes are provided on the following page.

[1] California standards for O_3, CO (except 8-hour Lake Tahoe), SO_2 (1- and 24-hour), NO_2, and PM (PM_{10}, $PM_{2.5}$, and visibility-reducing particles) are values that are not to be exceeded. All others are not to be equaled or exceeded. California AAQS are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

[2] National standards (other than for O_3 and PM and those based on the annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth-highest 8-hour concentration measured at each site in a year, averaged over 3 years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m^3 is equal to or less than 1. For $PM_{2.5}$, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over 3 years, are equal to or less than the standard. Contact the EPA for further clarification and current national policies.

[3] Concentration expressed first in the units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

[4] Any equivalent measurement method that can be shown to the satisfaction of the CARB to give equivalent results at or near the level of the air quality standard may be used.

[5] National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

[6] National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

[7] The reference method as described by the EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the EPA.

[8] On October 1, 2015, the national 8-hour O_3 primary and secondary standards were lowered from 0.075 to 0.070 ppm.

[9] On December 14, 2012, the national annual $PM_{2.5}$ primary standard was lowered from 15 µg/m^3 to 12.0 µg/m^3. The existing national 24-hour $PM_{2.5}$ standards (primary and secondary) were retained at 35 µg/m^3, as was the annual secondary standard of 15 µg/m^3. The existing 24-hour PM_{10} standards (primary and secondary) of 150 µg/m^3 also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

[10] To attain the 1-hour standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards, the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.

[11] On June 2, 2010, a new 1-hour SO_2 standard was established, and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until 1 year after an area is designated for the 2010 standard, except that in areas designated as Nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard, the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

[12] CARB has identified lead and vinyl chloride as "toxic air contaminants" with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

[13] The national standard for lead was revised on October 15, 2008, to a rolling 3-month average. The 1978 lead standard (1.5 µg/m^3 as a quarterly average) remains in effect until 1 year after an area is designated for the 2008 standard, except that in areas designated as Nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standards are approved.

[14] In 1989, CARB converted both the general statewide 10 mi visibility standard and the Lake Tahoe 30 mi visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

°C = degrees Celsius
µg/m^3 = micrograms per cubic meter
AAQS = ambient air quality standards
CARB = California Air Resources Board
CO = carbon monoxide
EPA = United States Environmental Protection Agency
mg/m^3 = milligrams per cubic meter
mi = mile/miles
NO_2 = nitrogen dioxide
O_3 = ozone
PM = particulate matter
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
ppb = parts per billion
ppm = parts per million
SO_2 = sulfur dioxide

Table B: Summary of Health and Environmental Effects of the Criteria Air Pollutants

Pollutant	Effects on Health and the Environment
Ozone (O_3)	● Respiratory symptoms ● Worsening of lung disease leading to premature death ● Damage to lung tissue ● Crop, forest and ecosystem damage ● Damage to a variety of materials, including rubber, plastics, fabrics, paint and metals
Particulate matter less than 2.5 microns in aerodynamic diameter ($PM_{2.5}$)	● Premature death ● Hospitalization for worsening of cardiovascular disease ● Hospitalization for respiratory disease ● Asthma-related emergency room visits ● Increased symptoms, increased inhaler usage
Particulate matter less than 10 microns in aerodynamic diameter (PM_{10})	● Premature death & hospitalization, primarily for worsening of respiratory disease ● Reduced visibility and material soiling
Nitrogen oxides (NO_X)	● Lung irritation ● Enhanced allergic responses
Carbon monoxide (CO)	● Chest pain in patients with heart disease ● Headache ● Light-headedness ● Reduced mental alertness
Sulfur oxides (SO_X)	● Worsening of asthma: increased symptoms, increased medication usage, and emergency room visits
Lead	● Impaired mental functioning in children ● Learning disabilities in children ● Brain and kidney damage
Hydrogen sulfide (H_2S)	● Nuisance odor (rotten egg smell) ● At high concentrations: headache & breathing difficulties
Sulfate	● Same as $PM_{2.5}$, particularly worsening of asthma and other lung diseases ● Reduces visibility
Vinyl chloride	● Central nervous system effects, such as dizziness, drowsiness & headaches ● Long-term exposure: liver damage & liver cancer
Visibility reducing particles	● Reduced airport safety, scenic enjoyment, road safety, and discourages tourism
Toxic air contaminants (TACs) (About 200 chemicals have been listed as toxic air contaminants.)	● Cancer ● Reproductive and developmental effects ● Neurological effects

Source: California Air Resources Board. 2022a. Common Air Pollutants. Website: www.arb.ca.gov/resources/common-air-pollutants (accessed June 2022).

Description of Global Climate Change and Its Sources

Earth's natural warming process is known as the "greenhouse effect." This greenhouse effect compares the Earth and the atmosphere surrounding it to a greenhouse with glass panes. The glass allows solar radiation (sunlight) into Earth's atmosphere but prevents radiated heat from escaping, thus warming Earth's atmosphere. GHGs keep the average surface temperature of the Earth to approximately 60°F. However, excessive concentrations of GHGs in the atmosphere can result in increased global mean temperatures, with associated adverse climatic and ecological consequences (IPCC 2013).

Scientists refer to the global warming context of the past century as the "enhanced greenhouse effect" to distinguish it from the natural greenhouse effect (Pew Center 2006). While the increase in temperature is known as "global warming," the resulting change in weather patterns is known as "global climate change." Global climate change (GCC) is evidenced in changes to global temperature rise, warming oceans, shrinking ice sheets, glacial retreat, decreased snow cover, sea level rise, declining Arctic sea ice, extreme weather events, and ocean acidification (IPCC 2014).

Higher temperatures, conducive to air pollution formation, could worsen air quality in California. While climate change may increase the concentration of ground-level ozone, the magnitude of the effect and, therefore, its indirect effects, are uncertain. If higher temperatures are accompanied by drier conditions, the potential for large wildfires could increase, which, in turn, would exacerbate air quality. Additionally, severe heat accompanied by drier conditions and poor air quality could increase the number of heat related deaths, illnesses, and asthma attacks throughout the state (CDPH 2019). However, if higher temperatures are accompanied by wetter, rather than drier conditions, the rains would temporarily clear the air of particulate pollution and reduce the incidence of large wildfires, thus reducing the pollution associated with wildfires. GHGs are present in the atmosphere naturally, are released by natural sources, or are formed from secondary reactions taking place in the atmosphere. The gases that are widely seen as the principal contributors to human-induced GCC are the following:[1]

- Carbon dioxide (CO_2);
- Methane (CH_4);
- Nitrous oxide (N_2O);
- Hydrofluorocarbons (HFCs);
- Perfluorocarbons (PFCs); and
- Sulfur hexafluoride (SF_6).

Over the last 200 years, human activities have caused substantial quantities of GHGs to be released into the atmosphere. These extra emissions are increasing GHG concentrations in the atmosphere and enhancing the natural greenhouse effect, which can cause global warming. Although GHGs produced by human activities include naturally occurring GHGs (e.g., CO_2, CH_4, and N_2O), some gases (e.g., HFCs, PFCs, and SF_6) are completely new to the atmosphere. Water vapor is a GHG but is generally excluded from the list of GHGs because it is short-lived in the atmosphere and its atmospheric concentrations are largely determined by natural processes (e.g., oceanic evaporation). For the purposes of this air quality study, the term "GHGs" will refer collectively to the six gases identified in the bulleted list provided above.

These GHGs vary considerably in terms of global warming potential (GWP), which is a concept developed to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. GWP is based on several factors, including the relative effectiveness of a gas in absorbing infrared radiation and the length of time that the gas remains in the atmosphere ("atmospheric lifetime"). The GWP of each gas is measured relative to CO_2, the most abundant GHG. The definition

[1] The greenhouse gases listed are consistent with the definition in Assembly Bill 32 (Government Code 38505), as discussed later in this section.

of GWP for a particular GHG is the ratio of heat trapped by one unit mass of the GHG to the ratio of heat trapped by one unit mass of CO_2 over a specified time period. For example, N_2O is from 265 to 310 times more potent at contributing to global warming than CO_2. GHG emissions are typically measured in terms of metric tons of CO_2 equivalents (MT CO_2e). Table C identifies the GWP for the three GHGs analyzed in this report. The EPA and CARB use GWP values from the 2007 Intergovernmental Panel on Climate Change (IPCC) Fourth Assessment Report (AR4). The IPCC has published the 2021 IPCC Sixth Assessment Report (AR6) with updated GWP values.

Table C: Global Warming Potential for Selected Greenhouse Gases

Pollutant	AR4 Values	AR6 Values
Carbon Dioxide (CO_2)	1 (by definition)	1 (by definition)
Methane (CH_4)	25	29.8 ± 11
Nitrous Oxide (N_2O)	298	273 ± 130

Sources: *2017 Climate Change Scoping Plan* (CARB 2017); Fifth Assessment Report (IPCC 2014); and Sixth Assessment Report (IPCC 2021).
Note: The EPA and CARB use global warming potential values from the IPCC Fourth Assessment Report (AR4) (2007).
AR4 = 2007 IPCC Fourth Assessment Report
AR6 = 2021 IPCC Sixth Assessment Report
CARB = California Air Resources Board
EPA = United States Environmental Protection Agency
IPCC = Intergovernmental Panel on Climate Change

Air Pollution Constituents and Attainment Status

CARB coordinates and oversees both State and federal air pollution control programs in the State. CARB oversees activities of local air quality management agencies and maintains air quality monitoring stations throughout the State in conjunction with the EPA and local air districts. CARB has divided the State into 15 air basins based on meteorological and topographical factors of air pollution. Data collected at these stations are used by CARB and the EPA to classify air basins as Attainment, Nonattainment, Nonattainment-Transitional, or Unclassified, based on air quality data for the most recent three calendar years compared with the AAQS.

Attainment areas may be the following:

- **Attainment/Unclassified ("Unclassifiable" in some lists).** These basins have never violated the air quality standard of interest or do not have enough monitoring data to establish Attainment or Nonattainment status.

- **Attainment-Maintenance (NAAQS only).** These basins violated a NAAQS that is currently in use (were Nonattainment) in or after 1990, but now attain the standard and are officially redesignated as Attainment by the EPA with a Maintenance State Implementation Plan (SIP).

- **Attainment (usually only for CAAQS, but sometimes for NAAQS).** These basins have adequate monitoring data to show attainment, have never been Nonattainment, or, for NAAQS, have completed the official Maintenance period.

Nonattainment areas are imposed with additional restrictions as required by the EPA. The air quality data are also used to monitor progress in attaining air quality standards. Table D lists the attainment status for the criteria pollutants in the Basin.

Table D: Attainment Status of Criteria Pollutants in the South Coast Air Basin

Pollutant	State	Federal
O_3	Nonattainment (1-hour) Nonattainment (8-hour)	Extreme Nonattainment (1-hour) Extreme Nonattainment (8-hour)
PM_{10}	Nonattainment (24-hour) Nonattainment (Annual)	Attainment-Maintenance (24-hour)
$PM_{2.5}$	Nonattainment (Annual)	Serious Nonattainment (24-hour) Moderate Nonattainment (Annual)
CO	Attainment (1-hour) Attainment (8-hour)	Attainment-Maintenance (1-hour) Attainment-Maintenance (8-hour)
NO_2	Attainment (1-hour) Attainment (Annual)	Attainment/Unclassified (1-hour) Attainment-Maintenance (Annual)
SO_2	Attainment (1-hour) Attainment (24-hour)	Attainment/Unclassified (1-hour) Attainment/Unclassified (Annual)
Lead[1]	Attainment (30-day average)	Attainment (3-month rolling)
All Others	Attainment/Unclassified	N/A

Source: *NAAQS and CAAQS Attainment Status for the South Coast Air Basin* (SCAQMD n.d.).

[1] Only the Los Angeles County portion of the Basin is in nonattainment for lead.

CO = carbon monoxide
N/A = not applicable
NO_2 = nitrogen dioxide
O_3 = ozone
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
SO_2 = sulfur dioxide

Regulatory Framework

Air quality, GHG standards, energy standards, and the regulatory framework are discussed below.

Federal Regulations

Pursuant to the Federal Clean Air Act (CAA) of 1970, the EPA established the NAAQS. The NAAQS were established for six major pollutants, termed "criteria" pollutants. Criteria pollutants are defined as those pollutants for which the federal and State governments have established AAQS, or criteria, for outdoor concentrations to protect public health.

The EPA has designated the Southern California Association of Governments (SCAG) as the Metropolitan Planning Organization responsible for ensuring compliance with the requirements of the CAA for the Basin.

The United States has historically had a voluntary approach to reducing GHG emissions; however, on April 2, 2007, the United States Supreme Court ruled that the EPA has the authority to regulate CO_2 emissions under the CAA. The Supreme Court ruled that GHGs fit within the CAA's definition of a pollutant and that the EPA did not have a valid rationale for not regulating GHGs. In December 2009, the EPA issued an endangerment finding for GHGs under the CAA.

On December 7, 2009, the EPA Administrator signed a final action under the CAA, finding that six GHGs (i.e., CO_2, CH_4, N_2O, HFCs, PFCs, and SF_6) constitute a threat to public health and welfare and that the combined emissions from motor vehicles cause and contribute to GCC.

In 2012, the EPA and the National Highway Traffic Safety Administration promulgated new rules to set GHG emission and fuel economy standards for new motor vehicles. The rules created requirements for model years 2017–2021 and 2022–2025, which would become more stringent each year, achieving greater GHG reductions over time. On March 31, 2020, the agencies issued the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule (EPA 2021) that increases the stringency of the Corporate Average Fuel Economy (CAFÉ) Standard and CO_2 emissions standards by 1.5 percent each year through model year 2026.

State Agencies, Regulations, and Standards

In 1967, the State Legislature passed the Mulford-Carrell Act, which combined two Department of Health bureaus (i.e., the Bureau of Air Sanitation and the Motor Vehicle Pollution Control Board) to establish the CARB. Since its formation, CARB has worked with the public, the business sector, and local governments to find solutions to the State's air pollution problems. California adopted the CCAA in 1988. CARB administers the CAAQs for the 10 air pollutants designated in the CCAA. These State air pollutants are the six criteria pollutants designated by the CAA as well as four others: visibility-reducing particulates, H_2S, sulfates, and vinyl chloride.

The California Global Warming Solutions Act of 2006, widely known as Assembly Bill (AB) 32, requires CARB to develop and enforce regulations for the reporting and verification of statewide GHG emissions. CARB was directed to set a statewide GHG emissions limit and set a timeline for adopting a scoping plan for achieving GHG reductions in a technologically and economically feasible manner.

The heart of the bill is the requirement that statewide GHG emissions be reduced to 1990 levels by 2020. The bill requires CARB to adopt rules and regulations in an open public process to achieve the maximum technologically feasible and cost-effective GHG reductions.

In 2016, the Legislature passed and Governor Jerry Brown signed, Senate Bill (SB) 32 and AB 197. SB 32 affirms the importance of addressing climate change by codifying into statute the GHG emissions reductions target of at least 40 percent below 1990 levels by 2030 contained in Governor Brown's April 2015 Executive Order (EO) B-30-15. SB 32 builds on AB 32 and keeps California on the path toward achieving the State's 2050 objective of reducing emissions to 80 percent below 1990 levels, consistent with an IPCC analysis of the emissions trajectory that would stabilize atmospheric GHG concentrations at 450 parts per million (ppm) CO_2e and reduce the likelihood of catastrophic impacts from climate change. The companion bill to SB 32, AB 197, provides additional direction to CARB related to the adoption of strategies to reduce GHG emissions.

In December 2017, CARB adopted "California's 2017 Climate Change Scoping Plan: The Strategy for Achieving California's 2030 Greenhouse Gas Target" (CARB 2017) that describes the actions the State will take to achieve the SB 32 climate goal of reducing GHG emissions at least 40 percent below 1990 levels by 2030. The 2017 Scoping Plan includes input from a range of State agencies and

is the result of a 2-year development process, including extensive public and stakeholder outreach, designed to ensure that California's climate and air quality efforts continue to improve public health and drive development of a more sustainable economy. It outlines an approach that cuts across economic sectors to combine GHG reductions with reductions of smog-causing pollutants, while also safeguarding public health and economic goals. The 2017 Scoping Plan reflects the direction from the Legislature on the Cap-and-Trade Program, as described in AB 398, the need to extend key existing emissions reductions programs, and acknowledges the parallel actions required under AB 617 to strengthen monitoring and reduce air pollution at the community level.

The actions identified in the 2017 Scoping Plan can reduce overall GHG emissions in California and deliver strong policy signals that will continue to drive investment and certainty in a low-carbon economy. The 2017 Scoping Plan builds upon the successful framework established by the original Scoping Plan and the 2014 Scoping Plan, while also identifying new, technologically feasibility and cost-effective strategies to ensure that California meets its GHG reduction targets in a way that promotes and rewards innovation, continues to foster economic growth, and delivers improvements to the environment and public health, including in disadvantaged communities.

Although the 2017 Scoping Plan does not impose any specific mandates or policies that specifically apply to individual development projects such as the proposed project, the Scoping Plan encourages local municipalities to update building codes and establish sustainable development practices for accommodating future growth. Key policies that involve the residential and commercial building sectors that are indirectly applicable to the proposed Project include the implementation of SB 275 (promoting infill development and high-density housing in high quality transit areas), implementing green building practices (i.e., the California Green Building Standards Code [CALGreen Code]), energy efficiency and water conservation policies, and waste diversion efforts.

Senate Bill 97 and CEQA Guidelines

In August 2007, the Legislature adopted SB 97, requiring the Office of Planning and Research (OPR) to prepare and transmit new California Environmental Quality Act (CEQA) guidelines for the mitigation of GHG emissions or the effects of GHG emissions to the California Natural Resources Agency. The OPR submitted its proposed guidelines to the Secretary for Natural Resources on April 13, 2009, and the *CEQA Guidelines Amendments* were adopted on December 30, 2009 and became effective on March 18, 2010.

The *CEQA Guidelines Amendments* do not specify a threshold of significance for GHG emissions or prescribe assessment methodologies or specific mitigation measures. Instead, the amendments encourage lead agencies to consider many factors in performing a CEQA analysis but rely on the lead agencies in making their own significance determinations based upon substantial evidence. The *CEQA Guidelines Amendments* also encourage public agencies to make use of programmatic mitigation plans and programs from which to tier when they perform individual project analyses.

The *CEQA Guidelines Amendments* require a lead agency to make a good-faith effort based on the extent possible on scientific and factual data to describe, calculate or estimate the amount of GHG emissions resulting from a project. The *CEQA Guidelines Amendments* give discretion to the lead agency whether to (1) use a model or methodology to quantify GHG emissions resulting from a

project and which model or methodology to use and/or (2) rely on a qualitative analysis or performance-based standards. The California Natural Resources Agency is required to periodically update the guidelines to incorporate new information or criteria established by CARB pursuant to AB 32.

California Green Building Standards

The California Green Building Standards Code, which is Part 11 of the California Code of Regulations, is commonly referred to as the CALGreen Code. The first edition of the CALGreen Code was released in 2008 and contained only voluntary standards. The 2019 CALGreen Code was updated in 2019, became effective on January 1, 2020, and applies to non-residential and residential developments. The CALGreen Code contains requirements for construction site selection, storm water control during construction, construction waste reduction, indoor water use reduction, material selection, natural resource conservation, site irrigation conservation, and more. The CALGreen Code provides for design options allowing the designer to determine how best to achieve compliance for a given site or building condition. The CALGreen Code also requires building commissioning, which is a process for the verification that all building systems, such as heating and cooling equipment and lighting systems, function at their maximum efficiency.

Senate Bill 350 (2015) Clean Energy and Pollution Reduction Act

SB 350, signed by Governor Jerry Brown on October 7, 2015, updates and enhances AB 32 by introducing the following set of objectives in clean energy, clean air, and pollution reduction for 2030: Raise California's renewable portfolio standard from 33 percent to 50 percent.

- Increase energy efficiency in buildings by 50 percent by the year 2030.

The 50 percent renewable energy standard will be implemented by the California Public Utilities Commission (CPUC) for private utilities and by the California Energy Commission (CEC) for municipal utilities. Each utility must submit a procurement plan showing it will purchase clean energy to displace other nonrenewable resources. The 50 percent increase in energy efficiency in buildings must be achieved through the use of existing energy efficiency retrofit funding and regulatory tools already available to State energy agencies under existing law. The addition made by this legislation requires State energy agencies to plan for and implement those programs in a manner that achieves the energy efficiency target.

*Senate Bill 100*On September 10, 2018, Governor Brown signed SB 100, which raises California's renewable portfolio standard requirements to 60 percent by 2030, with interim targets, and 100 percent by 2045. The bill also establishes a State policy that eligible renewable energy resources and zero-carbon resources supply 100 percent of all retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all State agencies by December 31, 2045. Under the bill, the State cannot increase carbon emissions elsewhere in the Western grid or allow resource shuffling to achieve the 100 percent carbon-free electricity target.

*Executive Order B-55-18*EO B-55-18, signed September 10, 2018, sets a goal "to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter." EO B-55-18 directs CARB to work with relevant State agencies to ensure that future Scoping Plans identify and recommend measures to achieve the carbon neutrality goal. The

goal of carbon neutrality by 2045 is in addition to other statewide goals, meaning not only should emissions be reduced to 80 percent below 1990 levels by 2050, but that, by no later than 2045, the remaining emissions be offset by equivalent net removals of CO_2e from the atmosphere, including through sequestration in forests, soils, and other natural landscapes.

Regional Air Quality Planning Framework

The EPA has designated SCAG as the Metropolitan Planning Organization responsible for ensuring compliance with the requirements of the CAA for the Basin. SCAG is a council of governments for Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura Counties. SCAG is a regional planning agency and a forum for regional issues relating to transportation, the economy and community development, and the environment. Although SCAG is not an air quality management agency, it is responsible for developing transportation, land use, and energy conservation measures that affect air quality.

On September 3, 2020, the Regional Council of SCAG adopted *Connect SoCal*, also known as the *2020–2045 Regional Transportation Plan/Sustainable Communities Strategy: A Plan for Mobility, Accessibility, Sustainability, and High Quality of Life* (a.k.a., *2020–2045 RTP/SCS*) (SCAG 2020). The *2020–2045 RTP/SCS* is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals. Connect SoCal embodies a collective vision for the region's future and is developed with input from local governments, county transportation commissions (CTCs), tribal governments, non-profit organizations, businesses and local stakeholders within the Counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura.

South Coast Air Quality Management District

The SCAQMD is the agency principally responsible for comprehensive air pollution control in the Basin. To that end, the SCAQMD, a regional agency, works directly with SCAG, county transportation commissions, and local governments, and cooperates actively with State and federal government agencies. The SCAQMD develops air quality-related rules and regulations, establishes permitting requirements, inspects emissions sources, and provides regulatory enforcement through such measures as educational programs or fines, when necessary.

Regional Air Quality Management Plan

SCAQMD and SCAG are responsible for formulating and implementing the Air Quality Management Plan (AQMP) for the Basin. The main purpose of an AQMP is to bring the area into compliance with federal and State air quality standards. SCAQMD prepares a new AQMP every 3 years, updating the previous plan and a 20-year horizon. A 2022 Update AQMP has been announced by the SCAQMD.

The latest plan is the 2016 AQMP, which incorporates the scientific and planning assumptions, and also includes emission inventory methodologies for various source categories (SCAQMD 2017). The 2016 AQMP includes the integrated strategies and measures needed to meet the NAAQS, implementation of new technology measures, and demonstrations of attainment of the 1-hour and 8-hour O_3 NAAQS as well as the latest 24-hour and annual $PM_{2.5}$ standards. Key elements of the 2016 AQMP include the following:

- Calculation and credit for co-benefits from other planning efforts (e.g., climate, energy, and transportation).
- A strategy with fair-share emission reductions at the federal, State, and local levels.
- Investment in strategies and technologies meeting multiple air quality objectives.
- Identification of new partnerships and significant funding for incentives to accelerate deployment of zero and near-zero technologies.
- Enhanced socioeconomic assessment, including an expanded environmental-justice analysis.
- Attainment of the 24-hour $PM_{2.5}$ standard in 2019 with no additional measures.
- Attainment of the annual $PM_{2.5}$ standard by 2025 with implementation of a portion of the O_3 strategy.
- Attainment of the 1-hour O_3 standard by 2022 with no reliance on "black box" future technology (CAA Section 182(e)(5) measures).

SCAQMD adopts rules and regulations to implement portions of the AQMP. Several of these rules may apply to project construction or operation. For example, SCAQMD Rule 403 requires the implementation of the best-available fugitive dust control measure during active construction periods capable of generating fugitive dust emissions from on-site earthmoving activities, construction/demolition activities, and construction equipment travel on paved and unpaved roads.

Although the SCAQMD is responsible for regional air quality planning efforts, it does not have the authority to directly regulate the air quality issues associated with new development projects within the Basin, such as the proposed project. Instead, SCAQMD published the *CEQA Air Quality Handbook* (SCAQMD 1993) to assist lead agencies, as well as consultants, project proponents, and other interested parties in evaluating potential air quality impacts of projects proposed in the Basin. The *CEQA Air Quality Handbook* provides standards, methodologies, and procedures for conducting air quality analyses in Environmental Impact Reports and was used extensively in the preparation of this analysis. SCAQMD is currently in the process of replacing the *CEQA Air Quality Handbook* (1993) with the *Air Quality Analysis Handbook* (SCAQMD 2022).

To assist the CEQA practitioner in conducting an air quality analysis in the interim while the replacement *Air Quality Analysis Guidance Handbook* is being prepared, supplemental guidance/ information is provided on the SCAQMD website and includes (1) on-road vehicle emission factors, (2) background CO concentrations, (3) localized significance thresholds (LSTs), (4) mitigation measures and control efficiencies, (5) mobile-source toxics analysis, (6) off-road mobile-source emission factors, (7) $PM_{2.5}$ significance thresholds and calculation methodology, and (8) updated SCAQMD Air Quality Significance Thresholds. SCAQMD also recommends using approved models to calculate emissions from land use projects, such as the California Emissions Estimator Model (CalEEMod). These recommendations were followed in the preparation of this analysis.

The following SCAQMD rules and regulations would apply to the proposed project:

- SCAQMD Rule 402 (SCAQMD 1976) requires projects to incorporate fugitive dust control measures.
- SCAQMD Rule 403 (SCAQMD 2005) requires projects to incorporate fugitive dust control measures.
- SCAQMD Rule 1113 (SCAQMD 2016) limits the volatile organic compound (VOC) content of architectural coatings.

Local Regulations

County of San Bernardino Countywide Plan (General Plan)

The County of San Bernardino (County) created a web-based version of the Countywide Plan (adopted in 2020). The Countywide Plan is organized around two main documents: (1) the Policy Plan, and (2) the Business Plan. The Policy Plan serves as the County's general plan—a blueprint for meeting the County's long-term vision for the future—but in a much more comprehensive way. The Policy Plan recognizes and differentiates the County's dual roles of serving as a "municipal" government for County unincorporated areas and as a "regional" government delivering programs, including those mandated or funded by the State and/or the federal government, to the County as a whole. The Business Plan takes an innovative systems approach to managing the County's resources with a Governance Element and an Implementation Plan.

County of San Bernardino Greenhouse Gas Emissions Reduction Plan (2011)

The County completed a *Greenhouse Gas Emissions Reduction Plan* in September 2011 and updated in in September 2021 (County of San Bernardino 2021). The plan sets forth an emissions reduction target, emissions reduction measures, and action steps to assist the County in demonstrating consistency with California's Global Warming Solutions Act of 2006 (AB 32). Together with the *Greenhouse Gas Emissions Reduction Plan*, the County adopted its *Greenhouse Gas Emissions Development Review Processes* (DRP) (County of San Bernardino 2015) in 2016. The DRP procedures are designed to be followed to evaluate project-level GHG impacts and determine significance for CEQA purposes. All projects need to comply with the GHG performance standards identified in the DRP and with State GHG emissions control requirements.

City of Fontana General Plan

The City of Fontana addresses air quality and GHG emissions in Chapter 12, Sustainability and Resilience, of the General Plan (City of Fontana 2018). The Sustainability and Resilience Chapter in the City's General Plan includes goals and policies that work to pursue sustainability and resilience by making resource-efficient choices to conserve water, energy, and materials, improve air quality, and adjust to changing conditions. The following policies are applicable to the proposed project:

- Continue organizational and operational improvements to maximize energy and resource efficiency and reduce waste.
- Continue to collaborate with San Bernardino County Transportation Authority (SBCTA) on greenhouse gas inventories and climate action planning.
- Promote energy-efficient development in Fontana.

- Meet state energy-efficiency goals for new construction.
- Promote green building through guidelines, awards and nonfinancial incentives.

THRESHOLDS OF SIGNIFICANCE

Certain air districts (e.g., SCAQMD) have created guidelines and requirements to conduct air quality analyses. SCAQMD's current guidelines, the *CEQA Air Quality Handbook* (SCAQMD 1993) with associated updates, were followed in this assessment of air quality and climate impacts for the proposed project.

Based on the *State CEQA Guidelines*, Appendix G (Public Resources Code Sections 15000–15387), a project would normally be considered to have a significant effect on air quality if it would violate any CAAQS, contribute substantially to an existing air quality violation, expose sensitive receptors to substantial pollutants concentrations, or conflict with adopted environmental plans and goals of the community in which it is located.

Pollutants with Regional Effects

SCAQMD has established daily emissions thresholds for construction and operation of a proposed project within the Basin. The emissions thresholds were established based on the attainment status of the Basin with regard to air quality standards for specific criteria pollutants. Because the concentration standards were set at a level that protects public health with an adequate margin of safety, these emissions thresholds are regarded as conservative and would overstate an individual project's contribution to health risks.

Regional Emissions Thresholds

Table E lists the CEQA criteria pollutant emissions thresholds of significance for project construction and operational emissions established for the Basin.

Table E: Regional Thresholds for Construction and Operational Emissions

Emissions Source	Pollutant Emissions Thresholds (lbs/day)					
	VOCs	NO_X	CO	PM_{10}	$PM_{2.5}$	SO_X
Construction	75	100	550	150	55	150
Operations	55	55	550	150	55	150

Source: Air Quality Significance Thresholds (SCAQMD 2019).

CO = carbon monoxide
lbs/day = pounds per day
NO_X = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
SO_X = sulfur oxides
VOCs = volatile organic compounds

Projects in the Basin with construction- or operation-related emissions that exceed any of their respective emission thresholds would be considered significant under SCAQMD guidelines. These thresholds, which SCAQMD developed and which apply throughout the Basin, apply as both project and cumulative thresholds. If a project exceeds these standards, it is considered to have a project-specific and cumulative impact.

Local Microscale Concentration Standards

The significance of localized project impacts under CEQA depends on whether ambient CO levels in the vicinity of the project are above or below State and federal CO standards. Because ambient CO levels are below the standards throughout the Basin, a project would be considered to have a significant CO impact if project emissions result in an exceedance of one or more of the 1-hour or 8-hour standards. The following are applicable local emission concentration standards for CO:

- California State 1-hour CO standard of 20 ppm; and
- California State 8-hour CO standard of 9 ppm.

Localized Impact Analysis

SCAQMD published its *Final Localized Significance Threshold Methodology* in June 2003 and updated it in July 2008 (SCAQMD 2008), recommending that all air quality analyses include an assessment of both construction and operational impacts on the air quality of nearby sensitive receptors. LSTs represent the maximum emissions from a project site that are not expected to result in an exceedance of the NAAQS or the CAAQS for CO, NO_2, PM_{10} and $PM_{2.5}$, as shown in Table A.

LSTs are based on the ambient concentrations of that pollutant within the project's Source Receptor Area (SRA) and the distance to the nearest sensitive receptor. For this project, the appropriate SRA is the Central San Bernardino Valley area (SRA 34). Sensitive receptors include residences, schools, hospitals, and similar uses that are sensitive to adverse air quality. As described above, the closest sensitive receptors are the single-family homes located to the east along Tamarind Court and to the south along Tamarind Avenue, with the closest being approximately 80 ft from the project site.

If the total acres disturbed is less than or equal to 5 ac per day, then the SCAQMD's screening look-up tables can be used to determine if a project has the potential to result in a significant impact. The project site is 4.35 ac; therefore, the 5 ac value was used. Table F lists the emissions thresholds that apply during project construction and operation.

Table F: SCAQMD Localized Significance Thresholds

Emissions Source Category	Pollutant Emissions (lbs/day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Construction (5 acres, 80-foot distance)	248	1,578	12	7
Operations (5 acres, 80-foot distance)	248	1,578	4	2

Source: *Final Localized Significance Threshold Methodology* (SCAQMD 2008).
Note: SRA 34 - Central San Bernardino Valley; nearest sensitive receptors are located 80 feet east of the project site.
CO = carbon monoxide
lbs/day = pounds per day
NO_X = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
SRA = Source Receptor Area

Greenhouse Gas Emissions

State CEQA Guidelines Section 15064(b) provides that the "determination of whether a project may have a significant effect on the environment calls for careful judgment on the part of the public agency involved, based to the extent possible on scientific and factual data," and further states that an "ironclad definition of significant effect is not always possible because the significance of an activity may vary with the setting."

Appendix G of the *State CEQA Guidelines* includes significance thresholds for GHG emissions. A project would normally have a significant effect on the environment if it would do either of the following:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; and/or
- Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.

Currently, there is no statewide GHG emissions threshold that has been used to determine the potential GHG emissions impacts of a project. Threshold methodology and thresholds are still being developed and revised by air districts in California.

Fontana is one of the consortium of cities that have adopted San Bernardino County's *Greenhouse Gas Emissions Reduction Plan Update* (County of San Bernardino 2021) in 2021 and DRP (County of San Bernardino 2015) in 2016. The DRP procedures need to be followed to evaluate GHG impacts and determine significance for CEQA purposes. All projects need to apply the GHG performance standards identified in the DRP and comply with State requirements. For projects exceeding the review standard of 3,000 MT CO_2e per year, the use of screening tables or a project-specific technical analysis to quantify and mitigate project emissions is required. If the GHG emissions from the project are less than 3,000 MT CO_2e per year and the project would apply GHG performance standards and State requirements, project-level and cumulative GHG emissions would be less than significant.

Energy

While no quantitative thresholds related to energy are included in the *State CEQA Guidelines*, the *State CEQA Guidelines* indicate that a project would normally have a significant adverse energy impact if the project would do either of the following:

- Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation

  OR

- Conflict with or obstruct a State or local plan for renewable energy or energy efficiency

For purposes of this analysis, impacts to energy resources will be considered significant if the project would result in the wasteful, inefficient, or unnecessary consumption of fuel or energy; and/or conversely, if the project would not incorporate renewable energy or energy efficiency measures into building design, equipment use, transportation, or other project features.

IMPACTS ANALYSIS

Emissions would include criteria air pollutants and GHG emissions. The sections below describe the proposed project's consistency with applicable air quality plans, estimated project emissions, and the significance of impacts with respect to SCAQMD thresholds.

Air Quality Impacts

Consistency with Applicable Air Quality Plans

A consistency determination plays an essential role in local-agency project review by linking local planning and unique individual projects to the air quality plans. A consistency determination fulfills the CEQA goal of fully informing local-agency decision-makers of the environmental costs of the project under consideration at a stage early enough to ensure that air quality concerns are addressed. Only new or amended General Plan elements, Specific Plans, and significantly unique projects need to undergo a consistency review due to the air quality plan strategy being based on projections from local General Plans.

The AQMP is based on regional growth projections developed by SCAG. The proposed project is an industrial development that would not house more than 1,000 persons, occupy more than 40 ac of land, or encompass more than 650,000 sf of floor area. Thus, the proposed project would not be defined as a regionally significant project under CEQA; therefore, it does not meet SCAG's Intergovernmental Review criteria.

The proposed land use is consistent with the City's General Plan designation of M-1 (Light Industrial) with an I-L (Light Industrial) land use. As such, the proposed project is consistent with the regional growth assumptions assumed for the City, which would be consistent with the SCAG Regional Comprehensive Plan Guidelines and the SCAQMD AQMP.

Pursuant to the methodology provided in Chapter 12 of the 1993 SCAQMD *CEQA Air Quality Handbook*, consistency with the Basin 2016 AQMP is affirmed when a project would not increase the frequency or severity of an air quality standards violation or cause a new violation and is consistent with the growth assumptions in the AQMP. Consistency review is presented as follows:

1. The project would result in short-term construction and long-term operational pollutant emissions that are all less than the CEQA significance emissions thresholds established by SCAQMD, as demonstrated below. Therefore, the project would not result in an increase in the frequency or severity of an air quality standard violation or cause a new air quality standard violation.

2. The *CEQA Air Quality Handbook* (SCAQMD 1993) indicates that consistency with AQMP growth assumptions must be analyzed for new or amended General Plan elements, Specific Plans, and significant projects. Significant projects include airports, electricity-generating facilities, petroleum and gas refineries, designation of oil-drilling districts, water ports, solid-waste disposal sites, and offshore-drilling facilities; therefore, the proposed project is not defined as significant.

Based on the consistency analysis presented above, the proposed project would be consistent with the regional AQMP.

Criteria Pollutant Analysis

The Basin is designated as nonattainment for O_3 and $PM_{2.5}$ for federal standards and nonattainment for O_3, PM_{10}, and $PM_{2.5}$ for State standards. The SCAQMD's nonattainment status is attributed to the region's development history. Past, present, and future development projects contribute to the region's adverse air quality impacts on a cumulative basis. By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size to, by itself, result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's contribution to the cumulative impact is considerable, then its impact on air quality would be considered significant.

In developing thresholds of significance for air pollutants, the SCAQMD considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions.

Construction Emissions. During construction, short-term degradation of air quality may occur due to the release of particulate emissions generated by grading, paving, building, and other activities. Emissions from construction equipment are also anticipated and would include CO, NO_X, volatile organic compounds (VOCs), directly emitted particulate matter ($PM_{2.5}$ and PM_{10}), and toxic air contaminants (TACs), such as diesel exhaust particulate matter.

Construction-related effects on air quality from the proposed project would be greatest during the grading phase due to the large disturbance of soils. If not properly controlled, these activities would temporarily generate particulate emissions. Sources of fugitive dust would include disturbed soils at the construction site. Unless properly controlled, vehicles leaving the site would deposit dirt and mud on local streets, which could be an additional source of airborne dust after it dries. PM_{10} emissions would vary from day to day, depending on the nature and magnitude of construction activity and local weather conditions. PM_{10} emissions would depend on soil moisture, silt content of soil, wind speed, and the amount of operating equipment. Larger dust particles would settle near the source, while fine particles would be dispersed over greater distances from the construction site.

Water or other soil stabilizers can be used to control dust, resulting in emission reductions of 50 percent or more. The SCAQMD has implemented Rule 403 measures for reducing fugitive dust emissions (PM_{10}). With the implementation of these control measures, fugitive dust emissions from construction activities would not result in adverse air quality impacts.

In addition to dust-related PM_{10} emissions, heavy trucks and construction equipment powered by gasoline and diesel engines would generate CO, SO_2, NO_X, reactive organic gases (ROGs), and some soot particulate ($PM_{2.5}$ and PM_{10}) in exhaust emissions. If construction activities were to increase traffic congestion in the area, CO and other emissions from traffic would increase slightly while those vehicles idle in traffic. These emissions would be temporary in nature and limited to the immediate area surrounding the construction site.

Construction emissions are calculated for the project using CalEEMod, Version 2020.4.0, consistent with SCAQMD's recommendations. Construction of the proposed project was estimated using CalEEMod defaults, which are set to begin in August 2022 and be completed in August 2023, which is a duration of approximately 1 year.

The construction analysis includes estimating the construction equipment that would be used during each construction activity, the hours of use for that construction equipment, the quantities of earth and debris to be moved, and the on-road vehicle trips (e.g., worker, soil-hauling, and vendor trips). The proposed earthwork for the project assumes the site would be balanced (no import or export needed). CalEEMod defaults are assumed for the construction activities, off-road equipment, and on-road construction fleet mix and trip lengths. Table G shows the tentative project construction schedule.

Table G: Tentative Project Construction Schedule

Phase Name	Phase Start Date	Phase End Date	Number of Days
Demolition	08/01/2022	08/26/2022	20
Site Preparation	08/27/2022	09/02/2022	5
Grading	09/03/2022	09/14/2022	8
Building Construction	09/15/2022	08/02/2023	230
Paving	08/03/2023	08/28/2023	18
Architectural Coating	08/29/2023	09/21/2023	18

Source: Estimated by LSA using CalEEMod defaults (June 2022).

CalEEMod was used to develop the construction equipment inventory and calculate the construction emissions. Table H lists the estimated construction equipment that would be used during project construction as estimated by CalEEMod default values. CalEEMod outputs are shown in Attachment C.

The criteria pollutant emission rates shown below in Table I are from the CalEEMod output tables listed as "Mitigated Construction," even though the only measures that have been applied to the analysis are the required construction emissions control measures, or standard conditions. They are also the combination of the on- and off-site emissions and the greater of summer and winter emissions. Each respective construction phase was evaluated for emissions and measured against the SCAQMD's peak daily thresholds.

As shown in Table I, the proposed project would not exceed any of the criteria pollutant thresholds of significance. Based on the proposed project's emissions as compared to the SCAQMD thresholds of significance, the project would be considered to have a less than significant impact.

Table H: Diesel Construction Equipment Used by Construction Phase

Construction Phase	Off-Road Equipment Type	Off-Road Equipment Unit Amount	Hours Used per Day	Horsepower	Load Factor
Demolition	Concrete/Industrial Saws	1	8	81	0.73
	Excavators	3	8	158	0.38
	Rubber Tired Dozers	2	8	247	0.4
Site Preparation	Rubber Tired Dozers	3	8	247	0.4
	Tractors/Loaders/Backhoes	4	8	97	0.37
Grading	Excavators	1	8	158	0.38
	Graders	1	8	187	0.41
	Rubber Tired Dozers	1	8	247	0.4
	Tractors/Loaders/Backhoes	3	8	97	0.37
Building Construction	Cranes	1	7	231	0.29
	Forklifts	3	8	89	0.2
	Generator Sets	1	8	84	0.74
	Tractors/Loaders/Backhoes	3	7	97	0.37
	Welders	1	8	46	0.45
Paving	Cement and Mortar Mixers	2	6	9	0.56
	Pavers	1	8	130	0.42
	Paving Equipment	2	6	132	0.36
	Rollers	2	6	80	0.38
	Tractors/Loaders/Backhoes	1	8	97	0.37
Architectural Coating	Air Compressors	1	6	78	0.48

Source: Compiled by LSA using CalEEMod defaults (June 2022).

Table I: Short-Term Regional Construction Emissions

Emissions Phase	Total Regional Pollutant Emissions (lbs/day)							
	VOCs	NO_X	CO	SO_X	Fugitive PM_{10}	Exhaust PM_{10}	Fugitive $PM_{2.5}$	Exhaust $PM_{2.5}$
Demolition	3	26	21	<1	<1	1	<1	1
Site Preparation	3	33	20	<1	9	2	5	1
Grading	2	21	16	<1	3	<1	2	<1
Building Construction	2	17	20	<1	1	<1	<1	<1
Paving	1	9	13	<1	<1	<1	<1	<1
Architectural Coating	17	1	2	<1	<1	<1	<1	<1
Peak Daily	**17**	**33**	**21**	**<1**	**11**		**6**	
SCAQMD Threshold	**75**	**100**	**550**	**150**	**150**		**55**	
Exceeds Threshold?	**No**	**No**	**No**	**No**	**No**		**No**	

Source: Compiled by LSA (June 2022).
Note: PM_{10} and $PM_{2.5}$ fugitive emissions are from the Mitigated Results table in CalEEMod. The only "mitigation" measures applied in this modeling are required dust control measures per SCAQMD Rule 403.
CO = carbon monoxide
lbs/day = pounds per day
NO_X = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
SCAQMD = South Coast Air Quality Management District
SO_X = sulfur oxides
VOCs = volatile organic compounds

Fugitive Dust. Fugitive dust emissions are generally associated with land clearing and exposure of soils to the air and wind, as well as cut-and-fill grading operations. Dust generated during construction varies substantially on a project-by-project basis, depending on the level of activity, the specific operations, and weather conditions at the time of construction.

The construction calculations prepared for this project assumed that dust control measures (watering a minimum of two times daily consistent with SCAQMD Rule 403) would be employed to reduce emissions of fugitive dust during site grading. Furthermore, all construction would need to comply with SCAQMD Rule 403 regarding the emission of fugitive dust. Table I lists total construction emissions (i.e., fugitive dust emissions and construction equipment exhausts) that have incorporated the following Rule 403 measures that would be implemented to significantly reduce PM_{10} emissions from construction:

- Water active sites at least twice daily (locations where grading is to occur shall be thoroughly watered prior to earthmoving).

- Cover all trucks hauling dirt, sand, soil, or other loose materials, or maintain at least 2 ft (0.6 meter) of freeboard (vertical space between the top of the load and the top of the trailer) in accordance with the requirements of California Vehicle Code Section 23114.

- Reduce traffic speeds on all unpaved roads to 15 mph or less.

These Rule 403 measures were incorporated in the CalEEMod analysis.

Architectural Coatings. Architectural coatings contain VOCs that are part of the O_3 precursors. Based on the proposed project, it is estimated that application of the architectural coatings for the proposed peak construction day would result in a peak of 17 pounds per day (lbs/day) of VOCs. Therefore, VOC emissions from architectural-coating application would not exceed the SCAQMD VOC threshold of 75 lbs/day.

Localized Significance Thresholds Construction Analysis. Construction-related emissions can be harmful to nearby sensitive receptors and can be harmful or dangerous from long periods of high concentrations of exposure. The amount of construction activity on any given day could vary greatly based on related on-site activates. CalEEMod determines the peak day emissions, which were used to evaluate potential impacts on nearby sensitive receptors. As previously mentioned, the nearest sensitive receptor identified is the single-family home located west of the proposed project site (at approximately 80 ft or 25 meters away). Table J shows the portion of the construction emissions that would be produced on the project site compared to the LSTs.

Table J shows that the localized construction emissions would not exceed the established project thresholds. Therefore, construction-related impacts would not have an adverse effect on nearby sensitive receptors.

Table J: Construction Localized Impacts Analysis

Emissions Source	Pollutant Emissions (lbs/day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Construction On-Site Emissions	33	21	10	6
Localized Significance Thresholds	**248**	**1,578**	**12**	**7**
Exceeds LST Thresholds?	**No**	**No**	**No**	**No**

Source: Compiled by LSA (June 2022).
Note: SRA 24 is Central San Bernardino Valley, 5 acres, receptors located at 80 feet (25 meters).
CO = carbon monoxide
lbs/day = pounds per day
NO_X = nitrogen oxides
LST = localized significance threshold
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
SRA = Source Receptor Area

Odors from Construction Activities. Heavy-duty equipment in the project area during construction would emit odors, primarily from the equipment exhaust. However, the construction-produced odors would cease to occur after individual construction is completed. No other sources of objectionable odors have been identified for the proposed project and no mitigation measures are required.

SCAQMD Rule 402 regarding nuisances states:

> "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."

During project construction, some odors may be present due to diesel exhaust. However, these odors would be temporary and limited to the construction period. In addition, the proposed project would be required to comply with SCAQMD nuisance and odor rules. As such, project-related impacts associated with odors would be less than significant, and no mitigation measures are required.

Naturally Occurring Asbestos. The proposed project site is in San Bernardino County, which is among the counties found to have serpentine and ultramafic rock in their soils (California Department of Conservation 2022). However, according to the California Geological Survey, no such rock has been identified in the project vicinity. Therefore, the potential risk for naturally occurring asbestos during project construction is small and less than significant.

Construction Emissions Conclusions. Tables I and J show that daily regional construction emissions would not exceed the daily thresholds of any criteria pollutant emission thresholds established by SCAQMD or expose sensitive receptors to an unhealthy amount of criteria pollutants. Therefore, there would be no air quality impacts during construction.

Operational Emissions. Long-term air pollutant emission impacts are those associated with mobile sources (e.g., vehicle trips), energy sources (e.g., natural gas) and area sources (e.g.,

architectural coatings and the use of landscape maintenance equipment) related to the proposed project.

The proposed project will consist of a 60,900 sf light industrial warehouse. Emission estimates for operation of the proposed project were calculated using CalEEMod, Version 2020.4.0. The primary emissions associated with the project are regional in nature, meaning that air pollutants are rapidly dispersed on release. Once operational, the project would generate 72 average daily traffic (ADT) of cars, 7 ADT of two-axle trucks, 6 ADT of three-axle trucks, and 19 ADT of trucks with four or more axles (LSA 2022). SAFE emission factors were applied to vehicle trips.

PM_{10} emissions result from running exhaust, tire and brake wear, and the entrainment of dust into the atmosphere from vehicles traveling on paved roadways. Entrainment of PM_{10} occurs when vehicle tires pulverize small rocks and pavement, and the vehicle wakes generate airborne dust. The contribution of tire and brake wear is small compared to the other PM emission processes. Gasoline-powered engines have small rates of particulate matter emissions compared with diesel-powered vehicles.

Energy source emissions result from activities in buildings for which electricity and natural gas are used. The quantity of emissions is the product of usage intensity (i.e., the amount of electricity or natural gas) and the emission factor of the fuel source. Major sources of energy demand include building mechanical systems, such as heating and air conditioning, lighting, and plug-in electronics, such as refrigerators and computers. Greater building or appliance efficiency reduces the amount of energy for a given activity and thus lowers the resultant emissions. The emission factor is determined by the fuel source, with cleaner energy sources, like renewable energy, producing fewer emissions than conventional sources.

Typically, area source emissions consist of direct sources of air emissions located at the project site, including architectural coatings and the use of landscape maintenance equipment. Area source emissions associated with the project would include emissions from the use of landscaping equipment and the use of consumer products.

The proposed project would incorporate water-efficient faucets, toilets, and landscaping consistent with Title 24. The peak daily operational emissions associated with the proposed project are identified in Table K.

As shown in Table K, the proposed project would not exceed SCAQMD's significance thresholds for ROG, NO_X, CO, SO_X, PM_{10}, and $PM_{2.5}$. Based on SCAQMD's criteria pollutant thresholds, the proposed project would be considered less than significant. Therefore, operation of the proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable NAAQS or CAAQS. Emission calculations sheets are attached in Attachment C.

Operational Localized Significance Threshold Analysis. Table L shows the calculated emissions for the proposed operational activities as compared with the appropriate LSTs. By design, the localized impacts analysis only includes on-site sources; however, the CalEEMod outputs do not separate on-site and off-site emissions for operations.

Table K: Project Operation Emissions (lbs/day)

	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Area Source Emissions	1	<1	<1	0	<1	<1
Energy Source Emissions	<1	<1	<1	<1	<1	<1
Mobile Source Emissions	<1	4	5	<1	2	<1
Warehouse Equipment	<1	5	6	<1	<1	<1
Total Project Emissions	**2**	**9**	**11**	**<1**	**2**	**<1**
SCAQMD Significance Thresholds	**55**	**55**	**550**	**150**	**55**	**150**
Exceeds Thresholds?	**No**	**No**	**No**	**No**	**No**	**No**

Source: Compiled by LSA (June 2022).
Note: Some values may not appear to add up correctly due to rounding.
CO = carbon monoxide
lbs/day = pounds per day
NO_X = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
ROG = reactive organic gases
SCAQMD = South Coast Air Quality Management District
SO_X = sulfur oxides

Table L: Long-Term Operational Localized Impacts Analysis

Emissions Sources	Pollutant Emissions (lbs/day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Operational On-Site Emissions	5	6	<1	<1
Localized Significance Thresholds	**248**	**1,578**	**4**	**2**
Exceeds Thresholds?	**No**	**No**	**No**	**No**

Source: Compiled by LSA (June 2022).
Note: SRA 24 is Central San Bernardino Valley, 5 acres, sensitive receptors located 80 feet (25 meters) away.
CO = carbon monoxide
LST = local significance threshold
NO_X = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
SRA = Source Receptor Area

Table L shows that the operational emission rates would not exceed the LSTs for sensitive receptors in the project vicinity. Therefore, the proposed operational activity would not result in a locally significant air quality impact.

Objectionable Odors

The SCAQMD addresses odor criteria within the *CEQA Air Quality Handbook*. The district has not established a rule or standard regarding odor emissions, rather, the district has a nuisance rule: "Any project with the potential to frequently expose members of the public to objectionable odors should be deemed to have a significant impact."

The proposed project would include industrial uses that would not be a source of odor emissions other than potentially those from outdoor trash storage. City regulations require trash storage areas to be in an enclosed area to limit air circulation. Through adherence to City regulations, odors from the trash storage areas would be less than significant; therefore, the project would not result in odors that would adversely affect a substantial number of people.

Greenhouse Gas Impacts

Generate Greenhouse Gas Emissions

This section discusses the project's impacts related to the release of GHG emissions for the construction and operational phases of the project.

Construction Activities. Construction activities associated with maximum buildout would produce combustion emissions from various sources. During construction, GHGs would be emitted through the operation of construction equipment and from worker and builder supply vendor vehicles, each of which typically use fossil-based fuels to operate. The combustion of fossil-based fuels creates GHGs such as CO_2, CH_4, and N_2O. Furthermore, CH_4 is emitted during the fueling of heavy equipment. Exhaust emissions from on-site construction activities would vary daily as construction activity levels change.

The SCAQMD does not have an adopted threshold of significance for construction-related GHG emissions. However, lead agencies are encouraged to quantify and disclose GHG emissions that would occur during construction. Using CalEEMod, it is estimated that construction activities would generate approximately 492 MT CO_2e annually. Based on SCAQMD guidance, construction emissions were amortized over 30 years (a typical project lifetime) and were added to the total project operational emissions as described below.

Operational GHG Emissions. Long-term GHG emissions are typically generated from mobile sources (e.g., cars, trucks, and buses), area sources (e.g., maintenance activities and landscaping), indirect emissions from sources associated with energy consumption, waste sources (landfilling and waste disposal), and water sources (water supply and conveyance, treatment, and distribution). Mobile-source GHG emissions would include project-generated vehicle and truck trips to and from the project. Area-source emissions would be associated with activities such as landscaping and maintenance on the project site. Energy source emissions would be generated at off-site utility providers as a result of increased electricity demand generated by the project. Waste source emissions generated by the proposed project include energy generated by landfilling and other methods of disposal related to transporting and managing project-generated waste. In addition, water source emissions associated with the proposed project are generated by water supply and conveyance, water treatment, water distribution, and wastewater treatment.

As described above, this analysis evaluates potential operational emissions associated with the proposed operational project. Operational GHG emissions were estimated using CalEEMod and the results are presented in Table M.

As shown in Table M, the proposed project would generate 749 MT CO_2e per year. As described in the Thresholds of Significance section, since the GHG emissions from the project are less than 3,000 MT CO_2e per year and the project would apply GHG performance standards and adhere to State requirements, project-level and cumulative GHG emissions would be less than significant.

Table M: Operational GHG Emissions

Emissions Source Category	Operational Emissions (Metric Tons per Year)			
	CO_2	CH_4	N_2O	CO_2e
Operational Emissions				
Area	<1	<1	0	<1
Energy	38	<1	<1	38
Mobile	504	<1	<1	519
Warehouse Equipment	94	<1	0	95
Waste	12	<1	0	29
Water	37	<1	<1	52
Proposed Construction Emissions Amortized over 30 Years				**16**
Total GHG Operational Emissions				**749**
SCAQMD Tier 3 Threshold (adjusted for 2023)				**2,640**
Would the Project Exceed the Adjusted Tier 3 Threshold?				**No**

Source: Compiled by LSA (June 2022).
Note: Some values may not appear to add correctly due to rounding.
CH_4 = methane
CO_2 = carbon dioxide
CO_2e = carbon dioxide equivalent
MT/CO_2e = metric tons of carbon dioxide equivalent
MT = metric tons
N_2O = nitrous oxide

Consistency with Greenhouse Gas Reduction Plans

The CARB Scoping Plan is applicable to State agencies but is not directly applicable to cities/counties and individual projects (i.e., the Scoping Plan does not require the City to adopt policies, programs, or regulations to reduce GHG emissions). However, new regulations adopted by the State agencies outlined in the Scoping Plan result in GHG emissions reductions at the local level. As a result, local jurisdictions benefit from reductions in transportation emissions rates, increases in water efficiency in the building and landscape codes, and other statewide actions that would affect a local jurisdiction's emissions inventory from the top down.

Statewide strategies to reduce GHG emissions include the low-carbon fuel standards and changes in the CAFÉ standards (e.g., Pavley I and Pavley II, and California Advanced Clean Cars program). Although measures in the Scoping Plan apply to State agencies and not the proposed project, the project's GHG emissions would be reduced by compliance with statewide measures that have been adopted since AB 32 and SB 32 were adopted. Therefore, the proposed project would be consistent with the CARB Scoping Plan.

Fontana is a member city of SCAG. SCAG's Connect SoCal 2020–2045 RTP/SCS, adopted September 3, 2020, is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals. The RTP/SCS embodies a collective vision for the region's future and is developed with input from local governments, County transportation commissions, Tribal governments, nonprofit organizations, businesses, and local stakeholders in Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura Counties. The RTP/SCS establishes GHG emissions goals for automobiles and light-duty trucks for 2020 and 2035 and establishes an overall GHG target for the region consistent with both the statewide GHG-reduction targets for 2020 and the post-2020 statewide GHG reduction goals.

The Connect SoCal 2020–2045 RTP/SCS contains over 4,000 transportation projects, including highway improvements, railroad grade separations, bicycle lanes, new transit hubs, and replacement bridges. These future investments were included in county plans developed by the six county transportation commissions and seek to reduce traffic bottlenecks, improve the efficiency of the region's network, and expand mobility choices. The Connect SoCal 2020–2045 RTP/SCS is an important planning document for the region, allowing project sponsors to qualify for federal funding. In addition, the Connect SoCal 2020–2045 RTP/SCS is supported by a combination of transportation and land use strategies that help the region achieve State GHG emission reduction goals and federal CAA requirements, preserve open space areas, improve public health and roadway safety, support the vital goods movement industry, and use resources more efficiently. The proposed project's consistency with the Connect SoCal 2020–2045 RTP/SCS goals is analyzed in detail in Table N.

Table N: Southern California Association of Governments RTP/SCS Goals Applicable to the Project

SCAG Measure	Project Consistency
Goal 2: Maximize mobility and accessibility for all people and goods in the region.	**Consistent:** Improvements to the transportation network in Fontana are developed and maintained to meet the needs of local and regional transportation and to ensure efficient mobility. A number of regional and local plans and programs are used to guide development and maintenance of transportation networks, including but not limited to: ● The San Bernardino County Congestion Management Program ● Caltrans Traffic Impact Studies Guidelines ● Caltrans Highway Capacity Manual ● SCAG RTP/SCS
Goal 3: Ensure travel safety and reliability for all people and goods in the region.	**Consistent:** All modes of transit in Fontana are required to follow safety standards set by corresponding regulatory documents. Pedestrian walkways and bicycle routes must follow safety precautions and standards established by local (e.g., City of Fontana, County of San Bernardino) and regional (e.g., SCAG, Caltrans) agencies. Roadways for motorists must follow safety standards established for the local and regional plans. The project would be consistent with ingress and egress to public streets from the project site, including crosswalks and pedestrian walkways.

Source: Compiled by LSA (June 2022).
CALGreen = California Green Building Standards Code
Caltrans = California Department of Transportation
RTP/SCS = Regional Transportation Plan/Sustainable Communities Strategy
SCAG = Southern California Association of Governments

Implementing SCAG's RTP/SCS will greatly reduce the regional GHG emissions from transportation and help to achieve statewide emission reduction targets. As demonstrated in Table N, the proposed project would not conflict with the stated goals of the RTP/SCS; therefore, the proposed project would not interfere with SCAG's ability to achieve the region's year 2020 and post-2020 mobile source GHG reduction targets outlined in the Connect SoCal 2020–2045 RTP/SCS, and it can be assumed that regional mobile emissions will decrease in line with the goals of the RTP/SCS. Furthermore, the proposed project is not regionally significant per *State CEQA Guidelines* Section 15206 and, as such, it would not conflict with the SCAG RTP/SCS targets since those targets were established and are applicable on a regional level.

The project would be consistent with policies in the 2017 Scoping Plan such as compliance with Title 24 energy reduction measures. Therefore, the proposed project would not conflict with an adopted plan, policy, or regulation pertaining to GHGs, and impacts would be less than significant.

Energy

The proposed project would increase the demand for electricity, natural gas, and gasoline when compared to the existing condition of the site. The discussion and analysis provided below is based on the data included in the CalEEMod output, which is included as Attachment C.

Construction-Period Energy Use

The anticipated construction schedule assumes that the proposed project would be built over approximately 12 months. The proposed project would require demolition, site preparation, grading, building construction, paving, and architectural coating during construction.

Construction of the proposed project would require energy for the manufacture and transportation of building materials and for preparation of the site for grading activities and building construction. Petroleum fuels (e.g., diesel and gasoline) would be the primary sources of energy for these activities.

Construction activities are not anticipated to result in an inefficient use of energy because gasoline and diesel fuel would be supplied by construction contractors who would conserve the use of their supplies to minimize their costs on the proposed project. Energy usage on the project site during construction would be temporary in nature and would be relatively small in comparison to the State's available energy sources. Therefore, construction energy impacts would be less than significant, and no mitigation would be required.

Operational Energy Use

Energy use includes both direct and indirect sources of emissions. Direct sources of emissions include on-site natural gas usage for heating, while indirect sources include electricity generated by off-site power plants. Natural gas use in CalEEMod is measured in units of a thousand British thermal units (kBTU) per year; however, this analysis converts the results to natural gas in units of therms. Electricity use in CalEEMod is measured in kilowatt hours (kWh) per year.

CalEEMod divides building electricity and natural gas use into uses that are subject to Title 24 standards and those that are not. For electricity, Title 24 uses include the major building envelope systems covered by Part 6 (California Energy Code) of Title 24 (e.g., space heating, space cooling, water heating, and ventilation). Non-Title 24 uses include all other end uses (e.g., appliances, electronics, and other miscellaneous plug-in uses). Because some lighting is not considered as part of the building envelope energy budget, CalEEMod considers lighting as a separate electricity use category.

For natural gas, uses are likewise categorized as Title 24 or non-Title 24. Title 24 uses include building heating and hot water end uses. Non-Title 24 natural gas uses include appliances.

Table O shows the estimated potential increased electricity, natural gas, gasoline, and diesel demand associated with the proposed project. The electricity and natural gas rates are from the CalEEMod analysis, while the gasoline and diesel rates are based on the traffic analysis (see Attachment C) in conjunction with United States Department of Transportation (DOT) fuel efficiency data.

Table O: Estimated Annual Energy Use of the Proposed Project

Land Use	Electricity Use (kWh/yr)	Natural Gas Use (kBTU/yr)	Gasoline (gal/yr)	Diesel (gal/yr)
Industrial	177,878	122,409	28,733	37,056

Source: Compiled by LSA (June 2022).
gal/yr = gallons per year
kBTU = thousand British thermal units
kWh = kilowatt-hours

As shown in Table O, the estimated potential increased electricity demand associated with the proposed project is 177,878 kWh per year. In 2019, California consumed approximately 277,750 gigawatt hours (GWh) or 277,750,000,000 kWh. Of this total, San Bernardino County consumed 15,969 GWh or 15,969,000,000 kWh (California Energy Commission n.d.-a). Therefore, electricity demand associated with the proposed project would be approximately 0.0048 percent of San Bernardino County's total electricity demand.

Also shown in Table O, the estimated potential increased natural gas demand associated with the proposed project is 122,409 kBTU per year or 1,224 therms (California Energy Commission n.d.-b). In 2019, California consumed approximately 12,571,000,000 therms, while San Bernardino County consumed 527,236,428 therms. Therefore, natural gas demand associated with the proposed project would be 0.0062 percent of San Bernardino County's total natural gas demand.

Furthermore, the proposed project would result in energy usage associated with gasoline and diesel to fuel project-related trips. The average fuel economy for light-duty vehicles (automobiles, pickups, vans, and sport utility vehicles) in the United States has steadily increased from about 14.9 miles per gallon (mpg) in 1980 to 22.2 mpg in 2019 (DOT 2017). The average fuel economy for heavy-duty trucks in the United States has also steadily increased, from 5.7 mpg in 2013 to a projected 8.0 mpg in 2021 (CEC 2015).

Using the EPA gasoline fuel economy estimates for 2019, the California diesel fuel economy estimates for 2021, and the traffic data from the project traffic analyses, the proposed project would result in the annual consumption of 28,733 gallons of gasoline and 37,056 gallons of diesel fuel. In 2019, vehicles in California consumed approximately 15.6 billion gallons of gasoline and 3.8 billion gallons of diesel fuel (CEC n.d.-c). Therefore, gasoline and diesel demand generated by vehicle trips associated with the proposed project would be a minimal fraction of gasoline and diesel fuel consumption in California and, by extension, in San Bernardino County.

In addition, vehicles associated with trips to and from the project site would be subject to fuel economy and efficiency standards, which are applicable throughout the State. As such, the fuel efficiency of vehicles associated with project operations would increase throughout the life of the

proposed project. Therefore, implementation of the proposed project would not result in a substantial increase in transportation-related energy uses.

Energy Use Summary

As described above, the proposed project would not result in the wasteful, inefficient, or unnecessary consumption of fuel or energy and would incorporate renewable energy or energy efficiency measures into building design, equipment uses, and transportation. Impacts would be less than significant, and no mitigation measures would be necessary.

Conflict with or Obstruction of a State or Local Plan for Renewable Energy or Energy Efficiency

As indicated above, energy usage on the project site during construction would be temporary in nature. In addition, energy usage associated with operation of the proposed project would be relatively small in comparison to the State's available energy sources and energy impacts would be negligible at the regional level. Because California's energy conservation planning actions are conducted at a regional level, and because the project's total impacts to regional energy supplies would be minor, the proposed project would not conflict with California's energy conservation plans as described in the CEC's *2021 Integrated Energy Policy Report*. In addition, the proposed project would comply with Title 24 and CALGreen standards. Thus, as shown above, the proposed project would avoid or reduce the inefficient, wasteful, and unnecessary consumption of energy and would not result in any irreversible or irretrievable commitments of energy. Therefore, the proposed project would not result in the wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation. Impacts would be less than significant, and no mitigation measures would be necessary.

CONCLUSION

Based on the analysis presented above, construction and operation of the proposed project would not result in the generation of criteria air pollutants that would exceed SCAQMD thresholds of significance. Compliance with SCAQMD Rule 403, Fugitive Dust, would further reduce construction dust impacts. The proposed project is not expected to produce significant emissions that would affect nearby sensitive receptors. The project would also not result in objectionable odors affecting a substantial number of people. GHG emissions released during construction and operation of the project are estimated to be lower than significance thresholds and would not be cumulatively considerable. The project would also be consistent with the 2016 AQMP. The proposed project would generally be consistent with the applicable GHG measures from the City's General Plan and the Connect SoCal 2020-2045 RTP/SCS.

Attachments: A – References
B – Figures
C – CalEEMod Output

ATTACHMENT A

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ATTACHMENT B

FIGURES

ATTACHMENT C

CALEEMOD OUTPUT