4.2 Air Quality

This section evaluates the potential for impacts on air quality resulting from implementation of The Cubes at Placentia Industrial Project (Proposed Project). The following sections describe the environmental setting for the Proposed Project as it relates to air quality. Information presented in this section is primarily based on the following document:

- Placentia Avenue Industrial Air Quality, Global Climate Change, Health Risk Assessment, and Energy Impact Analysis (Air Quality Impact Analysis) prepared by Ganddini Group (2024) and included in Appendix B of this Environmental Impact Report (EIR).

No comments were received in response to the Notice of Preparation regarding air quality. However, at the December 19, 2023, Draft EIR public scoping meeting, general comments regarding pollution and air quality were provided.

4.2.1 Environmental Setting

The Project Site is located within the South Coast Air Basin, which includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino counties. The following sections describe the environmental setting for the Proposed Project as it relates to air quality.

4.2.1.1 Regulatory Setting

This section describes the federal, state, and local regulatory framework adopted to address air quality.

Federal

Federal Clean Air Act (U.S. Code, Title 42, Section 7401 et seq.)

The Clean Air Act of 1970 is the comprehensive federal law that regulates air emissions from stationary and mobile sources. The Clean Air Act authorizes the U.S. Environmental Protection Agency to establish National Ambient Air Quality Standards to protect public health and public welfare and to regulate emissions of hazardous air pollutants. The current national standards are listed in Table 4.2-1, National and California Ambient Air Quality Standards. The primary standards listed in Table 4.2-1 have been set at levels intended to protect public health. The U.S. Environmental Protection Agency (EPA) has classified air basins (or portions thereof) as being in "attainment," "non-attainment," or "unclassified" for each criteria air pollutant based on whether or not the national standards have been achieved. Non-attainment areas are air basins that do not meet one or more of the national standards and are subject to additional restrictions as required by

the EPA. If an area is designated unclassified, it is because inadequate air quality data was available as a basis for a non-attainment or attainment designation.

The EPA classifies the South Coast Air Basin as in attainment for the federal carbon monoxide (CO), nitrogen dioxide (NO_2), respirable particulate matter (PM_{10}), and sulfur dioxide (SO_2) standards. The South Coast Air Basin is classified as non-attainment for the national ozone (O_3) 8-hour standard and fine particulate matter ($PM_{2.5}$). (AQMD 2022). The Los Angeles County portion of the South Coast Air Basin is classified as nonattainment for the national lead standard while the remainder of the air basin is classified as being in attainment.

Table 4.2-2, South Coast Air Basin Attainment Status, lists the attainment status of the South Coast Air Basin for criteria air pollutants.

Table 4.2-1. National and California Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[1]	Federal Standards[2]	
		Concentration[3]	Primary[3, 4]	Secondary[3, 5]
Ozone (O_3)[6]	1-Hour	0.09 ppm (180 µg/m^3)	—	Same as Primary Standards
	8-Hour	0.070 ppm (137 µg/m^3)	0.070 ppm (137 µg/m^3)	
Respirable Particulate Matter (PM_{10})[7]	24-Hour	50 µg/m^3	150 µg/m^3	Same as Primary Standards
	Annual Arithmetic Mean	20 µg/m^3	—	
Fine Particulate Matter ($PM_{2.5}$)[7]	24-Hour	—	35 µg/m^3	Same as Primary Standards
	Annual Arithmetic Mean	12 µg/m^3	12 µg/m^3	15 µg/m^3
Carbon Monoxide (CO)	8-Hour	9 ppm (10 mg/m^3)	9 ppm (10 mg/m^3)	None
	1-Hour	20 ppm (23 mg/m^3)	35 ppm (40 mg/m^3)	
Nitrogen Dioxide (NO_2)[8]	Annual Arithmetic Mean	0.030 ppm (57 µg/m^3)	0.053 ppm (100 µg/m^3)	Same as Primary Standard
	1-Hour	0.18 ppm (470 mg/m^3)	100 ppb (188 µg/m^3)	
Sulfur Dioxide (SO_2)[9]	Annual Arithmetic Mean	—	0.030 ppm (for certain areas)	—
	24-Hour	0.04 ppm (105 µg/m^3)	0.14 ppm (for certain areas)	—
	3-Hour	—	—	0.5 ppm (1300 µg/m^3)
	1-Hour	0.25 ppm (655 µg/m^3)	75 ppb (196 µg/m^3)	—
Lead[10, 11]	30-Day Average	1.5 µg/m^3	—	—
	Calendar Quarter	—	1.5 µg/m^3 (for certain areas)	Same as Primary Standard
	Rolling 3-Month Average[7]	—	0.15 µg/m^3	
Visibility-Reducing Particles[12]	8-Hour	See Footnote 12.	No Federal Standards	

Table 4.2-1. National and California Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[1]	Federal Standards[2]	
		Concentration[3]	Primary[3, 4]	Secondary[3, 5]
Sulfates	24-Hour	25 µg/m^3	No Federal Standards	
Hydrogen Sulfide	1-Hour	0.03 ppm (42 µg/m^3)	No Federal Standards	
Vinyl Chloride[10]	24-Hour	0.01 ppm (26 µg/m^3)	No Federal Standards	

Source: CARB 2016.

Notes: µg/m^3 = micrograms per cubic meter; mg/m^3 = milligram per cubic meter; ppb = parts per billion; ppm = parts per million

[1] California standards for O_3, CO, SO_2 (1-hour and 24-hour), NO_2, PM_{10}, $PM_{2.5}$, and visibility-reducing particles are values that are not to be exceeded. The standards for sulfates, lead, hydrogen sulfide, and vinyl chloride standards are not to be equaled or exceeded. The California Ambient Air Quality Standards are listed in the Table of Standards in California Code of Regulations, Title 17, Section 70200.

[2] National standards (other than O_3, PM, and those based on annual averages) are not to be exceeded more than once per year. The O_3 standard is attained when the fourth highest 8-hour concentration measured at each site in 1 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 U.S. EPA for further clarification and current national policies.

[3] Concentration expressed first in units in which it was promulgated. Equivalent units given in parenthesis are based on a reference temperature of 25 degrees Celsius (°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] National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

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

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

[7] 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 were retained as well. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

[8] To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of ppb. California standards are in units of 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.

[9] 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 non-attainment 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 ppb. California standards are in units of 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.

[10] The California Air Resources Board (CARB) had 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.

[11] 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 non-attainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

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

Table 4.2-2. South Coast Air Basin Attainment Status

Pollutant	California Standards	Federal Standards
Ozone (O_3) (1-Hour)	**Non-attainment**	**Non-attainment**
Ozone (O_3) (8-Hour)	**Non-attainment**	**Non-attainment**

Table 4.2-2. South Coast Air Basin Attainment Status

Pollutant	California Standards	Federal Standards
Respirable Particulate Matter (PM_{10})	**Non-attainment**	Attainment
Fine Particulate Matter ($PM_{2.5}$)	**Non-attainment**	**Non-attainment**
Carbon Monoxide (CO)	Attainment	Attainment/Unclassifiable[1]
Nitrogen Dioxide (NO_2)	Attainment	Attainment/Unclassifiable
Lead	Attainment	**Nonattainment** (Los Angeles County)/Attainment
Sulfur Dioxide (SO_2)	Attainment	Attainment

Source: South Coast AQMD 2022.

Note:

[1] Unclassified; indicates data is not sufficient for determining attainment or non-attainment.

The Clean Air Act requires states to develop a plan to attain and maintain the national standards in all areas of the country and a specific plan to attain the standards for each area designated non-attainment for a National standard. These plans, known as State Implementation Plans, are developed by state and local air quality management agencies and submitted to the EPA for approval. The State Implementation Plan includes strategies and control measures to attain the national standards by deadlines established by the Clean Air Act. The State Implementation Plan is periodically modified to reflect the latest emissions inventories, plans, and rules and regulations of air basins as reported by the agencies with jurisdiction over them.

State

California Ambient Air Quality Standards

The California Air Resources Board (CARB), a part of the California Environmental Protection Agency (CalEPA), is responsible for the coordination and administration of air pollution control programs in California. The Clean Air Act allows states to adopt ambient air quality standards and other regulations if they are at least as stringent as federal standards. California has adopted ambient air quality standards that equal to or stricter than the federal standards for six criteria air pollutants. The California Ambient Air Quality Standards are listed in the Table of Standards in California Code of Regulations, Title 17, Section 70200, and provided in Table 4.2-1. Similar to the National Ambient Air Quality Standards, areas have been designated as attainment, non-attainment, or unclassified with respect to the California Ambient Air Quality Standards. As shown in Table 4.2-2, the South Coast Air Basin is in non-attainment with the California Ambient Air Quality Standards for ozone, $PM_{10,}$ and $PM_{2.5}$. The South Coast Air Basin is designated as an attainment area for the state CO, nitrogen dioxide, sulfur dioxide, and lead.

Toxic Air Contaminant Regulations

California regulates toxic air contaminants primarily through the Tanner Air Toxics Act (Assembly Bill [AB] 1807) and the Air Toxics Hot Spots Information and Assessment Act of 1987

(AB 2588, Hot Spots Act). The act sets forth a formal procedure for CARB to designate substances as toxic air contaminants. This includes research, public participation, and scientific peer review before CARB designates a substance as a toxic air contaminant. To date, CARB has designated nearly 200 compounds as toxic air contaminants. The majority of estimated health risks from toxic air contaminants can be attributed to a relatively small number of compounds, the most important being particulate matter from diesel-fueled engines (i.e., diesel particulate matter).

Air Quality and Land Use Handbook: A Community Health Perspective

CARB developed the Air Quality and Land Use Handbook: A Community Health Perspective to provide guidance on land use compatibility with sources of toxic air contaminants (CARB 2005). These sources include freeways and high-traffic roads, commercial distribution centers, rail yards, refineries, dry cleaners, gasoline stations, and industrial facilities. The handbook is not a law or adopted policy but offers advisory recommendations for the siting of sensitive receptors near uses associated with toxic air contaminants. The handbook indicates that land use agencies must balance other considerations, including housing and transportation needs, economic development priorities, and other quality-of-life issues.

Assembly Bill 617

This bill requires the state board to develop a uniform statewide system of annual reporting of emissions of criteria air pollutants and toxic air contaminants for use by certain categories of stationary sources. The bill requires those stationary sources to report their annual emissions of criteria air pollutants and toxic air contaminants, as specified. This bill required the state board, by October 1, 2018, to prepare a monitoring plan regarding technologies for monitoring criteria air pollutants and toxic air contaminants and the need for and benefits of additional community air monitoring systems, as defined. The bill requires the state board to select, based on the monitoring plan, the highest priority locations in the state for the deployment of community air monitoring systems. The bill requires an air district containing a selected location, by July 1, 2019, to deploy a system in the selected location. The bill would authorize the air district to require a stationary source that emits air pollutants in, or that materially affect, the selected location to deploy a fence-line monitoring system, as defined, or other specified real-time, on-site monitoring. The bill authorizes the state board, by January 1, 2020, and annually thereafter, to select additional locations for the deployment of the systems. The bill would require air districts that have deployed a system to provide to the state board air quality data produced by the system. By increasing the duties of air districts, this bill would impose a state-mandated local program. The bill requires the state board to publish the data on its website.

Title 24 Energy Efficiency Standards and California Green Building Standards

California Code of Regulations (CCR) Title 24 Part 6: The California Energy Code was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption. The California Energy Code is updated on a regular basis.

The 2022 Energy Code encourages efficient electric heat pumps, establishes electric-ready requirements for new homes, expands solar photovoltaic and battery storage standards, and strengthens ventilation standards, among other requirements. The California Energy Commission anticipates that the 2022 Energy Code will provide $1.5 billion in consumer benefits and reduce greenhouse gas emissions by 10 million metric tons.

The standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods. CCR, Title 24, Part 11: California Green Building Standards (CALGreen) Code is a comprehensive and uniform regulatory code for all residential, commercial, and school buildings that went in effect on August 1, 2009, and is administered by the California Building Standards Commission.

The 2022 CALGreen Code mandatory measures for nonresidential uses that reduce air pollutant emissions and are applicable to the proposed Project include, but are not limited to, the following:

- Short-term bicycle parking. If the new project or an additional alteration is anticipated to generate visitor traffic, provide permanently anchored bicycle racks within 200 feet of the visitors' entrance, readily visible to passers-by, for 5% of new visitor motorized vehicle parking spaces being added, with a minimum of one two-bike capacity rack (5.106.4.1.1).

- Long-term bicycle parking. For new buildings with tenant spaces that have 10 or more tenant-occupants, provide secure bicycle parking for 5% of the tenant-occupant vehicular parking spaces with a minimum of one bicycle parking facility (5.106.4.1.2).

- Designated parking for clean air vehicles. In new projects or additions to alterations that add 10 or more vehicular parking spaces, provide designated parking for any combination of low-emitting, fuel-efficient and carpool/van pool vehicles as shown in Table 5.106.5.2 (5.106.5.2).

- Electric vehicle (EV) charging stations. New construction shall facilitate the future installation of EV supply equipment. The compliance requires empty raceways for future conduit and documentation that the electrical system has adequate capacity for the future load. The number of spaces to be provided for is contained in Table 5.106. 5.3.3 (5.106.5.3). Additionally, Table 5.106.5.4.1 specifies requirements for the installation of raceway conduit and panel power requirements for medium- and heavy-duty electric vehicle supply equipment for warehouses, grocery stores, and retail stores.

- Commissioning. For new buildings 10,000 square feet and over, building commissioning shall be included in the design and construction processes of the building project to verify that the building systems and components meet the owner's or owner representative's project requirements (5.410.2).

The 2022 CALGreen Code has been adopted in Perris Municipal Code Section 16.08.050. The 2025 CALGreen Code takes effect on January 1, 2026 and the Project would be required to comply with the CALGreen Code standards that are in effect at the time that the building permits are approved.

Regional

South Coast Air Quality Management District

The South Coast AQMD develops rules and regulations, establishes permitting requirements for stationary sources, inspects emission sources, and enforces such measures through educational programs or fines, when necessary. The South Coast AQMD is directly responsible for reducing emissions from stationary, mobile, and indirect sources. It has responded to this requirement by preparing a sequence of Air Quality Management Plans (AQMPs). The most recent of these AQMPs was adopted by the South Coast AQMD Governing Board on December 2, 2022.

The 2022 AQMP is focused on attaining the 2015 8-hour ozone standard for the South Coast Air Basin and Coachella Valley. The 2022 AQMP builds upon measures already in place from previous AQMPs. It also includes a variety of additional strategies such as regulation, accelerated deployment of available cleaner technologies (e.g., zero-emission technologies, when cost-effective and feasible, and low NOx technologies in other applications), best management practices, co-benefits from existing programs (e.g., climate and energy efficiency), incentives, and other Clean Air Act measures to achieve the 2015 8-hour ozone standard. The 2022 AQMP strategy includes the following:

- Wide adoption of zero emissions technologies anywhere available.
- Low NOx technologies where zero emissions are not feasible.
- Federal Action.
- Zero emissions technologies for residential and industrial sources such as water and space heaters in buildings and homes regionwide.
- Incentive funding in environmental justice areas.
- Prioritize benefits on the most disadvantaged communities.

During construction and operation, the Proposed Project must comply with applicable rules and regulations adopted by the South Coast AQMD. The following are the rules that the Proposed Project may be required to comply with, either directly, or indirectly (as well as others):

- **Rule 402:** Prohibits a person from discharging from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.
- **Rule 403:** Governs emissions of fugitive dust during construction and operation activities. Compliance with this rule is achieved through application of standard Best Management Practices.
- **Rule 445:** Prohibits permanently installed wood burning devices into any new development.
- **Rule 1108:** Governs the sale, use, and manufacturing of asphalt and limits the volatile organic compound (VOC) content in asphalt used in the South Coast Air Basin. This rule would regulate the VOC content of asphalt used during construction. Therefore, all asphalt used during construction of the project must comply with South Coast AQMD Rule 1108.
- **Rule 1113:** Serves to limit the VOC content of architectural coatings used on projects in the South Coast Air Basin. Any person who supplies, sells, offers for sale, or manufactures any architectural coating for use on projects in the South Coast Air Basin must comply with the current VOC standards set in this rule.
- **Rule 1303:** Governs the permitting of re-located or new major emission sources, requiring Best Available Control Measures and setting significance limits for PM_{10} among other pollutants.
- **Rule 1401:** New Source Review of Toxic Air Contaminants, specifies limits for maximum individual cancer risk, cancer burden, and non-cancer acute and chronic hazard index from new permit units, relocations, or modifications to existing permit units, which emit toxic air contaminants.
- **Rule 2305:** The Warehouse Indirect Source Rule requires owners and operators associated with warehouses 100,000 square feet or larger to directly reduce NO_X and particulate matter emissions, or to otherwise facilitate emission and exposure reductions of these pollutants in nearby communities.

South Coast AQMD CEQA Air Quality Handbook

Although the South Coast AQMD is responsible for regional air quality planning efforts, it does not have the authority to directly regulate air quality issues associated with plans and new development projects throughout the South Coast Air Basin. Instead, this is controlled through local jurisdictions in accordance with the California Environmental Quality Act (CEQA). In order to assist local jurisdictions with air quality compliance issues, the CEQA Air Quality Handbook

prepared by the South Coast AQMD (1993) with the most current updates and found at http://www.aqmd.gov/ceqa/hdbk.html, was developed in accordance with the projections and programs of the AQMP. The purpose of the CEQA Air Quality Handbook is to assist lead agencies, as well as consultants, project proponents, and other interested parties in evaluating a proposed project's potential air quality impacts. Specifically, the CEQA Air Quality Handbook explains the procedures that the South Coast AQMD recommends be followed for the environmental review process required by CEQA. The CEQA Air Quality Handbook provides direction on how to evaluate potential air quality impacts, how to determine whether these impacts are significant, and how to mitigate these impacts. The South Coast AQMD is in the process of developing an updated "Air Quality Analysis Guidance Handbook" to replace the CEQA Air Quality Handbook. The 1993 CEQA Air Quality Handbook is still available but not online. In addition, there are sections of the 1993 Handbook that are obsolete. In order to assist the CEQA practitioner in conducting an air quality analysis while the new handbook is being prepared, supplemental information regarding significance thresholds and analysis, emissions factors, cumulative impacts emissions analysis, and other useful subjects, are available at the South Coast AQMD website (South Coast AQMD 2023). The CEQA Air Quality Handbook and supplemental information is used in this analysis (Appendix B).

Southern California Association of Governments

The Southern California Association of Governments (SCAG) is the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino and Imperial Counties and addresses regional issues relating to transportation, the economy, community development and the environment. SCAG is the Federally designated metropolitan planning organization for the majority of the Southern California region and is the largest metropolitan planning organization in the nation. With respect to air quality planning, SCAG has prepared the Regional Transportation Plan and Regional Transportation Improvement Plan, which addresses regional development and growth forecasts. These plans form the basis for the land use and transportation components of the AQMP, which are utilized in the preparation of air quality forecasts and in the consistency, analysis included in the AQMP. The Regional Transportation Plan, Regional Transportation Improvement Plan, and AQMP are based on projections originating within the City and County General Plans.

On September 3, 2020, SCAG's Regional Council unanimously voted to approve and fully adopt Connect SoCal – the 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy of the Southern California Association of Governments, and the addendum to the Connect SoCal Program EIR. Connect SoCal is a long-range visioning plan that builds upon and expands land use and transportation strategies established over several planning cycles to increase mobility options and achieve a more sustainable growth pattern. Connect SoCal outlines more than $638 billion in transportation system investments through 2045. It was prepared through a collaborative, continuous, and comprehensive process with input from local governments, county transportation

commissions, Tribal governments, nonprofit organizations, businesses and local stakeholders within the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino and Ventura.

Most recently, in April 2024, SCAG approved Connect SoCal 2024. Connect SoCal 2024 outlines a vision for a more resilient and equitable future, with investment, policies and strategies for achieving the region's shared goals through 2050. Goals of the plan include more efficient development patterns, reduced congestion, expanded multi-model travel options, and reduced greenhouse gas emission from passenger vehicles. Priority Development Areas are a key focus of the plan to increase development in locations where people can access alternative modes of transportation or make short trips for day-to-day tasks.

Local

City of Perris General Plan

Local jurisdictions, such as the City of Perris, have the authority and responsibility to reduce air pollution through its police power and decision-making authority. Specifically, the City is responsible for the assessment and mitigation of air emissions resulting from its land use decisions. The City is also responsible for the implementation of transportation control measures as outlined in the 2022 AQMP. Examples of such measures include bus turnouts, energy-efficient streetlights, and synchronized traffic signals. In accordance with CEQA requirements and the CEQA review process, the City assesses the air quality impacts of new development projects, requires mitigation of potentially significant air quality impacts by conditioning discretionary permits, and monitors and enforces implementation of such mitigation.

The City relies on the expertise of the South Coast AQMD and utilizes the South Coast AQMD CEQA Air Quality Handbook as the guidance document for the environmental review of plans and development proposals within its jurisdiction.

The Healthy Community Element as well as the Conservation Element of the City of Perris General Plan summarize air quality issues in the South Coast Air Basin, air quality-related plans and programs administered by federal, state, and special purpose agencies, and establishes goals and policies to improve air quality.

Applicable goals and policies from the Healthy Community Element include:

- **Goal HC-6:** Healthy Environment – Support efforts of local businesses and regional agencies to improve the health of our region's environment.
  - **Policy HC-6.1:** Support regional efforts to improve air quality through energy efficient technology, use of alternative fuels, and land use and transportation planning.
  - **Policy HC-6.3:** Promote measures that will be effective in reducing emissions during construction activities.

- Perris will ensure that construction activities follow existing South Coast Air Quality Management District (SCAQMD) rules and regulations.
- All construction equipment for public and private projects will also comply with California Air Resources Board's vehicle standards. For projects that may exceed daily construction emissions established by the SCAQMD, Best Available Control Measures will be incorporated to reduce construction emissions to below daily emission standards established by the SCAQMD.
- Project proponents will be required to prepare and implement a Construction Management Plan which will include Best Available Control Measures among others. Appropriate control measures will be determined on a project-by-project basis, and should be specific to the pollutant for which the daily threshold is exceeded.

Applicable goals and policies from the Conservation Element include:

- **Goal X:** Encourage improved energy performance standards above and beyond the California Title 24 requirements.
  - **Policy X.B:** Encourage the use of trees within project design to lessen energy needs, reduce the urban heat island effect, and improve air quality throughout the region.

4.2.1.2 Existing Conditions

Section 4.2, Air Quality, of the Perris Valley Commerce Center Specific Plan (PVCCSP) EIR includes a detailed discussion of the environmental setting, which includes the following topics related to air quality: setting for the Perris Valley Commerce Center (PVCC) area, physical setting of the South Coast Air Basin, regional and local climate, precipitation and temperature, winds, stationary and mobile emission sources, air pollution constituents (criteria air pollutants, toxic air contaminants, and diesel emissions), monitored air quality, and existing air emissions. The following sections focus on information that is either particularly relevant to the Proposed Project or information that is new or has been updated since the PVCCSP EIR was prepared.

Climate

The Project Site is located within the City of Perris in the portion of Riverside County that lies within the South Coast Air Basin. The South Coast Air Basin is a 6,600-square-mile coastal plain bounded by the Pacific Ocean to the southwest and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The South Coast Air Basin includes the non-desert portions of Los Angeles, Riverside, and San Bernardino counties, and all of Orange County. The ambient concentrations of air pollutants are determined by the amount of emissions released by sources and the atmosphere's ability to transport and dilute such emissions. Natural factors that

affect transport and dilution include terrain, wind, atmospheric stability, and sunlight. Therefore, existing air quality conditions in the area are determined by such natural factors as topography, meteorology, and climate, in addition to the amount of emissions released by existing air pollutant sources.

Atmospheric conditions such as wind speed, wind direction, and air temperature gradients interact with the physical features of the landscape to determine the movement and dispersal of air pollutants. The topography and climate of Southern California combine to make the South Coast Air Basin an area of high air pollution potential. The South Coast Air Basin is a coastal plain with connecting broad valleys and low hills, bounded by the Pacific Ocean to the west and high mountains around the rest of the perimeter. The general region lies in the semi-permanent high-pressure zone of the eastern Pacific, resulting in a mild climate tempered by cool sea breezes with light average wind speeds. The usually mild climatological pattern is disrupted occasionally by periods of extremely hot weather, winter storms, or Santa Ana winds. During the summer months, a warm air mass frequently descends over the cool, moist marine layer produced by the interaction between the ocean's surface and the lowest layer of the atmosphere. The warm upper layer forms a cap over the cool marine layer and inhibits the pollutants in the marine layer from dispersing upward. In addition, light winds during the summer further limit ventilation. Furthermore, sunlight triggers the photochemical reactions that produce ozone. The region experiences more days of sunlight than any other major urban area in the nation except Phoenix (Appendix B).

Temperature and precipitation levels in the City vary throughout the year. In general, August is typically the warmest month and December is typically the coolest month. Rainfall around the Project Site varies considerably in both time and space. Almost all the annual rainfall comes from the fringes of mid-latitude storms from late November to early April, with summers being almost completely dry (Appendix B).

Air Pollutants and Effects

Pollutants are generally classified as either criteria air pollutants or non-criteria air pollutants. Federal ambient air quality standards have been established for criteria air pollutants, whereas no ambient standards have been established for non-criteria air pollutants. For some criteria air pollutants, separate standards have been set for different periods. Most standards have been set to protect public health. For some pollutants, standards have been based on other values (such as protection of crops, protection of materials, or avoidance of nuisance conditions). A summary of federal and state ambient air quality standards is provided in Section 4.2.1.1, Regulatory Conditions.

Criteria Pollutants

The criteria air pollutants consist of ozone, nitrogen dioxide, carbon monoxide, sulfur dioxide, lead, and particulate matter. These pollutants can harm your health and the environment, and cause property damage. The EPA calls these pollutants "criteria" air pollutants because it regulates them

by developing human health-based and/or environmentally based criteria for setting permissible levels. The following provides descriptions of each of the criteria air pollutants.

Nitrogen Oxides

Nitrogen Oxides (NOx) is the generic term for a group of highly reactive gases which contain nitrogen and oxygen. While most NOx is colorless and odorless, concentrations of nitrogen dioxide (NO_2) can often be seen as a reddish-brown layer over many urban areas. NOx forms when fuel is burned at high temperatures, as in a combustion process. The primary human-made sources of NOx is motor vehicles, electric utilities, and other industrial, commercial, and residential sources that burn fuel. NOx reacts with other pollutants to form, ground-level ozone, nitrate particles, acid aerosols, as well as NO_2, which cause respiratory problems. NOx and the pollutants formed from NOx can be transported over long distances, following the patterns of prevailing winds. Therefore, controlling NOx is often most effective if done from a regional perspective, rather than focusing on the nearest sources (Appendix B).

Ozone

Ozone (O_3) is not usually emitted directly into the air but at ground-level is created by a chemical reaction between NOx and volatile organic compounds (VOC) in the presence of sunlight. Motor vehicle exhaust, industrial emissions, gasoline vapors, chemical solvents as well as natural sources emit NOx and VOC that help form ozone. Ground-level ozone is the primary constituent of smog. Sunlight and hot weather cause ground -level ozone to form with the greatest concentrations usually occurring downwind from urban areas. Ozone is subsequently considered a regional pollutant. Ground-level ozone is a respiratory irritant and an oxidant that increases susceptibility to respiratory infections and can cause substantial damage to vegetation and other materials. Because NOx and VOC are ozone precursors, the health effects associated with ozone are also indirect health effects associated with significant levels of NOx and VOC emissions (Appendix B).

Carbon Monoxide

Carbon monoxide (CO) is a colorless, odorless gas that is formed when carbon in fuel is not burned completely. It is a component of motor vehicle exhaust, which contributes about 56 percent of all CO emissions nationwide. In cities, 85 to 95 percent of all CO emissions may come from motor vehicle exhaust. Other sources of CO emissions include industrial processes (such as metals processing and chemical manufacturing), residential wood burning, and natural sources such as forest fires. Woodstoves, gas stoves, cigarette smoke, and unvented gas and kerosene space heaters are indoor sources of CO. The highest levels of CO in the outside air typically occur during the colder months of the year when inversion conditions are more frequent. The air pollution becomes trapped near the ground beneath a layer of warm air. CO is described as having only a local influence because it dissipates quickly. Since CO concentrations are strongly associated with motor vehicle emissions, high CO concentrations generally occur in the immediate vicinity of

roadways with high traffic volumes and traffic congestion, active parking lots, and in automobile tunnels. Areas adjacent to heavily traveled and congested intersections are particularly susceptible to high CO concentrations (Appendix B).

CO is a public health concern because it combines readily with hemoglobin and thus reduces the amount of oxygen transported in the bloodstream. The health threat from lower levels of CO is most serious for those who suffer from heart disease such as angina, clogged arteries, or congestive heart failure. For a person with heart disease, a single exposure to CO at low levels may cause chest pain and reduce that person's ability to exercise; repeated exposures may contribute to other cardiovascular effects. High levels of CO can affect even healthy people. People who breathe high levels of CO can develop vision problems, reduced ability to work or learn, reduced manual dexterity, and difficulty performing complex tasks. At extremely high levels, CO is poisonous and can cause death.

Sulfur Oxide

Sulfur Oxide (SOx) gases (including sulfur dioxide [SO_2]) are formed when fuel containing sulfur, such as coal and oil is burned, and from the refining of gasoline. SOx dissolves easily in water vapor to form acid and interacts with other gases and particles in the air to form sulfates and other products that can be harmful to people and the environment (Appendix B).

Lead

Lead (Pb) is a metal found naturally in the environment as well as manufactured products. The major sources of lead emissions have historically been motor vehicles and industrial sources. Due to the phase out of leaded gasoline, metal processing is now the primary source of lead emissions to the air. High levels of lead in the air are typically only found near lead smelters, waste incinerators, utilities, and lead-acid battery manufacturers. Exposure of fetuses, infants and children to low levels of lead can adversely affect the development and function of the central nervous system, leading to learning disorders, distractibility, inability to follow simple commands, and lower intelligence quotient. In adults, increased lead levels are associated with increased blood pressure (Appendix B).

Particulate Matter

Particulate matter (PM) is the term for a mixture of solid particles and liquid droplets found in the air. Particulate matter is made up of a number of components including acids (such as nitrates and sulfates), organic chemicals, metals, and soil or dust particles. The size of particles is directly linked to their potential for causing health problems. Particles that are less than 10 micrometers in diameter (PM_{10}) are the particles that generally pass through the throat and nose and enter the lungs. Once inhaled, these particles can affect the heart and lungs and cause serious health effects. Particles that are less than 2.5 micrometers in diameter ($PM_{2.5}$) have been designated as a subset

of PM_{10} due to their increased negative health impacts and its ability to remain suspended in the air longer and travel further (Appendix B).

Reactive Organic Gases

Although not a criteria air pollutant, reactive organic gases (ROG), or VOC, are defined as any compound of carbon—excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate—that participates in atmospheric photochemical reactions. Although there are slight differences in the definition of ROG and VOC, the two terms are often used interchangeably. Indoor sources of VOC include paints, solvents, aerosol sprays, cleansers, tobacco smoke, etc. Outdoor sources of VOC are from combustion and fuel evaporation. A reduction in VOC emissions reduces certain chemical reactions that contribute to the formulation of ozone. VOC is transformed into organic aerosols in the atmosphere, which contribute to higher PM_{10} and lower visibility (Appendix B).

Other Pollutants of Concern

Toxic Air Contaminants

In addition to the above-listed criteria air pollutants, toxic air contaminants are another group of pollutants of concern. Sources of toxic air contaminants include industrial processes such as petroleum refining and chrome plating operations, commercial operations such as gasoline stations and dry cleaners, and motor vehicle exhaust. Cars and trucks release at least 40 different toxic air contaminants. The most important of these toxic air contaminants, in terms of health risk, are diesel particulates, benzene, formaldehyde, 1,3- butadiene, and acetaldehyde. Public exposure to toxic air contaminants can result from emissions from normal operations as well as from accidental releases. Health effects of toxic air contaminants include cancer, birth defects, neurological damage, and death (Appendix B).

Toxic air contaminants are less pervasive in the urban atmosphere than criteria air pollutants, however they are linked to short-term (acute) or long-term (chronic or carcinogenic) adverse human health effects. There are hundreds of different types of toxic air contaminants with varying degrees of toxicity. Sources of toxic air contaminants include industrial processes, commercial operations (e.g., gasoline stations and dry cleaners), and motor vehicle exhaust.

According to the 2013 California Almanac of Emissions and Air Quality, the majority of the estimated health risk from toxic air contaminants can be attributed to relatively few compounds, the most important of which is diesel particulate matter (CARB 2013). Diesel particulate matter is a subset of $PM_{2.5}$ because the size of diesel particles are typically 2.5 microns and smaller. The identification of diesel particulate matter as a toxic air contaminant in 1998 led the CARB to adopt the Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-fueled Engines and Vehicles in September 2000. The plan's goals are a 75-percent reduction in diesel particulate

matter by 2010 and an 85- percent reduction by 2020 from the 2000 baseline. Diesel engines emit a complex mixture of air pollutants, composed of gaseous and solid material. The visible emissions in diesel exhaust are known as particulate matter or PM, which includes carbon particles or "soot." Diesel exhaust also contains a variety of harmful gases and over 40 other cancer-causing substances. California's identification of diesel particulate matter as a toxic air contaminant was based on its potential to cause cancer, premature deaths, and other health problems. Exposure to diesel particulate matter is a health hazard, particularly to children whose lungs are still developing and older adults who may have other serious health problems. Overall, diesel engine emissions are responsible for the majority of California's potential airborne cancer risk from combustion sources (Appendix B).

Asbestos

Asbestos is listed as a toxic air contaminant by CARB and as a Hazardous Air Pollutant by the EPA. Asbestos occurs naturally in mineral formations and crushing or breaking these rocks, through construction or other means, can release asbestiform fibers into the air. Asbestos emissions can result from the sale or use of asbestos containing materials, road surfacing with such materials, grading activities, and surface mining. The risk of disease is dependent upon the intensity and duration of exposure. When inhaled, asbestos fibers may remain in the lungs and with time may be linked to such diseases as asbestosis, lung cancer, and mesothelioma. Naturally occurring asbestos is not present in Riverside County. The nearest likely locations of naturally occurring asbestos, as identified in the General Location Guide for Ultramafic Rocks in California prepared by the California Division of Mines and Geology, is located at Asbestos Mountain in the San Jacinto Mountains, approximately 45 miles southeast of the Project Site (DOC 2000). Due to the distance to the nearest natural occurrences of asbestos, the Project Site is not likely to contain asbestos (Appendix B).

Existing Ambient Air Quality

The air quality at any site is dependent on the regional air quality and local pollutant sources. Regional air quality is determined by the release of pollutants throughout the South Coast Air Basin. Estimates of the existing emissions in the South Coast Air Basin provided in the Final 2022 AQMP prepared by the South Coast AQMD (December 2022) indicate that collectively, mobile sources account for 46 percent of the VOC emissions, 85 percent of the NOx emissions, 89 percent of the CO emissions, and 29 percent of directly emitted $PM_{2.5}$, with another 18 percent of $PM_{2.5}$ from road dust (Appendix B).

The South Coast AQMD has divided the South Coast Air Basin into 38 air monitoring areas with a designated ambient air monitoring station representative of each area. The Project Site is located within the Perris Valley Air Monitoring Area (Area 24), which is located in Riverside County and covers from the San Bernardino and Riverside County line on the north, Paloma Valley on the south, Perris

on the west, and the San Jacinto Valley on the east. Prior to 2022, ambient air emissions of ozone within Area 24 were monitored at the Perris Valley Monitoring Station which was located approximately 2.6 miles southwest of the Project Site at 237 N. D Street, Perris. The Perris Valley Monitoring Station also measured ambient concentrations of PM_{10} prior to 2021. Ambient air quality concentrations are no longer monitored within Area 24.

As not all monitoring stations monitor all pollutants, representative data was also obtained from the Lake Elsinore-West Flint Street Monitoring Station (Lake Elsinore Station) located approximately 12.15 miles southwest of the Project Site at 506 West Flint Street, Lake Elsinore for those pollutants which were not measured at the Perris Valley Station. However, it should be noted that due to the air monitoring stations distances from the Project Site, recorded air pollution levels at the air monitoring station reflect with varying degrees of accuracy, local air quality conditions at the Project Site. Table 4.2-3, Air Quality Monitoring Summary, presents the monitored pollutant levels from the Perris Valley and Lake Elsinore Stations.

Table 4.2-3 summarizes 2021 through 2023 published monitoring data, which is the most recent 3-year period available. The data shows that during the past few years, the Perris Valley Station monitored area has exceeded the ozone and PM_{10} standards.

Table 4.2-3. Air Quality Monitoring Summary

Pollutant	Standard	Monitoring Station	2021	2022	2023
Ozone (O_3)					
Maximum 1-hour concentration (ppm)		Perris Valley Station	0.117	*	*
Number of days exceeded	State: > 0.12 ppm		**25**	*	*
Maximum 8-hour concentration (ppm)			0.094	*	*
Number of days exceeded	State: > 0.07 ppm		*	*	*
	Federal: > 0.07 ppm		**55**	*	*
Respirable Particulate Matter ($PM_{2.5}$)					
Maximum 24-hour concentration (µg/m^3)		Lake Elsinore	28.8	16.2	19.9
Number of days exceeded	Federal: > 35 µg/m^3		*	*	*
Annual arithmetic average concentration (µg/m^3)			6.9	5.8	5.9
Fine Particulate Matter (PM_{10})					
Maximum 24-Hour Concentration		Perris Valley Station	77.5	*	*
Number of days exceeded	Federal: >150 µg/m^3)		0	0	0
	State: > 50 µg/m^3		**4**	**0**	0
Annual arithmetic average concentration (µg/m^3)			30.4	*	*
Nitrogen Dioxide (NO_2)					
Maximum 1-hour concentration (ppm)		Lake Elsinore	0.044	0.037	0.042
Number of days exceeded	State: > 0.18 ppm		0	0	0
Carbon Monoxide (CO)					
Maximum 8-Hour Concentration		Lake Elsinore	*	*	*
Number of days exceeded	State: > 9 ppm		0	0	0
	Federal: > 9 ppm		0	0	0

Source: CARB 2024.

Notes: µg/m3 = micrograms per cubic meter: ppm = parts per million: * = insufficient data available to determine value.

4.2.2 Thresholds of Significance

According to Appendix G of the Guidelines for Implementation of the California Environmental Quality Act (CEQA Guidelines), the Proposed Project would have a significant impact on air quality if it would:

- **Threshold AQ-1:** Conflict with or obstruct implementation of the applicable air quality plan.
- **Threshold AQ-2:** Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard.
- **Threshold AQ-3:** Expose sensitive receptors to substantial pollutant concentrations.
- **Threshold AQ-4:** Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

Applicable Regional Thresholds

South Coast AQMD CEQA Air Quality Handbook

Additionally, CEQA Guidelines Section 15064.7 provides the significance criteria established by the applicable air quality management district or air pollution control district, when available, may be relied upon to make determinations of significance. The potential air quality impacts of the Proposed Project are, therefore, evaluated according to thresholds developed by the South Coast AQMD in their CEQA Air Quality Handbook, Air Quality Analysis Guidance Handbook, and subsequent guidance, which are listed below. Therefore, the Proposed Project would result in a potentially significant impact to air quality if it would:

- **AQ-1**: Conflict with or obstruct the implementation of the applicable air quality plan
- **AQ-2**: Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)
- **AQ-3:** Expose sensitive receptors to substantial pollutant concentrations that would:
  - Exceed the South Coast AQMD's localized significance thresholds
  - Cause or contribute to the formation of CO hotspots
  - Exceed the South Coast AQMD's significance thresholds for toxic air contaminants
- **AQ-4:** Create objectionable odors affecting a substantial number of people

Regional and Localized Significance Thresholds

The South Coast AQMD has established significance thresholds to assess the regional and localized impacts of Project-related air pollutant emissions. These significance thresholds are updated as needed to appropriately represent the most current technical information and attainment status in the South Coast Air Basin. Table 4.2-4, Maximum Daily Regional Emissions Thresholds, provides a summary of the South Coast AQMD Regional Emissions Thresholds for both construction and operational activities. The South Coast AQMD's CEQA Air Quality Significance Thresholds indicate that any projects in the South Coast Air Basin with daily emissions that exceed any of the indicated thresholds should be considered as having an individually and cumulatively significant air quality impact (South Coast AQMD 2023).

Table 4.2-4. Maximum Daily Regional Emissions Thresholds

Pollutant	Pounds/Day	
	Construction Regional Thresholds	Operational Regional Thresholds
NO_x	100	55
VOC	75	55
PM_{10}	150	150
$PM_{2.5}$	55	55
SO_x	150	150
CO	550	550

Source: South Coast AQMD 2023.

Notes: CO = carbon monoxide; NO_x = oxides of nitrogen; Pb = lead; PM_{10} = particulate matter less than 10 microns in diameter; $PM_{2.5}$ = particulate matter less than 2.5 microns in diameter; SO_x = sulfur oxides; VOC = volatile organic compounds;

The South Coast AQMD's screening look-up tables, and Localized Significance Thresholds (LSTs) are utilized in determining the significance of the Proposed Project's localized air quality impacts, and to determine if further detailed analysis is required. Consistent with South Coast AQMD guidance, the thresholds presented in Table 4.2-5, Maximum Daily Localized Emissions Thresholds, were calculated by interpolating the threshold values for the Proposed Project's disturbed acreage. Per South Coast AQMD staff, the 5-acre Look-up Table, which is the largest site available, can be used as a conservative screening analysis for on-site operational emissions to determine whether more-detailed dispersion modeling would be necessary. The Proposed Project was analyzed based on the Perris Valley source receptor area (Area 24) and, as the Project Site is 27.26 acres, used the thresholds for a five-acre Project Site.

Table 4.2-5. Maximum Daily Localized Emissions Thresholds

Pollutant	Pounds/Day	
	Construction	Operational
NO_x	170	270
CO	883	1,577
PM_{10}	7	4
$PM_{2.5}$	4	2

Source: South Coast AQMD 2008.

Notes: CO = carbon monoxide; NOx = oxides of nitrogen; PM_{10} = particulate matter less than 10 microns in diameter; $PM_{2.5}$ = particulate matter less than 2.5 microns in diameter;

With respect to "cumulative considerable" increases in emissions, the South Coast AQMD has published a report on how to address cumulative impacts from air pollution: White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution. In this report the South Coast AQMD clearly states (page D-3):

> ". . . the AQMD uses the same significance thresholds for project specific and cumulative impacts for all environmental topics analyzed in an Environmental Assessment or EIR. The only case where the significance thresholds for project specific and cumulative impacts

> differ is the Hazard Index (HI) significance threshold for [toxic air contaminant] emissions. The project specific (project increment) significance threshold is HI > 1.0 while the cumulative (facility-wide) is HI > 3.0. It should be noted that the HI is only one of three [toxic air contaminant] emission significance thresholds considered (when applicable) in a CEQA analysis. The other two are the maximum individual cancer risk (MICR) and the cancer burden, both of which use the same significance thresholds (MICR of 10 in 1 million and cancer burden of 0.5) for project specific and cumulative impacts.
>
> Projects that exceed the project-specific significance thresholds are considered by the South Coast AQMD to be cumulatively considerable. This is the reason project-specific and cumulative significance thresholds are the same. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant."

Therefore, this analysis assumes that individual projects that do not generate operational or construction emissions that exceed the South Coast AQMD's recommended daily thresholds of significance for project-specific impacts would also not cause a cumulatively considerable increase in emissions for those pollutants for which the South Coast Air Basin is in non-attainment, and, therefore, would not be considered to have a significant, adverse air quality impact. Alternatively, individual project-related construction and operational emissions that exceed South Coast AQMD thresholds of significance for project-specific impacts would be considered cumulatively considerable.

4.2.3 Regulatory Requirements

State and local regulations applicable to the Proposed Project are described below. The Proposed Project would be required to comply with the following during construction and/or operation.

RR AQ-1 All construction equipment for public and private projects will comply with CARB's vehicle standards including Section 2025, Title 13 which limits NOx, PM_{10} and $PM_{2.5}$ emissions from on-road diesel truck fleets that operate in the state.

RR AQ-2 All diesel-powered construction equipment used during project construction will comply with CARB Air Toxic Measure Rule 2485 which limits diesel powered equipment and vehicle idling to no more than 5 minutes at a location.

RR AQ-3 The Proposed Project will be constructed in compliance with applicable South Coast AQMD rules and regulations including Rule 403, which requires that fugitive dust be controlled with best available control measures so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. Control measures include but are not limited to application of water or chemical stabilizers to disturbed soils; managing haul road dust by application of water; covering haul vehicles; restricting vehicle speeds on unpaved roads to 15

mph; sweeping loose dirt from paved site access roadways; cessation of construction activity when winds exceed 25 mph and establishing a permanent stabilizing ground cover on finished sites. Water trucks will be utilized during all earth moving operations.

RR AQ-4 During construction, the Proposed Project will comply with South Coast AQMD Rule 1113 which requires that architectural coatings will be limited to an average of 50 grams per liter or less of VOCs for building coatings and 100 grams per liter or less of VOCs for traffic coatings.

4.2.4 Environmental Impacts

The following sections address various potential impacts relating to air quality that could result from implementation of the Proposed Project.

Methodology

Project construction and operation emissions were estimated using the California Emissions Estimator Model (CalEEMod) (Version 2022.1.1.22) software. Daily regional emissions during construction are forecasted by assuming a conservative estimate of construction activities (i.e., assuming all construction occurs at the earliest feasible date) and applying the mobile source Mand fugitive dust emissions factors. Equipment used was based on CalEEMod defaults. Emission rates are reported by the program in grams per trip and grams per mile or grams per running hour. Daily truck trips and CalEEMod default trip length data were used to assess roadway emissions from truck exhaust. The maximum daily emissions are estimated values for the worst-case day and do not represent the emissions that would occur for every day of Proposed Project construction. The maximum daily emissions are compared to the South Coast AQMD daily regional numeric indicators. Detailed construction equipment lists, construction scheduling, and emission calculations are provided in Appendix B of the Air Quality Impact Analysis (Appendix B).

Operational emissions are calculated based on land use types, the number of units or building sizes a project is proposing, vehicle trip characteristics, and project design features and/or mitigation measures to be implemented. The results are expressed in pounds per day and are compared with operational mass daily significance thresholds to determine impact significance. For vehicle emissions, traffic data was obtained from the Traffic Impact Analysis prepared by Ganddini Group Inc. (Appendix L of this EIR), and Vehicle Miles Traveled (VMT) and Average Daily Traffic (ADT) estimates presented in Appendix L were utilized in CalEEMod modeling.

The nearest industrial/commercial use to the Project Site is used to determine construction and operational LST air impacts for emissions of NO_X and CO as the averaging periods for these pollutants are shorter (8 hours or less) and it is reasonable to assume that an individual could be present at these sites for periods of one to 8 hours. The nearest receptor used for evaluation of

localized impacts of NO_X and CO is represented by existing single-family residential uses located approximately 50 feet to the south of the Project Site (across Placentia Avenue). It should be noted that the LST Methodology explicitly states that "It is possible that a project may have receptors closer than 25 meters. Projects with boundaries located closer than 25 meters to the nearest receptor should use the LSTs for receptors located at 25 meters." As such a 25-meter receptor distance will be used for evaluation of localized NO_X and CO.

The assessment of air quality and health risk impacts from pollutant emissions from the Proposed Project applied the EPA AERMOD Model, which is the air dispersion model accepted by the South Coast AQMD for performing air quality impact analyses. AERMOD predicts pollutant concentrations from point, area, volume, line, and flare sources with variable emissions in terrain from flat to complex with the inclusion of building downwash effects from buildings on pollutant dispersion. It captures the essential atmospheric physical processes and provides reasonable estimates over a wide range of meteorological conditions and modeling scenarios. AERMOD View Version 12.0.0, EPA version No. 22112, was utilized for this analysis.

The diesel particulate matter emission factors for the various vehicle types were derived from the CARB EMFAC2021 mobile source emission model. The emissions factors were derived for Riverside County. Emissions factors were estimated to establish the emissions generated while the vehicles travel off-site, along travel links from the entrance to the loading docks, and while idling at the loading dock during loading or unloading materials. All vehicles were assumed to travel on-site at a speed of 10 miles per hour. Off-site, the speeds along the roads were anticipated to average 35 miles per hour. Delivery vehicles were assumed to idle for a maximum of 15 minutes per vehicle per day (5 minutes per location: at the facility entrance, at the loading bay/truck parking area, and at the facility exit), in keeping with the CARB Air Toxic Control Measure, which regulates truck idling time (CARB 2005). The four different sets of emissions factors used in this assessment are detailed in Table 4.2-9. It should be noted that the diesel particulate matter emissions on both the gram per mile and gram per idle hour bases decline beyond 2026 for all vehicle classes and in particular the heavy-heavy-duty truck class (the 4+ axle "big rig" trucks). This is due to the CARB emissions' requirements on heavy-duty trucks that call for either the replacement of older trucks with cleaner trucks or the installation of diesel particulate matter filters on the truck fleet (Appendix B).

The Proposed Project will be required to comply with existing South Coast AQMD rules for the reduction of fugitive dust emissions. South Coast AQMD Rule 403 establishes these procedures. CalEEMod calculations assumed implementation of Rule 403 for fugitive dust control, which assumes application of standard best management practices in construction and operation activities. This typically includes application of water or chemical stabilizers to disturbed soils, managing haul road dust by application of water, covering haul vehicles, restricting vehicle speeds on unpaved roads to 15 mph, sweeping loose dirt from paved site access roadways, cessation of

construction activity when winds exceed 25 mph and establishing a permanent, stabilizing ground cover on finished sites. Compliance with Rule 1113 has also been assumed in the CalEEMod calculations. Per South Coast AQMD Rule 1113 as amended on June 3, 2011, the architectural coatings that would be applied after January 1, 2014 will be limited to an average of 50 grams per liter or less of VOCs for building coatings and 100 grams per liter or less of VOCs for traffic coatings. The phases of the construction activities which have been analyzed below for each phase are: (1) grading, (2) building construction, (3) paving, and (4) application of architectural coatings.. Details pertaining to the Proposed Project's construction timing and the type of equipment modeled for each construction phase are available in the CalEEMod output in Appendix B.

Applicable PVCCSP Standards, Guidelines, and Mitigation Measures

There are no PVCCSP Standards and Guidelines specifically relevant to this air quality analysis. The PVCCSP EIR includes mitigation measures that are relevant to air quality. These mitigation measures must be implemented, are incorporated as part of the Proposed Project, and are assumed in the analysis presented in this section.

MM Air 1 To identify potential implementing development project-specific impacts resulting from construction activities, proposed development projects that are subject to CEQA shall have construction-related air quality impacts analyzed using the latest available URBEMIS model, or other analytical method determined in conjunction with the South Coast AQMD. The results of the construction-related air quality impacts analysis shall be included in the development project's CEQA documentation. To address potential localized impacts, the air quality analysis may incorporate South Coast AQMD's Localized Significance Threshold analysis or other appropriate analyses as determined in conjunction with South Coast AQMD. If such analyses identify potentially significant regional or local air quality impacts, the City shall require the incorporation of appropriate mitigation to reduce such impacts.

MM Air 2 Each individual implementing development project shall submit a traffic control plan prior to the issuance of a grading permit. The traffic control plan shall describe in detail safe detours and provide temporary traffic control during construction activities for that project. To reduce traffic congestion, the plan shall include, as necessary, appropriate, and practicable, the following: temporary traffic controls such as a flag person during all phases of construction to maintain smooth traffic flow, dedicated turn lanes for movement of construction trucks and equipment on- and off-site, scheduling of construction activities that affect traffic flow on the arterial system to off-peak hour, consolidating truck deliveries, rerouting of construction trucks away from congested streets or sensitive receptors, and/or signal synchronization to improve traffic flow.

MM Air 3 To reduce fugitive dust emissions, the development of each individual implementing development project shall comply with South Coast AQMD Rule 403. The developer of each implementing project shall provide the City of Perris with the South Coast AQMD-approved dust control plan, or other sufficient proof of compliance with Rule 403, prior to grading permit issuance. Dust control measures shall include, but are not limited to:

- Requiring the application of non-toxic soil stabilizers according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for 20 days or more, assuming no rain),
- Keeping disturbed/loose soil moist at all times.
- Requiring trucks entering or leaving the site hauling dirt, sand, or soil, or other loose materials on public roads to be covered,
- Installation of wheel washers or gravel construction entrances where vehicles enter and exit unpaved roads onto paved roads, or wash off trucks and any equipment leaving the site each trip,
- Posting and enforcement of traffic speed limits of 15 miles per hour or less on all unpaved portions of the project site,
- Suspending all excavating and grading operations when wind gusts (as instantaneous gust) exceed 25 miles per hour,
- Appointment of a construction relations officer to act as a community liaison concerning on-site construction activity including resolution of issues related to PM-10 generation,
- Sweeping streets at the end of the day if visible soil material is carried onto adjacent paved public roads and use of South Coast AQMD Rule 1186 and 1186.1 certified street sweepers or roadway washing trucks when sweeping streets to remove visible soil materials,
- Replacement of ground cover in disturbed areas as quickly as possible.

MM Air 4 Building and grading permits shall include a restriction that limits idling of construction equipment on site to no more than five minutes.

MM Air 5 Electricity from power poles shall be used instead of temporary diesel or gasoline-powered generators to reduce the associated emissions. Approval will be required by the City of Perris' Building Division prior to issuance of grading permits.

MM Air 6 The developer of each implementing development project shall require, by contract specifications, the use of alternative fueled off-road construction equipment, the use of construction equipment that demonstrates early compliance with off-road equipment with the CARB in-use off-road diesel vehicle regulation (South Coast AQMD Rule 2449) and/or meets or exceeds Tier 3 standards with available CARB

verified or EPA certified technologies. Diesel equipment shall use water emulsified diesel fuel such as PuriNOx unless it is unavailable in Riverside County at the time of project construction activities. Contract specifications shall be included in project construction documents, which shall be reviewed by the City of Perris' Building Division prior to issuance of a grading permit.

MM Air 7 During construction, ozone precursor emissions from mobile construction equipment shall be controlled by maintaining equipment engines in good condition and in proper tune per manufacturers' specifications to the satisfaction of the City of Perris' Building Division. Equipment maintenance records and equipment design specification data sheets shall be kept on site during construction. Compliance with this measure shall be subject to periodic inspections by the City of Perris' Building Division.

MM Air 8 Each individual implementing development project shall apply paints using either high volume low pressure (HVLP) spray equipment with a minimum transfer efficiency of at least 50 percent or other application techniques with equivalent or higher transfer efficiency.

MM Air 9 To reduce VOC emissions associated with architectural coating, the project designer and contractor shall reduce the use of paints and solvents by utilizing pre-coated materials (e.g., bathroom stall dividers, metal awnings), materials that do not require painting, and require coatings and solvents with a VOC content lower than required under Rule 1113 to be utilized. The construction contractor shall be required to utilize "Super-Compliant" VOC paints, which are defined in South Coast AQMD's Rule 1113. Construction specifications shall be included in building specifications that assure these requirements are implemented. The specifications for each implementing development project shall be reviewed by the City of Perris' Building Division for compliance with this mitigation measure prior to issuance of a building permit for that project.

MM Air 10 To identify potential implementing development project-specific impacts resulting from operational activities, proposed development projects that are subject to CEQA shall have long-term operational-related air quality impacts analyzed using the latest available URBEMIS model, or other analytical method determined by the City of Perris as lead agency in conjunction with the South Coast AQMD. The results of the operational-related air quality impacts analysis shall be included in the development project's CEQA documentation. To address potential localized impacts, the air quality analysis may incorporate South Coast AQMD's Localized Significance Threshold analysis, CO Hot Spot analysis, or other appropriate

analyses as determined by the City of Perris in conjunction with South Coast AQMD. If such analyses identify potentially significant regional or local air quality impacts, the City shall require the incorporation of appropriate mitigation to reduce such impacts.

MM Air 11 Signage shall be posted at loading docks and all entrances to loading areas prohibiting all on-site truck idling in excess of five minutes.

MM Air 13 In order to promote alternative fuels, and help support "clean" truck fleets, the developer/successor-in-interest shall provide building occupants and businesses with information related to South Coast AQMD's Carl Moyer Program, or other state programs that restrict operations to "clean" trucks, such as 2007 or newer model year or 2010 compliant vehicles and information including, but not limited to, the health effect of diesel particulates, benefits of reduced idling time, CARB regulations, and importance of not parking in residential areas. If trucks older than 2007 model year would be used at a facility with three or more dock-high doors, the developer/successor-in-interest shall require, within 1 year of signing a lease, future tenants to apply in good-faith for funding for diesel truck replacement/retrofit through grant programs such as the Carl Moyer, Prop 1B, VIP [On-road Heavy Duty Voucher Incentive Program], HVIP [Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project], and SOON [Surplus Off-Road Opt-in for NOx] funding programs, as identified on South Coast AQMD's website (http://www.aqmd.gov). Tenants would be required to use those funds, if awarded.

MM Air 14 Each implementing development project shall designate parking spaces for high-occupancy vehicles and provide larger parking spaces to accommodate vans used for ride sharing. Proof of compliance would be required prior to the issuance of occupancy permits.

MM Air 15 To identify potential implementing development project-specific impacts resulting from the use of diesel trucks, proposed implementing development projects that include an excess of 10 dock doors for a single building, a minimum of 100 truck trips per day, 40 truck trips with TRUs [Transport Refrigeration Units] per day, or TRU operations exceeding 300 hours per week, and that are subject to CEQA and are located adjacent to sensitive land uses; shall have a facility-specific Health Risk Assessment performed to assess the diesel particulate matter impacts from mobile-source traffic generated by that implementing development project. The results of the Health Risk Assessment shall be included in the CEQA documentation for each implementing development project.

MM Air 18 Prior to the approval of each implementing development project, the Riverside Transit Agency (RTA) shall be contacted to determine if the RTA has plans for the future provision of bus routing within any street that is adjacent to the implementing development project that would require bus stops at the project access points. If the RTA has future plans for the establishment of a bus route that will serve the implementing development project, road improvements adjacent to the project sites shall be designed to accommodate future bus turnouts at locations established through consultation with the RTA. RTA shall be responsible for the construction and maintenance of the bus stop facilities. The area should aside for bus turnouts shall conform to RTA design standards, including the design of the contact between sidewalks and curb and gutter at bus stops and the use of Americans with Disabilities Act (ADA)-compliant paths to the major building entrances in the project.

MM Air 19 In order to reduce energy consumption from the individual implementing development projects, applicable plans (e.g., electrical plans, improvement maps) submitted to the City shall include the installation of energy-efficient street lighting throughout the project site. These plans shall be reviewed and approved by the applicable City Department (e.g., City of Perris' Building Division) prior to conveyance of applicable streets.

MM Air 20 Each implementing development project shall be encouraged to implement, at a minimum, an increase in each building's energy efficiency 15 percent beyond Title 24, and reduce indoor water use by 25 percent. All requirements would be documented through a checklist to be submitted prior to issuance of building permits for the implementing development project with building plans and calculations.

By preparing the Air Quality Impact Analysis and this EIR, the Project has complied with PVCCSP EIR mitigation measure MM Air 1, MM Air 10, and MM Air 15.

4.2.4.1 Threshold AQ-1: Consistency with Applicable Air Quality Plan

Impact Analysis

The PVCCSP EIR concludes that implementation of the PVCCSP and its subsequent implementing development and infrastructure projects would not conflict with or obstruct the implementation of the AQMP. Impacts were determined to be less than significant.

In December 2022, the South Coast AQMD adopted the Final 2022 AQMP. The 2022 AQMP builds upon measures already in place from previous AQMPs and continues to evaluate current integrated strategies and control measures to meet the National Ambient Air Quality Standards, as well as explore new and innovative methods to reach its goals. Some of these approaches include utilizing incentive programs, recognizing existing co-benefit programs from other sectors, and

developing a strategy with fair-share reductions at the federal, state, and local levels. The 2022 AQMP incorporates scientific and technological information and planning assumptions, including Connect SoCal 2020 and updated emission inventory methodologies for various source categories. The Proposed Project's consistency with the AQMP has been determined using the 2022 AQMP.

Criteria for determining consistency with the AQMP are defined in Chapter 12, Section 12.2 and Section 12.3, of the 1993 CEQA Air Quality Handbook. These indicators are discussed below:

Consistency Criterion 1

Per the CEQA Air Quality Handbook, Consistency Criterion 1 states that the Proposed Project would result in a potentially significant impact to air quality if it would result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations or delay the timely attainment of air quality standards or the interim emissions reductions specified in the AQMP.

The violations that Consistency Criterion No.1 refers to are the California and national standards. California and national ambient air quality standards violations would occur if regional or localized significance thresholds were exceeded.

Construction

As concluded below in Threshold AQ-2, the Proposed Project would not exceed the applicable regional significance thresholds for construction activity. Therefore, the Proposed Project would not have the potential to conflict with the AQMP according to this criterion.

Operation

As evaluated below in Threshold AQ-2, the Proposed Project would not exceed the applicable regional and localized significance thresholds for operational activity. Therefore, the Proposed Project would not conflict with the 2022 AQMP according to this criterion. Based on the preceding discussion, the Proposed Project would be consistent with the first criterion.

Consistency Criterion No. 2

Per the South Coast AQMD CEQA Air Quality Handbook, Consistency Criterion 2 states that the Proposed Project would result in a potentially significant impact to air quality if it would result exceed the assumptions in the 2022 AQMP at buildout.

The AQMP demonstrates that the applicable ambient air quality standards can be achieved within the time frames required under federal law. Growth projections from local general plans adopted by cities in the district are provided to the SCAG, which develops regional growth forecasts, which are then used to develop future air quality forecasts for the AQMP.

Development consistent with the growth projections in City of Perris General Plan is considered to be consistent with the AQMP.

Construction

Peak day emissions generated by construction activities are largely independent of land use assignments, but rather are a function of development scope and maximum area of disturbance. Irrespective of the site's land use designation, development of the Project Site to its maximum potential would likely occur, with disturbance of the entire site occurring during construction activities. As such, when considering that no emissions thresholds will be exceeded, a less than significant impact would result.

Operation

According to the PVCCSP, the Project Site is designated Light Industrial. The Light Industrial designation provides for light industrial uses and related activities including manufacturing, research, warehouse and distribution, assembly of non-hazardous materials and retail related to manufacturing.

The Proposed Project is proposed to consist of a 578,265-square-foot high-cube fulfillment center warehouse building with three access driveways, which is consistent with the PVCCSP land use designation and intensity. The Proposed Project would not require a General Plan amendment or zone change and, therefore, would be consistent with the City's planned growth projections. Additionally, the Proposed Project's construction and operational-source air pollutant emissions would not exceed the regional or localized significance thresholds, as discussed below.

Therefore, the Proposed Project would be consistent with the second criterion.

Conclusion

As evaluated through the criteria for determining consistency with the AQMP, the Proposed Project would not result in or cause national or California ambient air quality standards violations. The Proposed Project is consistent with the land use and growth intensities reflected in the adopted City of Perris General Plan and PVCCSP. Furthermore, the Proposed Project would not exceed any applicable regional or localized thresholds as discussed in Sections 4.2.5.2 and 4.2.6.2. As such, the Proposed Project would be consistent with the AQMP and a less than significant impact would occur.

Significance of Impact

Less Than Significant Impact.

4.2.4.2 Threshold AQ-2: Cumulative Increase in Criteria Pollutant Emissions

Impact Analysis

The PVCCSP EIR concluded that, even with mitigation, emissions from both the construction and operation of allowed uses within the PVCC would be significant and unavoidable. Specifically, construction-related emissions of NOx, reactive organic compounds (ROG, i.e., VOCs), and PM_{10}, and operational emissions of ROG (VOC), NOx, CO, PM_{10}, and $PM_{2.5}$ were determined to exceed the South Coast AQMD thresholds of significance.

Regional Construction Impacts

As previously discussed, the Proposed Project's construction emissions were calculated using CalEEMod. Assumptions for the phasing, duration, and required equipment for the construction of the Proposed Project were obtained from the Proposed Project applicant. The Proposed Project is anticipated to start construction no sooner than Spring 2025, taking approximately 12 months to complete. The Proposed Project is anticipated to be operational in 2026. The CalEEMod output and EMFAC Data are included in Appendix B of the Air Quality Impact Analysis (Appendix B of this EIR). The estimated maximum daily construction emissions without mitigation are summarized in Table 4.2-6, Construction-Related Regional Pollutant Emissions (pounds/day). As shown, the Proposed Project construction emissions would not exceed criteria air pollutant thresholds of significance established by the South Coast AQMD for any criteria air pollutant. Therefore, regional construction impacts would be less than significant.

Table 4.2-6. Construction-Related Regional Pollutant Emissions (pounds/day)

Activity	VOC[3]	NO_x	CO	SO_2	PM_{10}	$PM_{2.5}$
Maximum Daily Emissions [1,2]	72.60	29.80	48.70	<0.1	5.80	2.62
South Coast AQMD Thresholds	*75*	*100*	*550*	*150*	*150*	*55*
Significant?	**No**	**No**	**No**	**No**	**No**	**No**

Source: Refer to Appendix B.

Notes: CO = carbon monoxide; NOx = oxides of nitrogen; PM_{10} = particulate matter less than 10 microns in diameter; $PM_{2.5}$ = particulate matter less than 2.5 microns in diameter; SOx = sulfur oxides; VOC = volatile organic compounds;

1 = Includes on-site and off-site emissions. On-site grading PM-10 and PM-2.5 emissions show compliance with South Coast AQMD Rule 403 for fugitive dust

2 = Construction, painting and paving phases may overlap

3 = South Coast AQMD Rule 1113 limits architectural coatings for buildings to 50 g/L VOC and parking lot striping to 100 g/L VOC

Long-Term Regional Operational Impacts

There are four general sources of long-term operational emissions: area sources, energy sources, mobile sources (i.e., vehicles), and on-site cargo handling equipment. The primary source of operational emissions generated by the Proposed Project would be from mobile sources, specifically, the trucks that would travel to and from the Project Site and operate on the Project Site. Trip generation data is discussed further in Section 4.12, Transportation, of this EIR. The Proposed Project is expected to generate 1,047 average daily trips. The Proposed Project trip

generation includes 914 average daily passenger car trips and 133 average daily truck trips from the proposed warehouse (Appendix L).

Operational emissions were calculated using CalEEMod. The results of the modeling calculations are presented in Appendix B of the Air Quality Impact Analysis (Appendix B of this EIR). For vehicle emissions, traffic data was obtained from the Traffic Impact Analysis prepared by Ganddini Group Inc. (Appendix L of this EIR).

The maximum daily pollutant emissions created from the Proposed Project's long-term operations are shown in Table 4.2-7, Regional Operational Pollutant Emissions. As shown in this table, none of the South Coast AQMD regional thresholds of significance would be exceeded. Therefore, regional operational impacts would be less than significant.

Table 4.2-7. Regional Operational Pollutant Emissions

Activity	Pollutant Emissions (pounds/day)					
	VOC	NO_x	CO	SO_2	PM_{10}	$PM_{2.5}$
Maximum Daily Emissions	22.8	16.71	103.01	<1	19.70	5.37
South Coast AQMD Thresholds	*55*	*55*	*550*	*150*	*150*	*55*
Significant?	**No**	**No**	**No**	**No**	**No**	**No**

Source: CAPCOA 2022. Refer to Appendix B.

Notes: CO = carbon monoxide; NOx = oxides of nitrogen; PM_{10} = particulate matter less than 10 microns in diameter; $PM_{2.5}$ = particulate matter less than 2.5 microns in diameter; SOx = sulfur oxides; VOC = volatile organic compounds

As discussed in Section 4.2.1.2, Existing Conditions, criteria air pollutants have the potential to result in health impacts, such as headaches or throat irritation, at the time of exposure. In December 2018, in the case of *Sierra Club v. County of Fresno* (2018) 6 Cal.5th 502, the California Supreme Court held that an EIR air quality analysis must meaningfully connect the identified air quality impacts to the human health consequences of those impacts or meaningfully explain why that analysis cannot be provided.

Consistent with other local agencies, neither the City of Perris nor South Coast AQMD have adopted thresholds related to potential health impacts from criteria air pollutant emissions because individual exposure levels and individual reactions to localized short-term exposure to pollutant emissions from Project construction and operation cannot be feasibly determined. The localized level of ozone that receptors may be exposed to from VOC emissions cannot be determined because the formation of ozone is not directly determined by the quantity of VOC and NOx emissions generated by a project (San Joaquin Valley APCD 2015). The amount of ozone formed depends on heat and sunlight exposure, and once formed, ozone is likely to be dispersed or carried away from the site by wind. Conversely, ozone exposure on site could have been transported to the site by wind and be attributable to another source (EPA 2024a). Currently, there are no known methods that can feasibly ascertain the ultimate locations of ozone formation associated with the emissions of ozone precursors such as VOC and NOx (San Joaquin Valley APCD 2015).

In the absence to available data and methods to establish thresholds to reflect localized health impacts, the thresholds of significance adopted by the South Coast AQMD outlined in Tables 4.2-6 and Table 4.2-7 reflect Basin-wide consistency with the national and California ambient air quality standards, which are adopted to protect public health. Because the Project is calculated to below the South Coast AQMD thresholds of significance, the Project would not result in a significant contribution to impacts related to non-attainment of ambient air quality standards. The South Coast AQMD has also adopted the LSTs. The LSTs represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard and are developed based on the ambient concentrations of that pollutant for each source receptor area and distance to the nearest sensitive receptor. These thresholds of significance are intended to provide a better representation of potential local criteria pollutant exposure and potential health risks. Evaluation of localized impacts related to criteria pollutant emissions based on the LSTs, and cancer and chronic risks from diesel particulate matter from Project operation are addressed under Threshold AQ-3.

Significance of Impact

Less Than Significant Impact.

4.2.4.3 Threshold AQ-3: Sensitive Receptors

Impact Analysis

The PVCCSP EIR concludes that implementation of the PVCCSP and its subsequent implementing development and infrastructure projects would not expose sensitive receptors to substantial pollutant concentrations during project construction. However, the PVCCSP EIR acknowledges that individual projects would need to complete the appropriate analysis to address localized impacts from construction and operation. The PVCCSP EIR determined that impacts to sensitive receptors to be less than significant with no mitigation required.

Sensitive Receptors

Those who are sensitive to air pollution include children, older adults, and persons with pre-existing respiratory or cardiovascular illness. For purposes of CEQA, the South Coast AQMD considers a sensitive receptor to be a location where a sensitive individual could remain for 24 hours, such as residences, hospitals, or convalescent facilities (South Coast AQMD 2008). Commercial and industrial facilities are not included in the definition because employees do not typically remain on-site for 24 hours (Appendix B).

The nearest sensitive receptors to the Project Site include: the existing single-family residential uses located approximately 50 feet to the south of the Project Site (across Placentia Avenue), 495 feet to the east/northeast of the Project Site (across the drainage channel), and 695 feet to the west of the Project Site (along Redlands Avenue).

Localized Impacts from Criteria Air Pollutants

As previously stated, LSTs represent the maximum emissions from a project that will not cause or contribute to an exceedance of the most stringent applicable national and California ambient air quality standards at the nearest residence or sensitive receptor. Receptor locations are off-site locations where individuals may be exposed to emissions from Proposed Project activities. Consistent with the South Coast AQMD LST Methodology, the nearest land use where an individual could remain for 24 hours (in this case the nearest residential land use) has been used to determine construction and operational air quality impacts for PM_{10} and $PM_{2.5}$ emissions, since PM_{10} and $PM_{2.5}$ thresholds are based on a 24-hour averaging time.

As previously stated, the nearest industrial/commercial use to the Project Site is used to determine construction and operational LST air impacts for emissions of NO_X and CO as the averaging periods for these pollutants are shorter (8 hours or less).The nearest receptor used for evaluation of localized impacts of NO_X and CO is represented by existing single-family residential uses located approximately 50 feet to the south of the Project Site (across Placentia Avenue).

Construction

Construction activities associated with the Proposed Project would have the potential to generate air emissions and toxic air contaminant emissions. Assumptions for the phasing, duration, and required equipment for the construction of the Proposed Project were obtained from the Proposed Project applicant. Further details regarding construction can be found in Appendix B. The Proposed Project is anticipated to start construction no sooner than Spring 2025, taking approximately 12 months to complete. The Proposed Project is anticipated to be operational in 2026.

The LST analysis for construction is dependent, in part, on the number of acres that would be disturbed during each phase of construction. The disturbed area per day is representative of a piece of equipment making multiple passes over the same land area.

A complete list of off-road equipment assumed for construction activities, hours of operation, and maximum estimated emissions are presented in Appendix B of the Air Quality Impact Analysis (Appendix B of this EIR). The maximum acreage disturbed during Proposed Project implementation on a peak day would be 4.0 acres.

The local air emissions from construction were analyzed using the South Coast AQMD's Mass Rate Localized Significant Threshold Look-up Tables and the methodology described in the LST Methodology prepared by the South Coast AQMD. According to the LST Methodology, any receptor located closer than 25 meters (82 feet) shall be based on the 25-meter thresholds. As previously described, the nearest sensitive receptors to the Project Site are the existing single-family residential uses located approximately 50 feet (~15 meters) to the south, 495 feet (~151 meters) to the

east/northeast, and 695 feet (~212 meters) to the west of the Project Site; therefore, the South Coast AQMD Look-up Tables for 25 meters was used. Table 4.2-8, Local Construction Emissions at the Nearest Receptors, shows the on-site emissions from the CalEEMod for the different construction phases and the LST emissions thresholds.

The data provided in Table 4.2-8 shows that none of the analyzed criteria air pollutants would exceed the local emissions thresholds at the nearest sensitive receptors. Therefore, a less than significant local air quality impact would occur from construction of the Proposed Project.

Table 4.2-8. Local Construction Emissions at the Nearest Receptors

Activity	On-Site Pollutant Emissions (pounds/day)			
	NO_x	CO	PM_{10}	$PM_{2.5}$
Grading	29.70	28.30	4.82	2.56
Building Construction	16.70	20.10	0.68	0.62
Paving	7.12	9.94	0.32	0.29
Architectural Coating	0.86	1.13	0.02	0.02
Total Emissions	54.38	59.47	5.84	3.49
South Coast AQMD Thresholds	*170*	*883*	*7*	*4*
Exceed Threshold?	**No**	**No**	**No**	**No**

Source: CAPCOA 2022. Refer to Appendix B.

Notes: CO = carbon monoxide; NOx = oxides of nitrogen; PM_{10} = particulate matter less than 10 microns in diameter; $PM_{2.5}$ = particulate matter less than 2.5 microns in diameter; SOx = sulfur oxides; VOC = volatile organic compounds

Operation

Proposed Project-related air emissions from on-site sources such as architectural coatings, landscaping equipment, on-site usage of natural gas appliances as well as the operation of vehicles on-site may have the potential to exceed the state and federal air quality standards in the Proposed Project's vicinity, even though these pollutant emissions may not be significant enough to create a regional impact to the South Coast Air Basin.

Local air emissions from on-site operations were analyzed according to the methodology described in LST Methodology. The Proposed Project was analyzed based on the Perris Valley source receptor area (Area 24) and, as the site is 27.26 acres, used the thresholds for a five-acre Project Site.

Table 4.2-9, Local Operational Emissions at the Nearest Receptors, shows the on-site emissions from the CalEEMod that includes natural gas usage, landscape maintenance equipment, and vehicles operating on-site and the calculated emissions thresholds. Per LST Methodology, mobile emissions include only on-site sources which equate to approximately 10 percent of the Proposed Project-related new mobile sources. The data provided in Table 4.2-9 shows that the ongoing Proposed Project operations would not exceed South Coast AQMD local operational thresholds of significance. Therefore, the ongoing operations of the Proposed Project would create a less than significant operations-related impact to local air quality due to on-site emissions.

Table 4.2-9. Local Operational Emissions at the Nearest Receptors

On-Site Emission Source	On-Site Pollutant Emissions (pounds/day)			
	NO_x	CO	PM_{10}	$PM_{2.5}$
Area Sources	0.21	25.10	0.04	0.03
Energy Usage	2.97	2.49	0.23	0.23
Vehicle Emissions	1.38	7.52	1.95	0.51
Fire Water Pump	0.01	0.01	<0.005	<0.005
Total Emissions	*4.57*	*35.12*	*2.22*	*0.77*
South Coast AQMD Thresholds	*270*	*1,577*	*4*	*2*
Exceed Threshold?	**No**	**No**	**No**	**No**

Source: CAPCOA 2022. Refer to Appendix B.

Notes: CO = carbon monoxide; NOx = oxides of nitrogen; PM_{10} = particulate matter less than 10 microns in diameter; $PM_{2.5}$ = particulate matter less than 2.5 microns in diameter

Carbon Monoxide Hotspots

In addition to the estimated emissions presented above, the project-specific Air Quality Impact Analysis also assessed the potential for the Proposed Project to result in formation of CO "hotspots." CO is the pollutant of major concern along roadways because the most notable source of CO is motor vehicles. For this reason, CO concentrations are usually indicative of the local air quality generated by a roadway network and are used as an indicator of potential local air quality impacts. Local air quality impacts can be assessed by comparing future without and with Proposed Project CO levels to the state and federal CO standards which were presented above.

To determine if the Proposed Project could cause emission levels in excess of the CO standards discussed above, a sensitivity analysis is typically conducted to determine the potential for CO "hotspots" at a number of intersections in the general project vicinity. Because of reduced speeds and vehicle queuing, "hotspots" potentially can occur at high traffic volume intersections with a Level of Service E or worse.

The analysis prepared for CO attainment in the South Coast Air Basin by the South Coast AQMD can be used to assist in evaluating the potential for CO exceedances in the South Coast Air Basin. CO attainment was thoroughly analyzed as part of the South Coast AQMD's 2003 AQMP and the 1992 Federal Attainment Plan for Carbon Monoxide (1992 CO Plan). As discussed in the 1992 CO Plan, peak CO concentrations in the South Coast Air Basin are due to unusual meteorological and topographical conditions, and not due to the impact of particular intersections. Considering the region's unique meteorological conditions and the increasingly stringent CO emissions standards, CO modeling was performed as part of 1992 CO Plan and subsequent plan updates and AQMPs. In the 1992 CO Plan, a CO hotspot analysis was conducted for four busy intersections in Los Angeles at the peak morning and afternoon time periods. The intersections evaluated included: South Long Beach Boulevard and Imperial Highway (Lynwood); Wilshire Boulevard and Veteran Avenue (Westwood); Sunset Boulevard and Highland Avenue (Hollywood); and La Cienega Boulevard and

Century Boulevard (Inglewood). These analyses did not predict a violation of CO standards. The busiest intersection evaluated was that at Wilshire Boulevard and Veteran Avenue, which has a daily traffic volume of approximately 100,000 vehicles per day (2003 AQMP Appendix V, Table 4-7). The Los Angeles County Metropolitan Transportation Authority9 evaluated the Level of Service in the vicinity of the Wilshire Boulevard/Veteran Avenue intersection and found it to be Level of Service E during the morning peak hour and Level of Service F during the afternoon peak hour (MTA 2004).

According to the Traffic Impact Analysis (Appendix L), the Proposed Project would generate a maximum of approximately 1,047 daily vehicle trips. The intersection with the highest traffic volume is located at Wilson Avenue and Rider Street and has an Opening Year (2026) With Project AM peak hour volume of 823 vehicles (Appendix L). The 1992 Federal Attainment Plan for Carbon Monoxide (1992 CO Plan) showed that an intersection which has a daily traffic volume of approximately 100,000 vehicles per day would not violate the CO standard. Therefore, as the intersection volume falls far short of 100,000 vehicles per day, no CO "hotspot" modeling was required and no significant long-term air quality impact is anticipated to local air quality with the ongoing operation of the Proposed Project.

Toxic Air Contaminants

Construction

The greatest potential for toxic air contaminant emissions would be related to diesel particulate matter emissions associated with heavy equipment operations during construction of the Proposed Project. According to the Office of Environmental Health Hazard Assessment (OEHHA) and the South Coast AQMD Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis, health effects from toxic air contaminants are described in terms of individual cancer risk based on a lifetime (i.e., 30-year) resident exposure duration. Given the temporary and short-term construction schedule (approximately 12 months), the Proposed Project would not result in a long-term (i.e., lifetime or 30-year) exposure as a result of Proposed Project construction. Furthermore, construction-based PM emissions (including diesel exhaust emissions) do not exceed any local or regional thresholds

The Proposed Project would be required to comply with the CARB Air Toxics Control Measure that limits diesel-powered equipment and vehicle idling to no more than 5 minutes at a location, and the CARB In-Use Off-Road Diesel Vehicle Regulation; compliance with these would minimize emissions of toxic air contaminants during construction. The Proposed Project would also comply with the requirements of South Coast AQMD Rule 1403 if asbestos is found during the construction activities.

Health Risk Assessment

In order to evaluate the potential significance of the Proposed Project's mobile source diesel particulate matter emissions, and as required by PVCCSP EIR mitigation measure MM Air 15, the Placentia Avenue Industrial Health Risk Assessment, City of Perris (HRA), has been prepared by Ganddini Group Inc. (2024) and is included in Appendix B of this EIR. The Proposed Project's HRA is based on South Coast AQMD guidelines to produce conservative estimates of human health risk posed by exposure to diesel particulate matter.

Estimate of Emission Factors

The stationary sources emissions from the occasional use/testing of a 190 horsepower emergency fire pump 26 hours a year were calculated from the CalEEMod annual output Exhaust PM_{10} operational emissions for stationary sources (see the Air Quality Impact Analysis for CalEEMod details). The emissions of 0.005 tons/year were converted into grams per second. The total size of the emissions area was estimated to be 36.1 square meters (approximately the area of the fire pump room). See Table 4.2-10, below for the emissions factor used.

The diesel particulate matter emission factors for the various vehicle types were derived from the CARB EMFAC2021 mobile source emission model. The four different sets of emissions factors used in this assessment are detailed in Table 4.2-10, Diesel Particulate Matter Emissions Factors for the Proposed Project. It should be noted that the Diesel particulate matter emissions on both the gram per mile and gram per idle hour bases decline beyond 2026 for all vehicle classes and in particular the heavy-heavy-duty truck class (the 4+ axle "big rig" trucks). This is due to the CARB emissions' requirements on heavy-duty trucks that call for either the replacement of older trucks with cleaner trucks or the installation of Diesel particulate matter filters on the truck fleet.

Table 4.2-10. Diesel Particulate Matter Emissions Factors for the Proposed Project

Vehicle Class	1-Year Average (Opening Year 2026)		
	On-Site Travel (g/mi)	Off-Site Travel (g/mi)	Idling (g/hr)
Light Heavy-Duty Truck 2	0.04702	0.01946	0.77754
Medium Heavy-Duty Truck	0.02675	0.00660	0.04976
Heavy-Heavy-Duty Truck	0.01146	0.00773	0.01392
Emergency Fire Water Pump	0.00000398788 g/m2-sec		

Source: CAPCOA 2022. Refer to Appendix B.

Notes: CO = carbon monoxide; NOx = oxides of nitrogen; PM_{10} = particulate matter less than 10 microns in diameter; $PM_{2.5}$ = particulate matter less than 2.5 microns in diameter

Emission Source Characterization

Each of the emission source types described above also requires geometrical and emission release specifications for use in the air dispersion model. An average truck height of 13.5 feet and average truck width of 8.5 feet were entered into the haul road calculator in AERMOD in order to calculate

the plume height and release height for the line sources. The Air Quality Impact Analysis (Appendix B of this EIR) provides a summary of the assumptions used to configure the various emission sources. The following definitions are used to characterize the emission source geometrical configurations referred to in Table 13 of Appendix B:

- **Point source:** A single, identifiable, local source of emissions; it is approximated in the AERMOD air dispersion model as a mathematical point in the modeling region with a location and emission characteristics such as height of release, temperature, etc., for example, a truck idle location where emissions are sourced from the truck's exhaust stack while the vehicle is stationary.
- **Line source:** A series of volume sources along a path, for example, vehicular traffic volumes along a roadway.

The nearest sensitive receptor consists of the existing single-family residential uses located approximately 50 feet (~15 meters) to the south of the Project Site (see Figure 3 of Appendix B) (Receptors 1, 2, and 3), 495 feet (~151 meters) to the east/northeast of the Project Site (Receptor 5), and 695 feet (~212 meters) to the west of the Project Site (Receptor 6). The most-impacted residential receptors are shown as orange triangles labeled 1 through 6. The direction of on-site and off-site truck travel were obtained from the site plan, Traffic Impact Analysis, and City truck routes.

Dispersion Modeling

The assessment of air quality and health risk impacts from pollutant emissions from the Proposed Project applied the EPA AERMOD Model, which is the air dispersion model accepted by the South Coast AQMD for performing air quality impact analyses. A summary of Emission Configurations and basic options used in the dispersion modeling is shown in Tables 13 and 14, respectively, of the HRA (Appendix B).

The analysis takes into account the effects of building downwash on the dispersion of emissions from the various sources located at the Proposed Project Site. For purposes of this analysis, the emission source and building locations were taken from the Proposed Project Site plan. The proposed building geometries were obtained from the Proposed Project plans, assuming a uniform building height of approximately 40 feet. While the Proposed Project may exceed the assumed 40-foot height at different points of the building, it would not increase the risk potential associated with emissions dispersion.

Estimation of Health Risks

Based on the assumptions in the HRA (Appendix B), the 30.25-year, cumulative carcinogenic health risk to an individual born during the opening year of the Proposed Project, and located in the Proposed Project’s vicinity for the entire 30-year duration, is a maximum of 2.32 in a million

at receptor location 3. Therefore, as the maximum individual cancer risk would not exceed 10 in a million at any sensitive receptor location, the ongoing operation of the Proposed Project would result in a less than significant impact due to the cancer risk from diesel emissions created by the Proposed Project.

Tables 15 through 19 of the Proposed Project's HRA (Appendix B) summarize the Exposure Parameters for residential exposure scenarios based on 2015 OEHHA Guidelines. Appendix B of the HRA (Appendix B) includes the detailed risk calculation. The South Coast AQMD CEQA Air Quality Handbook states that emissions of toxic air contaminants are considered significant if an HRA shows an increased risk of greater than 10 in one million. Based on the analysis presented in the Proposed Project's HRA, the following provides a summary of potential impacts to nearby receptors.

The highest cancer risk is to children 2–16 years and is located at receptor 3 (see Figure 3 of Appendix B), with a maximum risk of 1.13 in one million. The maximum 3rd trimester (0.25-year) cancer risk is at receptor 3; with a maximum cancer risk of 0.04 in a million. The highest infant (zero to 2 years) cancer risk is at receptor 3; with a maximum risk of 1.02 in one million and the highest adult (16–30 years) cancer risk is also at receptor 3; with a maximum risk of 0.13 in one million. Therefore, no children, infants, or adults would be exposed to cancer risks in excess of 10 in a million.

The assessment of cancer-related health risk to sensitive receptors within the Proposed Project vicinity is based on the following most-conservative scenario: An unborn child in its 3rd trimester is potentially exposed to Diesel particulate matter emissions (via exposure of the mother) during the opening year. That child is born opening year and then remains at home for the entire first 2 years of life. From age 2 to 16, the child remains at home 100 percent of the time. From age 16 to 30, the child continues to live at home, growing into an adult that spends 73 percent of its time at home and lives there until age 30.

Based on the above, the 30.25-year, cumulative carcinogenic health risk (to an individual born during the opening year of the Proposed Project, and located in the Proposed Project vicinity for the entire 30-year duration), is a maximum of 2.32 in a million at receptor location 3. Therefore, as the maximum individual cancer risk would not exceed 10 in a million at any sensitive receptor location, the ongoing operation of the Proposed Project would result in a less than significant impact due to the cancer risk from diesel emissions created by the Proposed Project.

Non-cancer risk were also evaluated in the HRA. The non-carcinogenic hazards to adult, child and infant receptors are also detailed in Tables 15 through 18. The Reference Exposure Level for diesel particulate matter concentration at which no adverse health effects are anticipated is 5 $\mu g/m^3$. The OEHHA as protective for the respiratory system has established this concentration. Using the maximum diesel particulate matter concentration from opening year 2026, the resulting Hazard

Index would be 0.0006. The criterion for significance is an Hazard Index increase of 1.0 or greater. Therefore, the ongoing operations of the Proposed Project would result in a less than significant impact due to the non-cancer risk from diesel emissions created by the Proposed Project.

In accordance with the South Coast AQMD methodology, projects that do not exceed the South Coast AQMD criteria or can be mitigated to less than criteria levels are not significant and do not add to the overall cumulative impact. This applies to toxic air contaminants as well, as the South Coast AQMD does not have any cumulative toxic air contaminant thresholds; therefore, projects that do not exceed the South Coast AQMD toxic air contaminant threshold criteria or can be mitigated to less than criteria levels are not significant and do not add to the overall cumulative impact. As detailed above, the 30.25-year, cumulative carcinogenic health risk is a maximum of 2.32 in a million at the most-impacted receptor location, the existing residential use closest to the southern loading docks on the southern side of Placentia Avenue. Therefore, the Proposed Project's diesel emissions would not exceed the South Coast AQMD maximum individual cancer risk threshold of 10 in a million and the Proposed Project would not be considered to be cumulatively significant for toxic air contaminants.

In December 2018, in the case of *Sierra Club v. County of Fresno* (2018) 6 Cal.5th 502, the California Supreme Court held that an Environmental Impact Report's (EIR) air quality analysis must meaningfully connect the identified air quality impacts to the human health consequences of those impacts, or meaningfully explain why that analysis cannot be provided.

Most local agencies, including the City of Perris, lack the data to do their own assessment of potential health impacts from criteria air pollutant emissions, as would be required to establish customized, locally-specific thresholds of significance based on potential health impacts from an individual development project. The use of national or "generic" data to fill the gap of missing local data would not yield accurate results because such data does not capture local air patterns, local background conditions, or local population characteristics, all of which play a role in how a population experiences air pollution. Because it is impracticable to accurately isolate the exact cause of a human disease (for example, the role a particular air pollutant plays compared to the role of other allergens and genetics in causing asthma), existing scientific tools cannot accurately estimate health impacts of the Proposed Project's air emissions without undue speculation. Instead, readers are directed to the Proposed Project's air quality impact analysis above, which provides extensive information concerning the quantifiable and non-quantifiable health risks related to the Proposed Project's construction and long-term operation.

Notwithstanding the above, this air quality analysis does evaluate the Proposed Project's localized impact to air quality for emissions of CO, NOx, PM_{10}, and $PM_{2.5}$ by comparing the Proposed Project's on-site emissions to the South Coast AQMD's applicable LST thresholds. The LST analysis above determined that the Proposed Project would not result in emissions exceeding South

Coast AQMD's LSTs. Therefore, the Proposed Project would not be expected to exceed the most stringent applicable federal or state ambient air quality standards for emissions of CO, NOx, PM_{10}, and $PM_{2.5}$.

As the Proposed Project's emissions would comply with federal, state, and local air quality standards, the Proposed Project's emissions are not sufficiently high enough to warrant use of a regional modeling program to correlate health effects on a basin-wide level and would not provide a reliable indicator of health effects if modeled.

Significance of Impact

Less Than Significant Impact.

4.2.4.4 Threshold AQ-4: Odors

Impact Analysis

Construction

Potential sources that may emit odors during construction activities include the application of materials such as asphalt pavement. The objectionable odors that may be produced during the construction process are short-term in nature and the odor emissions are expected to cease upon the drying or hardening of the odor producing materials. Due to the short-term nature and limited amounts of odor producing materials being utilized, no significant impact related to odors would occur during construction of the Proposed Project. Diesel exhaust and VOCs would be emitted during construction of the Proposed Project, which are objectionable to some; however, emissions would disperse rapidly from the Project Site and therefore should not reach an objectionable level at the nearest sensitive receptors. Therefore, potential impacts would be less than significant.

Operation

The South Coast AQMD CEQA Air Quality Handbook states that a project that creates an odor nuisance pursuant to South Coast AQMD Rule 402 would result in a significant impact. Thus, compliance with South Coast AQMD Rule 402 would reduce potential impacts to less than significant levels.

Potential sources that may emit odors during the ongoing operations of the Proposed Project would include odor emissions from the intermittent diesel delivery truck emissions and trash storage areas. Due to the distance of the nearest receptors from the Project Site and through compliance with South Coast AQMD Rule 402, no significant impact related to odors would occur during the ongoing operations of the Proposed Project. Additionally, Proposed Project operational-related refuse would be stored in covered containers and removed at regular intervals in compliance with the City's solid waste regulations (Appendix B). Therefore, potential impacts would be less than significant in this regard.

Significance of Impact

Less Than Significant Impact.

4.2.5 Cumulative Impacts

The following sections address various potential cumulative impacts relating to air quality that could result from implementation of the Proposed Project.

4.2.5.1 Cumulative Threshold AQ-1: Consistency with Applicable Air Quality Plan

The AQMP is a cumulative plan for achieving ambient air quality standards in the South Coast Air Basin. As indicated under the analysis of Threshold AQ-1, the Proposed Project would not result in a conflict with the South Coast AQMD 2022 AQMP. As such, cumulatively considerable impacts due to a conflict with the AQMP would be less than significant.

As previously discussed, CARB designate the South Coast Air Basin as non-attainment for ozone, PM_{10}, and $PM_{2.5}$ under California Ambient Air Quality Standards while the EPA designates the South Coast Air Basin as non-attainment for ozone and $PM_{2.5}$ under the National Ambient Air Quality Standards. The AQMP is based on growth projections provided by SCAG. If projects are determined to be consistent with zoning/land use designations for the site, then cumulative projects would not have a cumulative impact. The Proposed Project is consistent with existing PVCCSP land use designation for the Project Site. Therefore, the Proposed Project would be consistent with the AQMP and would not result in a cumulatively considerable contribution to regional air quality impacts.

4.2.5.2 Cumulative Threshold AQ-2: Cumulative Increase in Criteria Pollutant Emissions

A project that is consistent with the South Coast AQMD thresholds of significance is considered to result in less than cumulatively considerable emissions. As indicated under the analysis for Threshold AQ-2, construction and operational-source air pollutant emissions would not result in exceedances of regional thresholds. Thus, the Proposed Project's emissions during construction and operation would be less than cumulatively considerable.

4.2.5.3 Cumulative Threshold AQ-3: Sensitive Receptors

Active cumulative projects within a 1-mile radius of the Project Site are listed in Table 4-1, Cumulative Projects, in Chapter 4, Environmental Analysis. The types of projects listed include housing, commercial/retail, and hotel, industrial, warehouse, and houses of worship projects. These projects are at various stages of development and require individual analysis to determine air quality impacts to sensitive receptors.

The Proposed Project construction and operational-source localized emissions would not exceed the South Coast AQMD's LSTs for any criteria air pollutant. Thus, the Proposed Project's localized emissions during construction and operation would be less than cumulatively considerable. In addition, construction and operation of the Proposed Project would not emit airborne toxic air contaminants at concentrations that would pose a significant health risk (including acute and carcinogenic health risks) to nearby sensitive receptors. Accordingly, long-term operation of the Proposed Project would not expose nearby sensitive receptors to substantial localized pollutant concentrations, and a cumulatively considerable impact would not occur.

4.2.5.4 Cumulative Threshold AQ-4: Odors

Impacts relative to objectionable odors are limited to the area immediately surrounding the odor source and are not cumulative in nature because the air emissions that cause odors disperse beyond the sources of the odor. As the emissions disperse, the odor becomes decreasingly detectable. With respect to odors, the Proposed Project does not include any land uses associated with the generation of odors or other emissions that could adversely affect a substantial number of people. Odors associated with the Proposed Project would occur during construction and operation. Construction-related odors would include construction equipment exhaust and the application of asphalt and architectural coatings, which would be temporary, short-term, and intermittent in nature, and would not contribute to any cumulatively considerable odor impacts in the local area. There are no components of the Proposed Project that could result in odors adversely affecting a substantial number of people; thus, Proposed Project-related odor impacts in combination with other cumulative projects would be less than cumulatively considerable.

4.2.6 Level of Significance Before Mitigation

4.2.6.1 Threshold AQ-1: Consistency with Applicable Air Quality Plan

The Proposed Project would not conflict with or obstruct implementation of the applicable Air Quality Plan.

4.2.6.2 Threshold AQ-2: Cumulative Increase in Criteria Pollutant Emissions

The Proposed Project would not result in a cumulatively considerable net increase of any criteria air pollutant for which the South Coast Air Basin is non-attainment under an applicable federal or state ambient air quality standard.

4.2.6.3 Threshold AQ-3: Sensitive Receptors

The Proposed Project would not expose sensitive receptors to substantial pollutant concentrations.

4.2.6.4 Threshold AQ-4: Odors

The Proposed Project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

4.2.7 Mitigation Measures

By preparing the Air Quality Impact Analysis, the Proposed Project has complied with PVCCSP EIR mitigation measures MM Air 1, MM Air 10, and MM Air 15. The following PVCCSP EIR mitigation measures are applicable to the Proposed Project. Implementation of these measures would further reduce the less than significant impacts of the Proposed Project and no Project-specific mitigation measures are required.

MM Air 2 Each individual implementing development project shall submit a traffic control plan prior to the issuance of a grading permit. The traffic control plan shall describe in detail safe detours and provide temporary traffic control during construction activities for that project. To reduce traffic congestion, the plan shall include, as necessary, appropriate, and practicable, the following: temporary traffic controls such as a flag person during all phases of construction to maintain smooth traffic flow, dedicated turn lanes for movement of construction trucks and equipment on- and off-site, scheduling of construction activities that affect traffic flow on the arterial system to off-peak hour, consolidating truck deliveries, rerouting of construction trucks away from congested streets or sensitive receptors, and/or signal synchronization to improve traffic flow.

MM Air 3 To reduce fugitive dust emissions, the development of each individual implementing development project shall comply with South Coast AQMD Rule 403. The developer of each implementing project shall provide the City of Perris with the South Coast AQMD-approved dust control plan, or other sufficient proof of compliance with Rule 403, prior to grading permit issuance. Dust control measures shall include, but are not limited to:

- Requiring the application of non-toxic soil stabilizers according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for 20 days or more, assuming no rain),
- Keeping disturbed/loose soil moist at all times.
- Requiring trucks entering or leaving the site hauling dirt, sand, or soil, or other loose materials on public roads to be covered,

- Installation of wheel washers or gravel construction entrances where vehicles enter and exit unpaved roads onto paved roads, or wash off trucks and any equipment leaving the site each trip,
- Posting and enforcement of traffic speed limits of 15 miles per hour or less on all unpaved portions of the project site,
- Suspending all excavating and grading operations when wind gusts (as instantaneous gust) exceed 25 miles per hour,
- Appointment of a construction relations officer to act as a community liaison concerning on-site construction activity including resolution of issues related to PM-10 generation,
- Sweeping streets at the end of the day if visible soil material is carried onto adjacent paved public roads and use of South Coast AQMD Rule 1186 and 1186.1 certified street sweepers or roadway washing trucks when sweeping streets to remove visible soil materials,
- Replacement of ground cover in disturbed areas as quickly as possible.

MM Air 4 Building and grading permits shall include a restriction that limits idling of construction equipment on site to no more than five minutes.

MM Air 5 Electricity from power poles shall be used instead of temporary diesel or gasoline-powered generators to reduce the associated emissions. Approval will be required by the City of Perris' Building Division prior to issuance of grading permits.

MM Air 6 The developer of each implementing development project shall require, by contract specifications, the use of alternative fueled off-road construction equipment, the use of construction equipment that demonstrates early compliance with off-road equipment with the CARB in-use off-road diesel vehicle regulation (South Coast AQMD Rule 2449) and/or meets or exceeds Tier 3 standards with available CARB verified or USEPA certified technologies. Diesel equipment shall use water emulsified diesel fuel such as PuriNOx unless it is unavailable in Riverside County at the time of project construction activities. Contract specifications shall be included in project construction documents, which shall be reviewed by the City of Perris' Building Division prior to issuance of a grading permit.

MM Air 7 During construction, ozone precursor emissions from mobile construction equipment shall be controlled by maintaining equipment engines in good condition and in proper tune per manufacturers' specifications to the satisfaction of the City of Perris' Building Division. Equipment

maintenance records and equipment design specification data sheets shall be kept on site during construction. Compliance with this measure shall be subject to periodic inspections by the City of Perris' Building Division.

MM Air 8 Each individual implementing development project shall apply paints using either high volume low pressure (HVLP) spray equipment with a minimum transfer efficiency of at least 50 percent or other application techniques with equivalent or higher transfer efficiency.

MM Air 9 To reduce VOC emissions associated with architectural coating, the project designer and contractor shall reduce the use of paints and solvents by utilizing pre-coated materials (e.g., bathroom stall dividers, metal awnings), materials that do not require painting, and require coatings and solvents with a VOC content lower than required under Rule 1113 to be utilized. The construction contractor shall be required to utilize "Super-Compliant" VOC paints, which are defined in South Coast AQMD's Rule 1113. Construction specifications shall be included in building specifications that assure these requirements are implemented. The specifications for each implementing development project shall be reviewed by the City of Perris' Building Division for compliance with this mitigation measure prior to issuance of a building permit for that project.

MM Air 11 Signage shall be posted at loading docks and all entrances to loading areas prohibiting all on-site truck idling in excess of five minutes.

MM Air 13 In order to promote alternative fuels, and help support "clean" truck fleets, the developer/successor-in-interest shall provide building occupants and businesses with information related to South Coast AQMD's Carl Moyer Program, or other state programs that restrict operations to "clean" trucks, such as 2007 or newer model year or 2010 compliant vehicles and information including, but not limited to, the health effect of diesel particulates, benefits of reduced idling time, CARB regulations, and importance of not parking in residential areas. If trucks older than 2007 model year would be used at a facility with three or more dock-high doors, the developer/successor-in-interest shall require, within 1 year of signing a lease, future tenants to apply in good-faith for funding for diesel truck replacement/retrofit through grant programs such as the Carl Moyer, Prop 1B, VIP [On-road Heavy Duty Voucher Incentive Program], HVIP [Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project], and SOON [Surplus Off-Road Opt-in for NOx] funding programs, as identified on

South Coast AQMD's website (http://www.aqmd.gov). Tenants would be required to use those funds, if awarded.

MM Air 14 Each implementing development project shall designate parking spaces for high-occupancy vehicles and provide larger parking spaces to accommodate vans used for ride sharing. Proof of compliance would be required prior to the issuance of occupancy permits.

MM Air 18 Prior to the approval of each implementing development project, the Riverside Transit Agency (RTA) shall be contacted to determine if the RTA has plans for the future provision of bus routing within any street that is adjacent to the implementing development project that would require bus stops at the project access points. If the RTA has future plans for the establishment of a bus route that will serve the implementing development project, road improvements adjacent to the Project sites shall be designed to accommodate future bus turnouts at locations established through consultation with the RTA. RTA shall be responsible for the construction and maintenance of the bus stop facilities. The area should aside for bus turnouts shall conform to RTA design standards, including the design of the contact between sidewalks and curb and gutter at bus stops and the use of Americans with Disabilities Act (ADA)-compliant paths to the major building entrances in the project.

MM Air 19 In order to reduce energy consumption from the individual implementing development projects, applicable plans (e.g., electrical plans, improvement maps) submitted to the City shall include the installation of energy-efficient street lighting throughout the project site. These plans shall be reviewed and approved by the applicable City Department (e.g., City of Perris' Building Division) prior to conveyance of applicable streets.

MM Air 20 Each implementing development project shall be encouraged to implement, at a minimum, an increase in each building's energy efficiency 15 percent beyond Title 24, and reduce indoor water use by 25 percent. All requirements would be documented through a checklist to be submitted prior to issuance of building permits for the implementing development project with building plans and calculations.

4.2.8 Level of Significance After Mitigation

Because no Project-specific mitigation measures are required, potential impacts are the same as described in Section 4.2.6, Level of Significance Before Mitigation.