# 5.3 Air Quality

## 5.3.1 INTRODUCTION

This section addresses potential air quality emissions impacts that may result from implementation of the Project. The following discussion addresses the existing air quality conditions in the vicinity of the Specific Plan, identifies applicable regulations, evaluates the Project's consistency with applicable goals and policies, identifies and analyzes environmental impacts, and recommends measures to reduce or avoid adverse impacts anticipated from implementation of the Project. The analysis in this section is based on the following resources:

- *City of Perris General Plan 2030,* Adopted 26 April 2005
- *City of Perris General Plan 2030 Environmental Impact Report,* Certified 26 April 2005
- Perris Municipal Code
- *Harvest Landing Retail Center & Business Park Project Air Quality Impact Analysis*, prepared by Urban Crossroads, April 2025, included as EIR Appendix B
- *Harvest Landing Retail Center & Business Park Project Construction and Operational Health Risk Assessment,* prepared by Urban Crossroads, April 2025, included as EIR Appendix C.

## 5.3.2 REGULATORY SETTING

### 5.3.2.1 Federal Regulation

#### United States Environmental Protection Agency

*Criteria Air Pollutants*

At the federal level, the United States Environmental Protection Agency (EPA) has been charged with implementing national air quality programs. The EPA's air quality mandates are drawn primarily from the federal Clean Air Act, which was enacted in 1970. The most recent major amendments to the Clean Air Act were made by Congress in 1990.

The Clean Air Act requires the EPA to establish National Ambient Air Quality Standards. The EPA has established primary and secondary National Ambient Air Quality Standards for the following criteria air pollutants: ozone, carbon monoxide (CO), nitrogen dioxide ($NO_2$), sulfur dioxide ($SO_2$), respirable particulate matter ($PM_{10}$), fine particulate matter ($PM_{2.5}$), and lead. Table 5.3-1 shows the National Ambient Air Quality Standards for these pollutants. The Clean Air Act also requires each state to prepare an air quality control plan, referred to as a state implementation plan. The Clean Air Act Amendments of 1990 added requirements for states with nonattainment areas to revise their state implementation plans to incorporate additional control measures to reduce air pollution. The state implementation plan is modified periodically to reflect the latest emissions inventories, planning documents, and rules and regulations of the air basins, as reported by their jurisdictional agencies. The EPA is responsible for reviewing all state implementation plans to determine whether they conform to the mandates of the Clean Air Act and its amendments, and to determine whether implementing the state implementation plans will achieve air quality goals. If the EPA determines a state implementation plan to be inadequate, a federal implementation plan that imposes additional control measures may be prepared for the nonattainment area.

The EPA also has regulatory and enforcement jurisdiction over emission sources beyond state waters (outer continental shelf), and those that are under the exclusive authority of the federal government, such as aircraft,

locomotives, and interstate trucking. The EPA's primary role at the state level is to oversee state air quality programs. The EPA sets federal vehicle and stationary source emissions standards and provides research and guidance in air pollution programs.

**Table 5.3-1: Ambient Air Quality Standards for Criteria Pollutants**

| Pollutant | Averaging Time | State Standard | National Standard | Pollutant Health and Atmospheric Effects | Major Pollutant Sources |
|---|---|---|---|---|---|
| **Ozone** | 1 hour<br>8 hours | 0.09 ppm<br>0.07 ppm | ---<br>0.075 ppm | High concentrations can directly affect lungs, causing irritation. Long-term exposure may cause damage to lung tissue. | Formed when reactive organic gases and nitrogen oxides react in the presence of sunlight. Major sources include on-road motor vehicles, solvent evaporation, and commercial/industrial mobile equipment. |
| **Carbon Monoxide (CO)** | 1 hour<br>8 hours | 20 ppm<br>9.0 ppm | 35 ppm<br>9 ppm | Classified as a chemical asphyxiant, carbon monoxide interferes with the transfer of fresh oxygen to the blood and deprives sensitive tissues of oxygen. | Internal combustion engines, primarily gasoline-powered motor vehicles. |
| **Nitrogen Dioxide ($NO_2$)** | 1 hour<br>Annual Arithmetic Mean | 0.18 ppm<br>0.030 ppm | 0.100 ppm<br>0.053 ppm | Irritating to eyes and respiratory tract. Colors atmosphere reddish-brown. | Motor vehicles, petroleum refining operations, industrial sources, aircraft, ships, and railroads. |
| **Sulfur Dioxide ($SO_2$)** | 1 hour<br>3 hours<br>24 hours<br>Annual Arithmetic Mean | 0.25 ppm<br>---<br>0.04 ppm<br>--- | 75 ppb<br>0.50 ppm<br>0.14 ppm<br>0.03 ppm | Irritates upper respiratory tract; injurious to lung tissue. Can yellow the leaves of plants, destructive to marble, iron, and steel. Limits visibility and reduces sunlight. | Fuel combustion, chemical plants, sulfur recovery plants, and metal processing. |
| **Respirable Particulate Matter ($PM_{10}$)** | 24 hours<br>Annual Arithmetic Mean | 50 µg/m³<br>20 µg/m³ | 150 µg/m³<br>--- | May irritate eyes and respiratory tract, decreases in lung capacity, cancer and increased mortality. Produces haze and limits visibility. | Dust and fume-producing industrial and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities (e.g., wind-raised dust and ocean sprays). |
| **Fine Particulate Matter ($PM_{2.5}$)** | 24 hours<br>Annual Arithmetic Mean | ---<br>12 µg/m³ | 35 µg/m³<br>12 µg/m³ | Increases respiratory disease, lung damage, cancer, and premature death. Reduces visibility and results in surface soiling. | Fuel combustion in motor vehicles, equipment, and industrial sources; residential and agricultural burning; Also, formed from photochemical reactions of other pollutants, including nitrogen oxides, sulfur oxides, and organics. |
| **Lead (Pb)** | 30 Day Average<br>Calendar Quarter<br>Rolling 3-Month Average | 1.5 µg/m³<br>---<br>--- | ---<br>1.5 µg/m³<br>0.15 µg/m³ | Disturbs gastrointestinal system, and causes anemia, kidney disease, and neuromuscular and neurological dysfunction (in severe cases). | *Present source:* lead smelters, battery manufacturing and recycling facilities. Past source: combustion of leaded gasoline. |
| **Hydrogen Sulfide** | 1 hour | 0.03 ppm | … | Nuisance odor (rotten egg smell), headache and breathing difficulties (higher concentrations) | Geothermal power plants, petroleum production and refining |
| **Sulfates ($SO_4$)** | 24 hour | 25 µg/m³ | … | Decrease in ventilatory functions; aggravation of asthmatic symptoms; aggravation of cardio-pulmonary disease; vegetation damage; degradation of visibility; property damage. | Industrial processes. |
| **Visibility Reducing Particles** | 8 hour | Extinction of 0.23/km; visibility of 10 miles or more | … | Reduces visibility, reduced airport safety, lower real estate value, and discourages tourism. | See PM2.5. |

ppm = parts per million; ppb = parts per billion; µg/m³ = micrograms per cubic meter.

### *Hazardous Air Pollutants*

The EPA has programs for identifying and regulating hazardous air pollutants. Title III of the Clean Air Act Amendments directed the EPA to promulgate national emissions standards for hazardous air pollutants (. The national emissions standards for hazardous air pollutants may differ for major sources than for area sources of hazardous air pollutants. Major sources are defined as stationary sources with potential to emit more than

10 tons per year of any hazardous air pollutant or more than 25 tons per year of any combination of hazardous air pollutants; all other sources are considered area sources. The emissions standards are to be promulgated in two phases. In the first phase (1992–2000), the EPA developed technology-based emission standards designed to produce the maximum emission reduction achievable. These standards are generally referred to as requiring maximum achievable control technology. For area sources, the standards may be different, based on generally available control technology. In the second phase (2001–2008), the EPA promulgated health-risk-based emissions standards that were deemed necessary to address risks remaining after implementation of the technology-based national emissions standards for hazardous air pollutants standards. The Clean Air Act Amendments also required the EPA to promulgate vehicle or fuel standards containing reasonable requirements that control toxic emissions of, at a minimum, benzene and formaldehyde. Performance criteria were established to limit mobile-source emissions of toxics, including benzene, formaldehyde, and 1,3-butadiene. In addition, Section 219 required the use of reformulated gasoline in selected areas with the most severe ozone nonattainment conditions to further reduce mobile-source emissions.

## 5.3.2.2 State Regulations

### California Air Resources Board

*Criteria Air Pollutants*

The California Air Resources Board (CARB), a department of the California Environmental Protection Agency, oversees air quality planning and control throughout California. CARB is responsible for coordination and oversight of state and local air pollution control programs in California and for implementation of the California Clean Air Act. The California Clean Air Act, which was adopted in 1988, requires CARB to establish the California Ambient Air Quality Standards. CARB has established ambient air quality standards for sulfates, hydrogen sulfide, vinyl chloride, visibility-reducing particulate matter, and the above-mentioned criteria air pollutants. Applicable California Ambient Air Quality Standards are shown in Table 5.3-1 along with the National Ambient Air Quality Standards.

The California Clean Air Act requires all local air districts in the state to endeavor to achieve and maintain the California Ambient Air Quality Standards by the earliest practical date. The Act specifies that local air districts shall focus particular attention on reducing the emissions from transportation and area-wide emission sources and provides districts with the authority to regulate indirect sources.

Among CARB's other responsibilities are overseeing compliance by local air districts with California and federal laws, approving local air quality plans, submitting state implementation plans to the EPA, monitoring air quality, determining and updating area designations and maps, and setting emissions standards for new mobile sources, consumer products, small utility engines, off-road vehicles, and fuels.

*Diesel Regulations*

CARB and the Ports of Los Angeles and Long Beach have adopted several iterations of regulations for diesel trucks that are aimed at reducing diesel particulate matter. More specifically, the CARB Drayage Truck Regulation, the CARB statewide On-road Truck and Bus Regulation, and the Ports of Los Angeles and Long Beach "Clean Truck Program" require accelerated implementation of "clean trucks" into the statewide truck fleet. In other words, older more polluting trucks will be replaced with newer, cleaner trucks as a function of these regulatory requirements.

Moreover, the average statewide diesel particulate matter emissions for Heavy Duty Trucks, in terms of grams of diesel particulate matter generated per mile traveled, will dramatically be reduced due to these

regulatory requirements. Diesel emissions identified in this analysis therefore overstate future diesel particulate matter emissions because not all these regulatory requirements are reflected in the modeling.

*Toxic Air Contaminants*

Air quality regulations also focus on toxic air contaminants. In general, for those toxic air contaminants that may cause cancer, there is no concentration that does not present some risk. In other words, there is no safe level of exposure. This contrasts with the criteria air pollutants, for which acceptable levels of exposure can be determined and for which the ambient standards have been established. Instead, the EPA and CARB regulate hazardous air pollutants and toxic air contaminants, respectively, through statutes and regulations that generally require the use of the maximum achievable control technology or best available control technology for toxics and to limit emissions. These statutes and regulations, in conjunction with additional rules set forth by the air quality districts, establish the regulatory framework for toxic air contaminants.

Toxic air contaminants in California are regulated primarily through the Tanner Air Toxics Act (Assembly Bill [AB] 1807 [Chapter 1047, Statutes of 1983]) (Health and Safety Code Section 39650 et seq.) and the Air Toxics Hot Spots Information and Assessment Act (AB 2588 [Chapter 1252, Statutes of 1987]) (Health and Safety Code Section 44300 et seq.). The Tanner Air Toxics 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 can designate a substance as a toxic air contaminant. To date, CARB has identified more than 21 toxic air contaminants and adopted the EPA's list of hazardous air pollutants as toxic air contaminants. Most recently, diesel particulate matter was added to the CARB list of toxic air contaminants. Once a toxic air contaminants is identified, CARB then adopts an airborne toxics control measure for sources that emit that particular toxic air contaminant. If there is a safe threshold for a substance at which there is no toxic effect, the control measure must reduce exposure below that threshold. If there is no safe threshold, the measure must incorporate best available control technology to minimize emissions.

The Air Toxics Hot Spots Information and Assessment Act requires existing facilities emitting toxic substances above a specified level to prepare a toxic-emission inventory, prepare a risk assessment if emissions are significant, notify the public of significant risk levels, and prepare and implement risk reduction measures.

CARB published the Air Quality and Land Use Handbook: A Community Health Perspective (Handbook), which provides guidance concerning land use compatibility with toxic air contaminant sources. Although it is not a law or adopted policy, the Air Quality and Land Use Handbook offers advisory recommendations for the siting of sensitive receptors near uses associated with toxic air contaminants, such as freeways and high-traffic roads, commercial distribution centers, rail yards, ports, refineries, dry cleaners, gasoline stations, and industrial facilities, to help keep children and other sensitive populations out of harm's way. Based on CARB's Community Health Air Pollution Information System, no major toxic air contaminant sources are located in proximity to the Project area. In addition, CARB has promulgated the following specific rules to limit toxic air contaminants emissions:

**CARB Rule 2485** (13 CCR, Chapter 10 Section 2485), Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling

**CARB Rule 2480** (13 CCR Chapter 10 Section 2480), Airborne Toxic Control Measure to Limit School Bus Idling and Idling at Schools

**CARB Rule 2477** (13 CCR Section 2477 and Article 8), Airborne Toxic Control Measure for In-Use Diesel Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets and Facilities Where TRUs Operate

### California Assembly Bill 1493– Pavley

In 2002, the California Legislature adopted AB 1493 requiring the adoption of regulations to develop fuel economy standards for the transportation sector. In September 2004, pursuant to AB 1493, CARB approved regulations to reduce fuel use and emissions from new motor vehicles beginning with the 2009 model year (Pavley Regulations). CARB, the EPA, and the U.S. Department of Transportation's National Highway Traffic and Safety Administration have coordinated efforts to develop fuel economy standards for model 2017-2025 vehicles, which are incorporated into the "Low Emission Vehicle" Regulations.

### California Code of Regulations (CCR) Title 13, Motor Vehicles, Section 2449(d)(3)

No vehicle or engines subject to this regulation may idle for more than 5 consecutive minutes. The idling limit does not apply to:

- Idling when queuing,
- Idling to verify that the vehicle is in safe operating condition,
- Idling for testing, servicing, repairing or diagnostic purposes,
- Idling necessary to accomplish work for which the vehicle was designed (such as operating a crane),
- Idling required to bring the machine system to operating temperature, and
- Idling necessary to ensure safe operation of the vehicle.

### Title 24 Energy Efficiency Standards and California Green Building Standards

California Code of Regulations Title 24 Part 6: California Energy Code was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption. California Code of Regulations Title 24 Part 11: California Green Building Standards (CALGreen) was first published in 2008 and took effect in 2009. CALGreen is updated on a regular basis, with the most recent approved update consisting of the 2022 California Green Building Code Standards that became effective January 1, 2023.

The 2022 CALGreen standards that reduce air quality emissions and are applicable to the proposed Project include, but are not limited to, the following:

*Nonresidential Mandatory Measures*

- 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).
- 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 5.106.5.5.1 specifies requirements for the installation of raceway conduit and panel power requirements for medium- and heavy-duty EV supply equipment for warehouses, grocery stores, and retail stores.
- Outdoor light pollution reduction. Outdoor lighting systems shall be designed to meet the backlight, uplight and glare ratings per Table 5.106.8 (5.106.8).
- Construction waste management. Recycle and/or salvage for reuse a minimum of 65% of the nonhazardous construction and demolition waste in accordance with Section 5.408.1.1. 5.405.1.2,

or 5.408.1.3; or meet a local construction and demolition waste management ordinance, whichever is more stringent (5.408.1).

- Excavated soil and land clearing debris. 100% of trees, stumps, rocks and associated vegetation and soils resulting primarily from land clearing shall be reuse or recycled. For a phased project, such material may be stockpiled on site until the storage site is developed (5.408.3).
- Recycling by Occupants. Provide readily accessible areas that serve the entire building and are identified for the depositing, storage, and collection of non-hazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics, organic waste, and metals or meet a lawfully enacted local recycling ordinance, if more restrictive (5.410.1).
- Water conserving plumbing fixtures and fittings. Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with the following:
    - Water Closets. The effective flush volume of all water closets shall not exceed
    - 1.28 gallons per flush (5.303.3.1)
    - Urinals. The effective flush volume of wall-mounted urinals shall not exceed
    - 0.125 gallons per flush (5.303.3.2.1). The effective flush volume of floor- mounted or other urinals shall not exceed 0.5 gallons per flush (5.303.3.2.2).
    - Showerheads. Single showerheads shall have a minimum flow rate of not more than 1.8 gallons per minute and 80 psi (5.303.3.3.1). When a shower is served by more than one showerhead, the combine flow rate of all showerheads and/or other shower outlets controlled by a single valve shall not exceed 1.8 gallons per minute at 80 psi (5.303.3.3.2).
    - Faucets and fountains. Nonresidential lavatory faucets shall have a maximum flow rate of not more than 0.5 gallons per minute at 60 psi (5.303.3.4.1). Kitchen faucets shall have a maximum flow rate of not more than 1.8 gallons per minute of 60 psi (5.303.3.4.2). Wash fountains shall have a maximum flow rate of not more than 1.8 gallons per minute (5.303.3.4.3). Metering faucets shall not deliver more than 0.20 gallons per cycle (5.303.3.4.4). Metering faucets for wash fountains shall have a maximum flow rate not more than 0.20 gallons per cycle (5.303.3.4.5).
- Outdoor potable water uses in landscaped areas. Nonresidential developments shall comply with a local water efficient landscape ordinance or the current California Department of Water Resources' Model Water Efficient Landscape Ordinance (MWELO), whichever is more stringent (5.304.1).
- Water meters. Separate submeters or metering devices shall be installed for new buildings or additions in excess of 50,000 square feet or for excess consumption where any tenant within a new building or within an addition that is project to consume more than 1,000 gallons per day (GPD) (5.303.1.1 and 5.303.1.2).
- Outdoor water uses in rehabilitated landscape projects equal or greater than 2,500 square feet. Rehabilitated landscape projects with an aggregate landscape area equal to or greater than 2,500 square feet requiring a building or landscape permit (5.304.3).
- 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 Building Standards Code has been adopted by the City of Perris Municipal Code Section 16.08.050.

## 5.3.2.3 Local and Regional Regulations

### South Coast Air Quality Management District

*Criteria Air Pollutants*

The South Coast Air Quality Management District (AQMD) attains and maintains air quality conditions in the South Coast Air Basin through a comprehensive program of planning, regulation, enforcement, technical innovation, and promotion of the understanding of air quality issues. The clean air strategy of the South Coast AQMD includes preparation of plans for attainment of ambient air quality standards, adoption and enforcement of rules and regulations concerning sources of air pollution, and issuance of permits for stationary sources of air pollution. The South Coast AQMD also inspects stationary sources of air pollution and responds to citizen complaints; monitors ambient air quality and meteorological conditions; and implements programs and regulations required by the Clean Air Act, the Clean Air Act Amendments, and the California Clean Air Act. Air quality plans applicable to the proposed Project are discussed below.

*Air Quality Management Plan*

The South Coast AQMD and the Southern California Association of Governments (SCAG) are responsible for preparing the air quality management plan (AQMP), which addresses federal and state Clean Air Act requirements. The AQMP details goals, policies, and programs for improving air quality in the South Coast Air Basin.

The 2012 AQMP was adopted by the South Coast AQMD Governing Board on December 12, 2012. The purpose of the 2012 AQMP for the South Coast Air Basin is to set forth a comprehensive and integrated program that will lead the region into compliance with the federal 24-hour PM2.5 air quality standard, and to provide an update to the South Coast Air Basin's commitment towards meeting the federal 8-hour ozone standards. The 2012 AQMP was also prepared to satisfy recent EPA requirements for a new attainment demonstration of the revoked 1-hour ozone standard, as well as a vehicle miles travelled (VMT) emissions offset demonstration. The 2012 AQMP, as approved by CARB, serves as the official state implementation plan submittal for the federal 2006 24-hour PM2.5 standard. In addition, the 2012 AQMP updated specific new control measures and commitments for emissions reductions to implement the attainment strategy for the 8-hour ozone state implementation plan. The 2012 AQMP set forth programs which require integrated planning efforts and the cooperation of all levels of government: local, regional, state, and federal.

In March 2017, the South Coast AQMD finalized the 2016 AQMP, which continues to evaluate 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 was adopted by the South Coast AQMD Governing Board on December 2, 2022. 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 emissions technologies, when cost-effective and feasible, and low nitrogen oxides (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 federal 8-hour ozone standard. South Coast AQMD includes a total of 49 control measures for the 2022 AQMP, including control measures focused on widespread deployment of zero emission and low NOx technologies through a combination of regulatory approaches and incentives.

*South Coast AQMD Rules and Regulations*

All projects are subject to South Coast AQMD rules and regulations. Specific rules that would be applicable to the proposed Project include the following:

**Rule 203 – Permit to Operate.** A person shall not operate or use any equipment or agricultural permit unit, the use of which may cause the issuance of air contaminants, or the use of which may reduce or control the issuance of air contaminants, without first obtaining a written permit to operate from the Executive Officer or except as provided in Rule 202. The equipment or agricultural permit unit shall not be operated contrary to the conditions specified in the permit to operate.

**Rule 401 – Visible Emissions.** A person shall not discharge into the atmosphere from any single source of emission whatsoever any air contaminant for a period or periods aggregating more than three minutes in any 1 hour that is as dark or darker in shade as that designated No. 1 on the Ringelmann Chart, as published by the United States Bureau of Mines.

**Rule 402 – Nuisance.** A person shall not discharge from any source whatsoever such quantities of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or that endanger the comfort, repose, health, or safety of any such persons or the public, or that cause, or have a natural tendency to cause, injury or damage to business or property. The provisions of this rule do not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.

**Rule 403 – Fugitive Dust.** South Coast AQMD Rule 403 governs emissions of fugitive dust during and after construction. Compliance with this rule is achieved through application of standard Best Management Practices, such as application of water or chemical stabilizers to disturbed soils, covering haul vehicles, restricting vehicle speeds on unpaved roads to 15 miles per hour, sweeping loose dirt from paved site access roadways, cessation of construction activity when winds exceed 25 mph, and establishing a permanent ground cover on finished sites.

Rule 403 requires project applicants to control fugitive dust using the best available control measures such that dust does not remain visible in the atmosphere beyond the property line of the emission source. In addition, Rule 403 requires implementation of dust suppression techniques to prevent fugitive dust from creating an offsite nuisance. Applicable Rule 403 dust suppression (and $PM_{10}$ generation) techniques to reduce impacts on nearby sensitive receptors may include, but are not limited to, the following:

- Apply nontoxic chemical soil stabilizers according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for 10 days or more).
- Water active sites at least three times daily. Locations where grading is to occur shall be thoroughly watered prior to earthmoving.
- Cover all trucks hauling dirt, sand, soil, or other loose materials, or maintain at least 0.6 meters (2 feet) of freeboard (vertical space between the top of the load and top of the trailer) in accordance with the requirements of California Vehicle Code Section 23114.
- Reduce traffic speeds on all unpaved roads to 15 miles per hour (mph) or less.
- Suspend all grading activities when wind speeds (including instantaneous wind gusts) exceed 25 mph.
- Provide bumper strips or similar best management practices where vehicles enter and exit the construction site onto paved roads, or wash off trucks and any equipment leaving the site each trip.
- Replant disturbed areas as soon as practical.
- Sweep onsite streets (and offsite streets if silt is carried to adjacent public thoroughfares) to reduce the amount of particulate matter on public streets. All sweepers shall be compliant with South Coast AQMD Rule 1186.1, Less Polluting Sweepers.

**Rule 461 – Gas Station.** This rule applies to the transfer of gasoline from any tank truck, trailer, or railroad tank car into any stationary storage tank or mobile fueler, and from any stationary storage tank or mobile fueler into any mobile fueler or motor vehicle fuel tank and requires enhanced vapor recovery system, and regular reporting.

**Rule 481 – Spray Coating.** This rule applies to all spray painting and spray coating operations and equipment and states that a person shall not use or operate any spray painting or spray coating equipment unless one of the following conditions is met:

- The spray coating equipment is operated inside a control enclosure, which is approved by the Executive Officer. Any control enclosure for which an application for permit for new construction, alteration, or change of ownership or location is submitted after the date of adoption of this rule shall be exhausted only through filters at a design face velocity not less than 100 feet per minute nor greater than 300 feet per minute, or through a water wash system designed to be equally effective for the purpose of air pollution control.
- Coatings are applied with high-volume low-pressure, electrostatic and/or airless spray equipment.
- An alternative method of coating application or control is used which has effectiveness equal to or greater than the equipment specified in the rule.

**Rule 1108 - Volatile Organic Compounds.** This rule 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 also regulates 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 – Architectural Coatings.** No person shall apply or solicit the application of any architectural coating within the South Coast AQMD with VOC content in excess of the values specified in a table incorporated in the Rule.

**Rule 1143 – Paint Thinners and Solvents.** This rule governs the manufacture, sale, and use of paint thinners and solvents used in thinning of coating materials, cleaning of coating application equipment, and other solvent cleaning operations by limiting their VOC content. This rule regulates the VOC content of solvents used during construction. Solvents used during the construction phase must comply with this rule.

**Rule 1186 – Emissions from Paved and Unpaved Roads.** The purpose of this rule is to reduce the amount of particulate matter entrained in the ambient air as a result of vehicular travel and requires that any owner or operator of a paved public road on which there is visible roadway accumulations shall begin removal of such material through street cleaning within 72 hours of any notification of the accumulation and shall completely remove such material as soon as feasible.

**Rule 1186.1 - Less-Polluting Sweepers.** This rule requires public and private sweeper fleet operators to acquire alternative-fuel or otherwise less-polluting sweepers when purchasing or leasing these vehicles for sweeping operations.

**Rule 2305 – Warehouse Indirect Source Rule.** The stated purpose of the Indirect Source Rule "is to reduce local and regional emissions of nitrogen oxides and particulate matter, and to facilitate local and regional emission reductions associated with warehouses and the mobile sources attracted to warehouses in order to assist in meeting state and federal air quality standards for ozone and fine particulate matter." The rule applies to owners and operators of new and existing warehouses located in the South Coast Air Basin "with greater than or equal to 100,000 square feet of indoor space in a single building that may be used for warehousing activities by one or more warehouse operators." The rule imposes a "Warehouse Points Compliance Obligation" (WPCO) on warehouse operators. Operators would be allowed to satisfy the WPCO by accumulating "Warehouse Actions and Investments to Reduce Emissions Points" (WAIRE Points) in

a given 12-month period. WAIRE Points will be awarded by implementing measures to reduce emissions listed on the WAIRE Menu, or by implementing a custom WAIRE Plan approved by the South Coast AQMD.

## City of Perris General Plan 2030

The City of Perris General Plan Healthy Community Element contains the following policies related to air quality that are applicable to the Project:

**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 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 South Coast AQMD, Best Available Control Measures will be incorporated to reduce construction emissions to below daily emission standards established by the Sout Coast AQMD.
- 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.

## City of Perris Good Neighbor Guidelines

The City of Perris Good Neighbor Guidelines for Siting New and/or Modified Industrial Facilities were adopted in September 2022. The purpose of the Good Neighbor Guidelines is to protect residential areas in the City while allowing for the planned development of new or modified industrial facilities. The Guidelines apply to all new warehouse, logistics, and distribution facilities with applications submitted after September 2022. The Good Neighbor Guidelines contain the following policies related to air quality that are applicable to future industrial developments within Phase 2 of the Specific Plan:

**Goal 1** **Protect the neighborhood characteristics of the urban, rural, and suburban communities.**

**Policy 1.1** Any industrial project over 400,000 square feet in size or requiring the preparation of an Environmental Impact Report (EIR) shall be designed to meet the requirements of LEED Silver Certification whether or not certification is pursued. Documentation shall be provided to the City demonstrating compliance.

**Policy 1.3** When possible, locate driveways, loading docks, and internal circulation routes away from sensitive receptors.

**Policy 1.12** Warehouse/ distribution facilities shall be designed to provide adequate on-site parking for commercial trucks and passenger vehicles and on site queuing for trucks away from sensitive receptors. Commercial trucks shall not be parked in the public right of way or nearby residential areas, in accordance with the Perris Municipal Code and Specific Plans.

**Policy 1.16** Signs shall be installed at all truck exit driveways directing truck drivers to the truck route as indicated in the City approved Truck Routing Plan and State Highway System to minimize potential impacts on sensitive receptors.

**Policy 1.17** Signs shall be installed in public view with contact information of facility operator and South Coast AQMD for complaints related to excessive dust, fumes, or odors, and truck and parking complaints. Any complaints made to the facility operator shall be answered within 72 hours of receipt.

**Policy 1.19** Signs and drive aisle pavement markings shall clearly identify the onsite circulation pattern to minimize unnecessary on-site vehicular travel.

**Goal 2** **Minimize exposure of diesel emissions to neighbors that are situated in close proximity to the warehouse/distribution center.**

**Policy 2.1** Minimize the air quality impacts of trucks on sensitive receptors by:

a) Restricting diesel engine and construction equipment idling to 5 minutes or less (South Coast AQMD Rule 2485). A driver of a vehicle shall turn off the engine upon stopping at a destination.

b) Designing facilities with adequate on-site queuing for trucks and away from sensitive receptors and preventing queuing of trucks on surrounding public streets.

c) Providing ingress and egress for trucks away from sensitive receptors.

d) For buildings with 50 or more dock high doors, a site plan is required identifying a planned location for future electric truck charging stations and installation of raceway for conduit to that location. A ratio of one charging station shall be required for every 50 dock high doors.

e) On-site equipment, such as forklifts, shall be electric with the necessary electrical charging stations provided or be powered by alternative technology.

f) Passenger vehicles parking should be separated from enclosed truck parking/truck court, and have separate primary access.

g) At least 10% of all passenger vehicle parking spaces shall be electric vehicle (EV) ready. At least 5% of all passenger vehicle parking spaces shall be equipped with working Level 2 Quick charge EV charging stations installed and operational, prior to issuance of a certificate of occupancy. Signage shall be installed indicating EV charging stations and that spaces are reserved for clean air/EV vehicles.

h) Encouraging replacement of diesel fleets with new model vehicles.

i) Preventing the queuing of trucks on streets or elsewhere outside the warehouse facility or near sensitive receptor.

j) Promoting the installation of on-site electric hook-ups to eliminate idling of main and auxiliary engines during loading and unloading of cargo and when trucks are not in use – especially where transport refrigeration units (TRUs) are proposed to be used.

**Policy 2.2** No operation shall be permitted which emits odorous gases or other odorous matter in such quantities as to be dangerous, injurious, noxious, or otherwise objectionable to a level that is detectable with or without the aid of instruments at or beyond the lot line of the property containing said operation or activity.

**Policy 2.3** Avoid locating exits and entries near sensitive receptors.

**Policy 2.5** Warehouses greater than 100,000 square feet are required to directly reduce nitrogen and diesel particulate matter emissions (South Coast AQMD Rule 2305).

**Policy 2.6** On site motorized operational equipment shall be ZE (Zero Emissions).

**Policy 2.7** Buildings over 400,000 square feet shall install solar panels so 100% of the power is supplied to the office area of the facility, unless it is restricted due to the March Air Force Base Accident Potential Zone.

**Policy 2.8** Truck operators with TRUs shall be required to utilize electric plug-in units when at loading docks.

**Policy 2.9** Pursuant to CARB's Truck and Bus Regulation, facility operators shall maintain records of their facility owned and operated fleet equipment and ensure that all diesel fueled Medium-Heavy Duty Trucks (MHDT) and Heavy-Heavy Duty (HHD) trucks with a gross vehicle weight rating greater than 19,500 pounds use year CARB compliant 2010 or newer engines. Records should be made available to the City of Perris.

**Policy 2.10** Facility operators shall coordinate with CARB and South Coast AQMD to obtain the latest information about regional air quality concentrations, health risks, and trucking regulations.

**Policy 2.11** Equipment operator of a TRU (Transportation Refrigeration Unit) shall not cause a TRU to operate while stationary unless the vehicle is lawfully parked and not within 500 feet of a school, unless the operator is actively engaged in the process of loading or unloading cargo or is waiting in a queue to load or unload for a period not to exceed 2 hours.

**Policy 2.12** Require low energy use features, low water use features, all-electric vehicles (EV) parking spaces and charging facility, carpool/vanpool parking spaces, and short- and long-term bicycle parking facilities (Title 24 of the California Code of Regulations – CALGreen).

**Policy 2.13** Post signs requiring to turn off truck engines when not in use.

**Goal 3** **Eliminate diesel trucks from unnecessary traversing through residential neighborhoods.**

**Policy 3.1** The facility operator shall abide by the truck routing plans, consistent with the City of Perris Truck Route Plan.

**Policy 3.3** Truck traffic shall be routed to impact the least number of sensitive receptors.

**Policy 3.5** Check in gates and/or guard booths are required to be positioned with a minimum of 150 feet inside the property line for on-site truck queuing. An additional 75 feet of on-site queuing shall be added for every 20 loading docks beyond 40 up to 300 feet. Multiple lanes (minimum lane width 12 feet) are permitted to achieve the required queuing. The general queuing and spillover of trucks onto the surrounding public streets are prohibited. Commercial trucks and/or trailers shall not be parked on the public right of way or adjacent to sensitive receptors.

**Goal 4** **Provide Buffers between Warehouses and Sensitive Receptors**

**Policy 4.1** A separation of at least 300 feet shall be provided, as measured from the dock doors to the nearest property line of the sensitive receptor.

**Policy 4.10** Require on-site signage for directional guidance to trucks entering and exiting the facility to minimize potential impacts on sensitive receptors.

**Goal 5** **Establish an Education Program to Inform Truckers of Health Effects of Diesel Particulate and Conduct Community Outreach to Address Residents' Concerns**

**Policy 5.1** Provide adequate notification to all owners of real property on the latest records of the County Assessor within 500 feet of the real property. or at least 25 property owners, whichever is greater, for all required public notices pertaining to a warehouse project's entitlement.

**Policy 5.2** Facility operators shall train their managers and employees on efficient scheduling and load management to eliminate unnecessary queuing and idling of trucks.

**Policy 5.3** Facility operators shall require their drivers to park and perform any maintenance of trucks in designated on site areas and not within the surrounding community or on public streets.

**Policy 5.4** Facility operators for sites that exceed 250 employees shall establish a rideshare program, in accordance with SAQMD Rule 2202, with the intent of discouraging single-occupancy vehicle trips and promote alternate modes of transportation, such as carpooling and transit where feasible.

**Policy 5.5** Provide informational flyers and pamphlets for truck drivers about the health effects of diesel particulates and importance of being a good neighbor.

**Policy 5.6** Encourage facility owners/management to have site visits with neighbors and the community to view measures taken to reduce/and or eliminate diesel particulate emissions.

**Policy 5.8** Provide facility owners/management with information from CARB and South Coast AQMD and encourage the utilization of resources provided by those agencies.

**Goal 6** **Implement Construction Practice Requirements in Accordance with State Requirements to Limit Emissions and Noise Impacts from Building Demolition, Renovation, and New Construction**

**Policy 6.1** In addition to regular construction inspections conducted by City Departments, the applicant shall provide monthly reports to the City demonstrating compliance with all the construction related policies.

**Policy 6.2** All diesel fueled off-road construction equipment greater than 50 horsepower shall be equipped with CARB Tier 4 Compliant engines. If Tier 4 equipment is not available within 50 miles of the project site, Tier 3 or cleaner off road construction equipment may be utilized.

**Policy 6.3** Construction contractor shall utilize construction equipment with properly operating and maintained mufflers, consistent with manufacturer's standards.

**Policy 6.4** Construction contractors shall locate or park all stationary construction equipment away from sensitive receptors nearest the project site, to the extent practicable.

**Policy 6.5** The surrounding streets shall be swept on a regular basis to remove any construction related debris and dirt.

**Policy 6.6** Appropriate dust control measures that meet the South Coast AQMD Rule 403 standards shall be implemented for grading and construction activity.

**Policy 6.7** Construction equipment maintenance records and data sheets, as well as any other records necessary to verify compliance with CARB standards shall be kept on site and furnished to the City of Perris upon request.

**Policy 6.8** Prepare a construction traffic control plan prior to grading, detailing the locations of equipment staging areas material stockpiles, proposed road closures, and hours of construction operations to minimize impacts to sensitive receptors.

**Policy 6.10** The maximum daily disturbance area (actively graded area) shall be determined by the Air Quality Study.

**Policy 6.11** Use of the most readily available technology (CARB Tier 3, Tier 4 Interim, and Tier 4 Compliant equipment).

**Policy 6.12** Designate an area of the construction site where electric-powered construction vehicles and equipment can charge if the utility provider can feasibly provide temporary power for this purpose.

**Policy 6.13** During construction, signs are required to be in public view with contact information for a designated representative of the building occupant and an South Coast AQMD representative who is designated to receive complaints about excessive dust, fumes, or odors on this site.

**Goal 7** **Ensure Compliance with the California Environmental Quality Act (CEQA) and State Environmental Agencies**

**Policy 7.1** In compliance with CEQA, conduct South Coast AQMD California Emissions Estimator Model (CalEEMod) and Emission Factors (EMFAC) computer models to identify the significance of air quality impacts on sensitive receptors.

**Policy 7.2** Require an air quality analysis to ensure air quality protection, in accordance with the Air Quality Management District (AQMD) guidelines, for both project specific and cumulative impact analysis.

**Policy 7.3** Require Health Risk Assessments for industrial uses within 1,000 feet of sensitive receptors in accordance with AQMD guidelines.

**Policy 7.5** Require Transportation Demand Management Measures for industrial uses with over 100 employees to reduce work related vehicle trips.

**Policy 7.6** Require signage about CARB regulations.

**Policy 7.7** All building roofs shall be solar-ready.

**Policy 7.8** Require the use of low VOC paints and coatings (South Coast AQMD Rule 1113).

# 5.3.3 ENVIRONMENTAL SETTING

## 5.3.3.1 Climate and Meteorology

The Specific Plan Area is located within the South Coast Air Basin, which is under the jurisdiction of the South Coast AQMD. 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 which produce ozone.

### 5.3.3.2 Criteria Air Pollutants

As described previously, the CARB and the EPA currently focus on the following air pollutants as indicators of ambient air quality: ozone, CO, nitrogen dioxide, sulfur dioxide, respirable particulate matter with an aerodynamic diameter of 10 micrometers or less ($PM_{10}$), fine particulate matter with an aerodynamic diameter of 2.5 micrometers or less ($PM_{2.5}$), and lead. These pollutants are referred to as "criteria air pollutants" because they are the most prevalent air pollutants known to be injurious to human health. Extensive health-effects criteria documents regarding the effects of these pollutants on human health and welfare have been prepared over the years.[1] Standards have been established for each criteria pollutant to meet specific public health and welfare criteria set forth in the federal Clean Air Act. California has generally adopted more stringent ambient air quality standards for the criteria air pollutants (CAAQS) and has adopted air quality standards for some pollutants for which there is no corresponding national standard (NAAQS), such as sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles.

#### Ozone

Ozone, the main component of photochemical smog, is primarily a summer and fall pollution problem. Ozone is not emitted directly into the air; but is formed through a complex series of chemical reactions involving other compounds that are directly emitted. These directly emitted pollutants (also known as ozone precursors) include reactive organic gases (ROG) or VOC, and NOx. While both ROG and VOC refer to compounds of carbon, ROG is a term used by CARB and is based on a list of exempted carbon compounds determined by CARB. VOC is a term used by the EPA and is based on its own exempt list. The time period required for ozone formation allows the reacting compounds to spread over a large area, producing regional pollution

[1] Additional sources of information on the health effects of criteria pollutants can be found at CARB and EPA's websites at http://www.arb.ca.gov/research/health/health.htm and http://www.epa.gov/air/airpollutants.html, respectively.

problems. Ozone concentrations are the cumulative result of regional development patterns rather than the result of a few significant emission sources.

Once ozone is formed, it remains in the atmosphere for one or two days. Ozone is then eliminated through reaction with chemicals on the leaves of plants, attachment to water droplets as they fall to earth ("rainout"), or absorption by water molecules in clouds that later fall to earth with rain ("washout").

Short-term exposure to ozone can irritate the eyes and cause constriction of the airways. In addition to causing shortness of breath, ozone can aggravate existing respiratory diseases such as asthma, bronchitis, and emphysema.

### Carbon Monoxide

CO is a colorless, odorless gas produced by the incomplete combustion of carbon-containing fuels, such as gasoline or wood. CO concentrations tend to be the highest during the winter morning, when little to no wind and surface-based inversions trap the pollutant at ground levels. Because CO is emitted directly from internal combustion engines, unlike ozone, motor vehicles operating at slow speeds are the primary source of CO in the South Coast Air Basin. The highest ambient CO concentrations are generally found near congested transportation corridors and intersections.

### Nitrogen Dioxide

Nitrogen dioxide is a reddish-brown gas that is a by-product of combustion processes. Automobiles and industrial operations are the main sources of nitrogen dioxide. Combustion devices emit primarily nitric oxide (NO), which reacts through oxidation in the atmosphere to form nitrogen dioxide. The combined emissions of nitrogen oxide and nitrogen dioxide are referred to as NOx, which are reported as equivalent nitrogen dioxide. Aside from its contribution to ozone formation, nitrogen dioxide can increase the risk of acute and chronic respiratory disease and reduce visibility. Nitrogen dioxide may be visible as a coloring component of a brown cloud on high pollution days, especially in conjunction with high ozone levels.

### Sulfur Dioxide

Sulfur dioxide is a colorless, extremely irritating gas or liquid that enters the atmosphere as a pollutant mainly as a result of burning high sulfur-content fuel oils and coal, and from chemical processes occurring at chemical plants and refineries. When sulfur dioxide oxidizes in the atmosphere, it forms sulfur trioxide ($SO_3$). Collectively, these pollutants are referred to as sulfur oxides (SOx).

Major sources of sulfur dioxide include power plants, large industrial facilities, diesel vehicles, and oil-burning residential heaters. Emissions of sulfur dioxide aggravate lung diseases, especially bronchitis. This compound also constricts the breathing passages, especially in people with asthma and people involved in moderate to heavy exercise. Sulfur dioxide potentially causes wheezing, shortness of breath, and coughing. Long-term sulfur dioxide exposure has been associated with increased risk of mortality from respiratory or cardiovascular disease.

### Particulate Matter

$PM_{10}$ and $PM_{2.5}$ consist of particulate matter that is 10 microns or less in diameter and 2.5 microns or less in diameter, respectively (a micron is one-millionth of a meter). $PM_{10}$ and $PM_{2.5}$ represent fractions of particulate matter that can be inhaled into the air passages and the lungs and can cause adverse health effects. Acute and chronic health effects associated with high particulate levels include the aggravation of chronic respiratory diseases, heart and lung disease, and coughing, bronchitis and respiratory illnesses in children.

Particulate matter can also damage materials and reduce visibility. One common source of $PM_{2.5}$ is diesel exhaust emissions.

$PM_{10}$ consists of particulate matter emitted directly into the air (e.g., fugitive dust, soot, and smoke from mobile and stationary sources, construction operations, fires, and natural windblown dust) and particulate matter formed in the atmosphere by condensation and/or transformation of sulfur dioxide and ROG. Traffic generates particulate matter emissions through entrainment of dust and dirt particles that settle onto roadways and parking lots. $PM_{10}$ and $PM_{2.5}$ are also emitted by burning wood in residential wood stoves and fireplaces and open agricultural burning. $PM_{2.5}$ can also be formed through secondary processes such as airborne reactions with certain pollutant precursors, including ROG, ammonia ($NH_3$), NOx, and SOx.

### Lead

Lead is a metal found naturally in the environment and present in some manufactured products. There are a variety of activities that can contribute to lead emissions, which are grouped into two general categories, stationary and mobile sources. On-road mobile sources include light-duty automobiles; light-, medium-, and heavy-duty trucks; and motorcycles.

Emissions of lead have dropped substantially over the past 40 years. The reduction before 1990 is largely due to the phase-out of lead as an anti-knock agent in gasoline for on-road automobiles. Substantial emission reductions have also been achieved due to enhanced controls in the metals processing industry. In the South Coast Air Basin, atmospheric lead is generated almost entirely by the combustion of leaded gasoline and contributes less than one percent of the material collected as total suspended particulates.

## 5.3.3.3 Toxic Air Contaminants

Concentrations of toxic air contaminants, or in federal parlance, hazardous air pollutants, are also used as indicators of ambient air quality conditions. A toxic air contaminant is defined as an air pollutant that may cause or contribute to an increase in mortality or in serious illness, or that may pose a hazard to human health. Toxic air contaminants are usually present in minute quantities in the ambient air; however, their high toxicity or health risk may pose a threat to public health even at low concentrations.

According to the 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 being particulate matter from diesel-fueled engines (diesel particulate matter). Diesel particulate matter differs from other toxic air contaminants in that it is not a single substance, but rather a complex mixture of hundreds of substances. Although diesel particulate matter is emitted by diesel-fueled internal combustion engines, the composition of the emissions varies depending on engine type, operating conditions, fuel composition, lubricating oil, and whether an emission control system is present.

Unlike the other toxic air contaminants, no ambient monitoring data are available for diesel particulate matter because no routine measurement method currently exists. However, CARB has made preliminary concentration estimates based on a particulate matter exposure method. This method uses the CARB emissions inventory's PM10 database, ambient PM10 monitoring data, and the results from several studies to estimate concentrations of diesel PM. In addition to diesel PM, the toxic air contaminants for which data are available that pose the greatest existing ambient risk in California are benzene, 1,3-butadiene, acetaldehyde, carbon tetrachloride, hexavalent chromium, para-dichlorobenzene, formaldehyde, methylene chloride, and perchloroethylene.

### 5.3.3.4 CO Hotspots

An adverse CO concentration, known as a "hot spot" is an exceedance of the State one-hour standard of 20 ppm or the eight-hour standard of 9 ppm. It has long been recognized that CO hotspots are caused by vehicular emissions, primarily when idling at congested intersections. In response, vehicle emissions standards have become increasingly stringent in the last twenty years. Currently, the allowable CO emissions standard in California is a maximum of 3.4 grams/mile for passenger cars (there are requirements for certain vehicles that are more stringent). With the turnover of older vehicles, introduction of cleaner fuels, and implementation of increasingly sophisticated and efficient emissions control technologies, CO concentration in the South Coast Air Basin is now designated as in attainment, and CO concentrations in the region have steadily declined (EIR Appendix B).

### 5.3.3.5 Odorous Emissions

Odors are generally regarded as an annoyance rather than a health hazard. However, manifestations of a person's reaction to foul odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache). Offensive odors are unpleasant and can lead to public distress generating citizen complaints to local governments. Although unpleasant, offensive odors rarely cause physical harm. The occurrence and severity of odor impacts depend on the nature, frequency, and intensity of the source, wind speed, direction, and the sensitivity of receptors.

### 5.3.3.6 Existing Conditions

The South Coast AQMD maintains monitoring stations within district boundaries, Source/Receptor Areas, that monitor air quality and compliance with associated ambient standards. The Project site is located in the Perris Valley area (Area 24). Prior to 2022, ambient air quality concentrations of ozone were monitored at the Perris Valley monitoring station, which was located approximately 1.08 miles south of the Specific Plan Area. Ambient pollutant concentrations are no longer monitored within the Perris Valley. Ambient air quality contractions for ozone prior to 2022 were taken from the Perris Valley monitoring station.[2] Ambient air quality concentrations of ozone (2022-2023), CO, nitrogen dioxide, and $PM_{10}$ were obtained from the Lake Elsinore Area monitoring station, located in Area 25, approximately 10.45 miles southwest of the Project site. Ambient air quality concentrations for $PM_{2.5}$ data was obtained from the Metropolitan Riverside County 1 monitoring station, which is located approximately 16.13 miles northwest of the Specific Plan Area in Area 23. The most recent three years of data are shown in Table 5.3-2, which identifies the number of days ambient air quality standards were exceeded in the area. Additionally, data for sulfur dioxide has been omitted as attainment is regularly met in the South Coast Air Basin and few monitoring stations measure sulfur dioxide concentrations.

In 2023, the federal and State ambient air quality standards (NAAQS and CAAQS) were exceeded on one or more days for ozone at most monitoring locations. No areas of the South Coast Air Basin exceeded federal or State standards for nitrogen dioxide, sulfur dioxide, CO, sulfates, or lead. See Table 5.3-3, for attainment designations of the South Coast Air Basin.

Both CARB and the EPA use this type of monitoring data to designate areas with air quality problems and to initiate planning efforts for improvement. The three basic designation categories are nonattainment,

[2] Ozone data for Perris Valley and Lake Elsinore in 2021 indicates that the two areas experienced very similar ozone concentrations. It can be reasonably inferred that Lake Elsinore data would, therefore, accurately represent Perris Valley ozone concentrations.

attainment, and unclassified. Nonattainment is defined as any area that does not meet, or that contributes to ambient air quality in a nearby area that does not meet the primary or secondary ambient air quality standard for the pollutant. Attainment is defined as any area that meets the primary or secondary ambient air quality standard for the pollutant. Unclassifiable is defined as any area that cannot be classified on the basis of available information as meeting or not meeting the primary or secondary ambient air quality standard for the pollutant. California designations include a subcategory of nonattainment-transitional, which is given to nonattainment areas that are progressing and nearing attainment.

**Table 5.3-2: Air Quality Monitoring Summary 2021-2023**

| Pollutant | Standard | Year | | |
|---|---|---|---|---|
| | | 2021 | 2022 | 2023 |
| Ozone ($O_3$) | | | | |
| Maximum Federal 1-Hour Concentration (ppm) | | 0.117 | 0.121 | 0.120 |
| Maximum Federal 8-Hour Concentration (ppm) | | 0.094 | 0.091 | 0.103 |
| Number of Days Exceeding State 1-Hour Standard | > 0.09 ppm | 25 | 17 | 10 |
| Number of Days Exceeding State/Federal 8-Hour Standard | > 0.070 ppm | 60 | 37 | 35 |
| Carbon Monoxide (CO) | | | | |
| Maximum Federal 1-Hour Concentration | > 35 ppm | 0.9 | 0.9 | 1.3 |
| Maximum Federal 8-Hour Concentration | > 20 ppm | 0.8 | 0.6 | 0.7 |
| Nitrogen Dioxide ($NO_2$) | | | | |
| Maximum Federal 1-Hour Concentration | > 0.100 ppm | 0.044 | 0.037 | 0.042 |
| Annual Federal Standard Design Value | | 0.007 | 0.007 | 0.007 |
| $PM_{10}$ | | | | |
| Maximum Federal 24-Hour Concentration (µg/m³) | > 150 µg/m³ | 89 | 91 | 186 |
| Annual Federal Arithmetic Mean (µg/m³) | | 21.4 | 19.8 | 20.8 |
| Number of Days Exceeding Federal 24-Hour Standard | > 150 µg/m³ | 0 | 0 | 1 |
| Number of Days Exceeding State 24-Hour Standard | > 50 µg/m³ | 4 | 1 | 5 |
| $PM_{2.5}$ | | | | |
| Maximum Federal 24-Hour Concentration (µg/m³) | > 35 µg/m³ | 82.1 | 38.5 | 48.7 |
| Annual Federal Arithmetic Mean (µg/m³) | > 12 µg/m³ | 12.58 | 10.80 | 10.47 |
| Number of Days Exceeding Federal 24-Hour Standard | > 35 µg/m³ | 10 | 1 | 1 |

Source: EIR Appendix B
ppm = Parts Per Million
µg/m³ = Microgram per Cubic Meter

**Table 5.3-3: Attainment Status of Criteria Pollutants in the South Coast Air Basin**

| Criteria Pollutant | State Designation | Federal Designation |
|---|---|---|
| Ozone – 1-hour standard | Nonattainment | -- |
| Ozone – 8-hour standard | Nonattainment | Nonattainment |
| $PM_{10}$ | Nonattainment | Attainment |
| $PM_{2.5}$ | Nonattainment | Nonattainment |
| Carbon Monoxide (CO) | Attainment | Unclassifiable/Attainment |
| Nitrogen Dioxide ($NO_2$) | Attainment | Unclassifiable/Attainment |
| Sulfur Dioxide ($SO_2$) | Attainment | Unclassifiable/Attainment |
| Lead | Attainment | Unclassifiable/Attainment |

Source: EIR Appendix B

The Project site is approximately 358.28 acres and includes two single-family residences, remnants of two previously demolished single-family residences, vacant land that has been disturbed from previous agricultural uses, and developed roadways; and the Overlay Area is currently developed with Val Verde Elementary School. These existing land uses currently generate a limited volume of air quality emissions.

## Sensitive Land Uses

Land uses such as schools, children's daycare centers, hospitals, and convalescent homes are considered to be more sensitive to poor air quality than the general public because the population groups associated with these uses have increased susceptibility to respiratory distress. In addition, residential uses are considered more sensitive to air quality conditions than commercial and industrial uses, because people generally spend longer periods of time at their residences, resulting in greater exposure to ambient air quality conditions. Recreational land uses are considered moderately sensitive to air pollution. Exercise places a high demand on respiratory functions, which can be impaired by air pollution, even though exposure periods during exercise are generally short. In addition, noticeable air pollution can detract from the enjoyment of recreation. Existing sensitive receptors within and in the vicinity of the Project site consist of existing residences and schools.

The closest sensitive receptors to the Project site are listed below and shown on Figure 5.3-1. All distances are measured from the Project site boundary to the outdoor living areas (e.g., backyards or patios) or at the building façade, whichever is closer. The nearest sensitive receptor include residences located approximately 96 feet from the site and Val Verde Elementary School located within the proposed Overlay and 66 feet from the closest Project area that is not included in the Overlay.

R1: Location R1 represents the existing residence at 25 Whirlaway Street, approximately 181 feet east of the Project site. Since there are no private outdoor living areas (backyards) facing the Project site, R1 is placed at the building façade.

R2: Location R2 represents the existing residence at 2266 Windsor Court, approximately 713 feet east of the Project site. R2 is placed in the private outdoor living area (backyard) facing the Project site.

R3: Location R3 represents the Centinela Grand senior living facility at 2225 North Perris Boulevard, approximately 112 feet east of the Project site. R3 is placed at the building façade nearest the Project site.

R4: Location R4 represents the Kindred Hospital at 2224 Medical Center Drive, approximately 709 feet east of the Project site. Since there are no private outdoor living areas (backyards) facing the Project site, receptor R4 is placed at the building façade.

R5: Location R5 represents the existing school Perris Early Head Start at 148 Avocado Drive, approximately 720 feet east of the Project site. R5 is placed in the private outdoor living area (backyard) facing the Project site.

R6: Location R6 represents the existing residence at 102 Oaktree Drive, approximately 454 feet south of the Project site. Since there are no private outdoor living areas (backyards) facing the Project site, R6 is placed at the building façade.

R7: Location R7 represents the property line of the residences under construction at Barrett Avenue and West Placentia Avenue, approximately 96 feet east of the Project site. R7 is placed in the private outdoor living area (backyard) facing the Project site.

R8: Location R8 represents the property line of the planned residential land use, approximately 726 feet northeast of the Project site. Since there are no private outdoor living areas (backyards) facing the Project site, R8 is placed at the building façade.

R9: Location R9 represents the property line of the existing Val Verde Elementary School at 2656 Indian Avenue, approximately 66 feet north of the Project site. R9 is placed at the building façade. Location R9 would be a sensitive receptor in the without Overlay scenarios.

R10: Location R10 represents the Walmart Supercenter located at 1800 N. Perris Boulevard, approximately 105 feet east of the Project site.

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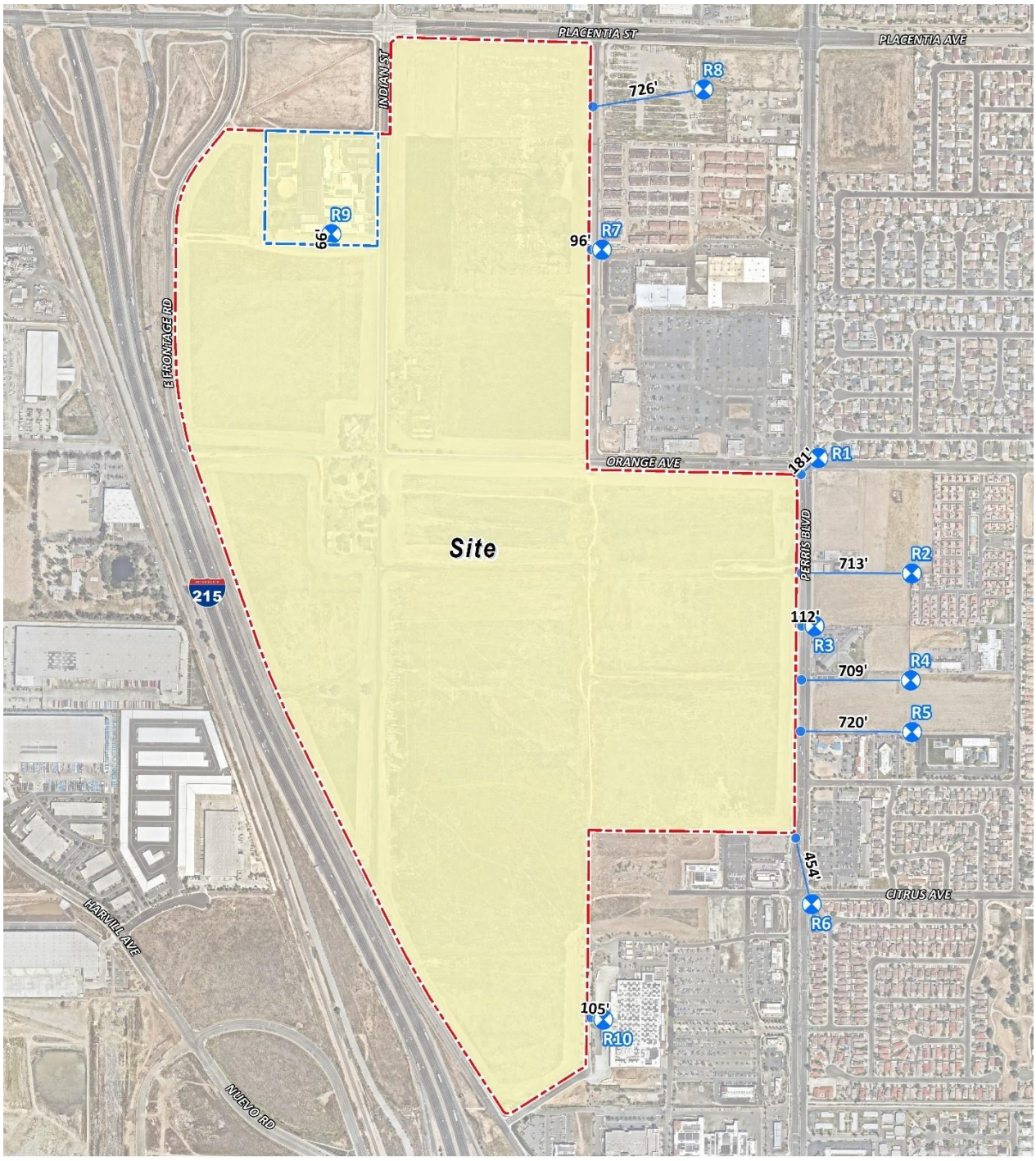
# Closest Air Quality Sensitive Receptor Locations




Source: Urban Crossroads. (Updated 2025). *Exhibit 3-B: Receptor Locations* [Map]. Harvest Landing Specific Plan Air Quality Impact Analysis (Appendix B to the EIR)

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# 5.3.4 THRESHOLDS OF SIGNIFICANCE

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Appendix G of the CEQA Guidelines indicates that a Project could have a significant effect if it were to:

AQ-1 Conflict with or obstruct 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.

AQ-3 Expose sensitive receptors to substantial pollutant concentrations.

AQ-4 Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

## Regional Significance Thresholds

The South Coast AQMD's most recent regional significance thresholds from April 2019 for regulated pollutants are listed in Table 5.3-4. The South Coast AQMD's CEQA air quality methodology provides that any projects that result in daily emissions that exceed any of the thresholds of significance in Table 5.3-4 would be considered to have both an individually (project-level) and cumulatively significant air quality impact.

**Table 5.3-4: South Coast AQMD Regional Air Quality Thresholds of Significance**

| Pollutant | Construction | Operations |
|---|---|---|
| NOx | 100 lbs/day | 55 lbs/day |
| VOC | 75 lbs/day | 55 lbs/day |
| $PM_{10}$ | 150 lbs/day | 150 lbs/day |
| $PM_{2.5}$ | 55 lbs/day | 55 lbs/day |
| SOx | 150 lbs/day | 150 lbs/day |
| CO | 550 lbs/day | 550 lbs/day |
| Lead | 3 lbs/day | 3 lbs/day |

Source: EIR Appendix B

## Local Significance Thresholds

The South Coast AQMD has also developed localized significance thresholds (LSTs) that represent the maximum emissions from a project that would not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standards at the nearest sensitive receptor, and thus would not cause or contribute to localized air quality impacts. LSTs are developed based on the ambient concentrations of that pollutant for each of the respective 38 Source Receptor Areas in the South Coast Air Basin. The localized thresholds, which are found in the mass rate look-up tables in the "Final Localized Significance Threshold Methodology" document prepared by the South Coast AQMD, were developed for use on projects that are less than or equal to five acres in size and are only applicable to the following criteria pollutants: NOx, CO, $PM_{10}$, and $PM_{2.5}$. The South Coast AQMD recommends that proposed projects larger than five acres in area undergo dispersion modeling to determine localized air quality impacts. As such, since the Project site is greater than five acres in area, air dispersion modeling is utilized to determine localized air quality.

LSTs apply, even for non-sensitive land uses, consistent with *LST Methodology* and South Coast AQMD guidance. Per the *LST Methodology*, commercial and industrial facilities are not included in the definition of sensitive receptor because employees and patrons do not typically remain on-site for a full 24 hours but are typically on-site for 8 hours or less. However, *LST Methodology* explicitly states that "LSTs based on shorter averaging periods, such as the nitrogen dioxide and CO LSTs, could also be applied to receptors such as industrial or commercial facilities since it is reasonable to assume that a worker at these sites could be present for periods of one to eight hours." Therefore, any adjacent land use where an individual could remain for 1 or 8 hours, that is located at a closer distance to the Project site than the receptor used for $PM_{10}$ and $PM_{2.5}$ analysis, must be considered to determine construction and operational LST air impacts for emissions of nitrogen dioxide and CO since these pollutants have an averaging time of 1 and 8 hours. LSTs are based off of ambient air quality standards for criteria pollutants as provided above in Table 5.3-1. LSTs applicable to the proposed Project are provided in Table 5.3-5.

**Table 5.3-5: South Coast AQMD Localized Air Quality Thresholds of Significance**

| Pollutant | Construction | Operations |
|---|---|---|
| NOx | 0.18 pounds/day | 0.18 pounds/day |
| $PM_{10}$ | 10.4 pounds/day | 2.5 pounds/day |
| $PM_{2.5}$ | 10.4 pounds/day | 2.5 pounds/day |
| CO (1-hour) | 20 pounds/day | 20 pounds/day |
| CO (8-hour) | 9 pounds/day | 9 pounds/day |

Source: EIR Appendix B

### Toxic Air Contaminants Threshold

Cancer risk is expressed in terms of expected incremental incidence per million population. The South Coast AQMD has established an incidence rate of 10 persons per million as the maximum acceptable incremental cancer risk due to diesel particulate matter exposure. This threshold serves to determine whether or not a given project has a potentially significant development-specific and cumulative impact. Projects that exceed the project-specific significance thresholds are considered by the South Coast AQMD to be cumulatively considerable. Thus, the project-specific and cumulative significance thresholds are the same. Conversely, projects that do not exceed the project-specific significance thresholds are not considered to be cumulatively significant.

## 5.3.5 METHODOLOGY

This analysis focuses on the nature and magnitude of the change in the air quality environment due to implementation of the proposed Project, as outlined in Section 3.0*, Project Description*. Air pollutant emissions associated with the proposed Project would result from construction equipment usage and from construction-related traffic. Additionally, emissions would be generated from operations of the future business park and commercial uses and from traffic volumes generated by these new uses. The increase in emissions generated by these Project activities and other secondary sources have been quantitatively estimated and compared to the applicable thresholds of significance recommended by the South Coast AQMD.

Although the Project would comply with all of the applicable South Coast AQMD requirements, it should be noted that emission reductions associated with Rules 402, 1301, 1401, and 2305 cannot be quantified in the California Emissions Estimator Model (CalEEMod) and are therefore not reflected in the emissions presented herein. Conversely, Rule 403 (Fugitive Dust) and Rule 1113 (Architectural Coatings) can be modeled in CalEEMod. As such, credit for Rule 403 and Rule 1113 has been taken in the analysis.

## AQMP Consistency

The South Coast AQMD's CEQA Air Quality Handbook suggests an evaluation of the following two criteria to determine whether a project involving a legislative land use action (such as the proposed Specific Plan Amendment) would be consistent with the AQMP:

1. The project would not 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.
2. The project would not exceed the assumptions in the AQMP based on the years of project build-out phase.

Consistency Criterion No. 1 refers to the federal and State ambient air quality standards (NAAQS and CAAQS). Federal and State ambient air quality standards violations would occur if regional or localized significance thresholds are exceeded.

Consistency Criterion No. 2 refers to the SCAG's growth forecast and associated assumptions included in the AQMP. The future air quality levels projected in the AQMP are based on SCAG's growth projections, which are based, in part, on the general plans of cities and counties located within the SCAG region. Projects that are consistent with the SCAG's growth forecast are accounted and consistent with the assumptions and modeling within the AQMP.

### Construction

Short-term construction-generated emissions of criteria air pollutants and ozone precursors from development of the Project were assessed in accordance with methods recommended by the South Coast AQMD. The Project's regional emissions were modeled using CalEEMod version 2022, as recommended by the South Coast AQMD. CalEEMod was used to determine whether short-term construction-related emissions of criteria air pollutants associated with the proposed Project would exceed applicable regional significance thresholds and where mitigation would be required. Modeling was based on Project-specific data and predicted short-term construction-generated emissions associated with the Project were compared with applicable South Coast AQMD regional significance thresholds for the determination of significance.

In addition, to determine whether or not construction activities associated with development of the Project would create significant adverse localized air quality impacts on nearby sensitive receptors, the worst-case daily emissions contribution from the proposed Project was compared to the South Coast AQMD's LSTs that are based on the pounds of emissions per day that can be generated by a project without causing or contributing to adverse localized air quality impacts.

The estimated acreage per day that would be disturbed by construction activities was determined by CalEEMod. In order to properly grade a piece of land, multiple passes with grading equipment may be required. As shown in Table 5.3-6, the proposed Project would grade a maximum of 8 acres per day during grading of both Phase 1 and Phase 2.

**Table 5.3-6: Acres Graded Per Day**

| Phase | Construction Activity | Total Acres Graded | Working Days | Acres Graded Per Day |
|---|---|---|---|---|
| Off-Site Utility Construction | Linear, Grading & Excavation | 18.79 | 19 | 0.99 |
| | Linear, Drainage, Utilities, & Sub-Grade | 18.79 | 13 | 1.45 |
| Phase 1 | Site Preparation | 119 | 17 | 7 |
| | Grading | 1,032 | 43 | 24 |
| Phase 2 | Site Preparation | 840 | 120 | 7 |
| | Grading | 2,480 | 310 | 8 |

Source: EIR Appendix B

### Operations

Long-term (i.e., operational) regional emissions of criteria air pollutants and precursors, including mobile- and area-source emissions from the Project, were also quantified using the CalEEMod computer model. Area-source emissions were modeled according to the size and type of the land uses proposed. Mass mobile-source emissions were modeled based on the increase in daily vehicle trips that would result from the proposed Project. Trip generation rates from the traffic impact analysis prepared for the proposed Project (see EIR Appendix B) were modeled to predict long-term operational emissions, which were compared to the applicable South Coast AQMD significance thresholds for a determination of significance.

The proposed Project analysis includes two scenarios (A and B) that have been evaluated to determine the potential maximum reasonable level of impacts that could occur based on different potential truck trip lengths. Scenario A is based on trip length recommendations from the South Coast AQMD's WAIRE Program and Scenario B is based on trip lengths from Streetlight™ data collected for the Project vicinity. This difference in trip lengths would only affect the mobile source emissions, and therefore, is only provided for the mobile source emissions listed below.

Additionally, Phase 2 includes a 10.66-acre Overlay area. For purposes of a thorough and conservative analysis, Phase 2 and Specific Plan Buildout is analyzed in a With Overlay Scenario and in a Without Overlay Scenario, as it is unknown at this time whether the Overlay area would be built out.

**Onsite Equipment Emissions.** It is common for industrial warehouse buildings and large commercial retailers (such as big box stores) to require cargo handling equipment to move empty containers and empty chassis to and from the various pieces of cargo handling equipment that receive and distribute containers. The City of Perris Good Neighbor Guidelines require that onsite motorized operational equipment for light industrial and warehousing uses to be zero emissions. Also, as detailed in the methodology section, it is anticipated that the proposed buildings would utilize diesel fire pumps and emergency generators. This analysis assumes that for operation of Phase 1 of the Project, seven diesel-fueled fire pumps would operate at 300 horsepower for 50 hours during the year and 5 emergency generators would operate at 300 horsepower for 50 hours during the year. For operation of Phase 2 of the Project, 16 diesel-fueled fire pumps would operate at 300 horsepower for 50 hours during the year and 16 emergency generators would operate at 300 horsepower for 50 hours during the year. Without implementation of the Overlay in Phase 2, the Project would operate 15 diesel-fueled fire pumps for 50 hours during the year and 15 emergency generators for 50 hours during the year.

**Gasoline Dispensing Emissions.** Operational VOC emissions have been analyzed using CalEEMod analysis software and methodology and are based on the default assumptions for a convenience store with fueling positions use. The proposed Project, as required by South Coast AQMD Rule 461, would install an enhanced vapor recovery system that would reduce VOC emissions from the storage, transfer and dispensing of gasoline.

# 5.3.6 ENVIRONMENTAL IMPACTS

As detailed in Section 3.0, *Project Description*, the proposed Project includes a Specific Plan Amendment to modify the existing land uses and development of the Project site pursuant to the proposed new land uses over two phases that are summarized below.

*Phase 1 Development*

Within Phase 1, the Project would construct and operate a 139.89-acre business park with seven buildings including a parcel hub, high cube warehouses, and light industrial buildings that would total 1,727,579 square feet; construct and operate a 22.16-acre shopping center with buildings totaling 250,457 square feet; and construct and operate a 167,060 square foot big box store on a 24.33-acre site with a 12-pump gas station and two fast-food restaurant parcels for two restaurants that would each be approximately 5,500 square feet.

In addition, during construction of Phase 1 the Project would implement street improvements on Indian Avenue, Orange Avenue, Frontage Road, Perris Boulevard, Barrett Avenue, Harvest Landing Way, and Private Drive A; install drainage infrastructure improvements in Perris Boulevard, Barrett Avenue, Orange Avenue, Indian Avenue, and Private Drive A; implement sewer line improvements in Perris Boulevard; implement water lines improvements in Barrett Avenue, Orange Avenue, Frontage Road, Walmart Supercenter Drive; and install a new water well for landscaping irrigation in the proposed drainage basin. Construction and operation of the Phase 1 development is analyzed at a project-specific level within this section.

*Phase 2 Buildout*

The proposed amended Specific Plan buildout of the Phase 2 development area without inclusion of the overlay area would allow up to 3,659,693 square feet of warehouse, light industrial, and/or manufacturing uses under the Multiple Business Use designation, at a maximum floor area ratio of 0.75. Development of the 10.66-acre overlay area would include approximately 348,262 square feet of warehouse, light industrial, and/or manufacturing uses under the Multiple Business Use designation. Total development within the Phase 2 area, including the overlay area, would include up to 4,007,955 square feet of building area.[3] The analysis within this section assumes that construction would begin in 2026 and be completed by 2030, thereby overlapping with operation of Phase 1 developments. Construction and operation of the Phase 2 buildout is analyzed at a programmatic level within this section.

**IMPACT AQ-1: THE PROJECT WOULD CONFLICT WITH OR OBSTRUCT IMPLEMENTATION OF THE APPLICABLE AIR QUALITY PLAN.**

*Specific Plan Area*

**Significant and Unavoidable Impact.** The South Coast AQMD's 2022 AQMP is the applicable air quality plan for the proposed Project. The South Coast AQMD's 2022 AQMP is the applicable air quality plan for the proposed Project.

Consistency Criterion No. 1 refers to violations of the federal and State ambient air quality standards (CAAQS and NAAQS). Federal and State ambient air quality standards violations would occur if localized significance thresholds or regional significance thresholds are exceeded. As evaluated in Impact AQ-2 and Impact AQ-3, with mitigation, the Project's regional construction-source emissions would exceed applicable

[3] The Phase 2 buildout square footage of 4,007,955 SF was based on the gross acreage of parcels within the Phase 2 area prior to roadway dedications. After roadway dedications, the maximum allowable development within Phase 2 would actually be 4,001,748 SF. However, for purposes of providing a conservative analysis, a buildout of 4,007,955 SF was assumed.

thresholds and localized construction-source emissions would not exceed applicable thresholds. The Project's localized operational-source emissions would not exceed applicable localized significance thresholds with mitigation. However, Project operational-source emissions would exceed applicable regional thresholds for emissions of VOC, NOx, $PM_{10}$, and $PM_{2.5}$. Since the Project construction-source and operational-source emissions would exceed South Coast AQMD regional thresholds, the Project would be inconsistent with Consistency Criterion No. 1.

Regarding Consistency Criterion No. 2, the 2022 AQMP demonstrates that the applicable ambient ai quality standards can be achieved within the timeframes required under federal law. Growth projections from local general plans adopted by cities in the district are provided to 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.

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 site to its maximum potential would likely occur, with disturbance of the entire site occurring during construction activities. As such, when considering that regional construction emissions thresholds would be exceeded, a significant impact is expected.

The proposed Specific Plan Amendment would annex three parcels (totaling 5.54 acres) to the Specific Plan area and designate them as MBU and add an MBU overlay to the 10.66-acre school site. The Project would detach a 7.26-acre parcel at the southern portion of the Specific Plan. In addition, the Specific Plan Amendment would change the land use of 170.1 acres from residential uses to Multiple Business and Commercial uses. As detailed in Section 5.13, *Population and Housing*, operation of Phase 1 at buildout would generate approximately 2,535 employees, with 1,678 employees generated by the MBU uses and 857 employees generated in the commercial use areas. Based on the proposed maximum allowed square footage for Phase 2 development, buildout of Phase 2 would generate up to 3,892 jobs. Thus, the total number of jobs at full buildout and complete occupancy of the proposed Project would be 6,427.

Although the Project would exceed the applicable regional thresholds for operational emissions, the Project could be concluded to be consistent with the second consistency criterion if the operational emissions generated by the proposed Project are less than those generated under the existing land use designations. The existing approved land uses were analyzed in the Harvest Landing Specific Plan Draft Environmental Impact Report (City of Perris, 2008). The emissions from the Harvest Landing Specific Plan Draft Environmental Impact Report are compared to those generated by the proposed Project in Table 5.3-7. As shown in Table 5.3-7, the operational emissions resulting from the previously approved Harvest Landing Specific Plan would be less that the emissions generated by the Project for summer VOC and $PM_{2.5}$ emissions and NOx and SOx emissions year round. As shown, implementation of the proposed Project would result in a net increase in Summer VOC and $PM_{2.5}$ emissions and NOx and SOx emissions, as compared to the previously approved specific plan, which is the basis for the current 2022 AQMP. The proposed Project would result in emissions greater than the previously approved project which are not necessarily accounted for in the 2022 AQMP and therefore a significant and unavoidable impact is expected.

As implementation of the Project would include a Specific Plan Amendment, General Plan Amendment, and Zone Change for the Harvest Landing Specific Plan, would result in VOC, NOX, CO, $PM_{10}$, and $PM_{2.5}$ emission exceedances and increase in summer VOC and $PM_{2.5}$ emissions and NOx and SOx emissions, as compared to the previously approved land uses, the Project would result in significant and unavoidable impacts and is determined to be inconsistent with the second criterion.

**Table 5.3-7: Comparison of Prior Specific Plan EIR Land Uses and Project Operational Emissions**

| Scenario | Emissions (lbs/day) | | | | | |
|---|---|---|---|---|---|---|
| | VOC | $NO_X$ | CO | $SO_X$ | $PM_{10}$ | $PM_{2.5}$ |
| Summer (Smog Season) | | | | | | |
| Proposed Project | 378.23 | 496.20 | 1721.45 | 6.04 | 372.09 | 104.85 |
| Previously Approved Specific Plan | 329.00 | 347.00 | 2581.00 | 3.00 | 502.00 | 100.00 |
| **Net (Proposed – Approved EIR)** | **49.23** | **149.20** | **-859.55** | **3.04** | **-129.91** | **4.85** |
| Winter | | | | | | |
| Proposed Project | 325.39 | 515.14 | 1327.56 | 5.87 | 371.61 | 104.49 |
| Previously Approved Specific Plan | 616.00 | 414.00 | 2757.00 | 4.00 | 544.00 | 141.00 |
| **Net (Proposed – Approved EIR)** | **-290.61** | **101.14** | **-1429.44** | **1.87** | **-172.39** | **-36.51** |

Source: EIR Appendix B

Overall, the Project would lead to increased regional air quality emissions that would exceed thresholds of significance after implementation of mitigation. Therefore, the proposed Project would result in a conflict with, or obstruct, implementation of the AQMP and impacts would be significant and unavoidable after implementation of the mitigation measures detailed below.

**IMPACT AQ-2: THE PROJECT WOULD 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.**

**Significant and Unavoidable Impact.**

## Construction

*Specific Plan Area*

Construction activities associated with the Project would result in emissions of CO, VOC, NOx, SOx, $PM_{10}$, and $PM_{2.5}$. Pollutant emissions associated with construction would be generated from the following construction activities: (1) demolition, site preparation, grading, and excavation; (2) construction workers traveling to and from the Project site; (3) delivery and hauling of construction supplies to, and debris from, the Specific Plan Area; (4) fuel combustion by onsite construction equipment; (5) building construction; application of architectural coatings; and paving. These construction activities would temporarily create emissions of dust, fumes, equipment exhaust, and other air contaminants.

The site contains structures and asphalt/concrete which total approximately 73,245 square feet or 2,779 tons of material in Phase 1 and approximately 468,472 square feet or 20,246 tons of material to be demolished in the Phase 2 area. Approximately, 1,606 tons of cement and asphalt demolition debris would be crushed and re-used as backfill material, which was estimated to occur over a 28-day period during the Phase 1 construction process. The remaining demolished material associated with demolition would be hauled to El Sobrante Landfill, approximately 25 roadway miles from the Specific Plan Area.

In addition, construction of the Business Park buildings, Community Shopping Center, and Commercial Big Box Retail sites in Phase 1 would require 389,200 cubic yards of import; and construction of Phase 2 is anticipated to require approximately 300,000 cubic yards of import, which would be imported 20 miles that would generate emissions.

Construction emissions are short-term and temporary. The maximum daily construction emissions for the proposed Project were estimated using CalEEMod and the modeling includes compliance with South Coast AQMD Rules 403 and 1113 (described above) that would reduce air contaminants during construction. Table 5.3-8 provides the maximum daily emissions of criteria air pollutants from construction of the Project by phase without the Overlay based on the CalEEMod modeling and assuming that each piece of construction equipment would operate 8 hours per day. As shown, the daily emissions resulting from Project construction would exceed the thresholds of significance for emissions of VOC and NOx during construction of Phase 1 and VOC during construction of Phase 2. Table 5.3-8 conservatively represents construction of the Specific Plan Area, including the overlay, as the construction schedule, equipment, and other assumptions would remain the same with or without redevelopment of the Overlay area.

**Table 5.3-8: Maximum Peak Daily Construction Emissions by Phase - without Mitigation**

| Phase | Source | Emissions (lbs/day) | | | | | |
|---|---|---|---|---|---|---|---|
| | | VOC | NOx | CO | SOx | $PM_{10}$ | $PM_{2.5}$ |
| Off-Site & Phase 1 | Summer | | | | | | |
| | 2026 | 77.72 | 126.11 | 237.04 | 0.31 | 21.65 | 8.38 |
| | Winter | | | | | | |
| | 2025 | 72.82 | 75.80 | 139.01 | 0.11 | 17.47 | 10.10 |
| | 2026 | 77.43 | 271.13 | 217.42 | 0.91 | 48.54 | 21.33 |
| **Total Maximum Daily Emissions** | | **77.72** | **271.13** | **237.04** | **0.91** | **48.54** | **21.33** |
| South Coast AQMD Regional Threshold | | 75 | 100 | 550 | 150 | 150 | 55 |
| **Threshold Exceeded?** | | **Yes** | **Yes** | **No** | **No** | **No** | **No** |
| Phase 2 | Summer | | | | | | |
| | 2027 | 4.66 | 46.00 | 40.98 | 0.11 | 5.92 | 2.44 |
| | 2028 | 6.69 | 67.29 | 62.80 | 0.22 | 12.33 | 5.57 |
| | 2029 | 8.48 | 63.36 | 127.77 | 0.22 | 24.95 | 6.44 |
| | 2030 | 96.66 | 45.13 | 163.29 | 0.14 | 30.18 | 7.97 |
| | Winter | | | | | | |
| | 2026 | 4.80 | 48.02 | 41.46 | 0.11 | 6.01 | 2.53 |
| | 2027 | 7.47 | 68.05 | 63.25 | 0.12 | 15.70 | 8.67 |
| | 2028 | 7.28 | 67.94 | 63.11 | 0.22 | 15.51 | 8.50 |
| | 2029 | 7.45 | 63.97 | 103.63 | 0.22 | 24.95 | 6.44 |
| | 2030 | 96.29 | 46.42 | 137.10 | 0.14 | 30.18 | 7.97 |
| **Total Maximum Daily Emissions** | | **96.66** | **68.05** | **163.29** | **0.22** | **30.18** | **8.67** |
| South Coast AQMD Regional Threshold | | 75 | 100 | 550 | 150 | 150 | 55 |
| **Threshold Exceeded?** | | **Yes** | **No** | **No** | **No** | **No** | **No** |

Source: EIR Appendix B

Table 5.3-9 provides the maximum daily emissions of criteria air pollutants from construction of Specific Plan Buildout with the Overlay based on the same CalEEMod modeling assumptions. As shown, the daily emissions resulting from Project construction would also exceed the thresholds of significance for emissions of NOx and VOC.

**Table 5.3-9: Maximum Peak Daily Construction Emissions - with Overlay - without Mitigation**

| Year | Emissions (lbs/day) | | | | | |
|---|---|---|---|---|---|---|
| | **VOC** | **NOx** | **CO** | **SOx** | **$PM_{10}$** | **$PM_{2.5}$** |
| Summer | | | | | | |
| 2026 | 77.72 | 126.11 | 237.04 | 0.31 | 21.65 | 8.38 |
| 2027 | 4.66 | 46.00 | 40.98 | 0.11 | 5.92 | 2.44 |
| 2028 | 6.69 | 67.29 | 62.80 | 0.22 | 12.33 | 5.57 |
| 2029 | 8.48 | 63.36 | 127.77 | 0.22 | 24.95 | 6.44 |
| 2030 | 96.66 | 45.13 | 163.29 | 0.14 | 30.18 | 7.97 |
| **Winter** | | | | | | |
| 2025 | 72.82 | 75.80 | 139.01 | 0.11 | 17.47 | 10.10 |
| 2026 | 85.34 | 344.52 | 290.03 | 1.08 | 56.97 | 25.07 |
| 2027 | 7.47 | 68.05 | 63.25 | 0.12 | 15.70 | 8.67 |
| 2028 | 7.28 | 67.94 | 63.11 | 0.22 | 15.51 | 8.50 |
| 2029 | 7.45 | 63.97 | 103.63 | 0.22 | 24.95 | 6.44 |
| 2030 | 96.29 | 46.42 | 137.10 | 0.14 | 30.18 | 7.97 |
| **Total Maximum Daily Emissions** | **96.66** | **344.52** | **290.03** | **1.08** | **56.97** | **25.07** |
| South Coast AQMD Regional Thresholds of Significance | 75 | 100 | 550 | 150 | 150 | 55 |
| **Threshold Exceeded?** | **Yes** | **Yes** | **No** | **No** | **No** | **No** |

Source: EIR Appendix B

As a result, Mitigation Measures AQ-1 through AQ-7 have been included, which require that construction use super-compliant low VOC paints, use of Tier 4 construction equipment over 50 horsepower, provision of a community liaison, limiting the amount of ground disturbance, use of newer construction equipment, and provision of meal options for construction workers.

As shown on Tables 5.3-10 and 5.3-11, with implementation of these mitigation measures, Project construction-source VOC emissions would be reduced to a less than significant level. However, NOx emissions would continue to exceed South Coast AQMD regional significance thresholds during construction of Phase 1. Thus, a significant and unavoidable impact from regional construction emissions would occur.

**Table 5.3-10: Maximum Peak Daily Construction Emissions by Phase - with Mitigation**

| Phase | Year | Emissions (lbs/day) | | | | | |
|---|---|---|---|---|---|---|---|
| | | VOC | NOx | CO | SOx | $PM_{10}$ | $PM_{2.5}$ |
| Off-Site &Phase 1 | **Summer** | | | | | | |
| | 2026 | 34.50 | 119.39 | 254.63 | 0.31 | 18.52 | 5.53 |
| | **Winter** | | | | | | |
| | 2025 | 69.60 | 32.26 | 135.88 | 0.11 | 13.81 | 6.75 |
| | 2026 | 34.21 | 207.97 | 248.36 | 0.91 | 41.24 | 14.67 |
| **Total Maximum Daily Emissions** | | **69.60** | **207.97** | **254.63** | **0.91** | **41.24** | **14.67** |
| South Coast AQMD Regional Threshold | | 75 | 100 | 550 | 150 | 150 | 55 |
| **Threshold Exceeded?** | | **No** | **Yes** | **No** | **No** | **No** | **No** |
| Phase 2 | **Summer** | | | | | | |
| | 2027 | 1.73 | 27.35 | 40.39 | 0.11 | 4.62 | 1.26 |
| | 2028 | 2.32 | 53.05 | 78.90 | 0.22 | 10.30 | 3.72 |
| | 2029 | 7.50 | 52.57 | 132.38 | 0.22 | 24.54 | 6.07 |
| | 2030 | 27.68 | 47.38 | 169.30 | 0.14 | 29.52 | 7.37 |
| | **Winter** | | | | | | |
| | 2026 | 1.76 | 28.01 | 40.15 | 0.11 | 4.65 | 1.28 |
| | 2027 | 1.71 | 33.95 | 62.43 | 0.12 | 12.67 | 5.90 |
| | 2028 | 2.29 | 53.70 | 78.39 | 0.22 | 12.67 | 5.90 |
| | 2029 | 6.47 | 53.18 | 108.24 | 0.22 | 24.54 | 6.07 |
| | 2030 | 27.31 | 48.67 | 143.10 | 0.14 | 29.52 | 7.37 |
| **Total Maximum Daily Emissions** | | **27.68** | **53.70** | **169.30** | **0.22** | **29.52** | **7.37** |
| South Coast AQMD Regional Threshold | | 75 | 100 | 550 | 150 | 150 | 55 |
| **Threshold Exceeded?** | | **No** | **No** | **No** | **No** | **No** | **No** |

Source: EIR Appendix B

**Table 5.3-11: Maximum Peak Daily Construction Emissions - with Overlay - with Mitigation**

| Source | Emissions (lbs/day) | | | | | |
|---|---|---|---|---|---|---|
| | VOC | NOx | CO | SOx | $PM_{10}$ | $PM_{2.5}$ |
| **Summer** | | | | | | |
| 2026 | 34.50 | 119.39 | 254.63 | 0.31 | 18.52 | 5.53 |
| 2027 | 1.73 | 27.35 | 40.39 | 0.11 | 4.62 | 1.26 |
| 2028 | 2.32 | 53.05 | 78.90 | 0.22 | 10.30 | 3.72 |
| 2029 | 7.50 | 52.57 | 132.38 | 0.22 | 24.54 | 6.07 |
| 2030 | 27.68 | 47.38 | 169.30 | 0.14 | 29.52 | 7.37 |
| **Winter** | | | | | | |
| 2025 | 69.60 | 32.26 | 135.88 | 0.11 | 13.81 | 6.75 |
| 2026 | 37.41 | 257.74 | 328.20 | 1.08 | 47.46 | 16.40 |
| 2027 | 1.71 | 33.95 | 62.43 | 0.12 | 12.67 | 5.90 |
| 2028 | 2.29 | 53.70 | 78.39 | 0.22 | 12.67 | 5.90 |
| 2029 | 6.47 | 53.18 | 108.24 | 0.22 | 24.54 | 6.07 |
| 2030 | 27.31 | 48.67 | 143.10 | 0.14 | 29.52 | 7.37 |
| **Total Maximum Daily Emissions** | **69.60** | **257.74** | **328.20** | **1.08** | **47.46** | **16.40** |
| South Coast AQMD Regional Threshold | 75 | 100 | 550 | 150 | 150 | 55 |
| **Threshold Exceeded?** | **No** | **Yes** | **No** | **No** | **No** | **No** |

Source: EIR Appendix B

## Operations

Implementation of the proposed Project would result in long-term regional emissions of criteria air pollutants and ozone precursors associated with area sources, such as natural gas consumption, landscaping, applications of architectural coatings, consumer products from operation of the proposed buildings.

It is common for industrial warehouse buildings and large commercial uses (such as big box stores) to require cargo handling equipment to move empty containers and empty chassis to and from the various pieces of cargo handling equipment that receive and distribute containers. Also, as described in Section 5.3.5, *Methodology*, it is anticipated that the Project would utilize diesel fire pumps and emergency generators, which were included in the modeling assumptions.

Operation of the proposed Project would include emissions from vehicles traveling to the Specific Plan Area and from vehicles in the parking lots and loading areas. The analysis of mobile emissions includes two scenarios (A and B) based on different potential truck trip lengths to identify each potential impact. Scenario A is based on trip length recommendations from the South Coast AQMD's WAIRE Program of 15.3 miles for 2-axle, 14.2 miles for 3-axle trucks and 40 miles for 4+-axle trucks. Scenario B is based on trip lengths from Streetlight™ data collected for the Project vicinity that is 31 miles for 2-axle and 3-axle trucks and 71 miles for 4+-axle trucks.

Additionally, for purposes of a thorough and conservative analysis, the proposed Project has been analyzed with the 10.66-acre Overlay area and without development and operation of the Overlay area, as it is unknown at this time whether the Overlay area would be built out.

*Phase 1 Developments*

As shown on Table 5.3-12, operation of Phase 1 of the Project in Scenario A (using trip lengths from the South Coast AQMD's WAIRE Program) would exceed the numerical thresholds of significance established by the South Coast AQMD for emissions of VOC, NOx, CO and $PM_{10}$ during both the summer and winter seasons.

**Table 5.3-12: Peak Daily Operational Emissions from Phase 1 - Scenario A – Without Mitigation**

| Source | Emissions (lbs/day) | | | | | |
|---|---|---|---|---|---|---|
| | **VOC** | **NOx** | **CO** | **SOx** | **$PM_{10}$** | **$PM_{2.5}$** |
| Summer | | | | | | |
| Mobile Source | 147.68 | 137.11 | 885.14 | 2.33 | 182.82 | 48.05 |
| Area Source | 65.83 | 0.79 | 94.21 | 0.01 | 0.17 | 0.13 |
| Energy Source | 0.14 | 2.63 | 2.21 | 0.02 | 0.20 | 0.20 |
| Stationary Source | 5.91 | 16.51 | 15.06 | 0.03 | 0.87 | 0.87 |
| Fueling Station | 9.35 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| On Site Equipment | 0.70 | 2.25 | 98.67 | 0.00 | 0.18 | 0.16 |
| **Total Maximum Daily Emissions** | **229.61** | **159.30** | **1095.30** | **2.38** | **184.23** | **49.41** |
| South Coast AQMD Regional Threshold | *55* | *55* | *550* | 150 | 150 | *55* |
| **Threshold Exceeded?** | **Yes** | **Yes** | **Yes** | **No** | **Yes** | **No** |
| Winter | | | | | | |
| Mobile Source | 137.47 | 145.66 | 778.21 | 2.21 | 182.82 | 48.05 |
| Area Source | 50.36 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Energy Source | 0.14 | 2.63 | 2.21 | 0.02 | 0.20 | 0.20 |
| Stationary Source | 5.91 | 16.51 | 15.06 | 0.03 | 0.87 | 0.87 |
| Fueling Station | 9.35 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| On Site Equipment | 0.70 | 2.25 | 98.67 | 0.00 | 0.18 | 0.16 |
| **Total Maximum Daily Emissions** | **203.94** | **167.05** | **894.15** | **2.26** | **184.06** | **49.28** |
| South Coast AQMD Regional Threshold | *55* | *55* | *550* | 150 | 150 | *55* |
| **Threshold Exceeded?** | **Yes** | **Yes** | **Yes** | **No** | **Yes** | **No** |

Source: EIR Appendix B

As shown on Table 5.3-13, for operation of buildout of Phase 1 under Scenario B (using trip lengths from Streetlight™ data collected for the Project vicinity), the Project would also exceed the numerical thresholds of significance established by the South Coast AQMD for emissions of VOC, NOx, CO, and $PM_{10}$ during both the summer and winter seasons.

**Table 5.3-13: Peak Daily Operational Emissions from Phase 1 - Scenario B - Without Mitigation**

| Source | Emissions (lbs/day) | | | | | |
|---|---|---|---|---|---|---|
| | **VOC** | **NOx** | **CO** | **SOx** | **$PM_{10}$** | **$PM_{2.5}$** |
| Summer | | | | | | |
| Mobile Source | 148.36 | 170.57 | 893.08 | 2.68 | 195.37 | 51.84 |
| Area Source | 65.83 | 0.79 | 94.21 | 0.01 | 0.17 | 0.13 |
| Energy Source | 0.14 | 2.63 | 2.21 | 0.02 | 0.20 | 0.20 |
| Stationary Source | 5.91 | 16.51 | 15.06 | 0.03 | 0.87 | 0.87 |
| Fueling Station | 9.35 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| On Site Equipment | 0.70 | 2.25 | 98.67 | 0.00 | 0.18 | 0.16 |
| **Total Maximum Daily Emissions** | **230.30** | **192.76** | **1103.23** | **2.73** | **196.78** | **53.19** |
| South Coast AQMD Regional Threshold | 55 | 55 | 550 | 150 | 150 | 55 |
| **Threshold Exceeded?** | **Yes** | **Yes** | **Yes** | **No** | **Yes** | **No** |
| Winter | | | | | | |
| Mobile Source | 138.16 | 180.55 | 786.08 | 2.56 | 195.37 | 51.84 |
| Area Source | 50.36 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Energy Source | 0.14 | 2.63 | 2.21 | 0.02 | 0.20 | 0.20 |
| Stationary Source | 5.91 | 16.51 | 15.06 | 0.03 | 0.87 | 0.87 |
| Fueling Station | 9.35 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| On Site Equipment | 0.70 | 2.25 | 98.67 | 0.00 | 0.18 | 0.16 |
| **Total Maximum Daily Emissions** | **204.63** | **201.94** | **902.02** | **2.60** | **196.62** | **53.07** |
| South Coast AQMD Regional Threshold | 55 | 55 | 550 | 150 | 150 | 55 |
| **Threshold Exceeded?** | **Yes** | **Yes** | **Yes** | **No** | **Yes** | **No** |

Source: EIR Appendix B

*Phase 2 Buildout*

As shown on Table 5.3-14 and Table 5.3-15, operation of Phase 2 of the Project at buildout in Scenario A (using trip lengths from the South Coast AQMD's WAIRE Program) would exceed the numerical thresholds of significance established by the South Coast AQMD for emissions of VOC, NOx, and CO during both the summer and winter seasons, both with and without the proposed Overlay.

**Table 5.3-14: Peak Daily Operational Emissions from Phase 2 - Scenario A - With Overlay - Without Mitigation**

| Source | Emissions (lbs/day) | | | | | |
|---|---|---|---|---|---|---|
| | VOC | NOx | CO | SOx | $PM_{10}$ | $PM_{2.5}$ |
| Summer | | | | | | |
| Mobile Source | 35.70 | 169.99 | 298.17 | 2.13 | 120.37 | 33.44 |
| Area Source | 119.71 | 1.47 | 174.32 | 0.01 | 0.31 | 0.23 |
| Stationary Source | 15.75 | 44.03 | 40.17 | 0.08 | 2.32 | 2.32 |
| On Site Equipment | 1.56 | 5.07 | 217.54 | 0.00 | 0.41 | 0.38 |
| **Total Maximum Daily Emissions** | **172.73** | **220.56** | **730.20** | **2.22** | **123.41** | **36.37** |
| South Coast AQMD Regional Threshold | 55 | 55 | 550 | 150 | 150 | 55 |
| **Threshold Exceeded?** | **Yes** | **Yes** | **Yes** | **No** | **No** | **No** |
| Winter | | | | | | |
| Mobile Source | 34.11 | 178.27 | 262.26 | 2.09 | 120.38 | 33.44 |
| Area Source | 91.07 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Stationary Source | 15.75 | 44.03 | 40.17 | 0.08 | 2.32 | 2.32 |
| On Site Equipment | 1.56 | 5.07 | 217.54 | 0.00 | 0.41 | 0.38 |
| **Total Maximum Daily Emissions** | **142.49** | **227.37** | **519.97** | **2.17** | **123.11** | **36.14** |
| South Coast AQMD Regional Threshold | 55 | 55 | 550 | 150 | 150 | 55 |
| **Threshold Exceeded?** | **Yes** | **Yes** | **No** | **No** | **No** | **No** |

Source: EIR Appendix B

**Table 5.3-15: Peak Daily Operational Emissions from Phase 2 - Scenario A - Without Overlay - Without Mitigation**

| Source | Emissions (lbs/day) | | | | | |
|---|---|---|---|---|---|---|
| | VOC | NOx | CO | SOx | $PM_{10}$ | $PM_{2.5}$ |
| **Summer** | | | | | | |
| Mobile Source | 32.61 | 155.18 | 272.34 | 1.95 | 109.92 | 30.54 |
| Area Source | 109.33 | 1.34 | 159.17 | 0.01 | 0.28 | 0.21 |
| Stationary Source | 14.77 | 41.28 | 37.66 | 0.07 | 2.17 | 2.17 |
| On Site Equipment | 1.45 | 4.71 | 202.00 | 0.00 | 0.38 | 0.35 |
| **Total Maximum Daily Emissions** | **158.16** | **202.51** | **671.17** | **2.03** | **112.76** | **33.27** |
| South Coast AQMD Regional Threshold | 55 | 55 | 550 | 150 | 150 | 55 |
| **Threshold Exceeded?** | **Yes** | **Yes** | **No** | **No** | **No** | **No** |
| **Winter** | | | | | | |
| Mobile Source | 31.16 | 162.74 | 239.54 | 1.91 | 109.93 | 30.54 |
| Area Source | 83.18 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Stationary Source | 14.77 | 41.28 | 37.66 | 0.07 | 2.17 | 2.17 |
| On Site Equipment | 1.45 | 4.71 | 202.00 | 0.00 | 0.38 | 0.35 |
| **Total Maximum Daily Emissions** | **130.55** | **208.72** | **479.20** | **1.98** | **112.48** | **33.06** |
| South Coast AQMD Regional Threshold | 55 | 55 | 550 | 150 | 150 | 55 |
| **Threshold Exceeded?** | **Yes** | **Yes** | **No** | **No** | **No** | **No** |

Source: EIR Appendix B

As shown on Table 5.3-16 and Table 5.3-17, buildout of Phase 2 in Scenario B (that uses trip lengths from Streetlight™ data collected for the Project vicinity) would exceed the numerical thresholds of significance for emissions of VOC, NOx and $PM_{10}$ during both the summer and winter seasons, and CO during the summer. These impacts would occur both with and without the Overlay.

**Table 5.3-16: Peak Daily Operational Emissions from Phase 2 - Scenario B - With Overlay - Without Mitigation**

| Source | Emissions (lbs/day) | | | | | |
|---|---|---|---|---|---|---|
| | **VOC** | **NOx** | **CO** | **SOx** | **$PM_{10}$** | **$PM_{2.5}$** |
| **Summer** | | | | | | |
| Mobile Source | 37.88 | 285.23 | 324.09 | 3.44 | 172.81 | 49.12 |
| Area Source | 119.71 | 1.47 | 174.32 | 0.01 | 0.31 | 0.23 |
| Stationary Source | 15.75 | 44.03 | 40.17 | 0.08 | 2.32 | 2.32 |
| On Site Equipment | 1.56 | 5.07 | 217.54 | 0.00 | 0.41 | 0.38 |
| **Total Maximum Daily Emissions** | **174.90** | **335.79** | **756.12** | **3.53** | **175.85** | **52.05** |
| South Coast AQMD Regional Threshold | 55 | 55 | 550 | 150 | 150 | 55 |
| **Threshold Exceeded?** | **Yes** | **Yes** | **Yes** | **No** | **Yes** | **No** |
| **Winter** | | | | | | |
| Mobile Source | 36.29 | 298.41 | 287.98 | 3.40 | 172.81 | 49.12 |
| Area Source | 91.07 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Stationary Source | 15.75 | 44.03 | 40.17 | 0.08 | 2.32 | 2.32 |
| On Site Equipment | 1.56 | 5.07 | 217.54 | 0.00 | 0.41 | 0.38 |
| **Total Maximum Daily Emissions** | **144.67** | **347.51** | **545.69** | **3.47** | **175.54** | **51.82** |
| South Coast AQMD Regional Threshold | 55 | 55 | 550 | 150 | 150 | 55 |
| **Threshold Exceeded?** | **Yes** | **Yes** | **No** | **No** | **Yes** | **No** |

Source: EIR Appendix B

**Table 5.3-17: Peak Daily Operational Emissions from Phase 2 - Scenario B - Without Overlay - Without Mitigation**

| Source | Emissions (lbs/day) | | | | | |
|---|---|---|---|---|---|---|
| | **VOC** | **NOx** | **CO** | **SOx** | **$PM_{10}$** | **$PM_{2.5}$** |
| **Summer** | | | | | | |
| Mobile Source | 34.60 | 260.37 | 296.01 | 3.14 | 157.80 | 44.85 |
| Area Source | 111.29 | 1.34 | 159.17 | 0.01 | 0.28 | 0.21 |
| Stationary Source | 14.77 | 41.28 | 37.66 | 0.07 | 2.17 | 2.17 |
| On Site Equipment | 1.45 | 4.71 | 202.00 | 0.00 | 0.38 | 0.35 |
| **Total Maximum Daily Emissions** | **162.11** | **307.70** | **694.84** | **3.22** | **160.63** | **47.59** |
| South Coast AQMD Regional Threshold | *55* | *55* | *550* | 150 | 150 | *55* |
| **Threshold Exceeded?** | **Yes** | **Yes** | **Yes** | **No** | **Yes** | **No** |
| **Winter** | | | | | | |
| Mobile Source | 33.14 | 272.41 | 263.03 | 3.10 | 157.80 | 44.85 |
| Area Source | 85.14 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Stationary Source | 14.77 | 41.28 | 37.66 | 0.07 | 2.17 | 2.17 |
| On Site Equipment | 1.45 | 4.71 | 202.00 | 0.00 | 0.38 | 0.35 |
| **Total Maximum Daily Emissions** | **134.50** | **318.40** | **502.69** | **3.17** | **160.35** | **47.38** |
| South Coast AQMD Regional Threshold | *55* | *55* | *550* | 150 | 150 | *55* |
| **Threshold Exceeded?** | **Yes** | **Yes** | **No** | **No** | **Yes** | **No** |

Source: EIR Appendix C

*Specific Plan Buildout*

As shown on Table 5.3-18 and Table 5.3-19, during operations from buildout of the Specific Plan in Scenario A (using trip lengths from the South Coast AQMD's WAIRE Program), operation of the Project would exceed the numerical thresholds of significance for emissions of VOC, NOx, CO, $PM_{10}$, and $PM_{2.5}$ during both the summer and winter seasons, both with and without the proposed Overlay.

**Table 5.3-18: Peak Daily Operational Emissions at Specific Plan Buildout - Scenario A - With Overlay - Without Mitigation**

| Source | Emissions (lbs/day) | | | | | |
|---|---|---|---|---|---|---|
| | **VOC** | **NOx** | **CO** | **SOx** | **$PM_{10}$** | **$PM_{2.5}$** |
| **Summer** | | | | | | |
| Mobile Source | 156.48 | 280.51 | 1037.06 | 4.28 | 302.67 | 81.11 |
| Area Source | 185.56 | 2.26 | 268.53 | 0.02 | 0.48 | 0.36 |
| Energy Source | 0.14 | 2.63 | 2.21 | 0.02 | 0.20 | 0.20 |
| Stationary Source | 21.66 | 60.54 | 55.23 | 0.10 | 3.19 | 3.19 |
| Fueling Station | 9.35 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| On Site Equipment | 2.34 | 7.60 | 326.31 | 0.00 | 0.62 | 0.57 |
| **Total Maximum Daily Emissions** | **375.54** | **353.55** | **1689.35** | **4.42** | **307.15** | **85.43** |
| South Coast AQMD Regional Threshold | *55* | *55* | *550* | 150 | 150 | *55* |
| **Threshold Exceeded?** | **Yes** | **Yes** | **Yes** | **No** | **Yes** | **Yes** |
| **Winter** | | | | | | |
| Mobile Source | 147.78 | 295.63 | 911.95 | 4.13 | 302.68 | 81.12 |
| Area Source | 141.43 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Energy Source | 0.14 | 2.63 | 2.21 | 0.02 | 0.20 | 0.20 |
| Stationary Source | 21.66 | 60.54 | 55.23 | 0.10 | 3.19 | 3.19 |
| Fueling Station | 9.35 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| On Site Equipment | 2.34 | 7.60 | 326.31 | 0.00 | 0.62 | 0.57 |
| **Total Maximum Daily Emissions** | **322.71** | **366.41** | **1295.70** | **4.25** | **306.68** | **85.07** |
| South Coast AQMD Regional Threshold | *55* | *55* | *550* | 150 | 150 | *55* |
| **Threshold Exceeded?** | **Yes** | **Yes** | **Yes** | **No** | **Yes** | **Yes** |

Source: EIR Appendix B

**Table 5.3-19: Peak Daily Operational Emissions at Specific Plan Buildout - Scenario A - Without Overlay - Without Mitigation**

| Source | Emissions (lbs/day) | | | | | |
|---|---|---|---|---|---|---|
| | **VOC** | **NOx** | **CO** | **SOx** | **$PM_{10}$** | **$PM_{2.5}$** |
| **Summer** | | | | | | |
| Mobile Source | 153.39 | 265.70 | 1011.23 | 4.09 | 292.22 | 78.21 |
| Area Source | 175.18 | 2.13 | 253.39 | 0.02 | 0.45 | 0.34 |
| Energy Source | 0.14 | 2.63 | 2.21 | 0.02 | 0.20 | 0.20 |
| Stationary Source | 20.67 | 57.79 | 52.72 | 0.10 | 3.04 | 3.04 |
| Fueling Station | 9.35 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| On Site Equipment | 2.23 | 7.24 | 310.77 | 0.00 | 0.59 | 0.54 |
| **Total Maximum Daily Emissions** | **360.97** | **335.49** | **1630.32** | **4.22** | **296.50** | **82.33** |
| South Coast AQMD Regional Threshold | 55 | 55 | 550 | 150 | 150 | 55 |
| **Threshold Exceeded?** | **Yes** | **Yes** | **Yes** | **No** | **Yes** | **Yes** |
| **Winter** | | | | | | |
| Mobile Source | 144.83 | 280.10 | 889.23 | 3.95 | 292.23 | 78.21 |
| Area Source | 133.54 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Energy Source | 0.14 | 2.63 | 2.21 | 0.02 | 0.20 | 0.20 |
| Stationary Source | 20.67 | 57.79 | 52.72 | 0.10 | 3.04 | 3.04 |
| Fueling Station | 9.35 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| On Site Equipment | 2.23 | 7.24 | 310.77 | 0.00 | 0.59 | 0.54 |
| **Total Maximum Daily Emissions** | **310.77** | **347.76** | **1254.93** | **4.06** | **296.05** | **82.00** |
| South Coast AQMD Regional Threshold | 55 | 55 | 550 | 150 | 150 | 55 |
| **Threshold Exceeded?** | **Yes** | **Yes** | **Yes** | **No** | **Yes** | **Yes** |

Source: EIR Appendix B

As shown on Table 5.3-20 and Table 5.3-21, at Specific Plan Buildout in Scenario B (using trip lengths from Streetlight™ data collected for the Project vicinity), the Project would exceed the numerical thresholds of significance for emissions of VOC, NOx, CO, $PM_{10}$, and $PM_{2.5}$ during both the summer and winter seasons, both with and without the Overlay.

**Table 5.3-20: Peak Daily Operational Emissions at Specific Plan Buildout - Scenario B - With Overlay - Without Mitigation**

| Source | Emissions (lbs/day) | | | | | |
|---|---|---|---|---|---|---|
| | **VOC** | **NOx** | **CO** | **SOx** | **$PM_{10}$** | **$PM_{2.5}$** |
| **Summer** | | | | | | |
| Mobile Source | 159.18 | 423.17 | 1,069.17 | 5.90 | 367.60 | 100.53 |
| Area Source | 185.56 | 2.26 | 268.53 | 0.02 | 0.48 | 0.36 |
| Energy Source | 0.14 | 2.63 | 2.21 | 0.02 | 0.20 | 0.20 |
| Stationary Source | 21.66 | 60.54 | 55.23 | 0.10 | 3.19 | 3.19 |
| Fueling Station | 9.35 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| On Site Equipment | 2.34 | 7.60 | 326.31 | 0.00 | 0.62 | 0.57 |
| **Total Maximum Daily Emissions** | **378.23** | **496.21** | **1721.46** | **6.04** | **372.08** | **104.84** |
| South Coast AQMD Regional Threshold | 55 | 55 | 550 | 150 | 150 | 55 |
| **Threshold Exceeded?** | **Yes** | **Yes** | **Yes** | **No** | **Yes** | **Yes** |
| **Winter** | | | | | | |
| Mobile Source | 150.47 | 444.37 | 943.81 | 5.75 | 367.60 | 100.53 |
| Area Source | 141.43 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Energy Source | 0.14 | 2.63 | 2.21 | 0.02 | 0.20 | 0.20 |
| Stationary Source | 21.66 | 60.54 | 55.23 | 0.10 | 3.19 | 3.19 |
| Fueling Station | 9.35 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| On Site Equipment | 2.34 | 7.60 | 326.31 | 0.00 | 0.62 | 0.57 |
| **Total Maximum Daily Emissions** | **325.40** | **515.15** | **1327.57** | **5.87** | **371.61** | **104.49** |
| South Coast AQMD Regional Threshold | 55 | 55 | 550 | 150 | 150 | 55 |
| **Threshold Exceeded?** | **Yes** | **Yes** | **Yes** | **No** | **Yes** | **Yes** |

Source: EIR Appendix B

**Table 5.3-21: Peak Daily Operational Emissions at Specific Plan Buildout - Scenario B - Without Overlay - Without Mitigation**

| Source | Emissions (lbs/day) | | | | | |
|---|---|---|---|---|---|---|
| | VOC | NOx | CO | SOx | $PM_{10}$ | $PM_{2.5}$ |
| **Summer** | | | | | | |
| Mobile Source | 155.90 | 398.32 | 1041.09 | 5.60 | 352.58 | 96.26 |
| Area Source | 177.14 | 2.13 | 253.39 | 0.02 | 0.45 | 0.34 |
| Energy Source | 0.14 | 2.63 | 2.21 | 0.02 | 0.20 | 0.20 |
| Stationary Source | 20.67 | 57.79 | 52.72 | 0.10 | 3.04 | 3.04 |
| Fueling Station | 9.35 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| On Site Equipment | 2.23 | 7.24 | 310.77 | 0.00 | 0.59 | 0.54 |
| **Total Maximum Daily Emissions** | **365.44** | **468.12** | **1660.18** | **5.73** | **356.86** | **100.38** |
| South Coast AQMD Regional Threshold | 55 | 55 | 550 | 150 | 150 | 55 |
| **Threshold Exceeded?** | **Yes** | **Yes** | **Yes** | **No** | **Yes** | **Yes** |
| **Winter** | | | | | | |
| Mobile Source | 147.33 | 418.37 | 918.86 | 5.45 | 352.59 | 96.26 |
| Area Source | 135.50 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Energy Source | 0.14 | 2.63 | 2.21 | 0.02 | 0.20 | 0.20 |
| Stationary Source | 20.67 | 57.79 | 52.72 | 0.10 | 3.04 | 3.04 |
| Fueling Station | 9.35 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| On Site Equipment | 2.23 | 7.24 | 310.77 | 0.00 | 0.59 | 0.54 |
| **Total Maximum Daily Emissions** | **315.23** | **486.03** | **1284.56** | **5.57** | **356.42** | **100.05** |
| South Coast AQMD Regional Threshold | 55 | 55 | 550 | 150 | 150 | 55 |
| **Threshold Exceeded?** | **Yes** | **Yes** | **Yes** | **No** | **Yes** | **Yes** |

Source: EIR Appendix B

## Mitigated Operation Emissions

As a result of the exceedances of the South Coast AQMD thresholds of significance, Mitigation Measures AQ-8 through AQ-19 have been included, which implement idling regulations and require electric vehicle charging and carpool parking, electric forklifts, use of newer trucks, truck charging infrastructure, solar infrastructure, rideshare programs, electric landscape equipment, truck route signage, CARB training, and propagation of fleet incentive information. Each of these measures would contribute to reducing emissions associated with the proposed Project. In addition, trucks would be required to comply with CARB's Heavy-Duty (Tractor-Trailer) GHG Regulation, which requires SmartWay tractor trailers that include idle-reduction technologies, aerodynamic technologies, and low-rolling resistant tires that would reduce fuel consumption and associated emissions.

*Phase 1 Developments*

As shown on Table 5.3-22, despite implementation of Mitigation Measures AQ-8 through AQ-19, emissions during Phase 1 operations under Scenario A would continue to exceed the numerical thresholds of significance established by the South Coast AQMD for emissions of VOC, NOx, CO, and $PM_{10}$ during the summer and winter season.

**Table 5.3-22: Mitigated Peak Daily Operational Emissions from Phase 1 - Scenario A**

| Source | Emissions (lbs/day) | | | | | |
|---|---|---|---|---|---|---|
| | **VOC** | **NOx** | **CO** | **SOx** | **$PM_{10}$** | **$PM_{2.5}$** |
| **Summer** | | | | | | |
| Mobile Source | 147.68 | 137.11 | 885.14 | 2.33 | 182.82 | 48.05 |
| Area Source | 50.36 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Energy Source | 0.14 | 2.63 | 2.21 | 0.02 | 0.20 | 0.20 |
| Stationary Source | 5.91 | 16.51 | 15.06 | 0.03 | 0.87 | 0.87 |
| Fueling Station | 9.35 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| **Total Maximum Daily Emissions** | **213.44** | **156.26** | **902.42** | **2.38** | **183.89** | **49.12** |
| South Coast AQMD Regional Threshold | *55* | *55* | *550* | 150 | 150 | *55* |
| **Threshold Exceeded?** | **Yes** | **Yes** | **Yes** | **No** | **Yes** | **No** |
| **Winter** | | | | | | |
| Mobile Source | 137.47 | 145.66 | 778.21 | 2.21 | 182.82 | 48.05 |
| Area Source | 50.36 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Energy Source | 0.14 | 2.63 | 2.21 | 0.02 | 0.20 | 0.20 |
| Stationary Source | 5.91 | 16.51 | 15.06 | 0.03 | 0.87 | 0.87 |
| Fueling Station | 9.35 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| **Total Maximum Daily Emissions** | **203.24** | **164.80** | **795.48** | **2.26** | **183.89** | **49.12** |
| South Coast AQMD Regional Threshold | *55* | *55* | *550* | 150 | 150 | *55* |
| **Threshold Exceeded?** | **Yes** | **Yes** | **Yes** | **No** | **Yes** | **No** |

Source: EIR Appendix B

As shown on Table 5.3-23, despite implementation of Mitigation Measures AQ-8 through AQ-19, emissions during Phase 1 operations under Scenario B would continue to exceed the numerical thresholds of significance for emissions of VOC, NOx, CO, and $PM_{10}$ during the summer and winter season.

**Table 5.3-23: Mitigated Peak Daily Operational Emissions from Phase 1 - Scenario B**

| Source | Emissions (lbs/day) | | | | | |
|---|---|---|---|---|---|---|
| | **VOC** | **NOx** | **CO** | **SOx** | **$PM_{10}$** | **$PM_{2.5}$** |
| **Summer** | | | | | | |
| Mobile Source | 148.36 | 170.57 | 893.08 | 2.68 | 195.37 | 51.84 |
| Area Source | 50.36 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Energy Source | 0.14 | 2.63 | 2.21 | 0.02 | 0.20 | 0.20 |
| Stationary Source | 5.91 | 16.51 | 15.06 | 0.03 | 0.87 | 0.87 |
| Fueling Station | 9.35 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| **Total Maximum Daily Emissions** | **214.13** | **189.71** | **910.35** | **2.72** | **196.44** | **52.91** |
| South Coast AQMD Regional Threshold | *55* | *55* | *550* | 150 | 150 | *55* |
| **Threshold Exceeded?** | **Yes** | **Yes** | **Yes** | **No** | **Yes** | **No** |
| **Winter** | | | | | | |
| Mobile Source | 138.16 | 180.55 | 786.08 | 2.56 | 195.37 | 51.84 |
| Area Source | 50.36 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Energy Source | 0.14 | 2.63 | 2.21 | 0.02 | 0.20 | 0.20 |
| Stationary Source | 5.91 | 16.51 | 15.06 | 0.03 | 0.87 | 0.87 |
| Fueling Station | 9.35 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| **Total Maximum Daily Emissions** | **203.92** | **199.69** | **803.35** | **2.60** | **196.44** | **52.91** |
| South Coast AQMD Regional Threshold | *55* | *55* | *550* | 150 | 150 | *55* |
| **Threshold Exceeded?** | **Yes** | **Yes** | **Yes** | **No** | **Yes** | **No** |

Source: EIR Appendix B

*Phase 2 Buildout*

As shown on Table 5.3-24, despite implementation of Mitigation Measures AQ-8 through AQ-19, emissions from operation of Phase 2 with the Overlay under Scenario A would continue to exceed thresholds of significance for emissions of VOC and NOx during both the summer and winter seasons.

**Table 5.3-24: Mitigated Peak Daily Operational Emissions from Phase 2 - with Overlay - Scenario A**

| Source | Emissions (lbs/day) | | | | | |
|---|---|---|---|---|---|---|
| | **VOC** | **NOx** | **CO** | **SOx** | **$PM_{10}$** | **$PM_{2.5}$** |
| **Summer** | | | | | | |
| Mobile Source | 35.70 | 169.99 | 298.17 | 2.13 | 120.37 | 33.44 |
| Area Source | 91.07 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Stationary Source | 15.75 | 44.03 | 40.17 | 0.08 | 2.32 | 2.32 |
| **Total Maximum Daily Emissions** | **142.52** | **214.02** | **338.34** | **2.21** | **122.69** | **35.76** |
| South Coast AQMD Regional Threshold | *55* | *55* | *550* | 150 | 150 | *55* |
| **Threshold Exceeded?** | **Yes** | **Yes** | **No** | **No** | **No** | **No** |
| **Winter** | | | | | | |
| Mobile Source | 34.11 | 178.27 | 262.26 | 2.09 | 120.38 | 33.44 |
| Area Source | 91.07 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Stationary Source | 15.75 | 44.03 | 40.17 | 0.08 | 2.32 | 2.32 |
| **Total Maximum Daily Emissions** | **140.93** | **222.30** | **302.43** | **2.17** | **122.69** | **35.76** |
| South Coast AQMD Regional Threshold | *55* | *55* | *550* | 150 | 150 | *55* |
| **Threshold Exceeded?** | **Yes** | **Yes** | **No** | **No** | **No** | **No** |

Source: EIR Appendix B

As shown on Table 5.3-25, despite implementation of Mitigation Measures AQ-8 through AQ-19, emissions during operation of Phase 2 with the Overlay under Scenario B would continue to exceed thresholds of significance for emissions of VOC, NOx, and $PM_{10}$ during both the summer and winter seasons.

**Table 5.3-25: Mitigated Peak Daily Operational Emissions from Phase 2 - with Overlay - Scenario B**

| Source | Emissions (lbs/day) | | | | | |
|---|---|---|---|---|---|---|
| | VOC | NOx | CO | SOx | $PM_{10}$ | $PM_{2.5}$ |
| **Summer** | | | | | | |
| Mobile Source | 37.88 | 285.23 | 324.09 | 3.44 | 172.81 | 49.12 |
| Area Source | 91.07 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Stationary Source | 15.75 | 44.03 | 40.17 | 0.08 | 2.32 | 2.32 |
| **Total Maximum Daily Emissions** | **144.70** | **329.26** | **364.26** | **3.52** | **175.13** | **51.44** |
| South Coast AQMD Regional Threshold | *55* | *55* | *550* | 150 | 150 | *55* |
| **Threshold Exceeded?** | **Yes** | **Yes** | **No** | **No** | **Yes** | **No** |
| **Winter** | | | | | | |
| Mobile Source | 36.29 | 298.41 | 287.98 | 3.40 | 172.81 | 49.12 |
| Area Source | 91.07 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Stationary Source | 15.75 | 44.03 | 40.17 | 0.08 | 2.32 | 2.32 |
| **Total Maximum Daily Emissions** | **143.11** | **342.44** | **328.15** | **3.47** | **175.13** | **51.44** |
| South Coast AQMD Regional Threshold | *55* | *55* | *550* | 150 | 150 | *55* |
| **Threshold Exceeded?** | **Yes** | **Yes** | **No** | **No** | **Yes** | **No** |

Source: EIR Appendix B

As shown on Table 5.3-26, with implementation of Mitigation Measures AQ-8 through AQ-19, emissions from operation of Phase 2 without the Overlay under Scenario A would continue to exceed thresholds of significance for emissions of VOC and NOx during both the summer and winter seasons.

**Table 5.3-26: Mitigated Peak Daily Operational Emissions from Phase 2 - without Overlay - Scenario A**

| Source | Emissions (lbs/day) | | | | | |
|---|---|---|---|---|---|---|
| | VOC | NOx | CO | SOx | $PM_{10}$ | $PM_{2.5}$ |
| **Summer** | | | | | | |
| Mobile Source | 32.61 | 155.18 | 272.34 | 1.95 | 109.92 | 30.54 |
| Area Source | 83.18 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Stationary Source | 14.77 | 41.28 | 37.66 | 0.07 | 2.17 | 2.17 |
| **Total Maximum Daily Emissions** | **130.56** | **196.46** | **310.00** | **2.02** | **112.10** | **32.71** |
| South Coast AQMD Regional Threshold | *55* | *55* | *550* | 150 | 150 | *55* |
| **Threshold Exceeded?** | **Yes** | **Yes** | **No** | **No** | **No** | **No** |
| **Winter** | | | | | | |
| Mobile Source | 31.16 | 162.74 | 239.54 | 1.91 | 109.93 | 30.54 |
| Area Source | 83.18 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Stationary Source | 14.77 | 41.28 | 37.66 | 0.07 | 2.17 | 2.17 |
| **Total Maximum Daily Emissions** | **129.10** | **204.02** | **277.20** | **1.98** | **112.10** | **32.71** |
| South Coast AQMD Regional Threshold | *55* | *55* | *550* | 150 | 150 | *55* |
| **Threshold Exceeded?** | **Yes** | **Yes** | **No** | **No** | **No** | **No** |

Source: EIR Appendix B

As shown on Table 5.3-27, despite implementation of Mitigation Measures AQ-8 through AQ-19, emissions from operation of Phase 2 without the Overlay under Scenario B would continue to exceed thresholds of significance for emissions of VOC, NOx, and $PM_{10}$ during both the summer and winter seasons.

**Table 5.3-27: Mitigated Peak Daily Operational Emissions from Phase 2 - without Overlay - Scenario B**

| Source | Emissions (lbs/day) | | | | | |
|---|---|---|---|---|---|---|
| | **VOC** | **NOx** | **CO** | **SOx** | **$PM_{10}$** | **$PM_{2.5}$** |
| **Summer** | | | | | | |
| Mobile Source | 34.60 | 260.37 | 296.01 | 3.14 | 157.80 | 44.85 |
| Area Source | 85.14 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Stationary Source | 15.75 | 44.03 | 40.17 | 0.08 | 2.32 | 2.32 |
| **Total Maximum Daily Emissions** | **135.49** | **304.40** | **336.18** | **3.22** | **160.11** | **47.17** |
| South Coast AQMD Regional Threshold | *55* | *55* | *550* | 150 | 150 | *55* |
| **Threshold Exceeded?** | **Yes** | **Yes** | **No** | **No** | **Yes** | **No** |
| **Winter** | | | | | | |
| Mobile Source | 33.14 | 272.41 | 263.03 | 3.10 | 157.80 | 44.85 |
| Area Source | 85.14 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Stationary Source | 15.75 | 44.03 | 40.17 | 0.08 | 2.32 | 2.32 |
| **Total Maximum Daily Emissions** | **134.03** | **316.44** | **303.20** | **3.18** | **160.12** | **47.17** |
| South Coast AQMD Regional Threshold | *55* | *55* | *550* | 150 | 150 | *55* |
| **Threshold Exceeded?** | **Yes** | **Yes** | **No** | **No** | **Yes** | **No** |

Source: EIR Appendix B

*Specific Plan Buildout*

Table 5.3-28 shows that, despite implementation of Mitigation Measures AQ-8 through AQ-19, emissions from buildout of the Specific Plan with the Overlay under Scenario A, would continue to exceed thresholds of significance for emissions of VOC, NOx, CO, $PM_{10}$, and $PM_{2.5}$ during both the summer and winter seasons.

**Table 5.3-28: Mitigated Peak Daily Operational Emissions from Buildout of the Specific Plan - with Overlay - Scenario A**

| Source | Emissions (lbs/day) | | | | | |
|---|---|---|---|---|---|---|
| | **VOC** | **NOx** | **CO** | **SOx** | **$PM_{10}$** | **$PM_{2.5}$** |
| **Summer** | | | | | | |
| Mobile Source | 156.48 | 280.51 | 1037.06 | 4.28 | 302.67 | 81.11 |
| Area Source | 141.43 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Energy Source | 0.14 | 2.63 | 2.21 | 0.02 | 0.20 | 0.20 |
| Stationary Source | 21.66 | 60.54 | 55.23 | 0.10 | 3.19 | 3.19 |
| Fueling Station | 9.35 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| **Total Maximum Daily Emissions** | **329.07** | **343.68** | **1094.50** | **4.40** | **306.06** | **84.50** |
| South Coast AQMD Regional Threshold | *55* | *55* | *550* | 150 | 150 | *55* |
| **Threshold Exceeded?** | **Yes** | **Yes** | **Yes** | **No** | **Yes** | **Yes** |
| **Winter** | | | | | | |
| Mobile Source | 147.78 | 295.63 | 911.95 | 4.13 | 302.68 | 81.12 |
| Area Source | 141.43 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Energy Source | 0.14 | 2.63 | 2.21 | 0.02 | 0.20 | 0.20 |
| Stationary Source | 21.66 | 60.54 | 55.23 | 0.10 | 3.19 | 3.19 |
| Fueling Station | 9.35 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| **Total Maximum Daily Emissions** | **320.37** | **358.80** | **969.39** | **4.25** | **306.06** | **84.50** |
| South Coast AQMD Regional Threshold | *55* | *55* | *550* | 150 | 150 | *55* |
| **Threshold Exceeded?** | **Yes** | **Yes** | **Yes** | **No** | **Yes** | **Yes** |

Source: EIR Appendix B

Table 5.3-29 shows that, despite implementation of Mitigation Measures AQ-8 through AQ-19, emissions at buildout of the Specific Plan with the Overlay under Scenario B would continue to exceed thresholds of significance for emissions of VOC, NOx, CO, $PM_{10}$, and $PM_{2.5}$ during both the summer and winter seasons.

**Table 5.3-29: Mitigated Peak Daily Operational Emissions from Buildout of the Specific Plan - with Overlay - Scenario B**

| Source | Emissions (lbs/day) | | | | | |
|---|---|---|---|---|---|---|
| | **VOC** | **NOx** | **CO** | **SOx** | **$PM_{10}$** | **$PM_{2.5}$** |
| **Summer** | | | | | | |
| Mobile Source | 159.18 | 423.17 | 1069.17 | 5.90 | 367.60 | 100.53 |
| Area Source | 141.43 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Energy Source | 0.14 | 2.63 | 2.21 | 0.02 | 0.20 | 0.20 |
| Stationary Source | 21.66 | 60.54 | 55.23 | 0.10 | 3.19 | 3.19 |
| Fueling Station | 9.35 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| **Total Maximum Daily Emissions** | **331.77** | **486.35** | **1,126.61** | **6.02** | **370.99** | **103.92** |
| South Coast AQMD Regional Threshold | *55* | *55* | *550* | 150 | 150 | *55* |
| **Threshold Exceeded?** | **Yes** | **Yes** | **Yes** | **No** | **Yes** | **Yes** |
| **Winter** | | | | | | |
| Mobile Source | 150.47 | 444.37 | 943.81 | 5.75 | 367.60 | 100.53 |
| Area Source | 141.43 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Energy Source | 0.14 | 2.63 | 2.21 | 0.02 | 0.20 | 0.20 |
| Stationary Source | 21.66 | 60.54 | 55.23 | 0.10 | 3.19 | 3.19 |
| Fueling Station | 9.35 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| **Total Maximum Daily Emissions** | **323.06** | **507.55** | **1,001.26** | **5.87** | **370.99** | **103.92** |
| South Coast AQMD Regional Threshold | *55* | *55* | *550* | 150 | 150 | *55* |
| **Threshold Exceeded?** | **Yes** | **Yes** | **Yes** | **No** | **Yes** | **Yes** |

Source: EIR Appendix B

Table 5.3-30 shows that, despite implementation of Mitigation Measures AQ-8 through AQ-19, emissions from buildout of the Specific Plan without the Overlay under Scenario A would continue to exceed thresholds of significance for emissions of VOC, NOx, CO, $PM_{10}$, and $PM_{2.5}$ during both the summer and winter seasons.

**Table 5.3-30: Mitigated Peak Daily Operational Emissions from Buildout of the Specific Plan - without Overlay - Scenario A**

| Source | Emissions (lbs/day) | | | | | |
|---|---|---|---|---|---|---|
| | **VOC** | **NOx** | **CO** | **SOx** | **$PM_{10}$** | **$PM_{2.5}$** |
| **Summer** | | | | | | |
| Mobile Source | 153.39 | 265.70 | 1011.23 | 4.09 | 292.22 | 78.21 |
| Area Source | 133.54 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Energy Source | 0.14 | 2.63 | 2.21 | 0.02 | 0.20 | 0.20 |
| Stationary Source | 20.67 | 57.79 | 52.72 | 0.10 | 3.04 | 3.04 |
| Fueling Station | 9.35 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| **Total Maximum Daily Emissions** | **317.10** | **326.12** | **1066.16** | **4.21** | **295.46** | **81.45** |
| South Coast AQMD Regional Threshold | 55 | 55 | 550 | 150 | 150 | 55 |
| **Threshold Exceeded?** | **Yes** | **Yes** | **Yes** | **No** | **Yes** | **Yes** |
| **Winter** | | | | | | |
| Mobile Source | 144.83 | 280.10 | 889.23 | 3.95 | 292.23 | 78.21 |
| Area Source | 133.54 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Energy Source | 0.14 | 2.63 | 2.21 | 0.02 | 0.20 | 0.20 |
| Stationary Source | 20.67 | 57.79 | 52.72 | 0.10 | 3.04 | 3.04 |
| Fueling Station | 9.35 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| **Total Maximum Daily Emissions** | **308.54** | **340.52** | **944.16** | **4.06** | **295.47** | **81.45** |
| South Coast AQMD Regional Threshold | 55 | 55 | 550 | 150 | 150 | 55 |
| **Threshold Exceeded?** | **Yes** | **Yes** | **Yes** | **No** | **Yes** | **Yes** |

Source: EIR Appendix C

Table 5.3-31 shows that, despite implementation of Mitigation Measures AQ-8 through AQ-19, emissions at buildout of the Specific Plan without the Overlay under Scenario B would continue to exceed thresholds of significance for emissions of VOC, NOx, CO, $PM_{10}$ and $PM_{2.5}$ during both the summer and winter seasons.

**Table 5.3-31: Mitigated Peak Daily Operational Emissions from Buildout of the Specific Plan - without Overlay - Scenario B**

| Source | Emissions (lbs/day) | | | | | |
|---|---|---|---|---|---|---|
| | **VOC** | **NOx** | **CO** | **SOx** | **$PM_{10}$** | **$PM_{2.5}$** |
| **Summer** | | | | | | |
| Mobile Source | 155.90 | 398.32 | 1041.09 | 5.60 | 352.58 | 96.26 |
| Area Source | 135.50 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Energy Source | 0.14 | 2.63 | 2.21 | 0.02 | 0.20 | 0.20 |
| Stationary Source | 21.66 | 60.54 | 55.23 | 0.10 | 3.19 | 3.19 |
| Fueling Station | 9.35 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| **Total Maximum Daily Emissions** | **322.56** | **461.50** | **1,098.53** | **5.72** | **355.97** | **99.65** |
| South Coast AQMD Regional Threshold | 55 | 55 | 550 | 150 | 150 | 55 |
| **Threshold Exceeded?** | **Yes** | **Yes** | **Yes** | **No** | **Yes** | **Yes** |
| **Winter** | | | | | | |
| Mobile Source | 147.33 | 418.37 | 918.86 | 5.45 | 352.59 | 96.26 |
| Area Source | 135.50 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Energy Source | 0.14 | 2.63 | 2.21 | 0.02 | 0.20 | 0.20 |
| Stationary Source | 21.66 | 60.54 | 55.23 | 0.10 | 3.19 | 3.19 |
| Fueling Station | 9.35 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| **Total Maximum Daily Emissions** | **313.99** | **481.54** | **976.30** | **5.57** | **355.97** | **99.65** |
| South Coast AQMD Regional Threshold | 55 | 55 | 550 | 150 | 150 | 55 |
| **Threshold Exceeded?** | **Yes** | **Yes** | **Yes** | **No** | **Yes** | **Yes** |

Source: EIR Appendix B

It is important to note that the majority of VOC emissions are derived from consumer products. For analytical purposes, consumer products include cleaning supplies, aerosols, and other consumer products. As such, the Project applicant cannot meaningfully control the use of consumer products by future building users via mitigation. On this basis, it is concluded that Project operational-source VOC emissions cannot be definitively reduced below applicable South Coat AQMD thresholds of significance.

Additionally, it should be noted that the majority of the Project's NOx, CO, $PM_{10}$, and $PM_{2.5}$ emissions are derived from vehicle usage. Since neither the Project applicant nor the City have regulatory authority to control tailpipe emissions, no feasible mitigation measures exist that would reduce these emissions to levels that are less-than-significant.

Despite implementation of Mitigation Measures AQ-8 through AQ-19 and the future anticipated regulations from the EPA and CARB to improve truck efficiency, the operational emissions from the proposed Project would exceed the South Coast AQMD's regional significance thresholds and would cumulatively contribute to the nonattainment designations in the SCAB. On this basis, it is concluded that Project operational-source VOC, NOx, CO, $PM_{10}$, and $PM_{2.5}$ emissions cannot be definitively reduced below applicable South Coast AQMD thresholds of significance and therefore are considered significant and unavoidable. The proposed Project would result in a significant and unavoidable impact to regional air quality from operation of the Project.

*Feasibility of Zero Emission Trucks*

As of 2025, the use of zero-emission heavy-duty trucks in support of uses such as those proposed by the Project remains infeasible given the extremely limited commercial availability of zero-emission trucks, as well as infrastructure limitations, including limited truck-accessible charging/refueling stations and electrical grid capacity. While many heavy-duty truck manufacturers have released zero-emission battery electric and hydrogen-powered trucks, these vehicles have yet to reach large scale production, and their use remains extremely limited. Tesla first revealed the Tesla Semi in 2017, and an initial order for 100 trucks was placed by PepsiCo. However, the Tesla Semi did not enter production until 2022, and, as of April 2024, only 36 trucks have been delivered to PepsiCo, with additional orders placed by UPS, Walmart, Sysco, Schneider, and ASKO Norway remaining unfulfilled. Although the Tesla Semi was initially slated to begin production in 2019, with production expected to hit 50,000 units in 2024, battery production constraints have severely limited production, and it is uncertain at this time when these orders may be expected to be fulfilled (DiNapoli, 2024).

Facing delays with the Tesla Semi, several companies have turned to other vehicle manufacturers, including Daimler's eCascadia. However, with a significantly shorter range of approximately 230 miles compared to the 500-mile range of the Tesla Semi, the eCascadia's use case is significantly limited in comparison. As of late 2023, Schneider has taken delivery of 92 eCascadias (Doll, 2023), representing 0.9% of the company's fleet of 10,600 tractors (Schneider, 2025).

The limited availability of zero-emission medium- and heavy-duty vehicles is borne out in CARB's Emission Factor (EMFAC) Model, as well as data published by HVIP. EMFAC model outputs provide detailed information as to the vehicle fleet in California, including fuel types for various vehicle classes and vehicle populations. Per EMFAC data, in 2024, battery electric trucks made up 0.01% of California's medium-duty truck fleet, and 0.21% of the heavy-duty truck fleet (CARB, 2025). Similarly, based on HVIP's Zero-Emission Vehicle Population Dashboard (California HVIP, 2025), as of October 2024, there are currently 226 medium-duty and 197 heavy-duty zero-emission vehicles within the South Coast Air AQMD's jurisdiction, which includes Orange, Riverside, and San Bernardino Counties, as well as much of Los Angeles County. In 2023, statewide deliveries totaled 183 medium-duty vehicles and 121 heavy-duty vehicles, while in 2024 there have been no medium-duty truck vehicle deliveries and 13 heavy-duty truck deliveries.

Further, the availability of truck accessible vehicle charging stations and hydrogen refueling stations in California and the United States as a whole severely limits the feasibility of zero-emission trucks. Although the California Energy Commission estimates that there are over 11,000 DC fast charging stations in California (CEC, 2025a), the vast majority of these are intended to accommodate light duty passenger vehicles and lack the accessibility for medium- and heavy-duty trucks. California's first publicly accessible DC fast charging station for medium- and heavy-duty trucks opened in March 2023 in Otay Mesa (Sempra, 2023). In addition, based on data provided by the U.S. Department of Energy Alternative Fuels Data Center, there are currently 12 publicly accessible DC fast charging stations with a total of 21 EV charging ports across the United States and Canada that are capable of accommodating heavy-duty (class 6-8) trucks (DOE, n.d.).

As of early 2024, medium- and heavy-duty truck DC fast charging depots are planned for three locations along Interstate 5 in the Central Valley as well as in Blythe (St. John, 2024), the lack of charging stations severely limits the useful range of battery electric trucks, effectively restricting their use to local routes only.

Adoption and implementation of hydrogen fuel cell trucks face similar challenges. Based on data provided by the California Energy Commission, there are currently 68 light-duty vehicle hydrogen refueling stations in California (CEC, 2025b). However, similar to DC fast chargers, these stations are intended for use by light duty passenger vehicles and would not be capable of accommodating medium- and heavy-duty trucks. According to the United States Department of Energy Alternative Fuels Data Center, there are five hydrogen

refueling stations across the United States and Canada that are capable of accommodating heavy-duty (class 6-8) trucks (DOE, n.d.).

Although infrastructure improvements and the installation of medium- and heavy-duty truck capable DC fast chargers and hydrogen fueling stations are currently in progress, the current state of charging and refueling infrastructure severely limits the feasibility of ZEV trucks beyond local routes where charging or hydrogen refueling would not be necessary outside of the location where trucks would be domiciled.

Finally, based on the current state of the electrical grid and the increasing adoption of electric vehicles in California, significant investments in the grid will need to occur in the coming decades will be needed to keep pace. However, these upgrades will be spread out over a period of decades such that the costs of infrastructure upgrades in any given year may be kept reasonable. Additionally, technologies such as battery integrated DC fast chargers may be used to reduce strain on the grid and limit the need for expensive utility upgrades. At the local level, there is not sufficient grid capacity at this time to support electrification of a significant portion of the proposed Project's truck fleet.

### Health Impacts of Emissions.

In December 2018, in the case of *Sierra Club v. County of Fresno* (2018) 6 Cal.5th 502, California Supreme Court held that an EIR's 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. As noted in the *Brief* of Amicus Curiae by the South Coast AQMD in the Friant Ranch case (April 6, 2015, Appendix 10.1), the South Coast AQMD has among the most sophisticated air quality modeling and health impact evaluation capability of any of the air districts in the State, and thus it is uniquely situated to express an opinion on how lead agencies should correlate air quality impacts with specific health outcomes.

The potential health impacts of criteria pollutants are analyzed on a regional level, not on a facility/project level. The South Coast AQMD and the San Joaquin Valley Unified Air Pollution Control District (APCD), experts in the area of air quality, both recognize that a meaningful, accurate analysis of potential health impacts resulting from criteria pollutants is not currently possible and not likely to yield substantive information that promotes informed decision making. The San Joaquin Valley Unified APCD, in its amicus curiae brief for the recent California Supreme Court decision in *Sierra Club v. County of Fresno* (2018)6 Cal.5th 502, explained that "it is not feasible to conduct a [health impact analysis] for criteria air pollutants because currently available computer modeling tools are not equipped for this task." The San Joaquin Valley Unified APCD described a project-specific health impact analysis as "not practicable and not likely to yield valid information" because "currently available modeling tools are not well suited for this task." The San Joaquin Valley Unified APCD further noted that "…the CEQA air quality analysis for criteria pollutants is not really a localized, project-level impact analysis but one of regional" cumulative impacts.

The South Coast AQMD discusses that it may be infeasible to quantify health risks caused by projects similar to the proposed Project, due to many factors. It is necessary to have data regarding the sources and types of air toxic contaminants, location of emission points, velocity of emissions, the meteorology and topography of the area, and the location of receptors (worker and residence). The *Brief* states that it may not be feasible to perform a health risk assessment for airborne toxics that will be emitted by a generic industrial building that was built on "speculation" (i.e., without knowing the future tenant(s). Even where a health risk assessment can be prepared, however, the resulting maximum health risk value is only a calculation of risk--it does not necessarily mean anyone will contract cancer as a result of the Project. The *Brief* also cites the author of the CARB methodology, which reported that a $PM_{2.5}$ methodology is not suited for small projects and may yield unreliable results. Similarly, South Coast AQMD staff does not currently know of a way to accurately quantify ozone-related health impacts caused by NOx or VOC emissions from relatively small projects, due to photochemistry and regional model limitations. The *Brief* concludes, with respect to the Friant Ranch EIR, that although it may have been technically possible to plug the data into a methodology, the results would not

have been reliable or meaningful. The Friant Ranch decision emphasized the need to correlate project-specific emissions to health outcomes, a task complicated by the scientific and technological challenges inherent in modeling secondary pollutants such as ozone and $PM_{2.5}$. Secondary pollutants are formed via complex chemical reactions involving multiple precursor emissions, influenced by atmospheric conditions, which makes the direct correlation of emissions to health outcomes challenging. The San Joaquin Valley Unified APCD and South Coast AQMD briefs described below highlight these complexities, asserting that currently available modeling tools are not equipped to provide reliable project-level health impact analyses. This underscores the lack of reliability in calculating regional health impacts, as emissions at an individual project level are often insufficient to affect regional pollutant concentrations and thus health impacts in a meaningful way.

The Sacramento Metropolitan Air Quality Management District issued interim recommendations in response to the Friant Ranch decision, stating that there is no reliable quantitative methodology to correlate emissions from individual projects with specific health consequences. The proposed Project follows these recommendations by relying on established regional analyses and using health impact conclusions drawn from comparable projects such as the Friant Ranch project, where no significant health impacts were identified at similar emission levels.

In its updated 2022 CEQA Guidelines, the Bay Area Air Quality Management District released additional guidance for demonstrating compliance with the 2018 Friant Ranch decision. Per the Bay Area AQMD CEQA Guidelines, lead agencies should explain the nature and magnitude of any health impacts that may result from criteria air pollutants and "make a reasonable effort to connect a project's emissions, where significant, to foreseeable health impacts or provide evidence as to why such an analysis is not scientifically possible."

On the other hand, for extremely large regional projects (unlike the proposed Project), the South Coast AQMD states that it has been able to correlate potential health outcomes for very large emissions sources – as part of their rulemaking activity, specifically 6,620 pounds/day of NOx and 89,180 pounds/day of VOC were expected to result in approximately 20 premature deaths per year and 89,947 school absences due to ozone.

The proposed Project does not generate anywhere near 6,620 pounds/day of NOx or 89,190 pounds/day of VOC emissions. As shown previously on Tables 5.3-7 through 5.3-30, the Project would generate up to 179.95 pounds/day of NOx during construction with mitigation and 507.55 pounds/day of NOx during operations with mitigation (2.7% and 7.7% of 6,620 pounds/day, respectively). The VOC emissions would be a maximum of 69.60 pounds/day during construction and 331.77 pounds/day during operations (0.08% and 0.4% of 89,190 pounds/day, respectively).

Therefore, the emissions are not sufficiently high enough to use a regional modeling program to correlate health effects on a basin-wide level. Notwithstanding, this evaluation does evaluate each of the Project's development scenarios localized impacts to air quality for emissions of CO, NOx, $PM_{10}$, and $PM_{2.5}$ by comparing the onsite emissions to the South Coast AQMD's applicable LST thresholds of significance. In addition, a Health Risk Assessment was prepared, which is discussed below. As described previously, the proposed Project would not result in emissions that exceeded the 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 $PM_{2.5}$. Therefore, the Project would not generate emissions on a localized scale that are expected to result in an exceedance of applicable standards, which are intended to be protective of public health. As discussed above, given the regional nature of such emissions and numerous unpredictable factors, an analysis that correlates health with regional emissions is not possible. It should also be noted that the EIR does identify health concerns related to criteria pollutant emissions. Table 5.3-1 includes a list of criteria pollutants and summarizes common sources and effects. Thus, the EIR's analysis is reasonable and intended to foster informed decision making.

**IMPACT AQ-3: THE PROJECT WOULD NOT EXPOSE SENSITIVE RECEPTORS TO SUBSTANTIAL POLLUTANT CONCENTRATIONS.**

## Localized Construction Impacts

*Specific Plan Buildout*

**Less than Significant Impact.** Table 5.3-32 through Table 5.3-34 identify daily localized onsite emissions that are estimated to occur during construction of Phase 1 and Phase 2 of the Project, both with and without the Overlay. As shown, emissions during the peak construction activity would not exceed the South Coast AQMD's localized significance thresholds at the closest sensitive receptors that are located as close as 66 feet from the Specific Plan Area. Therefore, impacts related to localized construction emissions would be less than significant.

**Table 5.3-32: Localized Significance Emissions Peak Construction of Phase 1**

| Peak Construction | CO | $NO_2$ | | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|
| | Averaging Time | | | | |
| | 1-Hour | 8-Hour | 1-Hour | 24-Hours | 24-Hours |
| Peak Day Localized Emissions | 0.08 | 0.02 | 5.12E-02 | 0.92 | 0.49 |
| Background Concentration [A] | 1.3 | 0.8 | 0.044 | | |
| **Total Concentration** | **1.38** | **0.82** | **0.10** | **0.92** | **0.49** |
| South Coast AQMD Localized Significance Threshold | 20 | 9 | 0.18 | 10.4 | 10.4 |
| **Threshold Exceeded?** | **No** | **No** | **No** | **No** | **No** |

Source: EIR Appendix B

**Table 5.3-33: Localized Significance Emissions Peak Construction of Phase 2 - With Overlay**

| Peak Construction | CO | $NO_2$ | | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|
| | Averaging Time | | | | |
| | 1-Hour | 8-Hour | 1-Hour | 24-Hours | 24-Hours |
| Peak Day Localized Emissions | 0.04 | 0.01 | 2.83E-02 | 1.21 | 0.66 |
| Background Concentration [A] | 1.3 | 0.8 | 0.044 | | |
| **Total Concentration** | **1.34** | **0.81** | **0.07** | **1.21** | **0.66** |
| South Coast AQMD Localized Significance Threshold | 20 | 9 | 0.18 | 10.4 | 10.4 |
| **Threshold Exceeded?** | **No** | **No** | **No** | **No** | **No** |

Source: EIR Appendix B

**Table 5.3-34: Localized Significance Emissions Peak Construction of Phase 2 - Without Overlay**

| Peak Construction | CO | | $NO_2$ | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|
| | Averaging Time | | | | |
| | 1-Hour | 8-Hour | 1-Hour | 24-Hours | 24-Hours |
| Peak Day Localized Emissions | 0.05 | 0.01 | 3.42E-02 | 1.39 | 0.77 |
| Background Concentration [A] | 1.3 | 0.8 | 0.044 | | |
| **Total Concentration** | **1.35** | **0.81** | **0.08** | **1.39** | **0.77** |
| South Coast AQMD Localized Significance Threshold | 20 | 9 | 0.18 | 10.4 | 10.4 |
| **Threshold Exceeded?** | **No** | **No** | **No** | **No** | **No** |

Source: EIR Appendix B

Although the emissions during the peak construction activity would not exceed the South Coast AQMD's localized significance thresholds at the maximally exposed receptor locations, the following tables provide the LST emissions with implementation of the construction-related Mitigation Measures AQ-1 through AQ-7, which are required to reduce regional construction emissions thresholds of significance, as detailed previously.

**Table 5.3-35: Localized Significance Emissions Peak Construction of Phase 1 - with Mitigation**

| Peak Construction | CO | | $NO_2$ | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|
| | Averaging Time | | | | |
| | 1-Hour | 8-Hour | 1-Hour | 24-Hours | 24-Hours |
| Peak Day Localized Emissions | 0.10 | 0.03 | 3.34E-02 | 0.69 | 0.27 |
| Background Concentration [A] | 1.3 | 0.8 | 0.044 | | |
| **Total Concentration** | **1.40** | **0.83** | **0.08** | **0.69** | **0.27** |
| South Coast AQMD Localized Significance Threshold | 20 | 9 | 0.18 | 10.4 | 10.4 |
| **Threshold Exceeded?** | **No** | **No** | **No** | **No** | **No** |

Source: EIR Appendix B

**Table 5.3-36: Localized Significance Emissions Peak Construction of Phase 2 - With Overlay - With Mitigation**

| Peak Construction | CO | | $NO_2$ | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|
| | Averaging Time | | | | |
| | 1-Hour | 8-Hour | 1-Hour | 24-Hours | 24-Hours |
| Peak Day Localized Emissions | 0.05 | 0.01 | 1.67E-02 | 1.04 | 0.50 |
| Background Concentration [A] | 1.3 | 0.8 | 0.044 | | |
| **Total Concentration** | **1.35** | **0.81** | **0.06** | **1.04** | **0.50** |
| South Coast AQMD Localized Significance Threshold | 20 | 9 | 0.18 | 10.4 | 10.4 |
| **Threshold Exceeded?** | **No** | **No** | **No** | **No** | **No** |

Source: EIR Appendix B

**Table 5.3-37: Localized Significance Emissions Peak Construction of Phase 2 - Without Overlay - With Mitigation**

| Peak Construction | CO | | $NO_2$ | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|
| | Averaging Time | | | | |
| | 1-Hour | 8-Hour | 1-Hour | 24-Hours | 24-Hours |
| Peak Day Localized Emissions | 0.06 | 0.01 | 2.02E-02 | 1.17 | 0.57 |
| Background Concentration [A] | 1.3 | 0.8 | 0.044 | | |
| **Total Concentration** | **1.36** | **0.81** | **0.06** | **1.17** | **0.57** |
| South Coast AQMD Localized Significance Threshold | 20 | 9 | 0.18 | 10.4 | 10.4 |
| **Threshold Exceeded?** | **No** | **No** | **No** | **No** | **No** |

Source: EIR Appendix B

## Localized Operational Impacts

*Specific Plan Buildout*

**Less than Significant with Mitigation Incorporated.** The localized operational analysis includes onsite sources (area, energy, mobile, and on-site cargo handling equipment). To account for onsite mobile emissions, a trip length of 1.6 miles was used for both trucks and passenger cars for Phase 1 and 1.2 miles for Phase 2 of the Project.

As shown on Tables 5.3-38 through 5.3-40, the only localized emissions that would exceed the South Coast AQMD's localized significance thresholds at the maximally exposed off-site receptors during Project operations would be emissions of $PM_{10}$ during operation of the Specific Plan at full buildout without the Overlay.

**Table 5.3-38: Localized Significance Emissions Peak Operations of Phase 1**

| Peak Operation | CO | | $NO_2$ | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|
| | Averaging Time | | | | |
| | 1-Hour | 8-Hour | 1-Hour | 24-Hours | 24-Hours |
| Peak Day Localized Emissions | 8.92E-02 | 4.89E-02 | 7.27E-03 | 2.20 | 0.63 |
| Background Concentration [A] | 1.3 | 0.8 | 0.044 | | |
| **Total Concentration** | **1.39** | **0.85** | **0.05** | **2.20** | **0.63** |
| South Coast AQMD Localized Significance Threshold | 20 | 9 | 0.18 | 2.5 | 2.5 |
| **Threshold Exceeded?** | **No** | **No** | **No** | **No** | **No** |

Source: EIR Appendix B

**Table 5.3-39: Localized Significance Emissions Peak Operations of Specific Plan Buildout - With Overlay**

| Peak Operation | CO | | $NO_2$ | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|
| | Averaging Time | | | | |
| | 1-Hour | 8-Hour | 1-Hour | 24-Hours | 24-Hours |
| Peak Day Localized Emissions | 9.89E-02 | 6.97E-02 | 8.62E-03 | 2.48 | 0.79 |
| Background Concentration [A] | 1.3 | 0.8 | 0.044 | | |
| **Total Concentration** | **1.40** | **0.87** | **0.05** | **2.48** | **0.79** |
| South Coast AQMD Localized Significance Threshold | 20 | 9 | 0.18 | 2.5 | 2.5 |
| **Threshold Exceeded?** | **No** | **No** | **No** | **No** | **No** |

Source: EIR Appendix B

**Table 5.3-40: Localized Significance Emissions Peak Operations of Both Specific Plan Buildout - Without Overlay**

| Peak Operation | CO | | $NO_2$ | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|
| | Averaging Time | | | | |
| | 1-Hour | 8-Hour | 1-Hour | 24-Hours | 24-Hours |
| Peak Day Localized Emissions | 1.11E-01 | 7.39E-02 | 9.75E-03 | 2.50 | 0.80 |
| Background Concentration [A] | 1.3 | 0.8 | 0.044 | | |
| **Total Concentration** | **1.41** | **0.87** | **0.05** | **2.50** | **0.80** |
| South Coast AQMD Localized Significance Threshold | 20 | 9 | 0.18 | 2.5 | 2.5 |
| **Threshold Exceeded?** | **No** | **No** | **No** | **Yes** | **No** |

Source: EIR Appendix B

With implementation of operational Mitigation Measures AQ-8 through AQ-19, emissions during the peak operations would be reduced to below the South Coast AQMD's localized significance thresholds at the maximally exposed receptor locations. The LST emissions generated from each of the operational scenarios with mitigation are provided in Tables 5.3-41 through 5.3-43. Therefore, with implementation of Mitigation Measures AQ-8 through AQ-19, impacts to sensitive receptors would be less than significant.

**Table 5.3-41: Localized Significance Emissions Peak Operation of Phase 1 - With Mitigation**

| Peak Operation | CO | | $NO_2$ | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|
| | Averaging Time | | | | |
| | 1-Hour | 8-Hour | 1-Hour | 24-Hours | 24-Hours |
| Peak Day Localized Emissions | 6.03E-02 | 3.31E-02 | 7.06E-03 | 2.18 | 0.62 |
| Background Concentration [A] | 1.3 | 0.8 | 0.044 | | |
| **Total Concentration** | **1.36** | **0.83** | **0.05** | **2.18** | **0.62** |
| South Coast AQMD Localized Significance Threshold | 20 | 9 | 0.18 | 2.5 | 2.5 |
| **Threshold Exceeded?** | **No** | **No** | **No** | **No** | **No** |

Source: EIR Appendix B

**Table 5.3-42: Localized Significance Emissions Peak Operations of Specific Plan Buildout - With Overlay - With Mitigation**

| Peak Operation | CO | | $NO_2$ | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|
| | Averaging Time | | | | |
| | 1-Hour | 8-Hour | 1-Hour | 24-Hours | 24-Hours |
| Peak Day Localized Emissions | 4.41E-02 | 3.11E-02 | 8.07E-03 | 2.43 | 0.75 |
| Background Concentration [A] | 1.3 | 0.8 | 0.044 | | |
| **Total Concentration** | **1.34** | **0.83** | **0.05** | **2.43** | **0.75** |
| South Coast AQMD Localized Significance Threshold | 20 | 9 | 0.18 | 2.5 | 2.5 |
| **Threshold Exceeded?** | **No** | **No** | **No** | **No** | **No** |

Source: EIR Appendix B

**Table 5.3-43: Localized Significance Emissions Peak Operations of Specific Plan Buildout - Without Overlay - With Mitigation**

| Peak Operation | CO | | $NO_2$ | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|
| | Averaging Time | | | | |
| | 1-Hour | 8-Hour | 1-Hour | 24-Hours | 24-Hours |
| Peak Day Localized Emissions | 4.99E-02 | 3.31E-02 | 9.13E-03 | 2.45 | 0.76 |
| Background Concentration [A] | 1.3 | 0.8 | 0.044 | | |
| **Total Concentration** | **1.35** | **0.83** | **0.05** | **2.45** | **0.76** |
| South Coast AQMD Localized Significance Threshold | 20 | 9 | 0.18 | 2.5 | 2.5 |
| **Threshold Exceeded?** | **No** | **No** | **No** | **No** | **No** |

Source: EIR Appendix B

This analysis includes separate construction and operational analysis for LSTs and does not include an analysis of overlapping construction and operational activities related to LST emissions because LSTs are based on location, distance, and site size. Construction and operational localized emissions would occur at different locations and different distances from sensitive receptors, as analyzed previously. Due to air dispersion, pollution concentrations would be different from sources at two different distances from a receptor. The LSTs are screening thresholds are conservative as the construction LST acreage is based on the maximum potential daily acreage disturbed at the closest potential receptor, while the operational LST acreage is based on the total area of the Project site. In addition, South Coast AQMD has developed separate LSTs for construction and operations. Construction emissions are temporary and move around onsite and operational emissions are stationary. Due to the differences in nature between construction and operational emissions sources as well as differences in distances to receptors, and separate significance thresholds, construction and operational LSTs are evaluated separately at maximum conditions.

## Construction Health Risk Impacts

*Specific Plan Buildout*

**Less than Significant Impact.** Diesel particulate matter and gasoline dispensing semissions from Project construction would occur from use of construction equipment and from heavy-duty diesel trucks traveling to and from the site and maneuvering onsite. Although Project construction activities are required to comply with CARB's idling limit of 5 minutes, the South Coast AQMD recommends that the onsite idling emissions should be estimated for 15 minutes of truck idling, which takes into account onsite idling that occurs while the trucks are waiting to check-in, travel to destination onsite, and/or check-out, etc. As such, this analysis estimated truck idling at 15 minutes, consistent with South Coast AQMD's recommendation.

The land use with the greatest potential exposure to Project construction-source diesel particulate matter and gasoline dispensing emissions is Location R7 which is located approximately 96 feet east of the Project site at the residences currently under construction at Barrett Avenue and West Placentia Avenue. Location R7 would experience the highest concentrations of diesel particulate matter and gasoline dispensing during Project construction due to its proximity to the Project site as well as meteorological conditions at the site.

As shown in Table 5.3-44, at the maximally exposed individual receptor location, the maximum incremental cancer risk attributable to Project construction-source diesel particulate matter and gasoline dispensing emissions prior to mitigation is estimated at 4.46 in one million in the Phase 2 without Overlay scenario and 4.26 in one million in the Phase 2 with Overlay scenario, which would not exceed South Coast AQMD thresholds of significance and would be less than significant.

**Table 5.3-44: Construction Related Cancer and Non-Cancer Health Risks**

| Scenario | Time Period | Location | Maximum Lifetime Cancer Risk (per Million) | Significance Threshold (per Million) | Exceeds Significance Threshold |
|---|---|---|---|---|---|
| Without Overlay | 5.16 Year Exposure | Maximum Exposed Sensitive Receptor (Location R7) | 4.46 | 10 | No |
| With Overlay | 5.16 Year Exposure | Maximum Exposed Sensitive Receptor (Location R7) | 4.26 | 10 | No |
| **Scenario** | **Time Period** | **Location** | **Maximum Hazard Index** | **Significance Threshold** | **Exceeds Significance Threshold** |
| Without Overlay | Annual Average | Maximum Exposed Sensitive Receptor (Location R7) | ≤0.01 | 1.0 | No |
| With Overlay | Annual Average | Maximum Exposed Sensitive Receptor (Location R7) | ≤0.01 | 1.0 | No |

Source: EIR Appendix C

With implementation of the mitigation that is required for construction regional emissions (Mitigation Measures AQ-1 through AQ-7), the maximum incremental cancer risk would be reduced to 1.08 in one million in the Phase 2 without Overlay scenario and 1.03 in one million in the Phase 2 with Overlay scenario, as shown on Table 5.3-45. As such, neither scenario would exceed the significance threshold of 10 in one million. At this same location, non-cancer risks were estimated to be ≤0.01 under both scenarios with and without mitigation, which would not exceed the applicable significance threshold of 1.0.

**Table 5.3-45: Construction Related Cancer and Non-Cancer Health Risks with Mitigation**

| Scenario | Time Period | Location | Maximum Lifetime Cancer Risk (per Million) | Significance Threshold (per Million) | Exceeds Significance Threshold |
|---|---|---|---|---|---|
| Without Overlay | 5.16 Year Exposure | Maximum Exposed Sensitive Receptor (Location R7) | 1.08 | 10 | No |
| With Overlay | 5.16 Year Exposure | Maximum Exposed Sensitive Receptor (Location R7) | 1.03 | 10 | No |
| **Scenario** | **Time Period** | **Location** | **Maximum Hazard Index** | **Significance Threshold** | **Exceeds Significance Threshold** |
| Without Overlay | Annual Average | Maximum Exposed Sensitive Receptor (Location R7) | ≤0.01 | 1.0 | No |
| With Overlay | Annual Average | Maximum Exposed Sensitive Receptor (Location R7) | ≤0.01 | 1.0 | No |

Source: EIR Appendix C

Location R7 is the nearest receptor to the Project site and would experience the highest concentrations of diesel particulate matter and gasoline dispensing during Project construction. Because all other modeled

receptors would experience lower concentrations of diesel particulate matter and gasoline dispensing during Project construction, all other receptors in the vicinity of the Project would be exposed to less emissions and therefore less risk. As such, the Project construction would not cause a significant human health or cancer risk to nearby land uses, and potential impacts would be less than significant.

## Operational Health Risk Impacts

*Specific Plan Buildout*

**Less than Significant with Mitigation Incorporated.** Diesel particulate matter and gasoline dispensing emissions from operation of the Project would result from testing of the diesel fire pump and emergency generator and from heavy-duty diesel trucks traveling to and from the site, maneuvering onsite, and entering and leaving the site during operation of the Project. Although the proposed Project activities are required to comply with CARB's idling limit of 5 minutes, South Coast AQMD recommends that the onsite idling emissions should be estimated for 15 minutes of truck idling, which takes into account onsite idling that occurs while the trucks are waiting to check-in, travel to destination onsite, and/or check-out, etc. As such, this analysis estimated truck idling at 15 minutes, consistent with South Coast AQMD's recommendation. Due to the programmatic nature of MBU development within the Phase 2 area, idling emissions were conservatively assumed across the entirety of the Phase 2 area.

**Residential Exposure Scenario:** The existing residential land use with the greatest potential exposure to Project operational-source diesel particulate matter and gasoline dispensing emissions under both the with Overlay and without Overlay scenarios is Location R7, which is located approximately 96 feet east of the Specific Plan Area. Since there are no private outdoor living areas facing the Project site, R7 is placed at the building façade nearest the Specific Plan Area.

As shown in Table 5.3-46, the maximum incremental cancer risk attributable to Project operational-source toxic air contaminant emissions is estimated at 12.99 in one million under the Specific Plan Buildout without Overlay scenario and 12.32 in one million under Specific Plan Buildout the with Overlay scenario, both of which would exceed the South Coast AQMD significance threshold of 10 in one million, resulting in a potentially significant impact. Therefore, Mitigation Measure AQ-20, which requires either: a minimum 1,000-foot setback between building loading docks and the residential development east of Barrett Avenue and between Val Verde Elementary School to any future MBU development on the Phase 2 block east of Indian Avenue; restriction of diesel powered trucks accessing any future MBU development on the Phase 2 block east of Indian Avenue; or preparation of a site specific HRA prior to approval of any future MBU development on the Phase 2 block east of Indian Avenue demonstrating that significant cancer risk impacts could be avoided without implementation of setbacks or diesel truck restrictions.

As shown in Table 5.3-47, with implementation of Mitigation Measure AQ-20, the cancer risk would be reduced to 8.69 in one million without the Overlay and 6.32 in one million with the Overlay, which would not exceed the South Coast AQMD significance threshold of 10 in one million.

At this same location, non-cancer risks were estimated to be $\leq$0.01 under both scenarios, with and without mitigation, which would not exceed the applicable significance threshold of 1.0. Because all other modeled receptors are further from the Specific Plan Area and would experience lower concentrations of toxic air contaminants during Project operation, all other receptors in the vicinity of the Project would be exposed to less emissions and therefore subject to less risk. As such, with implementation of Mitigation Measure AQ-20, potential impacts related to human health or cancer risk as a result of Project operational activity would be less than significant.

**Table 5.3-46: Operation Related Cancer and Non-Cancer Health Risks**

| Scenario | Time Period | Location | Maximum Lifetime Cancer Risk (per Million) | Significance Threshold (per Million) | Exceeds Significance Threshold |
|---|---|---|---|---|---|
| Without Overlay | 30 Year Exposure | Maximum Exposed Residential Receptor (Location R7) | 12.99 | 10 | **Yes** |
| | 25 Year Exposure | Maximum Exposed Worker Receptor (Location R10) | 2.06 | 10 | **No** |
| | 9 Year Exposure | Maximum Exposed School Child (Location R9) | 11.54 | 10 | **Yes** |
| With Overlay | 30 Year Exposure | Maximum Exposed Residential Receptor (Location R7) | 12.32 | 10 | **Yes** |
| | 25 Year Exposure | Maximum Exposed Worker Receptor (Location R10) | 1.91 | 10 | **No** |
| | 9 Year Exposure | Maximum Exposed School Child (Location R5) | 2.73 | 10 | **No** |
| **Scenario** | **Time Period** | **Location** | **Maximum Hazard Index** | **Significance Threshold** | **Exceeds Significance Threshold** |
| Without Overlay | Annual Average | Maximum Exposed Residential Receptor (Location R7) | ≤0.01 | 1.0 | **No** |
| | Annual Average | Maximum Exposed Worker Receptor (Location R10) | ≤0.01 | 1.0 | **No** |
| | Annual Average | Maximum Exposed School Child (Location R9) | ≤0.01 | 1.0 | **No** |
| With Overlay | Annual Average | Maximum Exposed Residential Receptor (Location R7) | ≤0.01 | 1.0 | **No** |
| | Annual Average | Maximum Exposed Worker Receptor (Location R10) | ≤0.01 | 1.0 | **No** |
| | Annual Average | Maximum Exposed School Child (Location R5) | ≤0.01 | 1.0 | **No** |

Source: EIR Appendix C

**Table 5.3-47: Operation Related Cancer and Non-Cancer Health Risks with Mitigation**

| Scenario | Time Period | Location | Maximum Lifetime Cancer Risk (Risk per Million) | Significance Threshold (Risk per Million) | Exceeds Significance Threshold |
|---|---|---|---|---|---|
| Without Overlay | 30 Year Exposure | Maximum Exposed Residential Receptor (Location R7) | 8.69 | 10 | **No** |
| | 25 Year Exposure | Maximum Exposed Worker Receptor (Location R10) | 2.06 | 10 | **No** |
| | 9 Year Exposure | Maximum Exposed School Child (Location R9) | 7.72 | 10 | **No** |
| With Overlay | 30 Year Exposure | Maximum Exposed Residential Receptor (Location R7) | 6.32 | 10 | **No** |
| | 25 Year Exposure | Maximum Exposed Worker Receptor (Location R10) | 2.08 | 10 | **No** |
| | 9 Year Exposure | Maximum Exposed School Child (Location R5) | 2.60 | 10 | **No** |
| Scenario | Time Period | Location | Maximum Hazard Index | Significance Threshold | Exceeds Significance Threshold |
| Without Overlay | Annual Average | Maximum Exposed Residential Receptor (Location R7) | ≤0.01 | 1.0 | **No** |
| | Annual Average | Maximum Exposed Worker Receptor (Location R10) | ≤0.01 | 1.0 | **No** |
| | Annual Average | Maximum Exposed School Child (Location R9) | ≤0.01 | 1.0 | **No** |
| With Overlay | Annual Average | Maximum Exposed Residential Receptor (Location R7) | ≤0.01 | 1.0 | **No** |
| | Annual Average | Maximum Exposed Worker Receptor (Location R10) | ≤0.01 | 1.0 | **No** |
| | Annual Average | Maximum Exposed School Child (Location R5) | ≤0.01 | 1.0 | **No** |

Source: EIR Appendix C

**Worker Exposure Scenario:** The worker receptor land use with the greatest potential exposure to Project operational toxic air contaminant emissions is Location R10, which represents the potential worker receptor located approximately 105 feet east of the Project site. As shown in Table 5.3-46, at the maximally exposed individual worker location, the maximum incremental cancer risk impact without mitigation is 2.06 in one million without the overlay and 1.91 in one million with the overlay. With implementation of Mitigation Measure AQ-20, Table 5.3-46 shows that the cancer risk would be 2.06 in one million without the Overlay and 2.08 in one million with the Overlay, all of which are less than the South Coast AQMD significance threshold of 10 in one million.

Maximum non-cancer risks at this same location were estimated to be ≤0.01 under both scenarios with and without mitigation, which would not exceed the applicable significance threshold of 1.0. As such, the Project would not cause a significant human health or cancer risk to adjacent workers, and potential impacts would be less than significant.

**School Child Exposure Scenario:** Without the Overlay the nearest potential school is Val Verde Elementary School (represented by Location R9), located approximately 66 feet north of the Specific Plan Area. With redevelopment of the Overlay, the nearest potential school would be Perris Early Head Start (represented by Location R5), located approximately 720 feet east of the Specific Plan Area. As shown in Table 5.3-46, at the maximally exposed individual school child location, the maximum incremental cancer risk impact attributable to the Project is calculated to be 11.54 in one million at Location R9 without the Overlay, and 2.73 in one million at Location R5 with the Overlay. As such, prior to mitigation, the Project's operational toxic air contaminant emissions would exceed the South Coast AQMD's 10 in one million significance threshold and result in a potentially significant impact for Val Verde Elementary School under the without Overlay scenario.

With implementation of Mitigation Measure AQ-20, Table 5.3-47 shows that the cancer risk would be reduced to 7.72 in one million at Location R9 without the Overlay and 2.60 in one million with the Overlay, both of which are less than the significance threshold of 10 in one million. Thus, mitigation would reduce potential impacts to a less than significant level.

At this same location, non-cancer risks attributable to the Project were calculated to be ≤0.01 under both scenarios, before and after mitigation, which would not exceed the applicable significance threshold of 1.0. Therefore, with mitigation, potential impacts related to human health or cancer risk to nearby school children would be reduced to a less than significant level.

## Combined Construction and Operational Health Risk Impacts

*Specific Plan Buildout*

The land use with the greatest potential exposure to combined Project construction-source and operational-source diesel particulate matter and gasoline dispensing emissions is Location R7. As shown in Table 5.3-48, the maximum incremental cancer risk attributable to Project construction-source and operational-source emissions at R7 is estimated at 17.45 in one million without the Overlay and 16.58 in one million with the Overlay, both of which would exceed the South Coast AQMD significance threshold of 10 in one million, resulting in a potentially significant impact.

**Table 5.3-48: Construction and Operation Related Cancer and Non-Cancer Health Risks**

| Scenario | Time Period | Location | Maximum Lifetime Cancer Risk (per Million) | Significance Threshold (per Million) | Exceeds Significance Threshold |
|---|---|---|---|---|---|
| Without Overlay | 30 Year Exposure | Maximum Exposed Sensitive Receptor (Location R7) | 17.45 | 10 | **Yes** |
| With Overlay | 30 Year Exposure | Maximum Exposed Sensitive Receptor (Location R7) | 16.58 | 10 | **Yes** |
| **Scenario** | **Time Period** | **Location** | **Maximum Hazard Index** | **Significance Threshold** | **Exceeds Significance Threshold** |
| Without Overlay | Annual Average | Maximum Exposed Sensitive Receptor (Location R7) | ≤0.01 | 1.0 | **No** |
| With Overlay | Annual Average | Maximum Exposed Sensitive Receptor (Location R7) | ≤0.01 | 1.0 | **No** |

Source: EIR Appendix C

Table 5.3-49 shows that with implementation of Mitigation Measure AQ-20, the maximum incremental cancer risk attributable to Project construction-source and operational-source diesel particulate matter emissions is estimated at 9.77 in one million without the Overlay and 7.35 in one million with the Overlay, both of which are less than the significance threshold of 10 in one million. At this same location, non-cancer risks were estimated to be ≤0.01 under both scenarios before and after mitigation, which would not exceed the applicable significance threshold of 1.0. As such, with implementation of Mitigation Measure AQ-20, potential impacts related to human health or cancer risk would be less than significant.

**Table 5.3-49: Construction and Operation Related Cancer and Non-Cancer Health Risks with Mitigation**

| Scenario | Time Period | Location | Maximum Lifetime Cancer Risk (Risk per Million) | Significance Threshold (Risk per Million) | Exceeds Significance Threshold |
|---|---|---|---|---|---|
| Without Overlay | 30 Year Exposure | Maximum Exposed Sensitive Receptor (Location R7) | 9.77 | 10 | **No** |
| With Overlay | 30 Year Exposure | Maximum Exposed Sensitive Receptor (Location R7) | 7.35 | 10 | **No** |
| **Scenario** | **Time Period** | **Location** | **Maximum Hazard Index** | **Significance Threshold** | **Exceeds Significance Threshold** |
| Without Overlay | Annual Average | Maximum Exposed Sensitive Receptor (Location R7) | ≤0.01 | 1.0 | **No** |
| With Overlay | Annual Average | Maximum Exposed Sensitive Receptor (Location R7) | ≤0.01 | 1.0 | **No** |

Source: EIR Appendix C

**IMPACT AQ-4: THE PROJECT WOULD NOT RESULT IN OTHER EMISSIONS (SUCH AS THOSE LEADING TO ODORS) ADVERSELY AFFECTING A SUBSTANTIAL NUMBER OF PEOPLE.**

**Less Than Significant Impact.** The proposed Project would not emit other emissions, such as those generating objectionable odors, that would affect a substantial number of people. The threshold for odor is identified by South Coast AQMD Rule 402, Nuisance, which states:

> *A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. The provisions of this rule shall not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.*

The type of facilities that are considered to result in other emissions, such as objectionable odors, include wastewater treatments plants, compost facilities, landfills, solid waste transfer stations, fiberglass manufacturing facilities, paint/coating operations (e.g., auto body shops), dairy farms, petroleum refineries, asphalt batch plants, chemical manufacturing, and food manufacturing facilities.

The proposed Project would implement commercial, business park, and industrial warehousing development within the Project site. These land uses do not involve the types of uses that would emit objectionable odors affecting a substantial number of people. Odors generated by industrial land uses are generated from uses such as manufacturing facilities, paint/coating operations, refineries, chemical manufacturing, and food manufacturing facilities. At the current time the specific tenants and uses of the proposed buildings are unknown. However, new tenants for these types of uses would be required to be reviewed through the City's permitting process. If potential concerns related to odors are identified for future building uses, the City would require appropriate hazardous materials permitting (as detailed in Section 5.9, *Hazards and Hazardous Materials*) and odor minimization plans or features would be required compliance with South Coast AQMD Rule 402, which would prevent nuisance odors.

During construction, emissions from construction equipment, architectural coatings, and paving activities may generate odors. However, these odors would be temporary, intermittent in nature, and would not affect a substantial number of people. The noxious odors would be confined to the immediate vicinity of the construction equipment. Also, the short-term construction-related odors would cease upon the drying or hardening of the odor-producing materials.

In addition, all Project-generated solid waste would be stored in covered containers and removed at regular intervals in compliance with solid waste regulations and would not generate objectionable odors. Therefore, impacts associated with other operation- and construction-generated emissions, such as odors, would be less than significant.

## 5.3.7 CUMULATIVE IMPACTS

The geographic area for analysis of cumulative air quality impacts is the South Coast Air Basin. As described previously, per South Coast AQMD's methodology, if an individual project would result in air emissions of criteria pollutants that exceed the South Coast AQMD's thresholds of significance for project-specific impacts, then it would also result in a cumulatively considerable net increase of these criteria pollutants.

As described in Impact AQ-2 above, after implementation of Mitigation Measures AQ-1 through AQ-7, NOx emissions would continue to exceed South Coast AQMD regional significance thresholds during construction. Also, after implementation of Mitigation Measures AQ-8 through AQ-19 operational emissions from Phase

1 would exceed thresholds of significance for VOC, NOx, CO and $PM_{10}$, and operational emissions from Phase 2 with and without the Overlay would exceed thresholds of significance for VOC and NOx under Scenario A, and also impacts to $PM_{10}$ under Scenario B. Additionally, after implementation of mitigation measures, operational impacts from buildout of the Specific Plan with and without the Overlay under both scenarios would exceed thresholds of significance for emissions of VOC, NOx, CO, $PM_{10}$ and $PM_{2.5}$. The large majority of operational-source emissions (by weight) would be generated by Project vehicles and consumer products that neither the Project applicant nor the City have the ability to reduce emissions of. Therefore, both construction and operational-source emissions from implementation of the proposed Project would be cumulatively considerable, and cumulative air quality impacts would be significant and unavoidable.

South Coast AQMD does not currently have a separate methodology or threshold to evaluate a project's contribution to cumulative cancer risk. Instead, consistent with other air quality impacts, "[p]rojects that exceed the project-specific significance thresholds are considered by the South Coast AQMD to be cumulatively considerable." As detailed previously, with incorporation of Mitigation Measure AQ-20, the Project would not exceed the South Coast AQMD cancer risk threshold of 10 in one million; and therefore, would not result in a cumulatively considerable health risk impact.

As shown in Figure 5.3-2, there are 10 cumulative projects located within 1,000 feet of the proposed Project site or Project truck routes. Of these 10 cumulative projects, eight are commercial in nature and would not generate a significant quantity of truck trips or diesel particulate matter emissions. The two remaining industrial projects include the following:

- Project 1: PP23170, 287,000 square foot warehouse, 110 daily truck trips
- Project 19: Orbis Industrial Truck Yard, 26-acre truck storage yard, 1,512 daily passenger car equivalent (PCE) trips

Compared to the approximately 2,626 daily truck trips anticipated to be generated by the proposed Project, the 110 daily truck trips generated by Project 1 would not be anticipated to significantly affect the cumulative health risk. Similarly, Project 19 would not result in a significant number of truck trips, and due to the storage lot nature of this project, would not result in significant idling emissions occurring on the site. As such, due to the relatively small size and small number of truck trips associated with these two projects, any cumulative impacts would be minimal and be less than cumulatively considerable.

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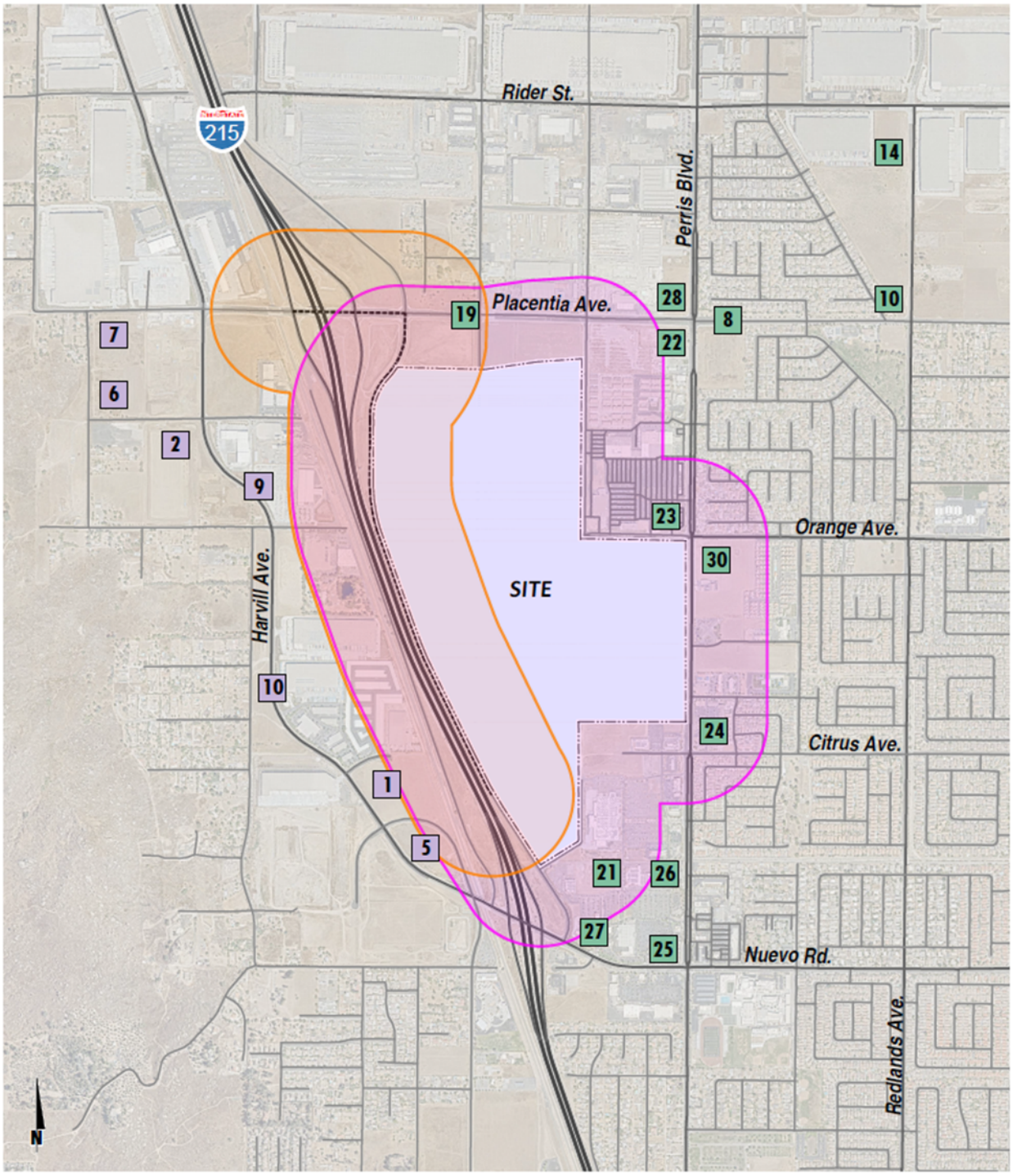
# HRA Cumulative Projects Locations




LEGEND:

= Site Boundary 1000-Foot Buffer

= Truck Route 1000-Foot Buffer

0 = Mead Valley Cumulative Projects

0 = Perris Cumulative Projects

Source: Urban Crossroads. (Updated 2025). *Exhibit 3-B: Cumulative Development Projects Location Map* [Map]. Harvest Landing Specific Plan Construction and Operational Health Risk Assessment (Appendix C to the EIR)

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# 5.3.8 EXISTING REGULATIONS

As discussed above, the Project would be required to comply with the following existing regulations and plans, programs, or policies which would help to reduce the potential impacts of the Project.

**State**

- Airborne Toxic Control Measure to Limit Diesel-Fuel Commercial Vehicle Idling (13 CCR 2485)
- In-Use Off-Road Diesel Idling Restriction (13 CCR 2449)
- California Green Building Standards Code (Code of Regulations, Title 24 Part 6)

**Regional**

- South Coast AQMD Rule 201: Permit to Construct
- South Coast AQMD Rule 402: Nuisance Odors
- South Coast AQMD Rule 403: Fugitive Dust
- South Coast AQMD Rule 1113: Architectural Coatings
- South Coast AQMD Rule 1186: Street Sweeping
- South Coast AQMD Rule 1403: Asbestos Emissions from Demolition/Renovation Activities
- South Coast AQMD Rule 2202: On-Road Motor Vehicle Mitigation Options
- South Coast AQMD Rule 2305: Indirect Source Rule

**City of Perris General Plan Healthy Community Element**

- Policy HC 6.3: reducing emissions from construction activities

# 5.3.9 PROJECT DESIGN FEATURES

None.

# 5.3.10 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Upon implementation of existing regulations, Impact AQ-4 would be less than significant. Without mitigation, Impacts AQ-1, AQ-2, and AQ-3 would be **potentially significant**.

# 5.3.11 MITIGATION MEASURES

## Construction Mitigation Measures

**Mitigation Measure AQ-1: Super-Compliant Low VOC.** Project construction plans and specifications shall state that the Project shall utilize "Super-Compliant" low VOC paints for nonresidential interior and exterior surfaces and low VOC paint for parking lot surfaces. Super-Compliant low VOC and low VOC paints have been reformulated to exceed the regulatory VOC limits put forth by South Coast AQMD's Rule 1113. Super-Compliant low VOC paints shall be no more than 10g/L of VOC and low VOC paints shall be no more than 50 g/L of VOC.

**Mitigation Measure AQ-2: Tier 4 Final.** The construction plans and specifications shall state that off-road diesel construction equipment rated at 50 horsepower (hp) or greater, complies with Environmental Protection Agency (EPA)/California Air Resources Board (CARB) Tier 4 Final off-road emissions standards or equivalent and shall keep all equipment maintenance records and data sheets, including design specifications and

emission control tier classifications, onsite or at the contractor's office and shall furnish documents to the Lead Agency or other regulators, upon request. The Lead Agency shall conduct an on-site inspection to verify compliance with construction mitigation and to identify other opportunities to further reduce particulate emissions.

**Mitigation Measure AQ-3:** The Project Applicant/Developer/Owner shall identify a person to act as a community liaison concerning onsite construction activities and operations and provide contact information for the community liaison to the surrounding community. The contact of the community liaison shall be provided to the Lead Agency and posted on the construction site prior to issuance of a demolition permit.

**Mitigation Measure AQ-4:** Project construction plans and specifications shall require that during Project grading operations, Project contractors shall limit the amount of daily grading disturbance area to not exceed the assumptions specified in the Draft EIR Air Quality Impact Analysis. Additionally, the Project Applicant/Developer/Contractor shall include a note on grading plans that prohibits grading on days with an Air Quality Index forecast of greater than 100 for particulates or ozone in the Project area. Daily Air Quality Index forecasts for the next day of grading shall be checked via the airnow.gov system the day prior by the Project Contractor.

**Mitigation Measure AQ-5:** Project construction plans and specifications shall require on-road heavy-duty haul trucks to be model year 2014 or newer if diesel-fueled, if such equipment is widely available and economically feasible, pursuant to CARB's particulate matter filter requirements.

**Mitigation Measure AQ-6:** The Project construction plans and specifications shall require the Project Applicant/Developer/Contractor provide information on transit and ridesharing programs and services to construction employees.

**Mitigation Measure AQ-7:** The Project construction plans and specifications shall require that the Project Applicant/Developer shall provide meal options onsite or shuttles between the construction site and nearby meal destinations for construction employees.

## Operation Mitigation Measures

**Mitigation Measure AQ-8: Idling Regulations.** The Project plans and specifications shall include signs at loading dock facilities that include: 1) instructions for truck drivers to shut off engines when not in use; 2) instructions for trucks drivers to restrict idling to no more than 5 minutes once the vehicle is stopped, the transmission is set to "neutral" or "park", and the parking brake is engaged pursuant to Title 13 of the California Code of Regulations, Section 2485; and 3) telephone numbers of the building facilities manager, South Coast AQMD and CARB to report violations. Signs shall be installed prior to receipt of an occupancy permit.

**Mitigation Measure AQ-9: Electric Vehicle Charging Stations and Carpool Parking.** The Project plans and specifications for the industrial buildings shall include electric vehicle charging stations and a minimum of 5 percent carpool parking spaces at each building for employees and the public to use.

**Mitigation Measure AQ-10: Electric Interior Vehicles.** The Project plans and specifications for all of the industrial buildings shall include infrastructure to support use of electric-powered forklifts and/or other interior vehicles. The requirement that all on-site yard hostlers, yard equipment, forklifts, and pallet jacks shall be zero-emissions equipment, or equivalent language, shall be incorporated in all Project facility lease documents. Prior to issuance of a Certificate of Occupancy, facility owners or tenants shall provide documentation to the City of Perris Planning Division verifying that signed lease documents incorporate the requirement that all on-site yard trucks/hostlers shall be zero-emissions equipment.

**Mitigation Measure AQ-11: Transportation Management.** The Project plans and specifications for the industrial buildings shall require that a Transportation Management Association (TMA) or similar mechanism shall be established by the Project to encourage and coordinate carpooling. The TMA shall advertise its services to the building occupants. The TMA shall offer transit incentives to employees and shall provide shuttle service to and from public transit, should a minimum of 5 employees request and use such service from a transit stop at the same drop-off and/or pickup time. The TMA shall distribute public transportation information to its employees. The TMA shall provide electronic message board space for coordination rides.

**Mitigation Measure AQ-12:** The City occupancy permitting shall require that all facility-owned and operated fleet equipment with a gross vehicle weight rating greater than 14,000 pounds accessing the site meet or exceed 2014 model-year emissions equivalent engine standards as currently defined in California Code of Regulations Title 13, Division 3, Chapter 1, Article 4.5, Section 2025. Facility operators which own vehicles subject to Section 2025 shall maintain records on-site demonstrating compliance with this requirement and shall make records available for inspection by the local jurisdiction, air district, and state upon request.

**Mitigation Measure AQ-13:** The Project plan and specifications shall include that the Project Applicant/Developer shall construct electric truck charging infrastructure within truck parking areas consisting of infrastructure (i.e., conduit) to support future installation of charging stations when such trucks are commercially available, as reasonably determined by the City of Perris Planning Division. Conduit shall be provided proportional to parking spaces at a ratio of conduit for one charging station for every 10 truck parking spaces for all buildings developed within the MBU designation. Additionally, the Project Applicant/Developer shall construct electric light- duty truck charging infrastructure consisting of infrastructure (i.e., conduit) proportional, i.e., conduit for one charging station for every five light-duty truck parking spaces at the Project for all buildings developed within the MBU designation.

**Mitigation Measure AQ-14:** Prior to the issuance of certificate of occupancy, the City Planning Manager, or designee, shall ensure all Project lease agreements require facility operators to train managers and employees on efficient scheduling and load management to eliminate unnecessary queuing and idling of trucks.

**Mitigation Measure AQ-15:** Prior to the issuance of certificate of occupancy, the City Planning Manager, or designee, shall ensure all Project lease agreements require operators to establish and promote a rideshare program that discourages single-occupancy vehicle trips and provides financial incentives for alternate modes of transportation, including carpooling, public transit, and biking.

**Mitigation Measure AQ-16:** Prior to the issuance of certificate of occupancy, the City Planning Manager, or designee, shall ensure all Project lease agreements require that all landscape equipment used to maintain the landscaping within the Project site shall be electric, and that Project plans support use of electrical landscaping equipment.

**Mitigation Measure AQ-17:** Prior to certificate of occupancy, the Project Applicant shall post signs at every truck exit driveway providing directional information to the truck route.

**Mitigation Measure AQ-18:** Prior to the issuance of certificate of occupancy, the City Planning Manager, or designee, shall ensure leasing agreements for each industrial building require that every tenant train its staff in charge of keeping vehicle records in diesel technologies and compliance with CARB regulations, by attending CARB- approved courses. Also, if the tenant/facility operator owns its own fleet of vehicles, subject to 13 California Code of Regulations section 2025, require such tenants/facility operators to maintain records on-site demonstrating compliance and make records available for inspection by the local jurisdiction, air district, and state upon request.

**Mitigation Measure AQ-19:** Prior to the issuance of certificate of occupancy, the City Planning Manager, or designee, shall ensure leasing agreements for each industrial building require that Project

Applicant/Developer/Owner provide tenants with information on incentive programs, such as the Carl Moyer Program and Voucher Incentive Program, to upgrade their fleets, prior to issuance of each certificate of occupancy.

**Mitigation Measure AQ-20:** The Project shall incorporate at least one of the following measures, applicable to the Phase 2 parcel located east of Indian Avenue and west of Barrett Avenue:

- The Phase 2 parcel located east of Indian Avenue and west of Barrett Avenue shall be developed such that a minimum 1,000-foot setback between building loading docks and the residential development east of Barrett Avenue is incorporated. If the Specific Plan Overlay is not being redeveloped as part of Phase 2 development, a 1,000-foot setback shall be incorporated between building loading docks and Val Verde Elementary School as well.
- Diesel-powered trucks shall be restricted from accessing the Phase 2 parcel located east of Indian Avenue and west of Barrett Avenue. Trucks accessing this parcel shall be electric-, hydrogen-, or natural gas-powered.
- Once site plans are available for Phase 2, a site specific HRA shall be prepared demonstrating that the Phase 2 development would not exceed South Coast AQMD significance thresholds. If the site-specific HRA determines that the Phase 2 development would not exceed South Coast AQMD significance thresholds, the first two measures of this Mitigation Measure shall not apply.

## 5.3.12 LEVEL OF SIGNIFICANCE AFTER MITIGATION

**Impact AQ-1:** The Project would not result in an exceedance of SCAG's growth projections, but the Project would result in an increase of criteria pollutants that would exceed regional thresholds of significance after implementation of mitigation. Therefore, the proposed Project would result in a conflict with, or obstruct, implementation of the AQMP and impacts would be significant and unavoidable.

**Impact AQ-2:**

**Construction.** With the application of Mitigation Measure AQ-1 through Mitigation Measure AQ-7, construction emissions would be reduced; however, there are no additional feasible measures that would reduce Project construction-source NOx emissions to levels that are less-than-significant. As such, Project construction-source NOx emission impacts would be significant and unavoidable.

**Operation.** Operational-source VOC, NOx, CO, $PM_{10}$, and $PM_{2.5}$ emissions would exceed regional thresholds of significance after implementation of Mitigation Measures AQ-8 through AQ-19. The predominance of the Project's operational-source emissions would be generated by passenger cars and trucks, and neither the Project Applicant nor the City have regulatory authority to control tailpipe emissions. Thus, no feasible mitigation measures beyond the measures identified herein exist that would reduce Project operational-source VOC, NOx, CO, $PM_{10}$, and $PM_{2.5}$ regional emissions to levels that are less-than-significant. As such, operational emissions would be significant and unavoidable.

**Impact AQ-3:** After implementation of Mitigation Measures AQ-8 through AQ-20, emissions during peak operational activity would not exceed the South Coast AQMD's localized significance threshold for any of the pollutants and would not exceed thresholds of significance related to cancer and non-cancer risks. Impacts would be less than significant with incorporation of mitigation.

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