

5.2 Air Quality

5.2.1 INTRODUCTION

This section provides an overview of the existing air quality within the Project site and surrounding region, a summary of applicable regulations, and analyses of potential short-term and long-term air quality impacts from implementation of the Proposed Project. Mitigation measures are recommended as necessary to reduce significant air quality impacts. This analysis is based on the following Los Angeles Harbor Department (LAHD) documents and technical studies prepared by LSA (LSA, 2024a) and are included as appendices to this EIR:

- *Port Master Plan*, LAHD, Adopted September 2018.
- *Air Quality, Health Risk, Greenhouse Gas, and Energy Impact Report John S. Gibson Trailer Lot Project*, (LSA, 2024a), provided as EIR Appendix B

5.2.2 REGULATORY SETTING

5.2.2.1 Federal Regulations

United States Environmental Protection Agency

Criteria Air Pollutants

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

The CAA requires the USEPA to establish National Ambient Air Quality Standards (NAAQS). The USEPA has established primary and secondary national ambient air quality standards (NAAQS) for the following criteria air pollutants: ozone (O₃), carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), respirable particulate matter with an aerodynamic diameter of 10 micrometers or less (PM₁₀), fine particulate matter with an aerodynamic diameter of 2.5 micrometers or less (PM_{2.5}), and lead (Pb). Table 5.2-1 shows the NAAQS for these pollutants. The CAA also requires each state to prepare an air quality control plan, referred to as a state implementation plan (SIP). The CAA Amendments of 1990 (CAAA) added requirements for states with nonattainment areas to revise their SIPs to incorporate additional control measures to reduce air pollution. The SIP 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 USEPA is responsible for reviewing all SIPs to determine whether they conform to the mandates of the CAA and its amendments, and to determine whether implementing the SIPs will achieve air quality goals. If the USEPA determines a SIP to be inadequate, a federal implementation plan that imposes additional control measures may be prepared for the nonattainment area.

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

Table 5.2-1: 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 | 0.09 ppm | --- | High concentrations can directly affect lungs, causing irritation. Long-term exposure may cause damage to lung tissue. | Formed when volatile organic compounds (VOCs) and NO _x react in the presence of sunlight. Major sources include on-road motor vehicles, solvent evaporation, and commercial/ industrial mobile equipment. |
| | 8 hours | 0.07 ppm | 0.075 ppm | | |
| Carbon Monoxide (CO) | 1 hour | 20 ppm | 35 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. |
| | 8 hours | 9.0 ppm | 9 ppm | | |
| Nitrogen Dioxide (NO_x) | 1 hour | 0.18 ppm | 0.100 ppm | Irritating to eyes and respiratory tract. Colors atmosphere reddish-brown. | Motor vehicles, petroleum refining operations, industrial sources, aircraft, ships, and railroads. |
| | Annual Arithmetic Mean | 0.030 ppm | 0.053 ppm | | |
| Sulfur Dioxide (SO₂) | 1 hour | 0.25 ppm | 75 ppb | 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. |
| | 3 hours | --- | 0.50 ppm | | |
| | 24 hours | 0.04 ppm | 0.14 ppm | | |
| | Annual Arithmetic Mean | --- | 0.03 ppm | | |
| Respirable Particulate Matter (PM₁₀) | 24 hours | 50 µg/m ³ | 150 µg/m ³ | 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). |
| | Annual Arithmetic Mean | 20 µg/m ³ | --- | | |
| Fine Particulate Matter (PM_{2.5}) | 24 hours | --- | 35 µg/m ³ | 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 NO _x , sulfur oxides, and organics. |
| | Annual Arithmetic Mean | 12 µg/m ³ | 12 µg/m ³ | | |
| Lead (Pb) | 30 Day Average | 1.5 µg/m ³ | --- | Disturbs gastrointestinal system, and causes anemia, kidney disease, and neuromuscular and neurological dysfunction (in severe cases). | <i>Present source:</i> lead smelters, battery manufacturing and recycling facilities. <i>Past source:</i> combustion of leaded gasoline. |
| | Calendar Quarter | --- | 1.5 µg/m ³ | | |
| | Rolling 3-Month Average | --- | 0.15 µg/m ³ | | |
| Hydrogen Sulfide | 1 hour | 0.03 ppm | ... | Nuisance odor (rotten egg smell), headache and | Geothermal power plants, petroleum production and refining |

| Pollutant | Averaging Time | State Standard | National Standard | Pollutant Health and Atmospheric Effects | Major Pollutant Sources |
|--------------------------------------|----------------|---|-------------------|---|-------------------------|
| | | | | breathing difficulties (higher concentrations) | |
| Sulfates (SO₄) | 24 hours | 25 µg/m ³ | ... | 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 hours | Extinction of 0.23/km; visibility of 10 miles or more | ... | Reduces visibility, reduced airport safety, lower real estate value, and discourages tourism. | See PM _{2.5} . |

Source: CARB, 2016.

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

The CAAA also required the USEPA 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.

Hazardous Air Pollutants

The USEPA has programs for identifying and regulating hazardous air pollutants (HAPs). Title III of the CAAA directed the USEPA to promulgate national emissions standards for HAPs (NESHAP). The NESHAP may differ for major sources than for area sources of HAPs. Major sources are defined as stationary sources with potential to emit more than 10 tons per year (tpy) of any HAP or more than 25 tpy of any combination of HAPs; all other sources are considered area sources. The emissions standards are to be promulgated in two phases. In the first phase (1992–2000), the USEPA 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 (MACT). For area sources, the standards may be different, based on generally available control technology. In the second phase (2001–2008), the USEPA promulgated health-risk-based emissions standards that were deemed necessary to address risks remaining after implementation of the technology-based NESHAP standards.

5.2.2.2 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 (CCAA). The CCAA, which was adopted in 1988, requires CARB to establish the California Ambient Air Quality Standards (CAAQS). CARB has established CAAQS for sulfates, hydrogen

sulfide, vinyl chloride, visibility-reducing particulate matter, and the above-mentioned criteria air pollutants. Applicable CAAQS are shown in Table 5.2-1.

The CCAA requires all local air districts in the state to endeavor to achieve and maintain the CAAQS 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 SIPs to the USEPA, 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

The CARB has adopted several iterations of regulations for diesel trucks that are aimed at reducing diesel particulate matter (DPM). More specifically, the Advanced Clean Fleets Regulation and Drayage Truck Regulations and the statewide On-road Truck and Bus Regulation 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.

The average statewide DPM emissions for Heavy Duty Trucks (HDT), in terms of grams of DPM generated per mile traveled, will dramatically be reduced due to these regulatory requirements. Diesel emissions identified in this analysis therefore overstate future DPM emissions because not all these regulatory requirements are reflected in the modeling conducted to evaluate the Proposed Project.

Toxic Air Contaminants

Air quality regulations also focus on toxic air contaminants (TACs). In general, for those TACs 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 ambient standards have been established. Instead, the USEPA and CARB regulate HAPs and TACs, respectively, through statutes and regulations that generally require the use of the MACT or best available control technology (BACT) for toxics and to limit emissions. These statutes and regulations, in conjunction with additional rules set forth by the districts, establish the regulatory framework for TACs.

TACs 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 (Hot Spots Act) (AB 2588 [Chapter 1252, Statutes of 1987]) (Health and Safety Code Section 44300 et seq.). AB 1807 sets forth a formal procedure for CARB to designate substances as TACs. This includes research, public participation, and scientific peer review before CARB can designate a substance as a TAC. To date, CARB has identified more than 21 TACs and adopted the USEPA's list of HAPs as TACs. Most recently, diesel PM was added to the CARB list of TACs. Once a TAC is identified, CARB then adopts an airborne toxics control measure (ATCM) for sources that emit that particular TAC. 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 BACT 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 TAC sources. Although it is not a law or adopted

policy, the Handbook offers advisory recommendations for the siting of sensitive receptors near uses associated with TACs, 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. In addition, CARB has promulgated the following specific rules to limit TAC 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, the CARB approved regulations to reduce fuel use and emissions from new motor vehicles beginning with the 2009 model year (Pavley Regulations). CARB, 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 five 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 (CCR) Title 24 Part 6: The California Energy Code (CALGreen) is updated every three years. The most recent update was the 2022 California Green Building Code Standards (CALGreen standards) became effective on January 1, 2023.

The 2022 CALGreen standards (California DGS, 2022) that reduce air quality emissions and are applicable to the Proposed Project include, but are not limited to, the following:

- **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 reused 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).
 - **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).

The CalGreen Building Standards Code has been adopted by the City of Los Angeles by reference in Municipal Code Article 9.

5.2.2.3 Regional Regulations

South Coast Air Quality Management District

Criteria Air Pollutants

The South Coast Air Quality Management District (SCAQMD) attains and maintains air quality conditions in the 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 SCAQMD 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. SCAQMD 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 CAA, CAAA, and CCAA. Air quality plans applicable to the Proposed Project are discussed below.

Air Quality Management Plan

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

SCAG is mandated by law to develop a long-term regional transportation and sustainability plan every four years. The most recently adopted AQMP is the 2022 AQMP that was adopted by the SCAQMD 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 NO_x technologies in other applications), best management practices, co-benefits from existing programs (e.g., climate and energy efficiency), incentives, and other CAA measures to achieve the 2015 federal 8-hour ozone standard. SCAQMD proposes a total of 49 control measures for the 2022 AQMP, including control measures focused on widespread deployment of zero emission and low NO_x technologies through a combination of regulatory approaches and incentives. The 2022 AQMP is based on data from SCAG 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS).

The SCAG 2020–2045 RTP/SCS also provides a combination of transportation and land use strategies that help the region achieve State GHG emissions reduction goals and Federal Clean Air Act requirements, preserve open space areas, improve public health and roadway safety, support our vital goods movement industry, and use resources more efficiently. Further, the RTP/SCS provides the socioeconomic growth forecast and transportation activity projections for the SCAQMD AQMP. GHG emissions resulting from development-related mobile sources are the most potent source of emissions.

SCAQMD Rules and Regulations

All projects are subject to SCAQMD rules and regulations (SCAQMD, 2023a). Specific rules 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. SCAQMD 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 PM₁₀ 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 SCAQMD Rule 1186.1, Less Polluting Sweepers.

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 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 SCAQMD Rule 1108.

Rule 1113 – Architectural Coatings. No person shall apply or solicit the application of any architectural coating within the SCAQMD 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.

5.2.2.4 Local Regulations

City of Los Angeles Sustainable City pLAN

The Port is committed to responsible growth through the implementation of the three tenets of sustainability: environment, economy, and equity. As such, the Port has adopted the City of Los Angeles Sustainable City pLAN (City of Los Angeles, 2019). The Plan contains goals for the City, especially in areas of local solar, energy efficient buildings, carbon and climate leadership, green jobs, preparedness and resiliency, air

quality, and environmental justice. In addition, the Plan advances the City's environment, economy, and social equity in 14 various categories with short term, near term (2025), and long-term (2035) targets. The following municipal targets from the Plan would be applicable to the proposed Project:

- Recycle 100 percent of all wastewater for beneficial reuse by 2035.
- Reduce potable water use per capita by 22.5 percent by 2025; and 25 percent by 2035; and maintain or reduce 2035 per capita water use through 2050.
- Reduce VMT per capita by at least 13% by 2025; 39% by 2035; and 45% by 2050.
- Reduce port related GHG emissions by 80% by 2050.
- Reduce industrial emissions by 38% by 2035; and 82% by 2050.
- Increase tree canopy in areas of greatest need by at least 50% by 2028.

Community Emissions Reduction Plan Wilmington, Carson, West Long Beach

The Community Emissions Reduction Plan (CERP) outlines the actions and commitments by the Community Steering Committee (CSC), the SCAQMD, and CARB to reduce air pollution in the Wilmington, Carson, and West Long Beach community (SCAQMD, 2019). The CERP is a critical part of implementing AB 617, which is a California law that addresses the disproportionate impacts of air pollution in environmental justice communities. The CERP includes targeted actions using many strategies, including developing and enforcing regulations, providing incentives to accelerate the adoption of cleaner technologies, and conducting outreach to provide useful information to support the public in making informed choices. Additionally, air monitoring strategies are used in implementation of the CERP to help provide critical information to help guide investigations or provide public information.

City of Los Angeles General Plan

The City of Los Angeles General Plan Health, Wellness, and Equity (HWE) Element (City of Los Angeles, 2023) and Air Quality (AQ) Element (City of Los Angeles, 1992) contain the following policies related to air quality that are applicable to the Project:

- Policy HWE 1.5** Improve Angelenos' health and well-being by incorporating a health perspective into land use, design, policy, and zoning decisions through existing tools, practices, and programs.
- Policy HWE 5.1** Reduce air pollution from stationary and mobile sources; protect human health and welfare and promote improved respiratory health.
- Policy HWE 5.2** Reduce negative health impacts for people who live and work in close proximity to industrial uses and freeways through health promoting land uses and design solutions.
- Policy HWE 5.4** Protect communities' health and well-being from exposure to noxious activities (for example, oil and gas extraction) that emit odors, noise, toxic, hazardous, or contaminant substances, materials, vapors, and others.
- Policy HWE 5.6** In collaboration with public, private, and nonprofit partners, increase the city's resilience to risks (increasing temperatures and heat related effects, wildfires, reduced water supply, poor air quality, and sea level rise) resulting from climate change, and target resilience in the most vulnerable communities.
- Goal AQ 1** Good air quality and mobility in an environment of continued population growth and healthy economic structure.

- Objective AQ 1.1** It is the objective of the City of Los Angeles to reduce air pollutants consistent with the Regional Air Quality Management Plan [AQMP], increase traffic mobility, and sustain economic growth citywide.
- Policy AQ 1.1.1** Encourage demonstration projects which involve creative and innovative uses of market incentive mechanisms to achieve air quality objectives.
- Objective AQ 1.3** It is the objective of the City of Los Angeles to reduce particulate air pollutants emanating from unpaved areas, parking lots, and construction sites.
- Policy AQ 1.3.1** Minimize particulate emissions from construction sites.
- Policy AQ 1.3.2** Minimize particulate emissions from unpaved roads and parking lots which are associated with vehicular traffic.
- Objective AQ 2.1** It is the objective of the City of Los Angeles to reduce work trips as a step towards attaining trip reduction objectives necessary to achieve regional air quality goals.
- Goal AQ 4** Minimal impact of existing land use patterns and future land use development on air quality by addressing the relationship between land use, transportation, and air quality.
- Objective AQ 4.1** It is the objective of the City of Los Angeles to include the regional attainment on air quality by addressing the relationship between land use, transportation, and air quality.
- Objective AQ 4.2** It is the objective of the City of Los Angeles to reduce vehicle trips and vehicle miles traveled associated with land use patterns.
- Policy AQ 4.2.3** Ensure that new development is compatible with pedestrian, bicycles, transit, and alternative fuel vehicles.
- Policy AQ 4.2.4** Require that air quality impacts be a consideration in the review and approval of all discretionary projects.
- Policy AQ 4.2.5** Emphasize trip reduction, alternative transit, and congestion management measures for discretionary projects.
- Policy AQ 4.3.2** Revise the City's General Plan/Community Plan to ensure that new or relocated major air pollution sources are located to minimize significant health risks to sensitive receptors.
- Goal AQ 5** Energy efficiency through land use and transportation planning, the use of renewable resources and less polluting fuels, and the implementation of conservation measures including passive methods such as site orientation and tree planting.
- Objective AQ 5.1** It is the objective of the City of Los Angeles to increase energy efficiency of City facilities and private developments.
- Policy AQ 5.1.1** Make improvements in Harbor and airport operations and facilities in order to reduce air emissions.
- Policy AQ 5.1.2** Effect a reduction in energy consumption and shift to non-polluting sources of energy in its buildings and operations
- Policy AQ 5.1.4** Reduce energy consumption and associated air emissions by encouraging waste reduction and recycling.

5.2.3 ENVIRONMENTAL SETTING

Climate and Meteorology

The Project area is located within the South Coast Air Basin (Basin), which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The 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 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 Basin an area of high air pollution potential. The Basin is a coastal plain with 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.

Criteria Air Pollutants

The California Air Resources Board (CARB) and the United States Environmental Protection Agency (USEPA) currently focus on the following air pollutants as indicators of ambient air quality: ozone, CO, NO₂, SO₂, PM₁₀, 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 CAA. California has generally adopted more stringent ambient air quality standards for the criteria air pollutants (referred to as State Ambient Air Quality Standards, or state standards) and has adopted air quality standards for some pollutants for which there is no corresponding national standard, 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

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

other compounds that are directly emitted. These directly emitted pollutants (also known as ozone precursors) include reactive organic gases (ROGs) or volatile organic compounds (VOCs), and oxides of nitrogen (NO_x). While both ROGs and VOCs 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 USEPA and is based on its own exemption list. The time period required for ozone formation allows the reacting compounds to spread over a large area, producing regional pollution 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 Basin. The highest ambient CO concentrations are generally found near congested transportation corridors and intersections.

Nitrogen Dioxide

NO₂ is a reddish-brown gas that is a by-product of combustion processes. Automobiles and industrial operations are the main sources of NO₂. Combustion devices emit primarily nitric oxide (NO), which reacts through oxidation in the atmosphere to form NO₂. The combined emissions of NO and NO₂ are referred to as NO_x, which are reported as equivalent NO₂. Aside from its contribution to ozone formation, NO₂ can increase the risk of acute and chronic respiratory disease and reduce visibility. NO₂ may be visible as a coloring component of a brown cloud on high pollution days, especially in conjunction with high ozone levels.

Sulfur Dioxide

SO₂ 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 SO₂ oxidizes in the atmosphere, it forms sulfur trioxide (SO₃). Collectively, these pollutants are referred to as sulfur oxides (SO_x).

Major sources of SO₂ include power plants, large industrial facilities, diesel vehicles, and oil-burning residential heaters. Emissions of SO₂ 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. SO₂ potentially causes wheezing, shortness of breath, and coughing. Long-term SO₂ exposure has been associated with increased risk of mortality from respiratory or cardiovascular disease.

Particulate Matter

PM₁₀ 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). PM₁₀ 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 SO_2 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 ROGs, ammonia (NH_3), NO_x , and SO_x .

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 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.

Toxic Air Contaminants

Concentrations of toxic air contaminants (TACs), or in federal parlance, hazardous air pollutants (HAPs), are also used as indicators of ambient air quality conditions. A TAC 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. TACs 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 TACs can be attributed to relatively few compounds, the most important being diesel particulate matter (DPM) from diesel-fueled engines. DPM differs from other TACs in that it is not a single substance, but rather a complex mixture of hundreds of substances. Although DPM 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 TACs, no ambient monitoring data are available for DPM 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 PM_{10} database, ambient PM_{10} monitoring data, and the results from several studies to estimate concentrations of diesel PM. In addition to diesel PM, the TACs 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.

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 SCAB is now designated as attainment, and CO concentrations in the Project vicinity have steadily declined (LSA, 2024a).

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.

Existing Conditions

SCAQMD maintains monitoring stations within district boundaries, Source/Receptor Areas (SRAs), that monitor air quality and compliance with associated ambient standards. However, the LAHD also maintains their own monitoring stations. LAHD's air quality monitoring station closest to the Project site is the San Pedro Community station. Pollutant monitoring results for years 2020 to 2022 at the San Pedro Community air quality monitoring station, shown in Table 5.2-2, indicate that air quality in the area has generally been good. As indicated in the monitoring results, the federal PM₁₀ standard had an unknown number of exceedances in 2020 and no exceedances in 2021 and 2022. The State PM₁₀ standard had an unknown number of exceedances during the 3-year period. The PM_{2.5} federal and State standard had an unknown number of exceedances in the 3-year period. The 1-hour ozone State standard also had an unknown number of exceedances in the 3-year period. The 8-hour ozone State and federal standards had no exceedances for 2020 and 2021 and had an unknown number of times in 2022. The State and federal SO₂ standards had an unknown number of exceedances in 2021 and no exceedances in 2020 and 2022. In addition, the CO and NO₂ standards were not exceeded in this area during the 3-year period.

Table 5.2-2: Air Quality Monitoring Summary 2020-2022

| Pollutant | Standard | 2020 | 2021 | 2022 |
|------------------------------------|---------------------|-------|-------|-------|
| Carbon Monoxide (CO) | | | | |
| Maximum 1-hour concentration (ppm) | | 1.9 | 6.9 | 2.7 |
| Number of days exceeded: | State: > 20 ppm | 0 | 0 | 0 |
| | Federal: > 35 ppm | 0 | 0 | 0 |
| Maximum 8-hour concentration (ppm) | | 2.0 | 1.2 | 2.2 |
| Number of days exceeded: | State: > 9 ppm | 0 | 0 | 0 |
| | Federal: > 9 ppm | 0 | 0 | 0 |
| Ozone (O₃) | | | | |
| Maximum 1-hour concentration (ppm) | | 0.101 | 0.154 | 0.9 |
| Number of days exceeded: | State: > 0.09 ppm | ND | ND | ND |
| | Federal: > 0.07 ppm | 0 | 0 | ND |
| Maximum 8-hour concentration (ppm) | | 0.067 | 0.061 | 0.071 |
| Number of days exceeded: | State: > 0.07 ppm | 0 | 0 | ND |
| | Federal: > 0.07 ppm | 0 | 0 | ND |

| Pollutant | Standard | 2020 | 2021 | 2022 |
|--|----------------------------------|-------|-------|-------|
| Coarse Particulates (PM₁₀) | | | | |
| Maximum 24-hour concentration (µg/m ³) | | 208.8 | 82.6 | 72.6 |
| Number of days exceeded: | State: > 50 µg/m ³ | ND | ND | ND |
| | Federal: > 150 µg/m ³ | ND | 0 | 0 |
| Annual arithmetic average concentration (µg/m ³) | | ND | ND | ND |
| Exceeded for the year: | State: > 20 µg/m ³ | ND | ND | ND |
| | Federal: > 50 µg/m ³ | ND | ND | ND |
| Fine Particulates (PM_{2.5}) | | | | |
| Maximum 24-hour concentration (µg/m ³) | | 62.2 | 39.8 | 35.4 |
| Number of days exceeded: | Federal: > 35 µg/m ³ | ND | ND | ND |
| Annual arithmetic average concentration (µg/m ³) | | ND | ND | ND |
| Exceeded for the year: | State: > 12 µg/m ³ | ND | ND | No |
| | Federal: > 15 µg/m ³ | ND | ND | No |
| Nitrogen Dioxide (NO₂) | | | | |
| Maximum 1-hour concentration (ppm) | | 0.0 | 0.073 | 0.061 |
| Number of days exceeded: | State: > 0.250 ppm | 0 | 0 | 0 |
| Annual arithmetic average concentration (ppm) | | ND | ND | ND |
| Exceeded for the year: | Federal: > 0.053 ppm | ND | ND | ND |
| Sulfur Dioxide (SO₂) | | | | |
| Maximum 1-hour concentration (ppm) | | ND | 0.147 | 0.014 |
| Number of days exceeded: | State: > 0.25 ppm | ND | ND | ND |
| Maximum 24-hour concentration (ppm) | | ND | 0.009 | 0.004 |
| Number of days exceeded: | State: > 0.04 ppm | 0 | 0 | 0 |
| | Federal: > 0.14 ppm | 0 | 0 | 0 |
| Annual arithmetic average concentration (ppm) | | ND | ND | ND |
| Exceeded for the year: | Federal: > 0.030 ppm | No | No | No |

Source: Table from Appendix B, Table F

Notes: Data taken from the POLA San Pedro Community Monitoring Station

Acronyms: µg/m³ = micrograms per cubic meter, CARB = California Air Resources Board, ND = No data – There were insufficient (or no) data to determine the value, ppm = parts per million

Both CARB and the USEPA 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, 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. See Table 5.2-3, for attainment designations for the SCAB.

Table 5.2-3: Attainment Status of Criteria Pollutants in the South Coast Air Basin (SCAB)

| Criteria Pollutant | State Designation | Federal Designation |
|----------------------------------|---------------------------|-------------------------|
| O ₃ – 1-hour standard | Nonattainment | Extreme Nonattainment |
| O ₃ – 8-hour standard | Nonattainment | Extreme Nonattainment |
| PM ₁₀ | Nonattainment | Attainment/Maintenance |
| PM _{2.5} | Nonattainment | Serious Nonattainment |
| CO | Attainment | Attainment/Maintenance |
| NO ₂ | Attainment | Attainment/Maintenance |
| SO ₂ | Unclassifiable/Attainment | Attainment/Unclassified |
| Pb | Attainment | Nonattainment |

Source: LSA, 2024a (EIR Appendix B).

Notes: The federal nonattainment designation for lead is only applicable towards the Los Angeles County portion of the SCAB.

The Project site is currently vacant but disturbed from previous development and contains multiple non-native, ornamental trees. Limited, temporary air quality emissions are currently generated by disking and weed control activities onsite. The closest worker receptor to the Project site is the Ports of America insurance company located immediately west at a distance of approximately 25 feet.

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 in the vicinity of the Project area consist of residences, schools, parks, and workplaces. There are no nearby sensitive receptors within a 1,000-foot radius of the Project site. As shown in Figure 5.2-1, the closest sensitive receptors to the Project site are single-family homes located approximately 1,366 feet southwest of the Project site's western property line.

Sensitive Receptor Distances



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5.2.4 THRESHOLDS OF SIGNIFICANCE

According to Appendix G of the State CEQA Guidelines, a project could have a significant adverse effect on air quality resources if it would:

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

The Initial Study established that the Proposed Project would result in less-than-significant impacts related to Threshold AQ-4; and no further assessment of this impact is required in this EIR.

Regional Thresholds

The Los Angeles CEQA Thresholds Guide references the SCAQMD CEQA Air Quality Handbook for calculating and determining the significance of construction and operational emissions. The SCAQMD's most recent regional significance thresholds from March 2023 for regulated pollutants are listed in Table 5.2-4. The SCAQMD's CEQA air quality methodology provides that any projects that result in daily emissions that exceed any of the thresholds in Table 5.2-4 would be considered to have both an individually (project-level) and cumulatively significant air quality impact.

Table 5.2-4: SCAQMD Regional Air Quality Thresholds

| Pollutant | Construction | Operations |
|-------------------|--------------|-------------|
| NO _x | 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 |
| SO _x | 150 lbs/day | 150 lbs/day |
| CO | 550 lbs/day | 550 lbs/day |
| Lead | 3 lbs/day | 3 lbs/day |

Source: SCAQMD, 2023b.

Localized Significance Thresholds

SCAQMD has also developed localized significance thresholds (LSTs) that represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standards, 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 38 source receptor areas (SRAs) in the Basin. The localized thresholds, which are found in the mass rate look-up tables in the "Final Localized Significance Threshold Methodology" document prepared by SCAQMD, were developed for use on projects that are less than or equal to 5 acres in size and are only applicable to the following criteria pollutants: NO_x, CO, PM₁₀, and PM_{2.5}.

Construction of the Proposed Project would actively disturb a maximum of 3.5 acres per day during site preparation and grading activities. For the Proposed Project, the appropriate SRA for the LST is the nearby South Coastal LA County (SRA 4). The SCAQMD recommends that the nearest sensitive receptor be considered when determining the Proposed Project's potential to cause an individual a cumulatively significant impact. SCAQMD provides LST screening tables for 25-, 50-, 100-, 200-, and 500-meter source-receptor distances. As previously stated, and consistent with LST Methodology, the nearest sensitive receptor is approximately 1,366 feet (416 meters) southwest of the Project site. The LST thresholds presented in Table 5.2-5 are derived by interpolation using the distance to the nearest sensitive receptors per the SCAQMD look up table. Table 5.2-5 lists the thresholds that are used to evaluate LST emissions.

Table 5.2-5: SCAQMD Construction & Operations Localized Significance Thresholds

| Emissions Source | Pollutant Emissions Threshold (lbs/day) | | | |
|--------------------------------------|---|---------|------------------|-------------------|
| | NO _x | CO | PM ₁₀ | PM _{2.5} |
| Construction (3.5 acres, 416 meters) | 153.0 | 7,630.0 | 152.0 | 89.0 |
| Operations (5 acres, 416 meters) | 168.0 | 8,154.0 | 39.0 | 24.0 |

Source: LSA, 2024a (EIR Appendix B).

Acronyms: CO = carbon monoxide, lbs/day = pounds per day, NO_x = nitrogen oxides, PM₁₀ = particulate matter less than 10 microns in size, PM_{2.5} = particulate matter less than 2.5 microns in size.

CO Hotspots

Areas of vehicle congestion have the potential to create pockets of CO called hotspots. These pockets have the potential to exceed the state one-hour standard of 20 ppm or the eight-hour standard of 9 ppm. Because CO is produced in greatest quantities from vehicle combustion and does not readily disperse into the atmosphere, adherence to ambient air quality standards is typically demonstrated through an analysis of localized CO concentrations. Hotspots are typically produced at intersections, where traffic congestion is highest because vehicles queue for longer periods and are subject to reduced speeds. With the turnover of older vehicles and introduction of cleaner fuels as well as implementation of control technology on industrial facilities, CO concentrations in the South Coast Air Basin and the state have steadily declined. The analysis of CO hotspots compares the volume of traffic that has the potential to generate a CO hotspot and the volume of traffic with implementation of the Proposed Project.

Diesel Mobile Source Health Risk Threshold

Cancer risk is expressed in terms of expected incremental incidence per million population. The SCAQMD and LAHD have established an incidence rate of 10 persons per million as the maximum acceptable incremental cancer risk due to DPM 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 SCAQMD to be cumulatively considerable. Thus, the project-specific and cumulative significance thresholds are the same. Conversely, projects that do not exceed the project-specific thresholds are not considered to be cumulatively significant.

Cancer Burden Threshold

If incremental individual cancer risk from the proposed Project would exceed the SCAQMD regulatory threshold of an incremental increase of 1 in one million, then an estimated determination of population level risks is required. This is distinct from the cancer risk, which is the risk probability for an exposed individual. The burden calculations are conservative estimates of the number of cancer cases that could occur in the exposed populations. The impacts are considered significant if more than 0.5 cases are calculated for the Proposed Project.

5.2.5 METHODOLOGY

This analysis focuses on the nature and magnitude of the change in the air quality environment due to implementation of the Proposed Project, based on the maximum, horizon year development assumptions that are 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 parking lot facilities. The net increase in emissions generated by these activities and other secondary sources have been quantitatively estimated and compared to the applicable thresholds of significance recommended by SCAQMD.

AQMP Consistency

SCAQMD's CEQA Handbook suggests an evaluation of the following two criteria to determine whether a project involving a legislative land use action (such as the proposed POLA Port Master Plan Amendment) and proposed truck and chassis parking lot would be consistent or in conflict with the AQMP:

1. The Project would not generate population and employment growth that would be inconsistent with SCAG's growth forecasts.
2. 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.

Consistency Criterion No. 1 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, and, in part, on SCAG's three Land Development Categories. Therefore, if the level of housing or employment related to the Proposed Project are consistent with the applicable assumptions used in the development of the AQMP, the Proposed Project would not jeopardize attainment of the air quality levels identified in the AQMP.

Consistency Criterion No. 2 refers to the CAAQS. An impact would occur if the long-term emissions associated with the Proposed Project would exceed SCAQMD's regional significance thresholds for operation-phase emissions.

Construction

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

In addition, to determine whether or not construction activities associated with development of the Proposed Project would create significant adverse localized air quality impacts on nearby sensitive receptors, the Proposed Project's worst-case daily emissions contribution was compared to SCAQMD'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 daily total on-site combustion, mobile, and fugitive dust emissions associated with construction were combined and evaluated against SCAQMD's LSTs for a 3.5-acre site.

Based on SCAQMD's LST Methodology, emissions for concern during construction activities are on-site NO_x, CO, PM_{2.5}, and PM₁₀. The LST Methodology clearly states that "off-site mobile emissions from the Project should not be included in the emissions compared to LSTs" (SCAQMD, 2008). As such, for purposes of the LST analysis, only emissions included in the CalEEMod "on-site" emissions outputs were considered.

In order to determine if potential health risk impacts would occur from Proposed Project construction, the distance to the nearest sensitive receptor from the site was assessed following SCAQMD guidance for preparation of health risk assessments.

Operations

Long-term (i.e., operational) regional emissions of criteria air pollutants and precursors, including mobile- and area-source emissions from the Proposed 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 during the horizon year condition. Trip generation rates were available from the traffic impact analysis prepared for the Proposed Project (see Appendix J of this EIR). Predicted long-term operational emissions were compared with applicable SCAQMD thresholds for determination of significance.

Trip Length

Construction

To determine emissions from worker vehicles during construction, the CalEEMod default of 18.5 miles was utilized for trip length. For vendor trips, the CalEEMod default of 10.2 miles was utilized for trip length. For hauling trips, 117 miles was utilized for trip length during site preparation as on-site contaminated soils would potentially need to be disposed of offsite in a registered facility. For hauling trips during grading, the CalEEMod default of 20 miles was utilized for trip length.

Operation

To determine emissions from passenger car vehicles during operation, the CalEEMod default of 16.6 miles was utilized for trip length. To determine emissions from trucks for the proposed truck and chassis parking lot, the analysis incorporated the increased vehicle miles traveled for trucks over baseline POLA conditions associated with the Proposed Project. As determined in a separate VMT Analysis of truck trips, prepared by the Los Angeles Harbor Department Goods Movement, the Proposed Project would result in an increase of 3.8 miles traveled on average for trucks accessing the Project site over existing conditions (LAHD, 2024). For on-site emissions, the HRA assumed that trucks would travel up to 0.38-mile onsite and the LST analysis assumed that five percent of the Project-related new mobile source emissions would occur onsite.

5.2.6 ENVIRONMENTAL IMPACTS

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

Less-than-Significant Impact.

SCAQMD AQMP Consistency

The SCAQMD's 2022 AQMP is the applicable air quality plan for the Proposed Project site. Pursuant to Consistency Criterion No. 1, the SCAQMD's 2022 AQMP is the applicable air quality plan for the Proposed Project. Projects that are consistent with the regional population, housing, and employment forecasts identified by SCAG are considered to be consistent with the AQMP growth projections, since the forecast

assumptions by SCAG forms the basis of the land use and transportation control portions of the AQMP. Additionally, because SCAG's regional growth forecasts are based upon, among other things, land uses designated in general plans, a project that is consistent with the land use designated in a general plan would also be consistent with the SCAG's regional forecast projections, and thus also with the AQMP growth projections.

The majority of the Project site is within the POLA Master Plan land use designation of Open Space. The Proposed Project would require a Master Plan Amendment to change the land use designation from Open Space to Maritime Support (APNs 7440-016-002, 7440-016-003, and 7440-016-007). The Maritime Support designation provides for water-dependent and non-water-dependent operations necessary to support cargo handling and other maritime activities. APNs 7440-016-001, 7440-016-002, 7440-016-003 have a City of Los Angeles General Plan designation of General/Bulk Cargo – Non-Hazardous Industrial and Commercial and are zoned Heavy Industrial [Q]M3-1VL, while APN 7412-024-007 has a City of Los Angeles General Plan designation of General/Bulk Cargo – Non-Hazardous Industrial and Commercial and is zoned Light Industrial [Q]M2-1VL. The Proposed Project would be consistent with the City of Los Angeles's General Plan land use designation and zoning for the site and no General Plan amendment or zone change would be necessary. While the Proposed Project would require a POLA Master Plan Amendment, the Proposed Project would be consistent with the City of Los Angeles's General Plan land use designation, which is relied on for SCAG's regional forecast projections and 2022 AQMP growth projections. Therefore, the Proposed Project is consistent with the SCAQMD 2022 AQMP and would not result in an impact related to Criterion No.1.

Regarding Consistency Criterion No. 2, which evaluates the Proposed Project's potential to increase the frequency or severity of existing air quality violations; as described previously, an impact related to Consistency Criterion No. 2 would occur if the long-term emissions associated with the Proposed Project would exceed SCAQMD's regional significance thresholds for operation-phase emissions. As detailed below in Impact AQ-2, the Proposed Project would result in regional operational-source emissions that would not exceed the SCAQMD thresholds of significance. Therefore, the Proposed Project would not result in an increase in the frequency or severity of existing air quality violations and would not contribute to new violations or delay the timely attainment of air quality standards or the interim emissions reductions specified in the AQMP. Therefore, the Proposed Project would not result in an impact related to Consistency Criterion No. 2.

Overall, the Proposed Project would not result in an inconsistency with SCAG's regional growth forecast or result in increased regional air quality emissions that would exceed thresholds. Therefore, the Proposed Project would not result in a conflict with, and would not obstruct, implementation of the AQMP, and impacts would be less than significant.

Community Emissions Reduction Plan Wilmington, Carson, West Long Beach

In addition to the regional AQMP, the SCAQMD has prepared the Wilmington, Carson, West Long Beach CERP in response to AB 617 (SCAQMD, 2019). The CERP addresses air quality issues and emissions associated with the POLA and Port of Long Beach and identifies three air quality priorities (zero- and near-zero-emissions technologies, oil tanker leaks, and enforcement of existing CARB regulations). The Proposed Project would be consistent with the priorities set forth by the CERP as it would provide zero-emission cargo-handling equipment onsite and trucks accessing the Project site would be required to be consistent with state regulations. Therefore, the Proposed Project would not conflict with the Wilmington, Carson, West Long Beach CERP.

Overall, the Proposed Project would not result in an inconsistency with the AQMP or result in emissions that would exceed SCAQMD thresholds. Therefore, the Proposed Project would not result in a conflict with, and

would not obstruct, implementation of an applicable air quality plan, and impacts would be less than significant.

IMPACT AQ-2: WOULD THE PROJECT RESULT IN A CUMULATIVELY CONSIDERABLE NET INCREASE OF A CRITERIA POLLUTANT FOR WHICH THE PROJECT REGION IS NON-ATTAINMENT UNDER AN APPLICABLE FEDERAL OR STATE AMBIENT AIR QUALITY STANDARD?

Construction

Less-than-Significant Impact. Construction activities associated with the Proposed Project would result in emissions of CO, VOCs, NO_x, SO_x, PM₁₀, and PM_{2.5}. Pollutant emissions associated with construction would be generated from the following construction activities: (1) 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 Project site; (4) fuel combustion by on-site construction equipment; (5) application of architectural coatings and paving. These construction activities would temporarily create emissions of dust, fumes, equipment exhaust, and other air contaminants. In addition, emissions would result from the import of approximately 3,433 cubic yards of soil during the grading phase.

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 SCAQMD Rules 403 and 1113 (described above), which would reduce air contaminants during construction. Table 5.2-6 provides the maximum daily emissions of criteria air pollutants from construction of the Proposed Project, which shows that Proposed Project construction would not exceed the thresholds established by the SCAQMD and impacts would be less than significant.

Table 5.2-6: Maximum Peak Construction Emissions

| Project Construction | Maximum Pollutant Emissions (lbs/day) | | | | | |
|---------------------------|---------------------------------------|-----------------|--------------|-----------------|------------------|-------------------|
| | VOCs | NO _x | CO | SO _x | PM ₁₀ | PM _{2.5} |
| Site Preparation | 1.0 | 24.7 | 29.7 | <0.1 | 9.0 | 4.9 |
| Grading | 1.3 | 31.0 | 36.9 | 0.1 | 5.2 | 2.6 |
| Paving | 2.0 | 8.7 | 11.6 | <0.1 | 0.6 | 0.4 |
| Architectural Coating | 7.6 | 1.1 | 1.0 | <0.1 | 0.1 | 0.1 |
| Maximum (lbs/day) | 7.6 | 31.0 | 36.9 | 0.1 | 9.0 | 4.9 |
| SCAQMD Thresholds | 75.0 | 100.0 | 550.0 | 150.0 | 150.0 | 55.0 |
| Exceeds Threshold? | No | No | No | No | No | No |

Source: LSA, 2024a (EIR Appendix B)

Notes: Some values may not appear to be added correctly due to rounding.

Acronyms: CO = carbon monoxide, lbs/day = pounds per day, NO_x = nitrogen oxides, PM_{2.5} = particulate matter less than 2.5 microns in size, PM₁₀ = particulate matter less than 10 microns in size, SCAQMD = South Coast Air Quality Management District, SO_x = sulfur oxides, VOCs = volatile organic compounds.

Operation

Less-than-Significant Impact. 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 landscaping, applications of architectural coatings, and consumer products. Operation of the Proposed Project would include emissions from vehicles traveling to the Project site and from vehicles in the parking lot. The Proposed Project would result in an increase of 3.8 miles traveled on average for trucks accessing the Project site over existing conditions, which would result in increased truck emissions. As shown in Table 5.2-7, the Proposed

Project's operational activities would not exceed the numerical thresholds of significance established by the SCAQMD for emissions of any criteria pollutants and impacts would be less than significant.

Table 5.2-7: Summary of Peak Operational Emissions

| Emission Type | Pollutant Emissions (lbs/day) | | | | | |
|--------------------------------|-------------------------------|-----------------|--------------|-----------------|------------------|-------------------|
| | VOCs | NO _x | CO | SO _x | PM ₁₀ | PM _{2.5} |
| Mobile Sources | 1.4 | 51.7 | 27.6 | 0.2 | 6.8 | 2.1 |
| Area Sources | 0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
| Energy Sources | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Off-Road Sources | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Project Emissions | 1.5 | 51.7 | 27.6 | 0.2 | 6.8 | 2.1 |
| SCAQMD Thresholds | 55.0 | 55.0 | 550.0 | 150.0 | 150.0 | 55.0 |
| Exceeds Threshold? | No | No | No | No | No | No |

Source: LSA, 2024a (EIR Appendix B)

Notes: Some values may not appear to be added correctly due to rounding.

Acronyms: CO = carbon monoxide, lbs/day = pounds per day, NO_x = nitrogen oxides, PM_{2.5} = particulate matter less than 2.5 microns in size, PM₁₀ = particulate matter less than 10 microns in size, SCAQMD = South Coast Air Quality Management District, SO_x = sulfur oxides, VOCs = volatile organic compounds.

IMPACT AQ-3: WOULD THE PROJECT EXPOSE SENSITIVE RECEPTORS, WHICH ARE LOCATED WITHIN ONE (1) MILE OF THE PROJECT SITE, TO SUBSTANTIAL POLLUTANT CONCENTRATIONS?

CO Hotspots

Less-than-Significant Impact. An adverse CO concentration, known as a “hot spot,” would occur if an exceedance of the State’s 1-hour standard of 20 ppm or the 8-hour standard of 9 ppm were to occur. The 2003 AQMP estimated traffic volumes that could generate CO concentrations to result in a “hot spot”. As shown on Table 5.2-8, the busiest intersection had a daily traffic volume of approximately 100,000 vehicles per day, and the 1-hour CO concentration was 4.6 ppm. This indicates that, even with a traffic volume of 400,000 vehicles per day, CO concentrations (4.6 ppm x 4= 18.4 ppm) would still not exceed the most stringent 1-hour CO standard (20.0 ppm).²

Table 5.2-8: Traffic Volumes for Intersections Evaluated in 2003 AQMP

| Intersection Location | Peak Traffic Volumes (vph) | | | | |
|-----------------------|----------------------------|--------------------------|---------------------------|---------------------------|----------------------|
| | Eastbound (a.m./p.m.) | Westbound (a.m./p.m.) | Southbound (a.m./p.m.) | Northbound (a.m./p.m.) | Total (a.m./p.m.) |
| Wilshire-Veteran | 4,954/2,069 | 1,830/3,317 | 721/1,400 | 560/933 | 8,062/7,719 |
| Sunset-Highland | 1,417/1,764 | 1,342/1,540 | 2,304/1,832 | 1,551/2,238 | 6,614/5,374 |
| La Cienega-Century | 2,540/2,243 | 1,890/2,728 | 1,384/2,029 | 821/1,674 | 6,634/8,674 |
| Long Beach-Imperial | 1,217/2,020 | 1,760/1,400 | 479/944 | 756/1,150 | 4,212/5,514 |

Source: SCAQMD, 2003

Acronyms: vph = vehicles per hour

Operation of the Proposed Project in the horizon year would result in a total of 225 trips during the AM peak hour through area intersections and a total of 100 trips in the PM peak hour through area intersections.

² Based on the ratio of the CO standard (20.0 ppm) and the modeled value (4.6 ppm).

These trips distributed throughout the vicinity of the Proposed Project would not result in increases in daily traffic volumes of 100,000 vehicles per day or more, even with converting truck trips to passenger car equivalent volumes. As such, Proposed Project-related traffic volumes are less than the traffic volumes identified in the 2003 AQMP; and are not high enough to generate a CO “hot spot”. Therefore, impacts related to CO “hot spots” from operation of the Proposed Project would be less than significant.

Localized Construction Air Quality Impacts

Less-than-Significant Impact. As discussed previously, the daily construction emissions generated onsite by the Proposed Project are evaluated against SCAQMD’s LSTs for a 3.5-acre site to determine whether the emissions would cause or contribute to adverse localized air quality impacts. Consistent with SCAQMD guidance, this analysis only analyzes on-site emissions and does not analyze offsite emissions sources in comparison to LSTs.

The appropriate SRA for the LST analysis is the South Coastal LA County SRA (SRA 4). The nearest sensitive receptor used for evaluation of localized impacts is the existing residences located approximately 1,366 feet (416 meters) southwest of the Proposed Project site. Table 5.2-9 identifies daily localized on-site emissions that are estimated to occur during construction of the Proposed Project. As shown, emissions during the peak construction activity would not exceed the SCAQMD’s localized significance thresholds under this scenario, and impacts would be less than significant.

Table 5.2-9: Localized Significance Emissions Peak Construction

| Source | NO _x | CO | PM ₁₀ | PM _{2.5} |
|-------------------------------------|-----------------|-----------|------------------|-------------------|
| On-Site Project Emissions (lbs/day) | 30.3 | 35.3 | 8.6 | 4.8 |
| Localized Significance Threshold | 153.0 | 7,630.0 | 152.0 | 89.0 |
| Exceeds Threshold? | No | No | No | No |

Source: LSA, 2024a (EIR Appendix B).

Notes: Source Receptor Area 4, based on a 3.5-acre construction disturbance daily area, at a distance of 416 meters from the Project boundary.

Acronyms: CO = carbon monoxide, lbs/day = pounds per day, NO_x = nitrogen oxides, PM_{2.5} = trip matter less than 2.5 microns in size, PM₁₀ = particulate matter less than 10 microns in size.

Localized Operational Air Quality Impacts

Less-than-Significant Impact. As shown on Table 5.2-10, emissions from operation of the Proposed Project would not exceed the SCAQMD’s localized significance thresholds for any criteria pollutant at the nearest sensitive receptor. Therefore, implementation of the Proposed Project would result in a less-than-significant impact related to localized operational emissions.

Table 5.2-10: Localized Significance Emissions from Project Operation

| Source | NO _x | CO | PM ₁₀ | PM _{2.5} |
|-------------------------------------|-----------------|-----------|------------------|-------------------|
| On-Site Project Emissions (lbs/day) | 2.6 | 1.4 | 0.3 | 0.1 |
| Localized Significance Threshold | 168.0 | 8,514.0 | 39.0 | 24.0 |
| Exceeds Threshold? | No | No | No | No |

Source: LSA, 2024a (EIR Appendix B).

Notes: Source Receptor Area 4, based on a 5-acre LSTs from SCAQMD lookup table, at a distance of 416 meters from the Project boundary.

Acronyms: CO= carbon monoxide, lbs/day = pounds per day, NO_x = nitrogen oxides, PM_{2.5} = particulate matter less than 2.5 microns in size, PM₁₀ = particulate matter less than 10 microns in size.

Friant Ranch Case

The potential health impacts of criteria pollutants are analyzed on a regional level, not on a facility/project level. The SCAQMD and the San Joaquin Valley Unified Air Pollution Control District (SJVAPD), 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. 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. The SJVAPD, 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 SJVAPD 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 SJVAPD 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.

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

As noted in the *Brief of Amicus Curiae* by the SCAQMD in the Friant Ranch case (April 6, 2015, Appendix 10.1), SCAQMD 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 SCAQMD 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, SCAQMD staff does not currently know of a way to accurately quantify ozone-related health impacts caused by NO_x 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.

On the other hand, for extremely large regional projects (unlike the Proposed Project), the SCAQMD 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 lbs/day of NO_x and 89,180 lbs/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 lbs/day of NO_x or 89,180 lbs/day of VOC emissions. As shown previously on Tables 5.2-6 and 5.2-7:

The Proposed Project would generate up to 31.0 lbs/day of NO_x during construction and 51.7 lbs/day of NO_x during operations (0.47% and 0.78% of 6,620 lbs/day, respectively). The VOC emissions would be a maximum of 7.6 lbs/day during construction and 1.5 lbs/day during operations (0.009% and 0.002% of 89,180 lbs/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, NO_x, PM₁₀, and PM_{2.5} by comparing the on-site emissions to the SCAQMD's applicable LST thresholds. In addition, a Mobile Source Health Risk Assessment was prepared, which is discussed below. As described previously, the Proposed Project would not result in emissions that exceeded the SCAQMD'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, NO_x, PM₁₀, and PM_{2.5}.

Construction Diesel Mobile Source Health Risk

Less-than-Significant Impact. Construction of the Proposed Project may expose surrounding sensitive receptors to DPM; however, the closest sensitive receptors are over 1,500 feet from the Project site. As shown in Table 5.2-11, at the maximum individual cancer risk (MICR) attributable to Project construction-source DPM emissions is estimated at 0.13 in one million, which is less than the SCAQMD significance threshold of 10 in one million. At this same location, non-cancer risks were estimated to be <0.001, which would not exceed the applicable threshold of 1.0. Because all other modeled receptors would experience lower concentrations of DPM during Project construction, all other receptors in the vicinity of the Project would be exposed to less emissions and therefore less risk than the MEIR identified herein. As such, the Project will not cause a significant human health or cancer risk to adjacent land uses as a result of Project construction activity. All other receptors during construction activity would experience less risk than what is identified for this location. Therefore, construction of the Proposed Project would result in less-than-significant health risk impacts.

Table 5.2-11: Health Risks from Project Construction

| Location | Carcinogenic Inhalation Health Risk in One Million | Chronic Inhalation Hazard Index | Acute Inhalation Hazard Index |
|--------------------------------------|--|---------------------------------|-------------------------------|
| Residential Receptor Risk | 0.13 | <0.001 | 0.000 |
| Worker Receptor Risk | 0.06 | 0.004 | 0.000 |
| SCAQMD Significance Threshold | 10.0 in one million | 1.0 | 1.0 |
| Significant? | No | No | No |

Source: LSA, 2024a (EIR Appendix B)

Operational Diesel Mobile Source Health Risk

Less-than-Significant Impact. A Health Risk Assessment (HRA), included in EIR Appendix B, was prepared to evaluate the health risk impacts as a result of exposure to DPM as a result of heavy-duty diesel trucks

traveling to and from the site, maneuvering onsite, and entering and leaving the site during operation of the Proposed Project.

The location of onsite and offsite truck activity during operational activities is shown on Figure 5.2-2. On-site truck idling was estimated to occur as trucks enter and travel through the parking lot. Although the proposed uses are required to comply with CARB's idling limit of 5 minutes, SCAQMD recommends that the on-site idling emissions should be estimated for 15 minutes of truck idling, which takes into account on-site idling that occurs while the trucks are waiting to pull into parking spaces, idling at the spaces, idling at check-in and check-out, etc. As such, this analysis estimated truck idling at 15 minutes, consistent with SCAQMD's recommendation.

SCAQMD recommends using a 10 in one million is used as the cancer risk threshold. A risk level of 10 in one million implies a likelihood that up to 10 people, out of one million equally exposed people would contract cancer if exposed continuously (24 hours per day) to the levels of toxic air contaminants over a specified duration of time. Table 5.2-12 provides a summary of the HRA modeling of cancer risks and chronic non-cancer hazards resulting from the Proposed Project's operational DPM emissions along with the SCAQMD health risk significance thresholds. As shown, the estimated maximum cancer risk for a sensitive receptor is 7.84 in one million at the residential sensitive receptor approximately 1,589 feet south of the Project site. The chronic hazard index would be 0.003 for the residential receptor maximally exposed individual receptor (MEIR), which is below the threshold of 1.0. In addition, the acute hazard index would be less than 0.001, which would also not exceed the threshold of 1.0. Although this location is not the nearest receptor to the Project site, it is the location that would experience the highest concentrations of DPM during Proposed Project operation due to meteorological conditions at the site. The closest worker receptor is the Ports of America insurance company located immediately west of the Project site at a distance of approximately 25 feet. At the maximally exposed individual worker receptor, the estimated cancer risk is 5.08 in one million, which is below the 10 in one million threshold. In addition, the chronic hazard index would be 0.002, which is below the threshold of 1.0, and the acute hazard index would be less than 0.001, which would also not exceed the threshold of 1.0. All other receptors would experience lower concentrations of DPM and thus less risk during operation of the Proposed Project than the MEIR identified herein. Therefore, operation of the Proposed Project would result in less-than-significant impacts.

Table 5.2-12: Health Risks from Project Operations

| Location | Carcinogenic Inhalation Health Risk in One Million | Chronic Inhalation Hazard Index | Acute Inhalation Hazard Index |
|--------------------------------------|--|---------------------------------|-------------------------------|
| Residential Receptor Risk | 7.84 | 0.003 | <0.001 |
| Worker Receptor Risk | 5.08 | 0.002 | <0.001 |
| SCAQMD Significance Threshold | 10.0 in one million | 1.0 | 1.0 |
| Significant? | No | No | No |

Source: LSA, 2024a (EIR Appendix B)

Population-Wide Risks (Cancer Burden)

As incremental individual cancer risk from the Project would exceed the SCAQMD regulatory threshold of an incremental increase of 1 in one million, an estimated determination of population level risks is required. Cancer risk was evaluated for a 30-year residential scenario and estimated at the geographical center of census tracts within the study area of the HRA and multiplied by the corresponding population number. As shown in Table 5.2-13, the cancer burden is estimated to be 0.025 individuals that were estimated to have a cancer risk of 1 in one million or more. Therefore, the proposed Project would not exceed SCAQMD's cancer burden significance threshold of 0.5.

Table 5.2-13: Project Cancer Burden

| Scenario | Cancer Burden |
|--------------------------------------|----------------------|
| Total Excess Cancer Burden | 0.025 |
| SCAQMD Significance Threshold | 0.5 |
| Significant? | No |

Source: LSA, 2024a (EIR Appendix B)

5.2.7 CUMULATIVE IMPACTS

As described previously, per SCAQMD's methodology, if an individual project would result in air emissions of criteria pollutants that exceeds the SCAQMD's thresholds for project-specific impacts, then it would also result in a cumulatively considerable net increase of these criteria pollutants.

As described in Impacts AQ-2 and AQ-3 above, emissions from construction and operation of the Proposed Project would not exceed SCAQMD's thresholds for any criteria pollutant at the regional or local level after implementation of existing regulations. Therefore, construction and operational-source emissions would not be cumulatively considerable.

5.2.8 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Compliance with existing regulations ensures Impacts AQ-1, AQ-2, and AQ-3 would be less than significant.

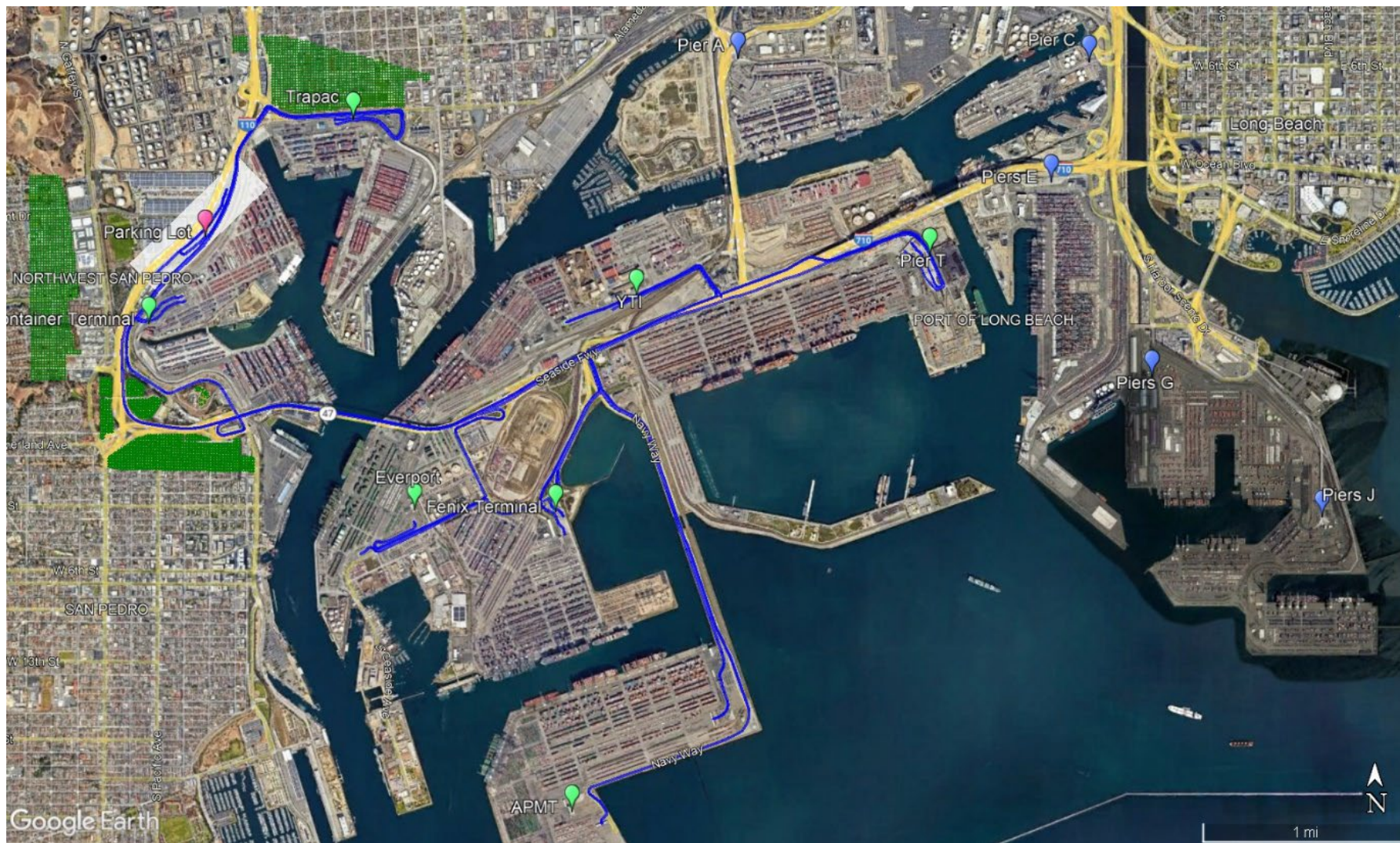
5.2.9 MITIGATION MEASURES

None required.

5.2.10 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Compliance with existing regulatory requirements ensures impacts related to air quality would be less than significant. No significant and unavoidable air quality impacts would occur.

Operational Truck Emission Sources



- Truck Travel Route
- Sensitive Receptors
- Project Site

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5.2.11 REFERENCES

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