

5.7 Greenhouse Gases

5.7.1 INTRODUCTION

This section evaluates greenhouse gas (GHG) emissions associated with the Proposed Project and its contribution to global climate change. Specifically, this section evaluates the extent to which GHG emissions from the Proposed Project contribute to elevated levels of GHGs in the Earth's atmosphere and consequently contributes to climate change. This section also addresses the Proposed Project's consistency with applicable plans, policies, and public agency regulations adopted for the purpose of reducing the emissions of GHGs. The analysis within this section is based on the following Los Angeles Harbor Department documents and technical reports:

- *Port Master Plan*, Port of Los Angeles, 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

5.7.2 REGULATORY SETTING

5.7.2.1 State Regulations

California Assembly Bill 1493 – Pavley

In 2002, the California Legislature adopted AB 1493 requiring the adoption of regulations to reduce GHG emissions in the transportation sector. In September 2004, pursuant to AB 1493, the CARB approved regulations to reduce GHG emissions from new motor vehicles beginning with the 2009 model year (Pavley Regulations). In September 2009, CARB adopted amendments to the Pavley Regulations to reduce GHG from 2009 to 2016. CARB, EPA, and the U.S. Department of Transportation's National Highway Traffic and Safety Administration (NHTSA) have coordinated efforts to develop fuel economy and GHG standards for model 2017-2025 vehicles. The GHG standards are incorporated into the "Low Emission Vehicle" (LEV) Regulations.

California Executive Order S-3-05 – Statewide Emission Reduction Targets

Executive Order S-3-05 was signed by Governor Arnold Schwarzenegger in June 2005. Executive Order S-3-05 establishes statewide emission reduction targets through the year 2050:

- By 2010, reduce GHG emissions to 2000 levels;
- By 2020, reduce GHG emissions to 1990 levels; and
- By 2050, reduce GHG emissions to 80 percent below 1990 levels.

Assembly Bill 1279

Assembly Bill (AB) 1279 requires the state to achieve net zero GHG emissions as soon as possible, but no later than 2045, and achieve and maintain net negative greenhouse gas emissions thereafter. The bill also requires California to reduce statewide GHG emissions by 85 percent compared to 1990 levels and directs the California Air Resources Board to work with relevant state agencies to achieve these goals.

California Assembly Bill 32 (AB 32), Global Warming Solutions Act of 2006 (Chapter 488, Statutes of 2006)

In 2006, the Legislature passed the California Global Warming Solutions Act of 2006 [Assembly Bill 32 (AB 32)], which created a comprehensive, multi-year program to reduce GHG emissions in California. AB 32 required the California Air Resources Board (CARB or Board) to develop a Scoping Plan that describes the approach California will take to reduce GHGs to achieve the goal of reducing emissions to 1990 levels by 2020. The Scoping Plan was first approved by the Board in 2008 and must be updated at least every five years. Since 2008, there have been two updates to the Scoping Plan. Each of the Scoping Plans have included a suite of policies to help the State achieve its GHG targets, in large part leveraging existing programs whose primary goal is to reduce harmful air pollution. The 2017 Scoping Plan identifies how the State can reach the 2030 climate target to reduce GHG emissions by 40 percent from 1990 levels, and substantially advance toward the 2050 climate goal to reduce GHG emissions by 80 percent below 1990 levels.

The AB 32 Scoping Plan also anticipates that local government actions will result in reduced GHG emissions because local governments have the primary authority to plan, zone, approve, and permit development to accommodate population growth and the changing needs of their jurisdictions. The Scoping Plan also relies on the requirements of Senate Bill 375 (discussed below) to align local land use and transportation planning for achieving GHG reductions.

The Scoping Plan must be updated every five years to evaluate AB 32 policies and ensure that California is on track to achieve the GHG reduction goals. On December 15, 2022, CARB adopted the 2022 Scoping Plan. The 2022 Scoping Plan builds on the previous Scoping Plans as well as the requirements set forth by AB 1279, which directs the state to become carbon neutral no later than 2045. To achieve this statutory objective, the 2022 Scoping Plan lays out how California can reduce GHG emissions by 85% below 1990 levels and achieve carbon neutrality by 2045. The Scoping Plan scenario to do this is to “deploy a broad portfolio of existing and emerging fossil fuel alternatives and clean technologies, and align with statutes, Executive Orders, Board direction, and direction from the governor.” The 2022 Scoping Plan sets one of the most aggressive approaches to reach carbon neutrality in the world.

Senate Bill 375 (Chapter 728, Statutes of 2008)

In August 2008, the Legislature passed, and on September 30, 2008, Governor Schwarzenegger signed SB 375, which addresses GHG emissions associated with the transportation sector through regional transportation and sustainability plans. Regional GHG reduction targets for the automobile and light-truck sector for 2020 and 2035, as determined by CARB, are required to consider the emission reductions associated with vehicle emission standards (see SB 1493), the composition of fuels (see Executive Order S-1-07), and other CARB-approved measures to reduce GHG emissions. Regional metropolitan planning organizations (MPOs) will be responsible for preparing a Sustainable Communities Strategy (SCS) within their Regional Transportation Plan (RTP). The goal of the SCS is to establish a development plan for the region, which, after considering transportation measures and policies, will achieve, if feasible, the GHG reduction targets. If an SCS is unable to achieve the GHG reduction target, an MPO must prepare an Alternative Planning Strategy demonstrating how the GHG reduction target would be achieved through alternative development patterns, infrastructure, or additional transportation measures or policies. SB 375 provides incentives for streamlining CEQA requirements by substantially reducing the requirements for “transit priority projects,” as specified in SB 375, and eliminating the analysis of the impacts of certain residential projects on global warming and the growth-inducing impacts of those projects when the projects are consistent with the SCS or Alternative Planning Strategy. On September 23, 2010, CARB adopted the SB 375 targets for the regional MPOs.

Executive Order B-30-15 – 2030 Statewide Emission Reduction Target

Executive Order B-30-15 was signed by Governor Jerry Brown on April 29, 2015, establishing an interim statewide GHG reduction target of 40 percent below 1990 levels by 2030, which is necessary to guide regulatory policy and investments in California in the midterm, and put California on the most cost-effective path for long-term emission reductions. Under this Executive Order, all state agencies with jurisdiction over sources of GHG emissions are required to continue to develop and implement emissions reduction programs to reach the state's 2050 target and attain a level of emissions necessary to avoid dangerous climate change. According to the Governor's Office, this Executive Order is in line with the scientifically established levels needed in the United States to limit global warming below 2 degrees Celsius – the warming threshold at which scientists say there will likely be major climate disruptions such as super droughts and rising sea levels.

Senate Bill 32 (Chapter 249, Statutes of 2016)

Senate Bill 32 was signed on September 8, 2016, by Governor Jerry Brown. SB 32 requires the state to reduce statewide GHG emissions to 40 percent below 1990 levels by 2030, a reduction target that was first introduced in Executive Order B-30-15. The new legislation builds upon the AB 32 goal of 1990 levels by 2020 and provides an intermediate goal to achieving S-3-05, which sets a statewide GHG reduction target of 80 percent below 1990 levels by 2050. A related bill that was also approved in 2016, AB 197 (Chapter 250, Statutes of 2016) creates a legislative committee to oversee regulators to ensure that CARB is not only responsive to the Governor, but also the Legislature.

AB 398 – Extension of Cap and Trade Program to 2030 (Chapter 617, Statutes of 2017)

AB 398 was signed by Governor Brown on July 25, 2017, and became effective immediately as urgency legislation. AB 398, among other things, extended the cap and trade program through 2030.

Senate Bill 97 (Chapter 185, Statutes of 2007)

SB 97 (Health and Safety Code Section 21083.5) was adopted in 2007 and required the Office of Planning and Research to prepare amendments to the State CEQA Guidelines for the mitigation of GHG impacts. The amendments became effective on March 18, 2010. The CEQA Amendments provide guidance to public agencies regarding the analysis and mitigation of the effects of GHG emissions in CEQA documents. A new section, State CEQA Guidelines Section 15064.4, was added to assist agencies in determining the significance of GHG emissions. The CEQA Section gives discretion to the lead agency whether to: (1) use a model of methodology to quantify GHG emissions resulting from a project, and which model or methodology to use; or (2) rely on a qualitative analysis or performance-based standards. CEQA does not provide guidance to determine whether the project's estimated GHG emissions are significant or cumulatively considerable.

Also amended were State CEQA Guidelines Sections 15126.4 and 15130, which address mitigation measures and cumulative impacts respectively. However, GHG mitigation measures are referenced in general terms, and no specific measures are identified. Additionally, the revision to the cumulative impact discussion requirement (Section 15130) simply directs agencies to analyze GHG emissions in an EIR when a project's incremental contribution of emissions may be cumulatively considerable, however it does not answer the question of when emissions are cumulatively considerable.

Section 15183.5 permits programmatic GHG analysis and later project-specific tiering, as well as the preparation of Greenhouse Gas Reduction Plans. Compliance with such plans can support a determination that a project's cumulative effect is not cumulatively considerable, according to proposed Section 15183.5(b).

CARB Advanced Clean Truck Regulation

CARB adopted the Advanced Clean Truck Regulation in June 2020 requiring truck manufacturers to transition from diesel trucks and vans to electric zero-emission trucks beginning in 2024. By 2045, every new truck sold in California is required to be zero-emission. This rule directly addresses disproportionate risks and health and pollution burdens and puts California on the path for an all zero-emission short-haul drayage fleet in ports and railyards by 2035, and zero-emission “last-mile” delivery trucks and vans by 2040. The Advanced Clean Truck Regulation accelerates the transition of zero-emission medium-and heavy-duty vehicles from Class 2b to Class 8. The regulation has two components including a manufacturer sales requirement, and a reporting requirement:

- **Zero-Emission Truck Sales:** Manufacturers who certify Class 2b through 8 chassis or complete vehicles with combustion engines are required to sell zero-emission trucks as an increasing percentage of their annual California sales from 2024 to 2035. By 2035, zero-emission truck/chassis sales need to be 55 percent of Class 2b – 3 truck sales, 75 percent of Class 4 – 8 straight truck sales, and 40 percent of truck tractor sales.
- **Company and Fleet Reporting:** Large employers including retailers, manufacturers, brokers, and others would be required to report information about shipments and shuttle services. Fleet owners, with 50 or more trucks, would be required to report about their existing fleet operations. This information would help identify future strategies to ensure that fleets purchase available zero-emission trucks and place them in service where suitable to meet their needs.

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) which became effective on January 1, 2023. The 2022 CALGreen standards that reduce GHG 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 percent 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 percent 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 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 (MWEL0), 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.

5.7.2.2 Local Regulations

City of Los Angeles Green New Deal 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 Sustainable City pLAN of the City of Los Angeles (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.

City of Los Angeles General Plan

The City of Los General Plan Health, Wellness, and Equity (HWE) Element (HWE) Element (City of Los Angeles, 2021) and Air Quality (AQ) Element (City of Los Angeles, 1992) contain the following policies related to GHG emissions that are applicable to the Proposed Project:

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 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.
- 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 4.2.5** Emphasize trip reduction, alternative transit, and congestion management measures for discretionary projects.
- 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.

5.7.3 ENVIRONMENTAL SETTING

Gases that trap heat in the atmosphere are called GHGs. The major concern with GHGs is that increases in their concentrations are contributing to global climate change. Global climate change is a change in the average weather on Earth that can be measured by wind patterns, storms, precipitation, and temperature. Although there is disagreement as to the rate of global climate change and the extent of the impacts attributable to human activities, most in the scientific community agree that there is a direct link between increased emissions of GHGs and long-term global temperature increases.

The principal GHGs are carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), sulfur hexafluoride (SF₆), perfluorocarbons (PFCs), and hydrofluorocarbons (HFCs). Because different GHGs have different warming potential, and CO₂ is the most common reference gas for climate change, GHG emissions are often quantified and reported as CO₂ equivalents (CO₂e). For example, SF₆ is a GHG commonly used in the utility industry as an insulating gas in circuit breakers and other electronic equipment. SF₆, while comprising a small fraction of the total GHGs emitted annually world-wide, is a much more potent GHG, with 22,800 times the global warming potential as CO₂. Therefore, an emission of one metric ton (MT) of SF₆ could be reported as an emission of 22,800 MT of CO₂e. The principal GHGs are described below, along with their global warming potential.

Carbon dioxide: Carbon dioxide (CO₂) is an odorless, colorless, natural GHG. Carbon dioxide's global warming potential is 1. Natural sources include decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic outgassing. Anthropogenic (manmade) sources are from burning coal, oil, natural gas, and wood.

Methane: Methane (CH₄) is a flammable gas and is the main component of natural gas. It has a lifetime of 12 years, and its global warming potential is 28. Methane is extracted from geological deposits (natural gas fields). Other sources are landfills, fermentation of manure, and decay of organic matter.

Nitrous oxide: Nitrous oxide (N₂O) (laughing gas) is a colorless GHG that has a lifetime of 121 years, and its global warming potential is 265. Sources include microbial processes in soil and water, fuel combustion, and industrial processes.

Sulfur hexafluoride: Sulfur hexafluoride (SF₆) is an inorganic, odorless, colorless, and nontoxic, nonflammable gas that has a lifetime of 3,200 years and a high global warming potential of 23,500. This gas is manmade and used for insulation in electric power transmission equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas.

Perfluorocarbons: Perfluorocarbons (PFCs) have stable molecular structures and only break down by ultraviolet rays about 60 kilometers above Earth's surface. Because of this, they have long lifetimes, between 10,000 and 50,000 years. Their global warming potential ranges from 7,000 to 11,000. Two main sources of perfluorocarbons are primary aluminum production and semiconductor manufacturing.

Hydrofluorocarbons: Hydrofluorocarbons (HFCs) are a group of GHGs containing carbon, chlorine, and at least one hydrogen atom. Their global warming potential ranges from 100 to 12,000. Hydrofluorocarbons are synthetic manmade chemicals used as a substitute for chlorofluorocarbons in applications such as automobile air conditioners and refrigerants.

Some of the potential effects in California of global warming may include loss in snowpack, sea level rise, more extreme heat days per year, more high ozone days, more forest fires, and more drought years. Globally, climate change has the potential to impact numerous environmental resources through potential, though uncertain, impacts related to future air temperatures and precipitation patterns. The projected effects of global warming on weather and climate are likely to vary regionally, but are expected to include the following direct effects:

- Higher maximum temperatures and more hot days over nearly all land areas;
- Higher minimum temperatures, fewer cold days and frost days over nearly all land areas;
- Reduced diurnal temperature range over most land areas;
- Increase of heat index over land areas; and
- More intense precipitation events.

There are also many secondary effects that are projected to result from global warming, including global rise in sea level, impacts to agriculture, changes in disease vectors, and changes in habitat and biodiversity. While the possible outcomes and the feedback mechanisms involved are not fully understood and much research remains to be done, the potential for substantial environmental, social, and economic consequences over the long term may be great.

GHGs are produced by both direct and indirect emissions sources. Direct emissions include consumption of natural gas, heating and cooling of buildings, landscaping activities and other equipment used directly by land uses. Indirect emissions include the consumption of fossil fuels for vehicle trips, electricity generation, water usage, and solid waste disposal.

Existing Conditions

The Project site is currently vacant but disturbed from previous development. The Project site is bounded by Interstate 110 (I-110) to the north and west, John S. Gibson Boulevard to the east, and existing container terminals to the south. Facilities near the Project area include Berths 121 – 131, which consists of container

terminals. The Project site is adjacent to and north of a commercial office building (2001 John S. Gibson Boulevard #1) and the Harbor Community Police Station (2175 John S. Gibson Boulevard). The Project site has a Port of Los Angeles Master Plan Land Use designation of Open Space. APNs 7440-016-001, 7440-016-002, and 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).

In 2021, GHG emissions from the Port of Los Angeles totaled 1,253,229 metric tons of carbon dioxide equivalent (MTCO_{2e}) (Starcrest Consulting Group, LLC, 2022). The primary GHG emissions in the Port of Los Angeles are from trucks, which account for 40 percent of total port-wide GHG emissions.

5.7.4 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:

- GHG-1 Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or
- GHG-2 Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHGs.

State CEQA Guidelines Section 15064.4 provides discretion to the lead agency whether to: (1) use a model of methodology to quantify GHG emissions resulting from a project, and which model or methodology to use; or (2) rely on a qualitative analysis or performance-based standards. In addition, CEQA does not provide guidance to determine whether the project's estimated GHG emissions are significant, but recommends that lead agencies consider several factors that may be used in the determination of significance of project related GHG emissions, including:

- The extent to which the project may increase or reduce GHG emissions as compared to the existing environmental setting.
- Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
- The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions.

State CEQA Guidelines Section 15130(f) describes that the effects of GHG emissions are by their very nature cumulative and should be analyzed in the context of CEQA's requirements for cumulative impact analysis. Additionally, State CEQA Guidelines Section 15064(h)3 states that a project's incremental contribution to a cumulative impact can be found not cumulatively considerable if the project would comply with an approved plan or mitigation program that provides requirements to avoid or lesson the cumulative problem.

The South Coast Air Quality Management District (SCAQMD) formed a working group to identify GHG emissions thresholds for land use projects that could be used by local lead agencies in the Basin in 2008. The working group developed several different options that are contained in the SCAQMD Draft Guidance Document – Interim CEQA Greenhouse Gas Significance Threshold (SCAQMD, 2008), that could be applied by lead agencies, which includes the following tiered approach:

- Tier 1 consists of evaluating whether or not the project qualifies for any applicable exemption under CEQA.

- Tier 2 consists of determining whether the project is consistent with a GHG reduction plan. If a project is consistent with a qualifying local GHG reduction plan, it does not have significant GHG emissions.
- Tier 3 consists of screening values, which the lead agency can choose, but must be consistent with all projects within its jurisdiction. A project's construction emissions are averaged over 30 years and are added to the project's operational emissions. If a project's emissions are below one of the following screening thresholds, then the project is less than significant:
 - All land use types: 3,000 MTCO_{2e} per year
 - Based on land use type:
 - Residential: 3,500 MTCO_{2e} per year
 - Commercial: 1,400 MTCO_{2e} per year
 - Mixed use: 3,000 MTCO_{2e} per year
 - Industrial: 10,000 MTCO_{2e} per year
- Tier 4 has the following options:
 - Option 1: Reduce business as usual emissions by a certain percentage; this percentage is currently undefined.
 - Option 2: Early implementation of applicable AB 32 Scoping Plan measures.
 - Option 3, 2020 Target: For service populations (SP), including residents and employees, 4.8 MTCO_{2e}/SP/year for projects and 6.6 MTCO_{2e}/SP/year for plans.
 - Option 3, 2035 Target: 3.0 MTCO_{2e}/SP/year for projects and 4.1 MTCO_{2e}/SP/year for plans.

The SCAQMD's interim thresholds used the Executive Order S-3-05-year 2050 goal as the basis for the Tier 3 screening level. Achieving the Executive Order's objective would contribute to worldwide efforts to cap CO₂ concentrations at 450 ppm, thus stabilizing global climate.

The thresholds identified above have not been adopted by the SCAQMD or distributed for widespread public review and comment, and the working group tasked with developing the thresholds has not met since September 2010. The future schedule and likelihood of threshold adoption is uncertain. If the CARB adopts statewide significance thresholds, SCAQMD staff plan to report back to the SCAQMD Governing Board regarding any recommended changes or additions to the SCAQMD's interim threshold.

In the absence of other thresholds of significance promulgated by the SCAQMD, the LAHD has been using the SCAQMD's 10,000 MTCO_{2e} threshold for industrial projects for the purpose of evaluating the GHG impacts associated with proposed projects. Other lead agencies through the Basin have also been using these adopted and draft thresholds. The LAHD's evaluation of impacts under the 10,000 MTCO_{2e}/year threshold is also considered to be conservative since it is being applied to all of the GHG emissions generated by the Proposed Project (i.e., area sources, energy sources, vehicular sources, solid waste sources, and water sources) whereas the SCAQMD's 10,000 MTCO_{2e}/year threshold applies only to the new stationary sources generated at industrial facilities.

Thus, for purposes of this analysis, if Project-related GHG emissions do not exceed the 10,000 MTCO_{2e}/year threshold, then Project-related GHG emissions would clearly have a less-than-significant impact pursuant to Threshold GHG-1. On the other hand, if Project-related GHG emissions exceed 10,000 MTCO_{2e}/year, the Proposed Project would be considered a substantial source of GHG emissions.

5.7.5 METHODOLOGY

The California Emissions Estimator Model (CalEEMod) v2022.1 has been used to determine construction and operational GHG emissions for buildout of the Proposed Project, based on the maximum development assumptions outlined in Section 3.0, *Project Description*.

The purpose of this model is to calculate construction-source and operational-source GHG emissions from direct and indirect sources; and quantify applicable air quality and GHG reductions achieved from measures incorporated into the Project to reduce or minimize GHG emissions. For construction phase Project emissions, GHGs are quantified and, per SCAQMD methodology, the total GHG emissions for construction activities are divided by 30-years, and then added to the annual operational phase of GHG emissions.

In addition, CEQA requires the lead agency consider the extent to which the Proposed Project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions. Therefore, this section addresses whether the Project complies with various programs and measures designed to reduce GHG emissions. There is no Statewide program or regional program or plan that has been adopted with which all new development must comply; thus, this analysis has identified the strategies most relevant to the POLA and the Proposed Project.

5.7.6 ENVIRONMENTAL IMPACTS

IMPACT GHG-1: WOULD THE PROJECT GENERATE GREENHOUSE GAS EMISSIONS, EITHER DIRECTLY OR INDIRECTLY, IN A WAY THAT WOULD HAVE A SIGNIFICANT IMPACT ON THE ENVIRONMENT?

Less-than-Significant Impact. Implementation of the Proposed Project would generate GHG emissions from construction activities, operational transportation, energy, waste disposal, and area sources (such as onsite equipment). For construction emissions, the SCAQMD recommends amortizing emissions over 30 years by calculating the total GHG emissions for the construction activities, dividing it by a 30-year project life, then adding that number to the annual operational phase GHG emissions, which is done within this analysis. Long-term operations of uses proposed by the Proposed Project would generate GHG emissions from the following primary sources:

- **Area Source Emissions.** Landscape maintenance equipment would generate emissions from fuel combustion and evaporation of unburned fuel. Equipment in this category would include lawnmowers, shredders/grinders, blowers, trimmers, chain saws, and hedge trimmers used to maintain the landscaping.
- **Energy Source Emissions.** GHGs are emitted from buildings as a result of activities for which electricity and natural gas are typically used as energy sources. Combustion of any type of fuel emits CO₂ and other GHGs directly into the atmosphere; these emissions are considered direct emissions associated with a building. GHGs are also emitted during the generation of electricity from fossil fuels; these emissions are considered to be indirect emissions.
- **Mobile Source Emissions.** The Project-related GHG emissions are derived primarily from vehicle trips generated by the Proposed Project, including employee trips to and from the site and truck trips associated with the proposed uses. In order to provide a conservative analysis, horizon year trips for the Proposed Project were modeled. As discussed in Chapter 3.0, *Project Description*, the Proposed Project would provide additional short-term truck and chassis parking space to alleviate truck traffic congestion and reduce the distance required for trucks to access shipping containers. The Proposed Project would allow trucks to avoid driving further into or from the Port to pick up or drop off chassis with containers. Trip generation rates used in CalEEMod for the Proposed Project were based on the Project's VMT Screening Memo (EIR Appendix K), which identifies that the Proposed Project would generate approximately 1,808 average daily trips, including 1,794 (PCE) one-way truck trips, 4 one-way delivery/vendor trips, and 10 passenger vehicle trips during the horizon year condition. Based on a separate VMT Analysis prepared for trucks, the total increase in VMT per day would be 6,809 over baseline POLA VMT, which is an average VMT per truck of 3.8 miles (LAHD, 2024). Therefore, this analysis would assume that each truck trip would travel 3.8 miles. However, as described further in Section 5.11, *Transportation*, truck trips associated with the Proposed Project would not necessarily be

new trips within the POLA complex, but diverted trips by trucks that are already accessing terminals within the POLA to pick up or drop off containers. Mobile emissions would also be caused by trucks maneuvering within the Project site, which is assumed to account for five percent of mobile source emissions from CalEEMod. CalEEMod assumes that all trucks would be diesel-fueled.

- **Onsite Cargo Handling Equipment Emissions.** The Proposed Project would need onsite operational equipment which would involve the use of a utility tractor rig and two forklifts. Onsite operational equipment would be zero-emission and all-electric. Electric charging infrastructure would be provided onsite, which would contribute to GHG emissions from energy sources.
- **Water Supply, Treatment, and Distribution.** Indirect GHG emissions result from the production of electricity used to convey, treat, and distribute water and wastewater. The amount of electricity required depends on the volume of water as well as the sources of the water. For purposes of analysis, water usage is based on the estimated water demand.
- **Solid Waste.** The proposed land uses would result in the generation and disposal of solid waste. A percentage of this waste would be diverted from landfills by a variety of means, such as reducing the amount of waste generated, recycling, and/or composting. The remainder of the waste not diverted would be disposed of at a landfill. GHG emissions from landfills are associated with the anaerobic breakdown of material.

The amortized construction and annual operational GHG emissions associated with the Proposed Project are summarized in Table 5.7-1. As shown, construction and operation of the Proposed Project would generate a net total of approximately 4,914.3 MTCO_{2e}/yr which would not exceed the screening threshold of 10,000 MTCO_{2e}/yr.

Table 5.7-1: Project-Generated GHG Emissions

Emissions Source	Operational Emissions (MT/yr)				
	CO ₂	CH ₄	N ₂ O	CO _{2e}	Percentage of Total
Mobile Sources	4,363.1	0.4	0.7	4,584.6	92
Area Sources	<0.1	<0.1	<0.1	<0.1	<1
Energy Sources	308.0	<0.1	<0.1	309.5	8
Water Sources	7.4	<0.1	<0.1	7.4	<1
Waste Sources	0.0	0.0	0.0	0.0	0
Off -Road Sources	0.0	0.0	0.0	0.0	0
Total Project Operational Emissions				4,901.5	100
Amortized Construction Emissions				12.8	-
Total Annual Emissions				4,914.3	-
Threshold				10,000	-
Exceed?				No	-

Source: LSA, 2024a (EIR Appendix B)

Acronyms: CH₄ = methane, CO₂ = carbon dioxide, CO_{2e} = carbon dioxide equivalent, MT/yr = metric tons per year, N₂O = nitrous oxide, SCAQMD = South Coast Air Quality Management District.

As shown in Table 5.7-1, the Proposed Project would result in approximately 4,914.3 MTCO_{2e}/yr, which would be below the SCAQMD Threshold of 10,000 MT CO_{2e}/yr. Therefore, operation of the Proposed Project would not generate significant GHG emissions that would have a significant effect on the environment. Table 5.7-1 shows that 92 percent of the GHG emissions from the Proposed Project would be generated by mobile emissions. As detailed, in Chapter 3.0, *Project Description*, the Proposed Project would provide additional short-term truck and chassis parking space to alleviate truck traffic congestion and reduce the

distance required for trucks to access shipping containers. The Proposed Project would allow trucks to avoid driving further into or from the POLA to pick up or drop off chassis with containers. As such, impacts would be less than significant.

IMPACT GHG-2: WOULD THE PROJECT CONFLICT WITH AN APPLICABLE PLAN, POLICY OR REGULATION ADOPTED FOR THE PURPOSE OF REDUCING THE EMISSIONS OF GREENHOUSE GASES?

Less-than-Significant Impact. The discussion of consistency of the Proposed Project with applicable plans, policies, and regulations adopted for the purpose of reducing GHG emissions is provided for informational purposes only. The State of California, through its Governors and Legislature, has established a comprehensive framework for the substantial reduction of GHG emissions over the next 40-plus years. Several state and local targets for reducing GHG emissions below 1990 levels have been established. Key examples include, but are not limited to:

- California Climate Strategy
- 2006 Assembly Bill (AB) 32
 - 1990 GHG emission levels by 2020
 - 40 percent below 1990 GHG emission levels by 2030
 - 80 percent below 1990 GHG emission levels by 2050
- Senate Bill (SB) 32 and 2017 CARB Scoping Plan
 - 40 percent below 1990 GHG emission levels by 2030
- Executive Order B-55-18 and 2022 CARB Scoping Plan
 - Carbon neutrality by 2045
- California Renewables Portfolio Standard
- SB 375
- Port and City of Los Angeles Plans and Strategies
- San Pedro Bay Ports CAAP
 - 40 percent below 1990 GHG emissions levels by 2030
 - 80 percent below 1990 GHG emissions levels by 2050
- City of Los Angeles C&D Waste Recycling Ordinance
- City of Los Angeles' Green New Deal Sustainable City pLAN (4-Year Update to the Sustainable City pLAN)
 - Reduce Port-related GHG emissions by 80 percent by 2050
- City of Los Angeles General Plan, Mobility Element
- City of Los Angeles Green Building Code, Title 24

While several state, regional, and local plans have been adopted which set guidelines and goals for the reduction of GHG emissions, no regulations or requirements have been adopted by relevant public agencies to implement those plans for specific projects pursuant to State CEQA Guidelines Section 15064.4(b)(3)¹.

¹ Center for Biological Diversity v. Cal. Dept. of Fish and Wildlife [Newhall Ranch] [2015] 62 Cal.4th 204, 223.

However, there are GHG emissions reduction measures and policies contained in state and local plans, strategies, policies, and regulations, such as the 2022 Scoping Plan and 2024 SCAG RTP/SCS, that directly or indirectly affect the Proposed Project's construction and operational emissions. As described previously, the Proposed Project would provide goods movement efficiencies that reduce generation of GHG emissions and is consistent with applicable GHG emissions reduction strategies. A summary of Proposed Project compliance with specific applicable GHG emissions reduction measures is included in Table 5.7-2.

Table 5.7-2: Applicable GHG Emissions Reduction Strategies

Strategy	Compliance with Strategy
State AB 32 Plan Strategies	
Vehicle Climate Change Standards	Consistent. These standards are enforced by CARB and vehicles that access the Project site would be required to comply with these standards.
Limit Idling Time for Commercial Vehicles (13 CCR §2485) and Off-Road Equipment (13 CCR § 2449)	Consistent. Construction contractors and truck operators would be required to comply with applicable idling regulations for on-road vehicles during Project construction and operation. Additionally, construction contractors would be required to comply with applicable off-road equipment idling regulations during Project construction and operation.
Use of Low Carbon or Alternative Fuels (Low Carbon Fuel Standard)	Consistent. The Proposed Project's primary source of GHG emissions is from transportation fuel use. Trucks and passenger vehicles accessing the Project would use California fuels that are subject to the Low Carbon Fuel Standard regulations. While these regulations are relatively new and have not yet caused a large penetration of low carbon/renewable fuels, over the Project lifespan, the Proposed Project's GHG emissions from transportation would be reduced as low carbon fuel availability use increases statewide.
Waste Reduction/Increase Recycling (including construction and demolition waste reduction)	Consistent. Solid waste generated during construction of the Proposed Project would be disposed of in accordance with the City of Los Angeles requirements discussed below under the Construction and Demolition (C and D) Waste Recycling Ordinance.
Increase Water Use Efficiency	Consistent. The Proposed Project would implement efficient faucets in the bathroom and would utilize capture and reuse cisterns to provide reusable stormwater for irrigation during site operations.
Electricity Use/Renewables Performance Standard	Consistent. The Proposed Project's electricity would come from Los Angeles DWP, a California publicly owned utility that is subject to the Renewables Performance Standard that requires increasing renewable energy procurement targets over time and so reduces GHG emissions from electricity generation. Therefore, the electricity used at the site would comply with state electricity sector GHG reduction strategies.
CARB 2022 Scoping Plan	Consistent. The development resulting from the Project would include sustainable design features related to reduction of GHG emissions that would meet existing regulatory requirements and be consistent with the 2022 CARB's Scoping Plan that provides measures to reduce GHG emissions.
SCAG 2024 RTP/SCS	
Promote sustainable development and best practices that enhance resource conservation, reduce resource consumption and promote resilience.	Consistent. The Proposed Project would incorporate various measures related to building design, landscaping, and energy systems to promote the efficient use of energy, pursuant to Title 24 CALGreen Code and Building Energy Efficiency Standards. In addition, Proposed Project would include approximately 316,373 SF of drought tolerant ornamental landscaping that would cover approximately 39 percent of

	the site. Irrigation for the landscape area would use captured and reclaimed rainwater.
Reduce hazardous air pollutants and greenhouse gas emissions and improve air quality throughout the region through planning and implementation efforts.	Consistent. The Proposed Project would not prevent SCAG from implementing actions that would improve air quality within the region. As discussed in Section 5.2 <i>Air Quality</i> , and Section 5.7, <i>Greenhouse Gas Emissions</i> , air quality and GHG impacts are expected to be less-than-significant, and the Proposed Project would incorporate various measures related to building design, landscaping, and energy systems to promote the efficient use of energy, pursuant to Title 24 CALGreen Code and Building Energy Efficiency Standards.
Reduce the exposure and impacts of emissions and pollutants and promote local and regional efforts that improve air quality for vulnerable populations, including but not limited to Priority Equity Communities and the AB 617 Communities.	
Accelerate the deployment of a zero-emission transportation system and use near-zero-emission technology to offer short-term benefits where zero-emissions solutions are not yet feasible or commercially viable.	Consistent. The Proposed Project would operate as a parking lot for the parking of trucks and loaded and unloaded chassis. Charging for electric on-site equipment would be installed to support zero-emission and clean technologies.
Support local and regional climate and hazard planning and implementation efforts for transportation, land use, and other factors.	Consistent. This policy would be implemented by cities and the counties within the SCAG region as part of the overall planning and maintenance of the regional transportation system. The Proposed Project would not prevent SCAG from implementing actions that would improve climate resilience within the region, as further described below.
Prioritize community and environmental justice concerns, together with economic needs, and support workforce development opportunities, particularly around deployment of zero-emission and clean technologies and their supporting infrastructure.	Consistent. The Proposed Project would operate as a parking lot for the parking of trucks and loaded and unloaded chassis. Charging for electric on-site equipment would be installed to support zero-emission and clean technologies.
Explore and advance the transition toward zero-emission and clean technologies and other transformative technologies, where viable.	
City of Los Angeles Plans and Strategies	
LA's Green New Deal Sustainable City pLAN (City of Los Angeles, 2019)	Consistent. The City of Los Angeles's Sustainable City pLAN is intended to guide operational, policy, and financial decisions to create a more sustainable city. Although the pLAN is more focused on City property, buildings, and public transportation, the pLAN includes a GHG reduction goal of 80 percent below baseline conditions by 2050 at the POLA. The pLAN notes three primary GHG reduction initiatives, two of which are applicable to the Proposed Project: <ul style="list-style-type: none"> • 100% zero emissions cargo handling equipment by 2030 • 100% zero emissions on-road drayage trucks by 2035 As discussed in Section 3.0, <i>Project Description</i> , the Proposed Project would utilize zero emissions cargo handling equipment. Further, drayage trucks accessing the Project site would be required to adhere to the POLA's Clean Trucks Program, which would require the phase in of zero emission and near zero emission drayage trucks. Therefore, the Proposed Project would be consistent with the City of Los Angeles pLAN.

<p>City of Los Angeles Construction and Demolition (C and D) Waste Recycling Ordinance</p>	<p>Consistent. The City of Los Angeles approved a Citywide construction and demolition (C&D) waste recycling ordinance in 2010. This ordinance requires that all mixed C&D waste generated within city limits be taken to City-certified C&D waste processors. LA Sanitation (LASAN) is responsible for the C&D waste recycling policy. All haulers and contractors responsible for handling C&D waste must obtain a Private Waste Hauler Permit from LASAN prior to collecting, hauling and transporting C&D waste, and C&D waste can only be taken to City certified C&D processing facilities. Project construction contractors would obtain a Private Waste Hauler Permit prior to construction.</p>
<p>City of Los Angeles General Plan – Mobility Element (City of Los Angeles, 2016)</p>	<p>Consistent. The Proposed Project would be consistent with the policies set forth in the City of Los Angeles General Plan Mobility Element, as further discussed in Table 5.8-2 in Section 5.8, <i>Land Use and Planning</i>, of this EIR.</p>

Overall, the Proposed Project would conform to state and local GHG emissions reduction and climate change regulations, policies, and strategies. Therefore, the Proposed Project would have less than significant GHG impacts.

5.7.7 CUMULATIVE IMPACTS

GHG emissions impacts are assessed in a cumulative context since no single project can cause a discernible change to climate. Climate change impacts are the result of incremental contributions from natural processes, and past and present human-related activities. Therefore, the area in which a Proposed Project in combination with other past, present, or future projects, could contribute to a significant cumulative climate change impact would not be defined by a geographical boundary such as a project site or combination of sites, city, or air basin. GHG emissions have high atmospheric lifetimes and can travel across the globe over a period of 50 to 100 years or more. Even though the emissions of GHGs cannot be defined by a geographic boundary and are effectively part of the global issue of climate change, CEQA places a boundary for the analysis of impacts at the state’s borders. Thus, the geographic area for analysis of cumulative GHG emissions impacts is the State of California.

Executive Order S-3-05, Executive Order B-30-15, AB 32, and SB 32 recognizes that California is the source of substantial amounts of GHG emissions and recognizes the significance of the cumulative impact of GHG emissions from sources throughout the state and sets performance standards for reduction of GHGs.

The analysis of GHG emission impacts under CEQA contained in this EIR effectively constitutes an analysis of the Proposed Project’s contribution to the cumulative impact of GHG emissions. As described previously, the estimated GHG emissions from development and operation of the Proposed Project would not exceed SCAQMD thresholds. Therefore, the contribution of the Proposed Project to significant cumulative GHG impacts would not be cumulatively considerable.

5.7.8 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Impacts GHG-1 and GHG-2 would be less-than-significant.

5.7.9 MITIGATION MEASURES

None required.

5.7.10 LEVEL OF SIGNIFICANCE AFTER MITIGATION

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

5.7.11 REFERENCES

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