Section 3.3
Greenhouse Gas Emissions

Section Summary

Section 3.3, *Greenhouse Gas Emissions*, provides the following:

- A description of existing greenhouse gas (GHG) emissions at the Port of Los Angeles (Port);
- A list of local, state, and federal regulations and policies that apply to the Terminal Island Maritime Support Facility (MSF) Project (Proposed Project) and alternatives;
- A discussion of the methodology used to determine whether the Proposed Project or alternatives would result in a significant adverse impact regarding GHG emissions (emission calculations are provided in EIR Appendix B1);
- An impact analysis of the Proposed Project and alternatives; and
- A description of mitigation measures proposed to reduce significant adverse impacts of the Project, including reasonably foreseeable direct, indirect and cumulative impacts relating to GHG emissions.

Key Points of Section 3.3

The Proposed Project would result in direct and indirect GHG emissions at levels that would not exceed the South Coast Air Quality Management District (SCAQMD) threshold when excluding the GHG emissions of the electricity supply; this impact would be less than significant. The GHG emissions attributable to the electricity supply are subject to control through California's Renewable Portfolio Standard (RPS) Program, where the electricity provider is obligated to reduce emissions thereby demonstrating compliance with the RPS targets. Under the No Impact Alternative (Alternative 1), no Project-related GHG emissions would occur. Under the Reduced Project Alternative (Alternative 2), GHG emissions would not exceed the SCAQMD threshold and therefore would result in a less-than-significant impact without the need for mitigation.

Construction-Related and Operations-Related Greenhouse Emissions Impacts

Construction and operational GHG emissions would be caused by construction vehicles and equipment and during operations from mobile sources, energy sources, area sources, water supply, solid waste, and onsite cargo-handling equipment. For the Proposed Project, the quantities of GHG emissions would be below the SCAQMD threshold when excluding the GHG emissions of the electricity supply, resulting in a less-than-significant impact (Impact GHG-1). The No Project Alternative (Alternative 1) would have no impact. Impacts would be less than significant for the Reduced Project Alternative (Alternative 2) and no mitigation is necessary. All alternatives would conform with any applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions.

3.3.1. Introduction

This section includes a description of the affected environment, as it pertains to GHG emissions, and predicted impacts from construction and operation of the Proposed Project and alternatives. Emission calculations are provided in EIR Appendix B1.

3.3.2. Environmental Setting

The global climate depends on the presence of naturally occurring GHGs to provide what is commonly known as the "greenhouse effect" which allows heat radiated from the Earth's surface to warm the atmosphere. The greenhouse effect is driven mainly by water vapor, aerosols, carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and other constituents. Globally, the presence of GHG affects temperatures, precipitation, sea levels, ocean currents, wind patterns, and storm activity. Human activity directly contributes to emissions of the anthropogenic GHGs, including CO_2, primarily from the use of fossil fuels as a source of energy.

3.3.2.1. Greenhouse Gases

Effects of GHG Emissions. Changing temperatures, precipitation, sea levels, ocean currents, wind patterns, and storm activity provide indicators and evidence of the effects of climate change. From 1950 onward, relatively comprehensive data sets of observations are available. Research by California's Office of Environmental Health Hazard Assessment (OEHHA) documents climate change indicators by categorizing the effects as: changes in California's climate; impacts to physical systems including oceans, lakes, rivers, and snowpack; and impacts to biological systems including humans, vegetation, and wildlife. The primary observed changes in California's climate include increased annual average air temperatures, more-frequent extremely hot days and nights, and increased severity of drought. Impacts to physical systems affected by warming temperatures and changing precipitation patterns show decreasing snowmelt runoff, shrinking glaciers, and rising sea levels. Impacts to terrestrial, marine, and freshwater biological systems, with resulting changes in habitat, agriculture, and food supply are occurring in conjunction with the potential to impact human well-being (OEHHA, 2018).

California GHG Emissions Trends. California first formalized a strategy to achieve GHG reductions in 2008, when California produced approximately 484 million metric tons of CO_2 equivalent ($MMTCO_2e$) according to the official California Air Resources Board (CARB) inventory (CARB, 2023). The State's economy-wide emissions have been declining in recent years. California's sources of GHG emitted approximately 381 $MMTCO_2e$ in 2021 (CARB, 2023), less than ten percent of the U.S. GHG emissions total for 2019 of 6,577 $MMTCO_2e$.

3.3.3. Applicable Regulations

3.3.3.1. Federal Regulations

United States Environmental Protection Agency GHG Mandatory Reporting Program (40 CFR Part 98). This rule requires mandatory reporting of GHG emissions for industrial facilities and power plants that emit more than 25,000 $MTCO_2e$ per year. The reporting

program (40 CFR Part 98.300, Subpart DD) applies to electric and transmission distribution equipment that use high global warming potential gases, including sulfur hexafluoride (SF_6), for insulation. Currently, there are no federal regulations limiting GHG emissions from the types of sources that would occur with the Proposed Project. The circuit breakers and gas switches related to electric power (substation) may be sources of GHG subject to reporting due to the leakage of SF_6.

3.3.3.2. State Regulations

California Global Warming Solutions Act of 2006 (Assembly Bill 32)

Assembly Bill (AB) 32 required that California's GHG emissions be reduced to 1990 levels by 2020. The reduction is being accomplished through an enforceable statewide cap on global warming emissions beginning in 2012. AB 32 directs CARB to develop regulations and a mandatory reporting system to track and monitor global warming emissions levels (AB 32, Chapter 488, Statutes of 2006). CARB must update the AB 32 Scoping Plan at least every 5 years. Most recently, CARB approved the 2022 Scoping Plan Update in December 2022 (CARB, 2022), which outlines a roadmap to achieve carbon neutrality by 2045.

In passing AB 32, the California Legislature found that:

> *Global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California. The potential adverse impacts of global warming include the exacerbation of air quality problems, a reduction in the quality and supply of water to the state from the Sierra snowpack, a rise in sea levels resulting in the displacement of thousands of coastal businesses and residences, damage to marine ecosystems and the natural environment, and an increase in the incidences of infectious diseases, asthma, and other human health-related problems.*

Other major Executive Orders, legislation, and regulations adopted for the purpose of reducing GHG emissions support the implementation of AB 32 and California's climate goals, as described below.

California Governor's Executive Orders on GHG Emissions

In September 2018, Executive Order B-55-18 established a new statewide goal to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter. The CARB was directed to develop the framework for implementing the goal of carbon neutrality. Executive Order B-30-15 (April 2015) established a California GHG reduction target of 40 percent below 1990 levels by 2030. One purpose of this interim target is to ensure California meets its target of reducing greenhouse gas emissions to 80 percent below 1990 levels by 2050 (Executive Order S-3-05, June 2005). This executive order also specifically addresses the need for climate adaptation and directs state agencies to update the California Climate Adaptation Strategy to identify how climate change will affect California infrastructure and industry and what actions the state can take to reduce the risks posed by climate change. Senate Bill 32 (SB 32) of 2016 codified this GHG emissions target to 40 percent below the 1990 level by 2030.

California Renewables Portfolio Standard (RPS) Program

Electric utilities in California must procure a minimum quantity of the sales from eligible renewable energy resources as specified by RPS requirements. The Clean Energy and Pollution Reduction Act of 2015 (Senate Bill 350 [SB 350]) established California's state policy objectives on long-term energy planning and procurement as signed into law on October 7, 2015. The 100 Percent Clean Energy Act of 2018 (Senate Bill 100 [SB 100]) revised the RPS targets to establish the policy that eligible renewable energy resources and zero-carbon resources supply 100 percent of retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all state agencies by December 31, 2045.

With SB 350 and SB 100, California's objectives include:

- To set the RPS for the procurement of California's electricity from renewable sources at 33 percent by 2020, 50 percent by 2026, and 60 percent by 2030;
- To plan for 100 percent of total retail sales of electricity in California to come from eligible renewable energy resources and zero-carbon resources by December 31, 2045; and
- To double the energy efficiency savings in electricity and natural gas end uses by retail customers by 2030.

The Clean Energy, Jobs, and Affordability Act of 2022 (SB 1020) added interim targets for renewable energy targets for electricity sales and procurement. The targets for renewable energy and zero-carbon energy retail sales of electricity to California end-use customers were set at 90 percent by 2035 and 95 percent by 2040 (CARB, 2022).

California Climate Crisis Act of 2022 (AB 1279)

AB 1279 establishes the policy of the state to achieve carbon neutrality as soon as possible, but no later than 2045; to maintain net negative GHG emissions thereafter; and to ensure that by 2045 statewide anthropogenic GHG emissions are reduced at least 85 percent below 1990 levels. The CARB 2022 Climate Change Scoping Plan outlines how carbon neutrality can be achieved by reducing anthropogenic GHG emissions while expanding actions to capture and store carbon through California's natural and working lands and using a variety of mechanical approaches (CARB, 2022).

Cap-and-Trade Program (17 CCR 95801 to 96022)

The California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms Regulation (Cap-and-Trade Program) was initially approved by CARB in 2011. The Cap-and-Trade Program applies to covered entities that fall within certain source categories, including electric utilities, petroleum refiners, and suppliers of transportation fuels, and is triggered when facility emissions exceed 25,000 $MTCO_2e$ in a year. The covered entities must hold compliance instruments sufficient to cover the actual GHG emissions, as evidenced through the CARB's Mandatory Reporting Regulation requirements. This means that the suppliers of electricity, such as the Los Angeles Department of Water and Power (LADWP), and providers of transportation fuels bear the GHG compliance obligation in the Cap-and-Trade Program for the GHG emissions from the electricity supply and from the use of transportation fuels in motor vehicle and off-road equipment.

3.3.3.3. Local Regulations

San Pedro Bay Ports Clean Air Action Plan

In 2017, the Port of Long Beach and Port of Los Angeles adopted the Clean Air Action Plan (CAAP) Update (SPBP, 2017), which outlines strategies to reduce pollution from port-related sources. The document provides guidance for accelerating progress toward a zero-emission future for the Port of Los Angeles. It includes strategies to reduce pollution from transportation and cargo-handling equipment. The CAAP aims to reduce GHGs from port-related sources to 40 percent below 1990 levels by 2030 and 80 percent below 1990 levels by 2050. The CAAP also outlines a 10 in a million excess residential cancer risk for individual port development projects.

Port of Los Angeles Clean Truck Program (CTP)

As part of the San Pedro Bay Ports CAAP, the Clean Truck Program (CTP) was established in 2008, and the 2017 CAAP Update reflects the early actions taken to comply with State law (SPBP, 2017). The CTP establishes efforts leading to an ultimate goal of a zero-emissions on-road drayage truck fleet by 2035 (SPBP, 2017). All drayage trucks entering port terminals must comply with the State law regulating drayage trucks and must comply with the provisions of the Port of Los Angeles Tariff Section 20: Clean Air Action Plan – General Rules & Regulations. As of 2018, new trucks entering the Port's Drayage Truck Registry (PDTR) must have a 2014 engine model year or newer. As of 2020, all heavy-duty trucks entering Port terminals that are not certified to meet the State's near-zero standard or better are charged a rate to enter. Existing trucks already in the PDTR can continue to operate in the Port. The CTP has reduced pollution from harbor trucks by more than 90 percent since its adoption.

City of Los Angeles Green New Deal Sustainable City pLAn

The Port has adopted the City of Los Angeles Sustainable City pLAn (City of Los Angeles, 2019). The Plan contains goals for the city including in areas of local solar, energy efficient buildings, carbon and climate leadership, green jobs, preparedness and resiliency, air quality, and environmental justice. The following targets from the pLAn would be applicable to the proposed Project:

- Reduce vehicle miles traveled 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.

City of Los Angeles General Plan

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

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.

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

3.3.4. Impacts and Mitigation Measures

3.3.4.1. Methodology

All construction- and operation-related GHG emissions are quantified based on the best available forecast of activities. This analysis uses the California Emissions Estimator Model (CalEEMod; version 2022.1.1) software developed by the California Air Pollution Control Officers Association (CAPCOA). This is the most recent online version of the CalEEMod software, and it relies upon mobile source emission factors from the CARB OFFROAD2017 inventory and EMFAC2021 models. Spreadsheet analysis of emissions from diverted truck travel augments the CalEEMod analysis for additional miles travelled by the drayage truck fleet mix in the CARB's EMFAC2021 (v1.0.2).

Where Proposed Project-specific design features are not yet defined, default and typical settings from CalEEMod are used, as published in the CalEEMod User's Guide and supporting appendices (CAPCOA, 2022). Appendix B1, Air Quality/GHG Emissions Calculations, provides details on the construction and operational assumptions for the Proposed Project and resulting emissions estimates used in this analysis.

3.3.4.2. Geographic Boundaries

For the purpose of assessing GHG impacts under CEQA, GHG emissions of the Proposed Project and alternatives were calculated within the South Coast Air Quality Management District (SCAQMD) boundaries. Complete trip lengths were used for construction workers, vendors, and hauling trips.

3.3.4.3. CEQA Baseline

State CEQA Guidelines, Section 15125, subdivision (a), provides that an EIR must include a description of the physical environmental conditions in the vicinity of the project, as they exist at the time the Notice of Preparation and Initial Study (NOP/IS) is published. Since the NOP/IS was released in December 2023, the LAHD has determined that 2023 is the baseline year for the CEQA analysis. In 2023, the baseline conditions for the Proposed Project include the existing conditions of the site, which consists of an unoccupied, unused parcel. No construction or operations currently occur. The Proposed

Project would represent a new use at the site and generate new chassis storage/support and/or wheeled empty container storage activities at the site, including emissions from both passenger vehicles and trucks.

3.3.4.4. Thresholds of Significance

State CEQA Guidelines Appendix G (California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000-15387) CEQA Checklist suggests two criteria for determining the significance of impacts related to GHG emissions:

Would the Project:

(a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

(b) Conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?

Accordingly, the Proposed Project or alternative would have a significant impact if it would:

GHG-1: Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.

GHG-2: Conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of GHGs.

For determining significance of the impact on the environment caused by GHG emissions, the Proposed Project GHG emissions are compared with a screening threshold of 10,000 $MTCO_2e$/year developed by the SCAQMD for industrial facilities (SCAQMD, 2023).

3.3.5. Impact Analysis

3.3.5.1. Proposed Project

Impact GHG-1: Would the Proposed Project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?

Construction and Operation

The Proposed Project would generate GHG emissions from construction activities, operational transportation, energy, waste disposal, and area sources (such as on-site equipment). The activities associated with the Proposed Project include mobilizing construction equipment, crews, and materials, and would require use of motor vehicles and off-road equipment during all construction activities and clean-up. These activities would cause GHG emissions due to fuels used by the construction vehicles and off-road equipment. The different sources include diesel-powered off-road equipment, gasoline-powered construction vehicles and equipment including on-highway trucks and autos for moving crews, equipment, materials, and water and for fuel delivery, and helicopters. Equipment and motor vehicles would directly emit CO_2, CH_4, and N_2O due to fuel use and combustion.

The resulting one-time quantity of GHG caused by construction would be 3,291 $MTCO_2e$ (EIR Appendix B1, Air Quality/GHG Emissions Calculations) emitted over the construction duration of approximately 24 months. To consider the overall effect of construction GHG emissions over the anticipated useful life of the facilities, the SCAQMD recommends assuming a 30-year life for amortizing total construction GHG emissions. The amortized construction GHG emissions rate would be 109.7 $MTCO_2e$/year, based on the one-time construction-phase quantity of 3,291 $MTCO_2e$ divided over 30 years.

Long-term operations of the Proposed Project would generate GHG emissions from mobile sources, energy sources, area sources, water supply, solid waste, and on-site cargo-handling equipment (assumed to be diesel-powered in the opening year [2027]). The analysis also includes the potential additional vehicle-miles traveled from diverting existing truck trips, which are not new truck trips generated to/from the POLA-POLB. The cargo-handling equipment would generate approximately 2,388 $MTCO_2e$/year in operational-phase GHG emissions under opening year (2027) conditions, and electrification of cargo-handling activities required by Project Feature (PF) AQ-1 (*Zero-Emissions Operational Equipment*) would reduce the on-site cargo-handling equipment emissions to zero before the buildout year (2046).

Operational energy consumption includes electricity use that would increase between the opening year and buildout year with increased electrification of cargo-handling equipment. Emission factors for the electricity supply rely on CalEEMod defaults for Los Angeles Department of Water and Power and are conservatively assumed to remain constant between the Project opening year and buildout year (CAPCOA, 2022). Consistent with RPS Program requirements, emission factors would decline as the electricity supply reflects increasing procurement of renewable energy by the utility.

Additional drayage truck travel for the trucks diverted to the site and on-site idling could cause up to 6,346 $MTCO_2e$/year for the opening year (2027) and 8,464 $MTCO_2e$/year for the buildout year (2046). Prior to Proposed Project buildout (2046), emissions from the truck trips served by the site would trend towards lower emissions than in the opening year as the CTP progresses towards the CAAP goal of a 100 percent transition to zero-emission trucks by 2035. Reductions related to meeting the 2035 zero-emission truck goal, however, are not included in the quantification presented.

The amortized construction and annual operational GHG emissions associated with the Proposed Project are summarized in Table 3.3-1. As shown, construction and operation of the Proposed Project would generate a combined total of approximately 9,457 $MTCO_2e$/year under opening year (2027) and 10,074 $MTCO_2e$/year under buildout year (2046). The largest contributor to annual GHG emissions would be off-site truck travel during operations.

The total annual GHG emissions from the Proposed Project in the opening year (2027) and buildout year (2046) added to the amortized construction emissions are shown in Table 3.3-1.

Table 3.3-1: Proposed Project Annual GHG Emissions

Activity	$MTCO_2e$/year
Amortized Construction Emissions	109.7
Opening Year (2027)	---
Worker Vehicles (2027)	319
Cargo-Handling Equipment (2027)	2,388
Electricity Use (2027)	282
Other Energy, Area Sources (2027)	13
Off-Site, Truck Trips (2027)	4,536
On-Site, Truck Trips (2027)	1,146
On-site, Truck Idling (2027)	664
Total Annual Emissions (2027) – Amortized Construction + Operations	**9,457**
Buildout Year (2046)	---
Worker Vehicles (2046)	337
Cargo-Handling Equipment (2046)	0
Electricity Use (2046)	1,151
Other Energy, Area Sources (2046)	13
Off-Site, Truck Trips (2046)	5,799
On-Site, Truck Trips (2046)	1,431
On-site, Truck Idling (2046)	1,234
Total Annual Emissions (2046) – Amortized Construction + Operations	**10,074**

Source: Appendix B1, Air Quality/GHG Emissions Calculations.
Note: Emissions may not precisely add up due to rounding.

The GHG emissions attributable to the electricity supply for the Proposed Project are subject to control through the RPS Program, and LADWP is obligated to reduce GHG emissions to demonstrate compliance with the targets, as discussed in Section 3.3.3.2, *State Regulations*.

The electricity supply is subject to the procurement actions taken by LADWP, which has approved a 2022 Power Strategic Long-Term Resource Plan (SLTRP). The 2022 SLTRP is known as the "LA100 Plan" as it establishes a roadmap to implement a City Council motion to achieve an electricity supply that is 100 percent carbon-free by 2035, in advance of 100 Percent Clean Energy Act of 2018 (SB 100) targets of zero-carbon resources for commercially available electricity by 2045. These actions are anticipated to achieve the SB 100 targets in advance of the Proposed Project buildout year (2046) and would have the effect of reducing the GHG emissions associated with electricity use throughout the State and City. As such, emissions associated with electricity are estimated to trend downward and are not included in the impact assessment in the buildout year (2046) as existing legislature will reduce those emissions in future years. The RPS Program and the provisions of the Cap-and-Trade Program applicable to suppliers of electricity are previously approved programs with regulations adopted for the purpose of reducing GHG emissions. The Project's use of electricity supplied by LADWP would not result in a considerable incremental contribution to the cumulative effect of GHG emissions because LADWP must comply with the RPS that requires

increasing renewable energy procurement over time to avoid and lessen the effects of GHG emissions from electricity generation.

As shown in Table 3.3-2, the total annual GHG emissions from the Proposed Project in the opening year (2027) with electricity included and buildout year (2046) without electricity included, due to future attainment of SB 100, would not exceed the screening threshold of 10,000 $MTCO_2e$/year; therefore, impacts would be less than significant.

Table 3.3-2: Proposed Project Annual GHG Emissions, Excluding Electricity Supply in Buildout Year

Activity	$MTCO_2e$/year
Amortized Construction Emissions	109.7
Opening Year (2027)	---
Total Annual Emissions (2027) – Amortized Construction + Operations including Electricity Use	**9,457**
Threshold	10,000
Exceeds Threshold?	No
Buildout Year (2046)	---
Total Annual Emissions (2046) – Amortized Construction + Operations including Electricity Use	10,074
Total Annual Emissions (2046) – Amortized Construction + Operations without Electricity Use	**8,923**
Threshold	10,000
Exceeds Threshold?	No

Source: SCAQMD, 2023; Appendix B1, Air Quality/GHG Emissions Calculations.

Impact Determination

Table 3.3-2 shows that the Proposed Project GHG emissions, when excluding those attributable to the electricity supply that are subject to control through the RPS Program, would not exceed the 10,000 MTCO2e threshold. Accordingly, no mitigation would be required for the Proposed Project GHG emissions.

Project Features and Mitigation Measures

No mitigation is required to reduce GHG emissions. The Proposed Project would, however, require the use of zero-emission operational equipment by January 1, 2030 with the following Project Feature, which would reduce GHG emissions.

PF AQ-1: Zero-Emission Operational Equipment. All yard equipment would be required to be zero emissions by January 1, 2030. Any diesel operations would cease by December 31, 2029, and would be tracked and enforced once an entitlement is issued. A 100 percent transition to zero emissions by January 1, 2030 shall be required, and any non-conforming equipment would be a breach of the Permit/Lease.

Additionally, MM AQ-1 identified for air quality impacts in Section 3.1, *Air Quality and Health Risk*, would provide for early electrification of cargo-handling equipment, depending on feasibility, which may also improve operational GHG emissions.

MM AQ-1: Zero-Emission Cargo-Handling Equipment. At the start of operation, Tenant shall utilize zero-emission off-road cargo-handling equipment (CHE) for Project operations. If the Tenant determines that specific CHE types cannot feasibly be deployed due to operational or infrastructure constraints, the Tenant shall provide a written report detailing the evidence and supporting documentation concerning feasibility and other relevant factors within 90 calendar days. The feasibility determination shall be subject to mutual agreement between the Board of Harbor Commissioners and Tenant, which shall not be unreasonably withheld by Tenant.

All CHE operated on site shall be zero emissions starting January 1, 2030.

In the event an Applicable Law comes into effect that requires the cargo-handling equipment used on site to be zero-emission equipment, the Applicable Law would govern.

Residual Impacts

Impacts would be less than significant.

Impact GHG-2: Would the Proposed Project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs?

Construction and Operation

Activities related to both construction and operation of the Proposed Project would emit GHG mostly through the use of transportation fuels that are within the policies of the State's AB 32 Climate Change Scoping Plan (CARB, 2022). The majority of emissions would be from mobile sources. Mobile sources of GHG, including the off-road equipment and on-road motor vehicles, are not directly subject to GHG controls, but would be users of transportation fuels from refiners and suppliers that are required to comply with CARB Cap-and-Trade and Low Carbon Fuel Standard regulations to reduce GHG emissions caused by the production and use of transportation fuels.

Table 3.3-3 summarizes the consistency of the Proposed Project with key relevant GHG reduction strategies. As summarized in Table 3.3-3, Proposed Project activities related to construction and operation would either be exempt from or would be required to comply with CARB rules and regulations to reduce GHG emissions. The Proposed Project would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions.

1 **Table 3.3-3: Applicable GHG Emissions Reduction Strategies**

Strategy	Compliance with Strategy
State AB 32 Climate Change Scoping Plan Strategies (CARB, 2022)	
Limited Idling Time for Commercial Vehicles (13 CCR § 2485) and Off-Road Equipment (13 CCR § 2449)	The construction contractors and truck operators would be required to comply with applicable idling regulations for on-road vehicles during construction and operation. Additionally, the construction contractor and operators would be required to comply with applicable off-road equipment idling requirements during construction and operation.
Use of Low Carbon or Alternative Fuels (Low Carbon Fuel Standard)	The Project's primary source of GHG emissions is from transportation fuel use. The facility and facility users would use California fuels that are subject to the Low Carbon Fuel Standard regulations. While these regulations are new and have not yet caused a large penetration of low carbon/renewable fuels, over the Project life, GHG emissions from transportation and on-site equipment would be reduced as low carbon fuel supplies increase statewide.
Electricity Use/Renewables Performance Standard	The Project's electricity would be supplied by Los Angeles Department of Water and Power, a California publicly owned utility that is subject to the Renewables Performance Standard, which requires utilities to steadily increase the procurement of renewable energy to reduce the GHG emissions of the electricity supply. Therefore, the electricity used at the Project site would comply with state electricity sector GHG reduction strategies.
Advanced Clean Trucks and Advanced Clean Fleets Regulations	These regulations establish goals for the manufacture and sales for electrification of California's heavy-duty truck fleet, although not yet enforceable. Regulations for drayage truck fleets would require use of electric or other zero-emission models of heavy-duty vehicles and retirement of older legacy drayage trucks as new models spread throughout the market in the future.
Port of Los Angeles and City of Los Angeles Plans and Strategies	
LA's Green New Deal / Sustainable City pLAn (City of Los Angeles, 2019)	The City of Los Angeles' Sustainable City pLAn is intended to guide operational, policy, and financial decisions to create a more sustainable Los Angeles. Although the Plan is mostly focused on city property, buildings, and public transportation, the plan includes the 80% from baseline emissions reduction goal and notes three primary GHG emissions reduction initiatives, two of which would apply to Project emission sources: - 100% zero-emissions cargo-handling equipment by 2030. - 100% zero-emissions on-road drayage trucks by 2035. Only drayage trucks registered in the Ports Drayage Truck Registry or having a day pass would be admitted to the Project site, and this would ensure compliance with the Ports' Clean Truck Program (SPBP, 2017). LAHD will address the implementation of the port-wide cargo-handling equipment emissions reduction initiative for all affected tenants. Implementation will include the replacement of existing fossil fuel powered cargo-handling equipment with electrically powered cargo-handling equipment and the use of renewable fuels to replace fossil fuel use. A goal for the facility would be compliance with this emissions reduction initiative by 2030.

Strategy	Compliance with Strategy
San Pedro Bay Ports Clean Air Action Plan (CAAP) (SPBP, 2017)	The CAAP has several policy initiatives related to GHG emissions reductions. The policy initiatives that apply to the project's GHG emissions sources are the same as those listed above for the Sustainable City pLAn.
City of Los Angeles General Plan – Mobility Element (City of Los Angeles, 2016)	The City of Los Angeles General Plan, Mobility Element was developed to improve the way people, goods, and resources are moved in Los Angeles. The Proposed Project would be consistent with this General Plan Element.

Impact Determination

The Proposed Project would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions. This impact would be less than significant.

Mitigation Measures

Mitigation is not required.

Residual Impacts

Impacts would be less than significant.

3.3.5.2. Alternative 1 – No Project Alternative

Under this alternative, the Project site would remain unused. Like the CEQA baseline, the activities under the No Project Alternative (Alternative 1) are considered negligible in the foreseeable future as no future development has been permitted or approved.

Impact GHG-1: Would the No Project Alternative (Alternative 1) generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

In the No Project Alternative (Alternative 1), the Project would not be constructed. No construction or operations phase GHG emissions would occur.

Impact Determination

Since no construction or operation phase emissions would occur under the No Project Alternative (Alternative 1), there would be no impacts.

Mitigation Measures

Mitigation is not required.

Residual Impacts

There would be no residual impacts.

Impact GHG-2: Would the No Project Alternative (Alternative 1) conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

In the No Project Alternative (Alternative 1), the Project would not be constructed. No construction or operations phase GHG emissions would occur, and there would be no potential to conflict with an applicable plan, policy, or regulation for reducing GHG emissions.

Impact Determination

The No Project Alternative (Alternative 1) would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions. There would be no impacts.

Mitigation Measures

Mitigation is not required.

Residual Impacts

There would be no residual impacts.

3.3.5.3. Alternative 2 – Reduced Project Alternative

In the Reduced Project Alternative (Alternative 2), the Project site area would be reduced from 89.2 acres to 52.7 acres, essentially utilizing half the usable space. Construction and operational activities would be identical to the Proposed Project, but with reduced intensity. Less asphalt concrete, stall striping, lighting, and fencing would be installed due to the reduced Project footprint.

Impact GHG-1: Would the Reduced Project Alternative (Alternative 2) generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

In the Reduced Project Alternative (Alternative 2), the usable site area would decrease by half. Since the area of Reduced Project Alternative (Alternative 2) is half that of the Proposed Project and since construction activities would be the same, with reduced intensity, the total GHG emissions associated with Reduced Project Alternative (Alternative 2) would be less than the Proposed Project.

Impact Determination

Since construction and operation emissions would be less than that of the Proposed Project, impacts of Reduced Project Alternative (Alternative 2) would be less than significant.

Mitigation Measures

No mitigation is required for the Reduced Project Alternative (Alternative 2); however, GHG emissions would be reduced with implementation of PF AQ-1 (Zero-Emission Operational Equipment). See Section 3.3.5.1, Proposed Project, under Impact GHG-1, for the full text of this Project Feature. Residual Impacts

Impacts would be less than significant.

Impact GHG-2: Would the Reduced Project Alternative (Alternative 2) conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

In the Reduced Project Alternative (Alternative 2), construction and operation activities at the site would emit GHG mostly through the use of transportation fuels that are within the policies of the Climate Change Scoping Plan. The majority of emissions would be from mobile sources – the off-road equipment and on-road motor vehicles that are not directly subject to GHG controls, but would be users of transportation fuels from refiners and suppliers that are required to comply with CARB Cap-and-Trade and Low Carbon Fuel Standard regulations to reduce GHG emissions. Through these programs, Reduced Project Alternative (Alternative 2) activities would either be exempt from or would be required to comply with CARB rules and regulations to reduce GHG emissions and would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions.

Impact Determination

The Reduced Project Alternative (Alternative 2) would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions. This impact would be less than significant.

Mitigation Measures

Mitigation is not required.

Residual Impacts

Impacts would be less than significant.

3.3.5.4. Summary of Impact Determinations

Table 3.3-4 summarizes the CEQA impact determinations of the Proposed Project and alternatives related to GHG emissions. This table is meant to allow easy comparison of the potential impacts of the Proposed Project and alternatives. Identified potential impacts may be based on federal, state, or City of Los Angeles significance criteria, LAHD criteria, and the scientific judgment of the report preparers.

For each type of potential impact, the table provides the CEQA impact determination, applicable mitigation, and notes the residual impacts (i.e., the impact remaining after mitigation). All impacts, whether significant or not, are included in this table.

Table 3.3-4: Summary Matrix of Potential Impacts and Mitigation Measures for GHG Emissions

Alternative	Environmental Impacts	Impact Determination	Applied Mitigation Measures	Residual Impacts
Proposed Project	**GHG-1:** Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment	Less Than Significant	Mitigation Not Required **PF AQ-1:** Zero-Emission Operational Equipment **MM AQ-1:** Zero-Emission Cargo-Handling Equipment	Less Than Significant
	GHG-2: Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions	Less Than Significant	Mitigation Not Required	Less Than Significant
Alt 1 – No Project	**GHG-1**	No Impact	Mitigation Not Required	No Impact
	GHG-2	No Impact	Mitigation Not Required	No Impact
Alt 2 – Reduced Project	**GHG-1**	Less Than Significant	Mitigation Not Required **PF AQ-1:** Zero-Emission Operational Equipment	Less Than Significant
	GHG-2	Less Than Significant	Mitigation Not Required	Less Than Significant

3.3.5.5. Mitigation Monitoring

The mitigation monitoring program below does not contain any mitigation measures, as none were found necessary. Instead, this section summarizes implementation of the applicable Project Feature and MM AQ-1, which would be applied to the Proposed Project as a condition of approval. MM AQ-1 would not apply to Alternative 2 (Reduced Project Alternative). Mitigation is not applicable to Alternative 1 (No Project).

Project Feature	**PF AQ-1: Zero-Emission Operational Equipment.** All yard equipment would be required to be zero emissions by January 1, 2030. Any diesel operations would cease by December 31, 2029, and would be tracked and enforced once an entitlement is issued. A 100 percent transition to zero emissions by January 1, 2030 shall be required, and any non-conforming equipment would be a breach of the Permit/Lease.
Timing	Prior to January 1, 2030.
Methodology	LAHD will include this Project Feature in lease agreements with Tenant(s).

Mitigation Measure	**MM AQ-1: Zero-Emission Cargo-Handling Equipment.** At the start of operation, Tenant shall utilize zero-emission off-road cargo-handling equipment (CHE) for Project operations. If the Tenant determines that specific CHE types cannot feasibly be deployed due to operational or infrastructure constraints, the Tenant shall provide a written report detailing the evidence and supporting documentation concerning feasibility and other relevant factors within 90 calendar days. The feasibility determination shall be subject to mutual agreement between the Board and Tenant, which shall not be unreasonably withheld by Tenant. All CHE operated on site shall be zero emissions starting January 1, 2030. In the event an Applicable Law comes into effect that requires the cargo-handling equipment used on site to be zero-emission equipment, the Applicable Law would govern.
Timing	At the start of operations or no later than January 1, 2030 depending on feasibility.
Methodology	LAHD will include this mitigation measure in the permit with Tenant(s).

3.3.6. Sea Level Rise

An analysis of issues associated with future sea-level rise (SLR) is not required by CEQA. However, this consideration of the Project's vulnerability to SLR and the potential consequences related to that vulnerability is presented in this EIR for informational purposes.

3.3.6.1. Background

The adverse effects of global climate change, including SLR, represent a risk to coastal communities and resources now and for the foreseeable future. Sea levels will continue to rise due to the ocean's sustained response to the warming that has already occurred, and this will occur even if climate change mitigation succeeds in limiting surface air temperatures in the coming decades. Accordingly, facility planning in coastal areas must incorporate a consideration of likely SLR.

For the *Port of Los Angeles, the Sea Level Rise Adaptation Study* noted that mean sea levels have already risen four inches in the past 100 years (LAHD, 2018). The study characterized SLR as "a significant risk that challenges the long-term viability of this national asset. If left unmitigated, business operations will be temporarily impacted, international cargo may move elsewhere, and community/commercial or natural habitat assets could be destroyed."

The following discussion addresses two types of effects on coastal resources and surrounding communities driven by SLR. First, flooding of a project site due to SLR alone or SLR combined with extreme high tides and/or storm surge damaging facilities, resulting in financial loss and even injury or death to workers and visitors. Second, damage caused by flooding could result in releases to the environment of, for example, structural elements, hazardous materials, cargos, and raw materials. These releases could

involve harbor waters, as elements are washed away, or the air, as tanks or other containers ruptured by flood waters release volatile materials to the air. These possibilities are considered below to the extent they would apply to the Project.

3.3.6.2. Methodology

The most relevant studies of SLR are the *State of California Sea Level Rise Guidance: 2024 Science & Policy Update* (OPC/OST, 2024) and the Port's adaptation study (LAHD, 2018). Both studies recognize the uncertainty of SLR projections, particularly beyond approximately 2050, and offer multiple potential future scenarios of SLR under different assumptions of GHG emissions, ice cap melting, and other factors. The State's study recommends selecting a level of risk aversion (low, intermediate-high, or high) in order to select an appropriate future SLR scenario. For the Proposed Project, a medium-high risk aversion may be appropriate, as the Proposed Project may be less adaptive to medium to high consequences if impacted by SLR. The State's study uses a high-emissions assumption through 2100 to estimate SLR. The Port's SLR estimates, which are based on an earlier National Research Council study, do not include consideration of risk aversion levels but do incorporate a high-emissions scenario. The Port's study considers horizon years of 2030, 2050, and 2100 and three scenarios of global warming (low, mid-range, high). The Port's study focuses on Port infrastructure by predicting inundation and flooding under various scenarios of SLR, high tides, and storm tides, whereas the State's study is a more general consideration of SLR alone along the California coast. To evaluate the effects of SLR on a project, the State's study recommends considering project lifespan when selecting SLR scenarios. The Proposed Project would be expected to have a maximum service life of 25 years and is therefore assumed to operate until 2046 but not 2100. Therefore, only 2050 SLR estimates are used to estimate SLR-related impacts for the Proposed Project. The State's study for the medium-high risk aversion level, high-emissions scenario (i.e., greatest SLR) at the Los Angeles tide gauge predicts SLR of approximately 0.9 ft higher than the 2000 level by 2050 (OPC/OST, 2024 – Appendix 2, Table 11). The Port's study projects that under the high-emissions scenario, the sea level at the Port could rise 24 inches above the 2000 level by 2050.

3.3.6.3. Discussion

The Port's study shows that SLR alone would not cause permanent inundation or shoreline overtopping at the Project site (LAHD, 2018). However, SLR with storm tide conditions could temporarily flood low lying areas within the Project site and access routes surrounding the site. The inundation could temporarily interrupt Project operations.

The Project would, like all port facilities, operate under various contingency and emergency prevention and response plans that would mandate shutdown of infrastructure such as gas lines and electrical facilities in anticipation of flooding. Accordingly, the presence of water on the site would not pose a serious risk of rupture or electrical hazard. Although traffic could be blocked by water depths of more than a few inches, vehicle movement should be able to resume quickly after waters have receded, which would be a matter of hours. Accordingly, SLR does not pose substantial structural risks to the Proposed Project or the alternatives, and no compensatory structural revisions are needed.

Neither the Proposed Project nor any of the alternatives include storage of hazardous materials in quantities that could be released. Containers would be stored on chassis and would be empty. Accordingly, damage to facilities caused by SLR scenarios would not adversely affect nearby facilities or communities.

3.3.7. Significant Unavoidable Impacts

No significant unavoidable impacts related to GHG emissions or sea-level rise would occur during construction or operation of the Proposed Project or alternatives.