

Chapter 4

Cumulative Analysis

Section Summary

This chapter evaluates the potential for the Proposed Project or an alternative, together with other past, present, and reasonably foreseeable future projects in the geographic scope of each resource area, to make a cumulatively considerable contribution to a significant cumulative impact.

Chapter 4, *Cumulative Analysis*, provides the following:

- A description of the existing environmental setting in the Port area;
- A description of the past, present, and foreseeable future projects in the surrounding area;
- An impact analysis of the cumulative impacts related to the Proposed Project and alternatives; and
- A description of any mitigation or project features proposed to reduce any potential impacts and residual cumulative impacts, as applicable.

Key Points of Chapter 4

The Proposed Project would construct and operate a chassis support facility at Terminal Island at the Port of Los Angeles (POLA or Port). Its operations would be generally consistent with other uses in the Project area, which include liquid bulk, dry bulk, and container terminals. The Proposed Project would make no cumulatively considerable contributions to significant cumulative impacts in the following resource areas under the California Environmental Quality Act (CEQA):

- Energy;
- Greenhouse Gas Emissions; and
- Hazards and Hazardous Materials.

The No Project Alternative (Alternative 1) would not contribute to any cumulatively considerable impacts as there would be no change in activity at the site, which under baseline conditions is negligible. The Reduced Project Alternative (Alternative 2) would not contribute to any cumulatively considerable impacts because it would have reduced construction activity and reduced on-site activity levels during operations.

4.1 Introduction

This chapter presents CEQA requirements for a cumulative impact analysis and analyzes the potential for the Proposed Project or an alternative to contribute to a cumulatively considerable effect when its impacts are combined with those of other past, present, and reasonably foreseeable future projects. Sections 4.1.1, *Requirements for Cumulative Impact Analysis*, and 4.1.2, *Projects Considered in the Cumulative Analysis*, respectively, present the requirements for the cumulative impact analyses and descriptions of the related projects. Section 4.2, *Cumulative Impact Analysis*, addresses each of the resource areas that were determined to result in potentially significant impacts in the Notice of Preparation/Initial Study (Appendix A) and are analyzed in detail in this Environmental Impact Report (EIR).

4.1.1. Requirements for Cumulative Impact Analysis

State CEQA Guidelines Section 15130 requires a reasonable analysis of the cumulatively considerable impacts of the Proposed Project. Cumulative impacts are defined as “two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts” (State CEQA Guidelines Section 15355).

Cumulative impacts are further described as follows:

(a) *The individual effects may be changes resulting from a single project or a number of separate projects.*

(b) *The cumulative impacts from several projects are the changes in the environment, which result from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time (State CEQA Guidelines Section 15355[b]).*

Furthermore, according to State CEQA Guidelines Section 15130(a)(1):

As defined in Section 15355, a “cumulative impact” consists of an impact which is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts. An EIR should not discuss impacts which do not result in part from the project evaluated in the EIR.

In addition, as stated in the State CEQA Guidelines, Section 15064(h)(4):

The mere existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the proposed project’s incremental effects are cumulatively considerable.

Therefore, the following cumulative impact analysis focuses on whether the impacts of the Proposed Project or alternatives would make a cumulatively considerable contribution to a significant cumulative impact within the context of impacts caused by other past, present, or reasonably foreseeable future projects. The cumulative impact scenario considers other projects proposed within the area defined for each resource that would have the potential to contribute to cumulatively considerable impacts.

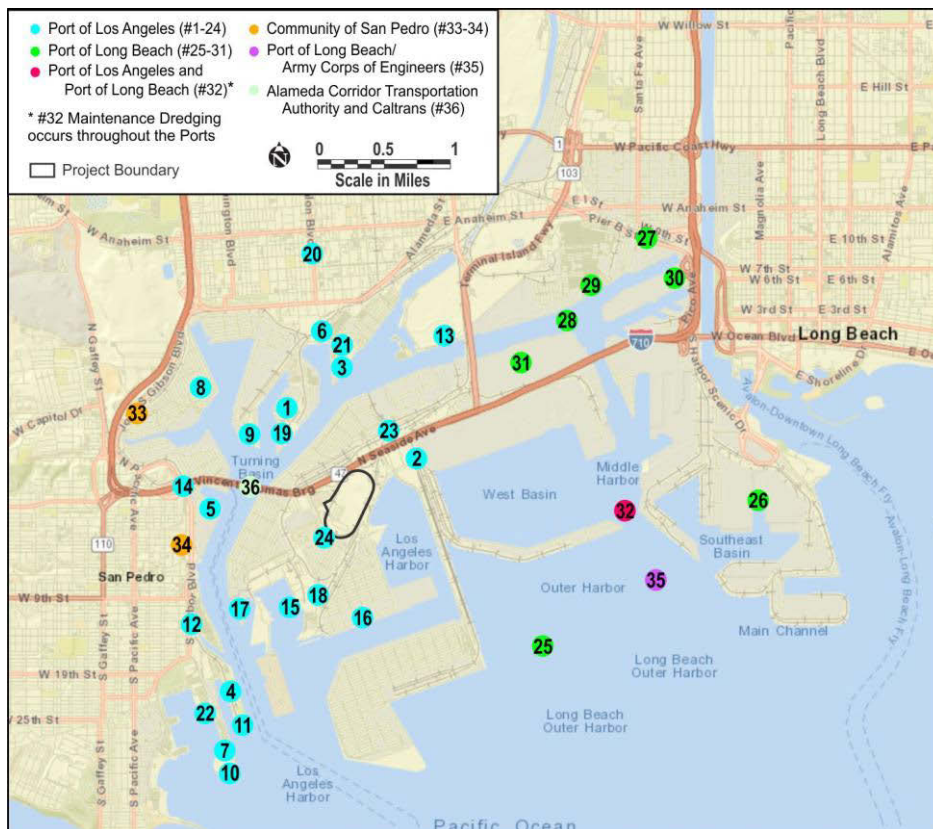
4.1.2. Projects Considered in the Cumulative Analysis

Table 4-1 lists 35 recent, current, or reasonably foreseeable future projects (approved or proposed) identified within the general vicinity of the Project site that could contribute to cumulative impacts. The list was compiled from sources that include the Los Angeles Harbor Department (LAHD), the Port of Long Beach (POLB), the California Department of Transportation, the U.S. Army Corps of Engineers, and other local jurisdictions. The locations of these projects are shown in Figure 4-1 with project summaries in Table 4-1.

The list of related projects does not include numerous small and medium-sized residential and commercial developments in the general vicinity of the Project site (i.e., San Pedro, Wilmington, Harbor City, Carson, and Long Beach). Those projects are assumed to be included in the population and activity projections produced by the Southern California Association of Governments (SCAG) and other planning entities and used in the South Coast Air Quality Management District (SCAQMD) and Los Angeles Department of Transportation (LADOT) analyses on which this cumulative analysis is based and thus do not need to be considered separately.

For the purposes of this EIR, the timeframe of current or reasonably anticipated projects extends from 2024 through 2045, and the Project vicinity is defined as the area over which effects of the Proposed Project could contribute to cumulative effects, which differs for each resource area. The cumulative regions of influence for individual resources are documented further in each of the resource-specific discussions in Section 4.2, *Cumulative Impact Analysis*.

Figure 4-1. Locations of Related and Cumulative Projects



1 **Table 4-1: Related and Cumulative Projects**

No. in Figure	Project Title and Location	Project Description	Project Status
Port of Los Angeles Projects			
1	Berth 163-164 [Nustar-Valero] Marine Oil Terminal Wharf Improvements	Demolish the existing 19,000-square-foot timber wharf and construct a new steel and concrete loading platform, access trestles, mooring and berthing structures, and necessary utilities to comply with the Marine Oil Terminal Engineering and Maintenance Standards (MOTEMS). The project also consists of a 30-year lease for the facility.	IS/Mitigated Negative Declaration (MND) adopted September 2021. Construction is anticipated in 2028.
2	Navy Way/Seaside Interchange	Construct roadway improvements at SR-47/Navy Way to eliminate traffic signal and movement conflicts. Augment an existing partial interchange at SR-47/Seaside Avenue/Navy Way by removing the last traffic signal and at-grade intersection between I-170 and I-110, adding a new auxiliary lane and a new collector-distributor road, and implementing traffic channelization improvements. This project is included in the 2016 Southern California Association of Governments (SCAG) Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) as ID 1M0430.	Draft IS/MND released October 2024. Environmental review in process. Construction expected to begin December 2025 and end June 2028.
3	Berths 191-194 (Ecocem) Low-Carbon Cement Processing Facility	Construct and operate a dry bulk terminal for vessel unloading, raw material milling, and storage and loading onto trucks of low-carbon construction binder.	NOP released March 2022. Draft EIR released in October 2023. Final EIR Certified March 2025.
4	Westway Decommissioning	Decommission Westway Terminal along the Main Channel (Berths 70-71). Work includes decommissioning, removal of 136 storage tanks with total capacity of 593,000 barrels (bbl), and remediation of the site.	Decommissioning completed in 2013. Remedial action plan under development with LARWQCB.
5	Berths 97-109, China Shipping Development	Development of the China Shipping Terminal Phase I, II, and III including wharf construction, landfill and terminal construction, and backland development, including operation under a revised project to modify certain mitigation measures.	Construction completed in 2014. Final Supplemental EIR completed in 2019. RSDEIR in preparation for ongoing operations.
6	Wilmington Waterfront Master Plan (Avalon Boulevard Corridor Project)	Intended to provide waterfront access and promote development specifically along Avalon Boulevard. Project elements include a promenade, waterfront park, pedestrian bridge, location for the Wilmington Youth Sailing and Aquatic Center, public pier, and other visitor serving uses.	Waterfront promenade completed in 2025. Next phase of construction on the Avalon Pedestrian Bridge and Promenade Gateway is anticipated in 2025-2028.
7	Berth 44 Boatyard	Redevelopment of the former San Pedro Boatworks site at 2945 Miner Street. Project components include demolition of existing structures and buildings on site; grading; paving; and construction of concrete pads, docks, gangways, slips, underground utilities, water treatment systems, storm drainage, fencing, lighting, and buildings for boatyard operations.	Environmental review in process. IS/NOP issued January 2024.

No. in Figure	Project Title and Location	Project Description	Project Status
8	Berths 121-131 [Yang Ming] Container Terminal Improvements	Demolish existing wharf at Berths 126-129, construct a new wharf, install up to 10 new wharf cranes, recon-struct the shoreline, dredge and dispose of up to 310,000 cubic yards of sediments to deepen the berth, expand the existing on-dock railyard and install electric-powered RMG cranes for railcar loading/unloading.	NOI/NOP released in 2014. Draft EIR/EIS in progress.
9	Berths 148-151 (Phillips 66) Marine Oil Terminal Improvement	Construct various wharf and seismic ground improvements that are required to comply with MOTEMS and a new 20-year entitlement.	IS/NOP released February 2023. EIR in progress.
10	Outer Harbor Cruise Terminal and Outer Harbor Park	Construct two new cruise terminals that would total up to 200,000 square feet (approximately 100,000 square feet each) and parking at Berths 45-47 and 49-50 in the Outer Harbor. The terminals would be designed to accommodate the berthing of a Freedom Class or equivalent cruise vessel (1,150 feet in length). A proposed Outer Harbor Park would encompass approximately 6 acres at the Outer Harbor. This project was evaluated in the San Pedro Waterfront Project EIS/EIR certified September 2009.	Request for Proposal for future development released in January 2023. Project is in design with construction anticipated in 2026-2028.
11	City Dock No. 1 Marine Research Project (AltaSea)	Development of a marine research center within a 32.13-acre area located between Berths 57-72. This project would change the break bulk areas east of East Channel (Berths 57-72) to institutional uses.	Phase I development in progress since 2017.
12	West Harbor Modification Project (formerly San Pedro Public Market)	Redevelopment of 30 acres, formerly known as the Ports O' Call Village, with up to 300,000 square feet of visitor-serving commercial uses and up to a 75,000 square feet conference center. This project would involve changing the industrial uses along Harbor Boulevard to commercial. This project also includes a waterfront promenade and three acres of open space. This project was evaluated in the San Pedro Waterfront Project EIR/EIS and subsequent Addendum. The revised project environmental analysis includes a 108,000-square-foot outdoor amphitheater, a more than 30,000-square-foot public lawn and park, a 2.5-acre entertainment venue, a 100-foot diameter Ferris wheel with an approximately 150-foot-tall by 50-foot-wide tower attraction, and other visitor-serving commercial uses. Construction of this project would generate over 300 jobs, and operation would sustain approximately 230 permanent jobs across hospitality, retail, and entertainment. Labor would be sourced from surrounding communities when possible through partnerships with local organizations and workforce programs. This project was evaluated in the San Pedro Waterfront Project EIS/EIR certified September 2009.	BHC certified the Final EIS/EIR and approved the project in 2009. Addendum 1 in May 2016 and Addendum 2 in November 2019. IS/NOP for a Supplemental EIR was released April 2022. Construction of promenade, town square, floating docks, and landscape/hardscape improvements completed. Construction of restaurant buildings to be completed in 2025. Draft Subsequent EIR released November 2024 for new phases of development. Conceptual planning and design in progress by private developer.

No. in Figure	Project Title and Location	Project Description	Project Status
13	Goods Movement Workforce Training Facility	Development of an approximately 20-acre site at 1400 East Anchorage Road for a goods movement workforce training facility.	Environmental review in process; NOP released February 2024. Project is in design with construction anticipated in 2027-2029.
14	SR-47/Vincent Thomas Bridge & Front Street/ Harbor Boulevard Interchange Reconfiguration	Reconfigure existing interchange at SR-47/Vincent Thomas Bridge and Harbor Boulevard/ Front Street to improve safety and operation for vehicles exiting the highway. Improvements also include modification of the eastbound entrance ramps and modification of Harbor Boulevard and Front Street approaching and between the ramp termini.	Construction ongoing through 2026.
15	Al Larson Boat Shop Improvement	Modernize existing boat yard and 30-year lease extension.	Final EIR certified in 2009. Project on hold.
16	Berths 302-306 [APL now known as Fenix Marine] Container Terminal	Improve and expand the existing terminal, including the addition of cranes, modifications to the main gate, converting an existing dry container storage unit to a refrigerated unit, and the expansion of the terminal onto 41 acres adjacent to the existing terminal. Revised project includes continued operations with minor modifications to the terminal and a 15-year lease extension through 2043.	Evaluated in Final EIR/EIS in 2012 and an Addendum in 2016. Expansion project on hold; revised project ongoing.
17	Berths 238-239 [PBF Energy] Marine Oil Terminal Improvement	Demolish the existing Berth 238 loading platform, construct a new platform and associated mooring structures at Berth 238, and install landside improvements.	Construction pending; anticipated in 2025-2027.
18	Star-Kist Cannery Facility	Demolish 14-acre site for future use as cargo support or container chassis storage.	MND adopted February 2023. Construction anticipated in 2025-2026.
19	Berths 167-169 [Shell] Marine Oil Terminal Wharf Improvements	Various wharf and seismic ground improvements that are required to comply with MOTEMS, as well as other landside elements and a new 30-year lease.	Final EIR certified in 2018. Construction is anticipated to continue through 2026.
20	Avalon and Fries Street Segments Closure	Permanent physical closure of segments of Avalon Boulevard and Fries Avenue by installing street modifications that include cul-de-sac, curbs and gutters, and fencing and signage.	Construction pending.
21	Berths 187-191 (Vopak) Liquid Bulk Terminal Wharf Improvements and Cement Terminal	Various wharf and improvements that are required to comply with MOTEMS, improvements to an adjacent wharf to facilitate resumption of cement terminal operations on the site, and a new 30-year entitlement.	IS/NOP issued July 2022. EIR in preparation (not yet issued).

No. in Figure	Project Title and Location	Project Description	Project Status
22	Cabrillo Way Marina	Develop, operate, and maintain a marina, hotels, boater and visitor-serving club and meeting facilities, restaurants, retail buildings, and commercial areas at 2293 Miner Street. Evaluated in the West Channel/Cabrillo Marina Phase II Development Project (Cabrillo Way Marina).	Final Supplemental EIR certified December 2003. Request for qualifications for contractors released in 2019. Environmental review in process.
23	SA Recycling Amendment to Permit No. 750	Project is located at 901 New Dock Street on Terminal Island, 90731. Project seeks an amendment to Permit No. 750 to allow for an up to 10-year extension of existing operations, with up to 5 additional years for use of the site as a non-operational restoration period for any necessary closure and remediation activities to restore the property.	Environmental review in process; Final Subsequent EIR approved by the Board of Harbor Commissioners April 2024. Project is in operation.
24	Terminal Island Grade Separation Project	Close the existing tunnel/crossing and create a new 2,000-foot-long four lane, grade-separated roadway over POLA mainline tracks with connecting roadway approaches on both ends. Construction would include a 115-foot span bridge, retaining walls, embankment fill, grading, paving, landscaping, and traffic signal modifications at the intersection of Ferry St. and Terminal Way.	Notice of Exemption processed January 2024. Construction anticipated to begin in Q1 2026.
Port of Long Beach Projects			
25	Pier Wind Terminal Development Project	Project involves the construction and development of 430 acres of new land for a terminal (Pier Wind Terminal) and transportation corridor. Construction of the terminal and transportation corridor would be completed in two phases over approximately 9 years beginning in 2027 with completion expected in 2035.	Environmental review in process; IS/NOP/NOI released November 2023.
26	Piers G & J Terminal Redevelopment	Develop a marine terminal of up to 315 acres by consolidating two existing marine container terminals on Piers G and J and several surrounding parcels. Construction would occur in four phases over an 11-year period and includes approximately 53 acres of landfills, dredging, concrete wharves, rock dikes, and road and railway improvements.	Project approved September 2000. Construction ongoing.
27	Pier B On-Dock Rail Support Facility	Expand the existing Pier B Rail Yard in two phases, including realignment of the adjacent Pier B Street and utility relocation.	Final EIR certified February 2018. Construction pending; expected to begin in 2024 and to be completed by 2032.
28	Southern California Edison Transmission Tower Replacement	Replace a series of transmission towers across the Cerritos Channel.	Final EIR certified in 2017. Construction of new towers completed August 2021. Demolition of old transmission tower in-water footings underway.
29	Toyota Facility Improvements	Construct a new consolidated vehicle processing and distribution center, hydrogen fuel cell and generator facility, and fueling station. Demolition of some existing facilities.	IS/MND adopted in 2018. Construction completed September 2023.

No. in Figure	Project Title and Location	Project Description	Project Status
30	World Oil Tank Installation Project	Installation and operation of two 25,000-bbl petroleum storage tanks at 1405 Pier C Street.	Environmental review in process. EIR issued September 2024.
31	Pier S Battery Energy Storage System Project	Construction and operation of a 70-megawatt (MW) battery energy storage system (BESS) on approximately 2.9 acres of the existing, privately-owned power generation site on Pier S.	Draft IS/MND released December 2024.
POLA and POLB Projects			
32	Maintenance Dredging and Structure Repair	Routine removal of accumulated sediment from channel beds to maintain the design depths of navigation channels, harbors, marinas, boat launches, and port facilities. Conducted regularly for navigational purposes. Also, routine in-kind maintenance and repairs of structures.	Dredging intermittently initiated on average every 3-5 years; at least once every 5 years. Intermittent structure repairs.
Community of San Pedro Projects			
33	John S. Gibson Truck & Chassis Parking Lot Project	Development of a fully paved, striped, and fenced 393-stall container parking lot to be used for loading/unloading and parking of shipping containers on 18.66 acres at 1599 W. John S Gibson Boulevard. The project includes a total landscape planting area of 9.35 acres, including a landscaped wall area.	IS/NOP issued October 2023. DEIR released November 2024.
34	Pacific Corridors Redevelopment	Development of commercial/retail, manufacturing, and residential components at cross streets Gaffey and Pacific Avenue. Construction underway of four housing developments and Welcome Park.	Project underway. Estimated to be completed in 2032 according to City of Los Angeles Planning Department.
POLB/U.S. Army Corps of Engineers Projects			
35	Port of Long Beach Deep Draft Navigation and Main Channel Deepening	Dredge up to 10 million cubic yards of material to deepen channels, basins, and standby areas to improve waterborne transportation efficiencies and navigational safety for vessel operations. A new dredge substation will be constructed to provide electricity to dredge equipment.	POLB NEPA EIS Record of Decision issued July 2022; CEQA EIR certified by POLB September 2022. Construction estimated to commence in 2027
Alameda Corridor Transportation Authority and Caltrans Projects			
36	SR-47 Vincent Thomas Bridge Deck Replacement	Bridge repairs including replacement of bridge deck, median concrete barrier and guardrails, and upgrading of seismic sensors.	Final EIR approved October 2024. Construction anticipated in 2026-2028.

1 Source: Caltrans, 2023a, 2023b; CEQAnet, 2000, 2001, 2020, 2022; Construction Journal, 2022; Pacific Maritime Magazine, 2023;
 2 POLA, 2018, 2023a, 2023b, 2024, 2025; POLB, 2020 2022, 2023; PR Newswire, 2019; SCAG, 2020; Urbanize Los Angeles,
 3 2018; USACE, 2019; N.D.

4.2 Cumulative Impact Analysis

The following sections analyze the cumulative impacts identified for each resource area relative to the Proposed Project and the list of related projects identified in Table 4-1. The discussion of impacts of past, present, and reasonably foreseeable future projects refers to the list of projects and reference numbers as shown in Table 4-1. The alternatives listed below are analyzed under CEQA relative to the related projects:

- Alternative 1 – No Project Alternative
- Alternative 2 – Reduced Project Alternative

The cumulative impact analysis considers the resources that are analyzed in Chapter 3, *Environmental Analysis*, of this EIR. The Initial Study (IS) determined that construction and operation of the Proposed Project may have significant impacts related to air quality, energy, greenhouse gases (GHG), and hazards and hazardous materials that would be potentially cumulatively considerable. Accordingly, these issues are further evaluated in this cumulative impact analysis. In addition, the IS identified less-than-significant impacts related to Aesthetics, Biological Resources, Geology and Soils, Hydrology and Water Quality, Land Use and Planning, Noise, Public Services, Transportation, and Utilities and Service Systems. As such, potential cumulative impacts of these resource areas are discussed briefly below.

Aesthetics. The Project area and vicinity are characterized primarily by views of industrial infrastructure, heavy equipment, highly developed uses, and the Pacific Ocean. The visual character in the vicinity of the Project area is already not considered to be sensitive or significantly affected due to the extensive industrialized development. Like the Proposed Project, the cumulative projects identified in Table 4-1 would generally result in visual impacts that are consistent with the existing use and nature of the Port and not significant. The Proposed Project's contribution to aesthetics would not be cumulatively considerable.

Biological Resources. The Project vicinity and overall Port are highly developed, with little natural terrestrial habitat or native vegetation to support biological resources. Past, present, and reasonably foreseeable future projects would be required to comply with existing laws and regulations such as the Migratory Bird Treaty Act, Clean Water Act, and Porter-Cologne Water Quality Control Act, and Fish and Game Code Section 1600 *et seq.* The Project site is disturbed and contains non-native vegetation, and the Proposed Project would not result in any significant impacts to biological resources. The Proposed Project's contribution to biological resources would not be cumulatively considerable.

Geology and Soils. While the Project area is in a seismically active region, seismic and geologic impacts are typically site-specific and limited to individual project sites. The impacts of projects identified in Table 4-1 would be specific to each project's respective site and would not contribute to impacts to other sites. Furthermore, these projects would be required to comply with local, State, and federal construction guidelines and standards to protect public safety. The only project at the Project site that has the potential to result in cumulative geology and soils impacts in combination with the Proposed Project is the Terminal Island Grade Separation (#24). However, both the Proposed Project and the projects identified in Table 4-1 are located on the relatively flat land of the Port Complex with no potential for landslides, artificial fill, and would follow erosion and sediment control requirements during construction. Therefore, Proposed Project impacts would not

1 have a potential to combine with similar effects from other projects and would not be
2 cumulatively considerable.

3 **Hydrology and Water Quality.** The geographic scope for hydrology and water quality
4 would include projects near the Project site that involve construction and ground distur-
5 bance. Combined, these projects could have impacts related to stormwater contamination,
6 runoff, or spills. Nearby projects include Navy Way/Seaside Interchange (#2) and SR-47/
7 Vincent Thomas Bridge & Front Street/Harbor Boulevard Interchange Reconfiguration
8 (#14). Like the Proposed Project, these projects would comply with the requirements of
9 the National Pollutant Discharge Elimination System (NPDES) Stormwater Program and
10 implement construction best management practices, as applicable. Therefore, Proposed
11 Project impacts would not have a cumulatively considerable impact.

12 **Land Use and Planning.** Cumulative impacts may occur if the Proposed Project
13 combined with other nearby projects, and would conflict with existing land uses resulting
14 in significant environmental impacts. The Proposed Project would require a Port Master
15 Plan amendment, changing the Project site's land use designations from Maritime (23.6
16 acres), Liquid Bulk (53.3 acres), and Container (12.3) to a dual designation of Container
17 and Maritime Support for the full 89.2-acre site. This land use change and proposed
18 operations would be consistent with the surrounding maritime support uses in Planning
19 Area 3, which focus on container operations. The Proposed Project would provide better
20 support for this use by improving the efficiency of terminal operations and optimizing the
21 use of existing land to support chassis storage and handling of empty wheeled containers.
22 Therefore, the Proposed Project would not contribute to a land use and planning conflict
23 that is cumulatively considerable.

24 **Noise.** Cumulative noise impacts would typically occur if the Proposed Project's noise
25 impacts combined with cumulative projects within approximately 0.25 mile, as well as
26 the potential for combined increases in traffic noise. Cumulatively considerable noise
27 impacts would occur if there are sensitive receptors near the Proposed Project and nearby
28 cumulative projects. The Terminal Island Grade Separation (#24) is the closest project to
29 the Proposed Project and would have an overlapping construction schedule with the
30 Proposed Project. The nearest sensitive receptors to the Project site are liveboards in
31 Newmarks Yacht Centre, approximately 1 mile north of the Project site, and residential
32 areas in San Pedro approximately 1.2 miles west of the Project site. Construction of the
33 Proposed Project and Terminal Island Grade Separation would occur Monday through
34 Friday between 7:00 a.m. and 4:00 p.m., or between 8:00 a.m. and 4:00 p.m. on Saturdays,
35 which would comply with Los Angeles Municipal Code Section 41.40, which restricts
36 construction noise between 9:00 p.m. and 7:00 a.m. and within 500 feet of noise sensitive
37 land uses (residences, hotels, or other places of residence). Operational activities may
38 cause an increase in on-site operational noise; however, given the distance to the closest
39 residential receptors these activities would not change ambient noise conditions. The
40 primary operational noise source would be generated from the diverted truck trips to the
41 Project site and workers commuting to the site, which would utilize the new grade
42 separation. Incremental changes in noise from vehicles along transportation routes would
43 attenuate over distance; resulting noise levels would not exceed any local noise ordinance
44 thresholds and therefore would not be cumulatively considerable.

45 **Public Services.** The geographic scope for cumulative effects on public services is the
46 area that includes the cumulative projects identified in Table 4-1 that would be served by
47 the same public service providers. Of the cumulative projects, Pier Wind Terminal

1 Development Project (#25) has the greatest potential to induce population growth by
2 attracting workers to the area, thus potentially increasing the need for public services.
3 However, the Proposed Project would not induce population growth, and with the
4 availability of multiple public services and varying construction schedules, the Proposed
5 Project would not result in a cumulatively considerable effect on public services.

6 **Transportation.** The geographic scope for cumulative impacts to transportation
7 primarily includes local roadways as well as pedestrian facilities and bicycle paths that
8 may serve the Proposed Project. Other cumulative projects that would utilize the same
9 roadways as the Proposed Project may include Navy Way/Seaside Interchange (#2), Star-
10 Kist Cannery Facility (#18), and Terminal Island Grade Separation (#24). Navy Way/
11 Seaside Interchange construction may coincide with the Proposed Project and other
12 ongoing projects in particular, as lane closures are likely to occur and affect transporta-
13 tion and traffic patterns. However, the project would be required to coordinate with the
14 public to reduce transportation conflicts. In addition, although the Proposed Project
15 would increase trucking activity at the Project site, truck trips during operations would be
16 diversions of existing truck trips and would not exacerbate truck traffic volumes.
17 Therefore, the impacts of the Proposed Project would not result in a cumulatively
18 considerable effect on transportation.

19 **Utilities and Service Systems.** The geographic scope for cumulative effects on utilities is
20 the area that includes the cumulative projects listed in Table 4-1 that would be served by
21 the same utilities as the Proposed Project. Of the cumulative projects, Pier Wind
22 Terminal Development Project (#25) has the greatest potential to induce population
23 growth by attracting workers to the area, thus potentially increasing the need for
24 expanded utilities and service systems. However, the Proposed Project would not induce
25 population growth. With the availability of existing utility providers and connections and
26 various construction schedules among the cumulative projects, the Proposed Project
27 would not result in a cumulatively considerable effect on utilities and service systems.

28 **4.2.1. Air Quality and Health Risk**

29 **4.2.1.1. Scope of Analysis**

30 The region of analysis for cumulative effects of air emissions (Cumulative Impacts AQ-1
31 and AQ-3) is the South Coast Air Basin (SCAB). For evaluating localized effects of air
32 quality through ambient pollutant concentrations (Cumulative Impacts AQ-2 and AQ-4),
33 the Southern California Air Quality Management District (SCAQMD) typically assesses
34 cumulative projects within one mile of a Project site. For health effects (Impact AQ-5),
35 the area of influence includes the cumulative projects within the Port Complex (the Ports
36 of Los Angeles and Long Beach) and their effects on the surrounding communities of San
37 Pedro, Wilmington, and Long Beach.

38 **4.2.1.2. Existing Cumulative Condition**

39 The SCAB experiences nonattainment conditions for ozone and particulate matter,
40 largely due to high regional population density, the vast number and wide range of types
41 of emission sources, and the topographical and meteorological conditions that foster
42 formation and limit dispersion of ambient air pollutants. The existing air quality condi-
43 tions of the SCAB occur in connection with the effects of past projects and the effects of
44 other current projects, and nonattainment conditions may be exacerbated by the effects of

1 probable future projects. Because of the existing regional air quality conditions, in
2 connection with the effects of cumulative projects, the existing regional cumulative air
3 quality impact is significant.

4 Elevated levels of cancer risk and adverse health effects occur in proximity to the Port
5 Complex due to a wide range of sources related to past projects and other current pro-
6 jects, including the operational activities of the San Pedro Bay Ports (SCAQMD, 2021).
7 The elevated levels of air pollution that can occur in this area of the SCAB are associated
8 with cancer risk and other adverse health effects, including asthma, bronchitis, reduced
9 lung function, and increased mortality and morbidity. Because of these adverse effects,
10 the existing localized cumulative air quality impact is significant.

11 **4.2.1.3. Cumulative Impact Analysis**

12 **Cumulative Impact AQ-1: Would construction of the Proposed Project or**
13 **alternatives result in emissions that would make a cumulatively**
14 **considerable contribution to a significant cumulative impact from**
15 **exceedance of the SCAQMD regional thresholds of significance for**
16 **construction emissions?**

17 ***Impacts of Past, Present, and Reasonably Foreseeable Future Projects***

18 Construction of the Proposed Project would span approximately 24 months. Several large
19 or moderate-sized construction projects could occur concurrently at the Port and
20 surrounding areas (Table 4-1) including, the Navy Way/Seaside Interchange (#2) located
21 adjacent to the Proposed Project. Other related projects that could be under construction
22 simultaneously include the Vincent Thomas Bridge Deck Replacement (#36), Pier B
23 On-Dock Rail Support Facility (#27), and the Deep Draft Navigation and Channel
24 Deepening (#35).

25 The construction impacts of the related projects would be cumulatively significant if their
26 combined construction emissions would exceed the SCAQMD daily emission thresholds
27 for construction. Because this would almost certainly be the case for the majority of anal-
28 yzed criteria pollutants and precursors (PM10, PM2.5, nitrogen oxides [NO_x], sulfur
29 oxides [SO_x], CO, and volatile organic compounds [VOCs]), the related projects would
30 result in a significant cumulative air quality impact for PM10, PM2.5, NO_x, SO_x, CO,
31 and VOCs.

32 ***Contribution of the Proposed Project (Prior to Mitigation)***

33 The calculated construction emissions associated with the Proposed Project reflect com-
34 pliance with SCAQMD Rules 403 and 1113, as described in Section 3.1.4, *Impacts and*
35 *Mitigation Measures*. The maximum daily emissions of criteria air pollutants from
36 construction of the Proposed Project would not exceed SCAQMD significance thresholds
37 (Table 3.1-5). As a result, Proposed Project construction emissions would not make a
38 cumulatively considerable contribution to a significant cumulative impact.

39 ***Contribution of the Alternatives***

40 The No Project Alternative (Alternative 1) would have no construction activities and
41 would therefore not make a cumulatively considerable contribution to a significant
42 cumulative impact related to construction emissions.

1 Emissions from construction of the Reduced Project Alternative (Alternative 2) would be
2 slightly less than the Proposed Project and therefore would not exceed the SCAQMD
3 significance thresholds for any criteria pollutants. As a result, construction emissions of
4 the Reduced Project Alternative (Alternative 2) would not make a cumulatively
5 considerable contribution to a significant cumulative impact.

6 ***Mitigation Measures and Residual Cumulative Impacts***

7 Because the Proposed Project's construction emissions would not exceed SCAQMD sig-
8 nificance thresholds, no mitigation is required, and construction of the Proposed Project
9 would not make a cumulatively considerable contribution to a significant cumulative
10 impact. As with the Proposed Project, construction emissions from the alternatives would
11 not exceed SCAQMD significance thresholds, no mitigation is required, and the alter-
12 natives would not make a cumulatively considerable contribution to a significant
13 cumulative impact.

14 **Cumulative Impact AQ-2: Would construction of the Proposed Project or 15 alternatives result in off-site ambient air pollutant concentrations that 16 would make a cumulatively considerable contribution to a significant 17 cumulative impact from exceedance of the SCAQMD thresholds of 18 significance?**

19 ***Impacts of Past, Present, and Reasonably Foreseeable Future Projects***

20 As described in Cumulative Impact AQ-1, above, several large or moderate-sized con-
21 struction projects (Table 4-1) and several small projects in the Port and surrounding areas
22 could occur concurrently with construction of the Proposed Project. The construction
23 impacts of these related projects would be cumulatively significant if their combined
24 construction ambient pollutant concentrations would exceed the ambient concentration
25 thresholds for construction. Although there is no way to be certain if a cumulative excee-
26 dance of the thresholds would happen for any pollutant without performing dispersion
27 modeling of the related projects, cumulative air quality impacts are likely to be signifi-
28 cant for ozone (considers NO_x and VOCs as an ozone precursors), PM₁₀, and PM_{2.5}, as
29 the South Coast Air Basin is a nonattainment area for these pollutants. Cumulative
30 impacts are unlikely to exceed the thresholds for CO and sulfur dioxide (SO₂) because the
31 entire SCAB is in attainment for CO and SO₂, and Project-level modelling evaluations for
32 other large Port projects have calculated levels well below the CO and SO₂ threshold.
33 Consequently, construction of the related projects is assumed to result in a significant
34 cumulative air quality impact for ozone, PM₁₀, and PM_{2.5}.

35 ***Contribution of the Proposed Project (Prior to Mitigation)***

36 Construction of the Proposed Project would not result in emissions that would exceed
37 SCAQMD localized significance thresholds (LSTs) (Table 3.1-6). Per SCAQMD policy,
38 a project's contribution is considered cumulatively considerable if the project's impacts
39 exceed SCAQMD project-specific significance thresholds (SCAQMD, 2003). As a result,
40 impacts from Proposed Project construction would not make a cumulatively considerable
41 contribution to an existing significant cumulative impact related to off-site ambient
42 concentrations.

Contribution of the Alternatives

The No Project Alternative (Alternative 1) would have no construction activities and would therefore not make a considerable contribution to an existing significant cumulative impact.

Construction of the Reduced Project Alternative (Alternative 2) would produce emissions similar to or slightly less than the Proposed Project and would therefore not result in emissions of any criteria pollutant that would exceed SCAQMD thresholds. Accordingly, impacts from construction of the Reduced Project Alternative (Alternative 2) would not make a cumulatively considerable contribution to an existing significant cumulative impact related to off-site ambient concentrations.

Mitigation Measures and Residual Cumulative Impacts

Because the Proposed Project and alternatives would not contribute to significant cumulative impacts related to off-site concentrations, no mitigation is required. Therefore, the Proposed Project and alternatives would not make a cumulatively considerable residual contribution to a significant cumulative impact.

Cumulative Impact AQ-3: Would the Proposed Project or alternatives result in operational emissions that would make a cumulatively considerable contribution to a significant cumulative impact from exceedance of the SCAQMD regional thresholds of significance?

Impacts of Past, Present, and Reasonably Foreseeable Future Projects

Operation of most of the past, present, and reasonably foreseeable projects in Table 4-1 would contribute to cumulatively considerable impacts by emitting criteria pollutants. The operational impacts of related projects would be cumulatively significant if their operational emissions would exceed the SCAQMD daily emission thresholds for operations. Because this almost certainly would be the case for most or all analyzed criteria pollutants and precursors, the related projects are assumed to result in a significant cumulative air quality criteria pollutant impact.

Contribution of the Proposed Project (Prior to Mitigation)

Proposed Project operational activities would exceed the numerical SCAQMD significance thresholds for emissions of nitrogen oxides (NO_x) (Table 3.1-7) and therefore would have a significant impact on regional air quality. As discussed above, per SCAQMD policy, a project's contribution is considered cumulatively considerable if the project's impacts exceed SCAQMD project-specific significance threshold (SCAQMD, 2003). As a result, impacts from Proposed Project operation would be cumulatively considerable prior to implementation of mitigation.

Contribution of the Alternatives

The No Project Alternative (Alternative 1) would not result in operational emissions. Accordingly, the No Project Alternative (Alternative 1) would not make a cumulatively considerable contribution to an existing significant cumulative air quality impact.

The Reduced Project Alternative (Alternative 2) would operate about half the area of the Proposed Project and therefore would produce about half the operational emissions in

1 comparison to the Proposed Project. Therefore, the Reduced Project Alternative
2 (Alternative 2) would not exceed numerical SCAQMD significance thresholds for
3 emissions of any criteria pollutants. Accordingly, impacts from operation of the Reduced
4 Project Alternative (Alternative 2) would not make a cumulatively considerable
5 contribution to an existing significant cumulative impact related to operational emissions.

6 ***Mitigation Measures and Residual Cumulative Impacts***

7 Implementation of mitigation measure (MM) AQ-1 (*Zero-Emission Cargo-Handling*
8 *Equipment*) and project feature (PF) AQ-1 (*Zero-Emission Operational Equipment*)
9 would lower operational NO_x emissions. Nonetheless, even with these measures, the
10 Proposed Project would make a cumulatively considerable contribution due to the limited
11 feasibility of zero-emission cargo-handling equipment at project start. The residual
12 cumulative impact would be significant and unavoidable.

13 As previously stated, the alternatives would not exceed the SCAQMD thresholds for
14 emissions of any criteria pollutants and therefore would not result in cumulatively
15 considerable impacts.

16 **Cumulative Impact AQ-4: Would operation of the Proposed Project or** 17 **alternatives make a cumulatively considerable contribution to a** 18 **significant cumulative impact related to off-site ambient air pollutant** 19 **concentrations exceeding the SCAQMD thresholds of significance?**

20 ***Impacts of Past, Present, and Reasonably Foreseeable Future Projects***

21 Operation of most of the related projects in Table 4-1 would contribute to cumulatively
22 considerable impacts. The operations impacts of related projects would be cumulatively
23 significant if their combined operations ambient pollutant concentrations would exceed
24 the ambient concentration thresholds for operations. Although there is no way to be
25 certain if a cumulative exceedance of the thresholds would happen for any pollutant
26 without performing dispersion modeling for each of other projects, cumulative air quality
27 impacts are likely to be significant for ozone (considers NO_x and VOCs as ozone
28 precursors), PM₁₀, and PM_{2.5}, as the South Coast Air Basin is a nonattainment area for
29 these pollutants. Consequently, operation of the related projects is assumed to result in a
30 significant cumulative air quality impact for ozone, PM₁₀, and PM_{2.5}. As explained under
31 Cumulative Impact AQ-2, cumulative impacts are unlikely to exceed the thresholds for
32 CO and SO₂.

33 ***Contribution of the Proposed Project (Prior to Mitigation)***

34 Operation of the Proposed Project would not produce maximum emissions that would
35 exceed the SCAQMD's numerical LSTs for any criteria pollutants (Table 3.1-8). As
36 discussed above, per SCAQMD policy, a project's contribution is considered cumula-
37 tively considerable if the project's impacts exceed SCAQMD project-specific signifi-
38 cance threshold (SCAQMD, 2003). As a result, impacts from Proposed Project operation
39 would not make a cumulatively considerable contribution to an existing significant
40 cumulative impact related to off-site ambient air pollutant concentrations.

Contribution of the Alternatives

The No Project Alternative (Alternative 1) would not result in operational emissions. Accordingly, the No Project Alternative (Alternative 1) would not make a cumulatively considerable contribution to an existing significant cumulative air quality impact.

The off-site ambient air pollutant concentrations associated with operation of the Reduced Project Alternative (Alternative 2) would be similar to or slightly less than the Proposed Project and would therefore not exceed SCAQMD's numerical LSTs for any criteria pollutants. Accordingly, impacts from operation of the Reduced Project Alternative (Alternative 2) would not make a cumulatively considerable contribution to an existing significant cumulative impact related to off-site ambient air pollutant concentrations.

Mitigation Measures and Residual Cumulative Impacts

Because the Proposed Project and alternatives would not contribute to significant cumulative impacts related to off-site ambient air pollutant concentrations during operations, no mitigation is required. Therefore, the Proposed Project and alternatives would not make a cumulatively considerable residual contribution to a significant cumulative impact.

Cumulative Impact AQ-5: Would the Proposed Project or alternatives make a cumulatively considerable contribution to a significant cumulative impact from exposure of receptors to significant levels of TACs?

Impacts of Past, Present, and Reasonably Foreseeable Future Projects

Although the SCAQMD MATES studies have documented substantial decreases in cancer risk to port-area populations over the past 20 years, health risk from air toxins in the port area remains elevated above the risks in communities elsewhere in the SCAB. In addition, the California Air Resources Board (CARB) *Diesel Particulate Matter Exposure Assessment Study for the Ports of Los Angeles and Long Beach* estimated that there are elevated levels of cancer risks due to operational emissions from sources within and near the Ports (CARB, 2006). Based on this information, cancer risk from toxic air contaminant (TAC) emissions within the Project region, including the past, present, and reasonably foreseeable future projects and the Proposed Project, is considered a significant cumulative impact. Non-cancer impacts associated with past, present, and reasonably foreseeable projects in the Proposed Project area are also assumed to have significant cumulative impacts.

As described in Section 3.1.1.3, the San Pedro Bay Ports have approved port-wide air pollution control measures through the San Pedro Bay Ports Clean Air Action Plan (CAAP). Implementation of those measures would reduce the health risk impacts from the Proposed Project and future projects at the ports. Existing regulations and future rules proposed by the CARB and the U.S. Environmental Protection Agency (see Section 3.1.3, *Applicable Regulations*) would also further reduce air emissions and associated cumulative health impacts from Port operations. However, because future proposed measures (other than CAAP measures) and rules have not been adopted, they have not been accounted for in the emission calculations or health risk assessment for the Proposed Project. Therefore, it is unknown at this time how those future measures would reduce cumulative health risk impacts within the Project area; accordingly, airborne

1 cancer and non-cancer impacts within the Project region are considered to be
2 cumulatively significant.

3 ***Contribution of the Proposed Project (Prior to Mitigation)***

4 Based on an assessment of health risks from the maximum anticipated rate of on-site
5 DPM emissions, the Proposed Project construction and operation activities would not
6 expose sensitive receptors to substantial TAC concentrations. As a result, impacts from
7 the Proposed Project would not make a cumulatively considerable contribution to an
8 existing significant cumulative impact related to the exposure of receptors to significant
9 levels of TACs.

10 ***Contribution of the Alternatives***

11 The No Project Alternative (Alternative 1) would not result in emissions of TACs.
12 Accordingly, the No Project Alternative (Alternative 1) would not make a cumulatively
13 considerable contribution to an existing significant cumulative air quality impact.

14 Impacts from emissions of TACs from the Reduced Project Alternative (Alternative 2)
15 would be similar to or slightly less than those of the Proposed Project. Accordingly, the
16 Reduced Project Alternative (Alternative 2) would not make a cumulatively considerable
17 contribution to an existing significant cumulative impact related to the exposure of
18 receptors to significant levels of TACs.

19 ***Mitigation Measures and Residual Cumulative Impacts***

20 Because the Proposed Project and alternatives would not make a cumulatively consider-
21 able contribution to significant cumulative impacts related to the exposure of receptors to
22 significant levels of TACs, no mitigation is required. Therefore, the Proposed Project and
23 alternatives would not make a cumulatively considerable residual contribution to a
24 significant cumulative impact.

25 **Cumulative Impact AQ-6: Would the Proposed Project or alternatives 26 conflict with or obstruct implementation of an applicable air quality plan?**

27 ***Impacts of Past, Present, and Reasonably Foreseeable Future Projects***

28 Related projects at the Port and surrounding areas (Table 4-1) would have significant
29 cumulative impacts if they result in population growth or operational emissions that
30 exceed the assumptions in the 2022 Air Quality Management Plan (AQMP) (SCAQMD,
31 2022). The related projects would be subject to regional planning efforts and applicable
32 land use plans (such as the General Plan or Community Plan) or transportation plans such
33 as the Regional Transportation Plan and the Regional Transportation Improvement
34 Program. Since the 2022 AQMP accounts for population projections that were developed
35 by SCAG and accounts for planned land use and transportation infrastructure growth, the
36 related projects would be consistent with the AQMP. Therefore, the related projects
37 would not result in significant cumulative impacts related to an obstruction of the AQMP.

38 Related projects would also have significant cumulative impacts if they conflict with the
39 Wilmington, Carson, West Long Beach Community Emissions Reduction Plan (CERP)
40 and the CAAP. The CERP and CAAP would guide future activities at the Port to reduce
41 air pollution in the Wilmington, Carson, and West Long Beach and Port Complex areas,
42 which are disproportionately burdened with existing cumulative air pollution exposure.

1 Foreseeable future projects in this analysis are anticipated to undergo independent envi-
2 ronmental review pursuant to CEQA and/or the National Environmental Policy Act
3 (NEPA) and would include consistency analyses with the CERP, CAAP, or other
4 applicable air quality plans. Therefore, impacts relating to conflicting or obstructing
5 implementation of an applicable air quality plan would not be cumulatively significant.

6 ***Contribution of the Proposed Project (Prior to Mitigation)***

7 As discussed in Section 3.1.5.1, *Proposed Project*, the Proposed Project would be consis-
8 tent with the AQMP, CERP, and the CAAP and therefore, would not conflict with or
9 obstruct implementation of an applicable air quality plan. As a result, the Proposed
10 Project would not make a cumulatively considerable contribution to a cumulative impact
11 in terms of conflicting with or obstructing implementation of an applicable AQMP.

12 ***Contribution of the Alternatives***

13 The No Project Alternative (Alternative 1) would not result in additional emissions that
14 would conflict with the AQMP, CERP, or the CAAP.

15 The Reduced Project Alternative (Alternative 2) would have generally similar emissions
16 as the Proposed Project and, for the reasons described above for the Proposed Project,
17 would not make a cumulatively considerable contribution to a cumulative impact in terms
18 of conflicting with or obstructing implementation of an applicable air quality plan.

19 ***Mitigation Measures and Residual Cumulative Impacts***

20 No mitigation is required because the Proposed Project and alternatives would not make a
21 cumulatively considerable contribution to a significant cumulative impact.

22 **4.2.2. Energy**

23 **4.2.2.1. Scope of Analysis**

24 The scope of the analysis of cumulative effects related to energy conservation includes
25 the overall Port Complex and the immediate surrounding region. The analysis recognizes
26 that energy is required for virtually every activity undertaken by citizens and businesses
27 every day, including domestic uses, transportation, manufacturing, construction, and
28 goods movement and distribution. Energy is supplied by a variety of sources, but fossil
29 fuels are currently the major source. Given the finite nature of fossil fuel supplies and the
30 need to reduce fossil fuel use due to their documented relationship to climate change, the
31 efficiency of energy use and the extent to which energy can be conserved are important
32 issues. The significance criteria used for the cumulative analysis are the same as those
33 used for analysis in Section 3.2.4.3, *Thresholds of Significance*.

34 **4.2.2.2. Existing Cumulative Condition**

35 As discussed in Section 3.2.2, *Environmental Setting*, the Los Angeles Department of
36 Water and Power (LADWP) provides electrical services to the Proposed Project and has
37 adequate generation capacity to serve the Port's current load requirements. Currently,
38 renewable energy sources account for approximately one-third of LADWP's capacity
39 (Table 3.2-1). This is expected to increase over time based on Senate Bill (SB) 100 which
40 established that 100 percent of all electricity in California must be obtained from

1 renewable and zero-carbon energy resources by 2045 through the Renewables Portfolio
2 Standards (RPS).

3 **4.2.2.3. Cumulative Impact Analysis**

4 **Cumulative Impact EN-1: Would the Proposed Project make a cumu-**
5 **latively considerable contribution to a significant cumulative impact**
6 **related to wasteful, inefficient, or unnecessary consumption of energy**
7 **resources, during Project construction or operation?**

8 ***Impacts of Past, Present, and Reasonably Foreseeable Future Projects***

9 Construction and operation of past, present, and reasonably foreseeable future projects
10 has consumed and will continue to consume energy in the form of electricity, petroleum
11 fuels, and natural gas. These demands are currently accommodated by existing facilities
12 as petroleum fuels are provided by local refineries, electricity is provided by LADWP,
13 and natural gas is provided by the Southern California Gas Company. Many of the
14 projects identified in Table 4-1 involve new or expanded uses that have resulted or will
15 result in additional demands on fuel, electricity, and natural gas.

16 As described above, adequate energy supplies exist to meet the demands of the related
17 projects. Furthermore, the high cost of energy represents an incentive for construction
18 and operational activities to use energy as efficiently as is consistent with Project goals
19 and fiscal responsibility. Therefore, past, present, and reasonably foreseeable future
20 projects would not result in a cumulatively significant impact related to energy use and
21 conservation.

22 ***Contribution of the Proposed Project (Prior to Mitigation)***

23 As described in Section 3.2.5.1, *Proposed Project*, construction of the Proposed Project
24 would not result in unnecessary use of energy because construction is necessary to install
25 the facility. Because construction would be consistent with the policies in the Port of Los
26 Angeles' Sustainable Construction Guidelines, which include provisions to reduce energy
27 consumption, such as limiting idling and other measures, it would not result in wasteful
28 consumption of energy.

29 Operation of the Proposed Project would require use of fossil fuels for motor vehicle
30 trips, but as described in Section 3.2.5.1, *Proposed Project*, overall use of energy for
31 operation-phase truck trips would not substantially change because these trips are not
32 new truck trips generated to/from the Port Complex. Forklifts and UTRs would be
33 electrically powered, which would reduce the use of fossil fuels. Accordingly, no notable
34 change in long-term consumption of non-renewable energy resources would occur with
35 implementation of the Proposed Project and the consumption of energy resources during
36 operation would not be wasteful, inefficient, or unnecessary.

37 Because construction and operation of the Proposed Project would represent an efficient
38 use of energy, the Proposed Project would not result in a cumulatively considerable
39 contribution to a significant cumulative impact related to energy demand or the efficient
40 use of energy resources under CEQA.

Contribution of the Alternatives

The No Project Alternative (Alternative 1) would not involve construction, and operational activities would be the same as baseline activities. Accordingly, energy consumption would not increase above baseline conditions. Therefore, the No Project Alternative (Alternative 1) would not make a cumulatively considerable contribution to a significant cumulative impact related to energy conservation.

The Reduced Project Alternative (Alternative 2) would involve similar construction and operational activities as the Proposed Project. Accordingly, this alternative would not make a cumulatively considerable contribution to a significant cumulative impact related to energy conservation.

Mitigation Measures and Residual Cumulative Impacts

Although no mitigation is required, MM AQ-1 (*Zero-Emission Cargo-Handling Equipment*) and PF AQ-1 (*Zero-Emission Operational Equipment*) would improve energy efficiency. The Proposed Project and alternatives would not make a cumulatively considerable contribution to a significant cumulative impact.

4.2.3. Greenhouse Gas Emissions

4.2.3.1. Scope of Analysis

Scientific evidence indicates a trend of warming global surface temperatures over the past century due largely to the generation of GHGs from anthropogenic sources, as further discussed in Section 3.3, *Greenhouse Gas Emissions*. Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors. Therefore, the cumulative global emissions of GHGs contributing to global climate change can be attributed to every nation, region, and city, and virtually every individual on Earth.

4.2.3.2. Existing Cumulative Condition

As discussed in Section 3.3.2, *Environmental Setting*, 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 first formalized a strategy to achieve GHG reductions in 2008, when California produced approximately 484 million metric tons of CO₂ equivalent (MMTCO₂e) according to the official CARB inventory (CARB, 2023). The State's

1 economy-wide emissions have been declining in recent years. California's sources of
2 GHG emitted approximately 381 MMTCO₂e in 2021 (CARB, 2023), less than ten
3 percent of the U.S. GHG emissions total for 2019 of 6,577 MMTCO₂e.

4 **4.2.3.3. Cumulative Impact Analysis**

5 **Cumulative Impact GHG-1: Would the Proposed Project or alternatives**
6 **generate greenhouse gas emissions, either directly or indirectly, that**
7 **would make a cumulatively considerable contribution to a significant**
8 **cumulative impact?**

9 ***Impacts of Past, Present, and Reasonably Foreseeable Future Projects***

10 Past, present, and reasonably foreseeable future projects in the area (Table 4-1) have
11 generated and will continue to generate GHGs from the combustion of fossil fuels and the
12 use of coatings, solvents, refrigerants, and other products. Current and future projects will
13 incorporate a variety of GHG reduction measures in response to federal, state, and local
14 mandates and initiatives, and these measures are expected to reduce GHG emissions from
15 future projects. However, because of the long-lived nature of GHGs in the atmosphere
16 and the global nature of GHG emissions impacts, no specific quantitative thresholds of
17 significance under CEQA for GHG emissions from related projects in the region or
18 statewide have been identified. It is therefore conservatively assumed that any GHG
19 emissions related to past, present, and reasonably foreseeable future projects represent a
20 significant cumulative impact.

21 ***Contribution of the Proposed Project (Prior to Mitigation)***

22 The challenge in assessing the significance of an individual project's contribution to glo-
23 bal GHG emissions and associated global climate change impacts is to determine whether
24 a project's GHG emissions, which are at a micro-scale relative to global emissions, make
25 a cumulatively considerable incremental contribution to a macro-scale impact. SCAQMD
26 developed a project-level significance threshold for GHGs. For the purposes of this
27 cumulative discussion, it is conservatively assumed that an exceedance of the project-
28 level threshold would result in a cumulatively considerable contribution to the overall
29 GHG burden. GHG emissions associated with the Proposed Project would be below
30 SCAQMD's threshold for both the opening year (2027) and buildout year (2046) (Table
31 3.3-2). Because construction and operational activities would not generate GHG
32 emissions that may have a significant impact on the environment, the Proposed Project
33 would not result in a cumulatively considerable contribution to a significant cumulative
34 impact related to GHG emissions.

35 ***Contribution of the Alternatives***

36 The No Project Alternative (Alternative 1) would not result in an increase in GHG
37 emissions and would therefore not make a cumulatively considerable contribution to a
38 significant cumulative impact.

39 The Reduced Project Alternative (Alternative 2) would produce less GHG emissions as
40 only half the site would be operating compared to the Proposed Project. Assuming a
41 proportional reduction in GHG emissions, the Reduced Project Alternative (Alternative
42 2) would not exceed the SCAQMD GHG significance thresholds. Accordingly, impacts
43 of the Reduced Project Alternative (Alternative 2) would not make a cumulatively

1 considerable contribution to an existing significant cumulative impact related to GHG
2 emissions.

3 ***Mitigation Measures and Residual Cumulative Impacts***

4 No mitigation is required; however, implementation of PF AQ-1 (*Zero-Emission*
5 *Operational Equipment*) would further reduce operational GHG emissions through the
6 transition of all yard equipment to zero-emission equipment. As such, the Proposed
7 Project would not make a cumulatively considerable residual contribution to significant
8 cumulative impacts related to operational GHG emissions. As previously stated, the
9 alternatives would not exceed the SCAQMD thresholds for GHG emissions and therefore
10 would not result in cumulatively considerable impacts.

11 **Cumulative Impact GHG-2: Would the Proposed Project or alternatives** 12 **conflict with an applicable plan, policy or regulation adopted for the** 13 **purpose of reducing the emissions of greenhouse gases, that would** 14 **make a cumulatively considerable contribution to a significant** 15 **cumulative impact?**

16 ***Impacts of Past, Present, and Reasonably Foreseeable Future Projects***

17 Related projects would have significant cumulative impacts if they would result in a
18 conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing
19 GHG emissions. Foreseeable future projects in this analysis are anticipated to undergo
20 independent environmental review pursuant to CEQA and/or NEPA and would include
21 consistency analyses with all applicable plans. Therefore, impacts relating to conflicting
22 or obstructing implementation of an applicable GHG emissions reduction plan would not
23 be cumulatively significant.

24 ***Contribution of the Proposed Project (Prior to Mitigation)***

25 Through the Climate Change Scoping Plan and CARB Cap-and-Trade and Low Carbon
26 Fuel Standard regulations, Proposed Project activities would either be exempt from or
27 would be required to comply with CARB rules and regulations as well as all other local
28 plans and strategies to reduce GHG emissions (Table 3.3-3). As such, the Proposed
29 Project would not conflict with any applicable plan, policy, or regulation adopted for the
30 purpose of reducing GHG emissions and would not result in a cumulatively considerable
31 contribution to a significant cumulative impact related to applicable plans, policies, or
32 regulations.

33 ***Contribution of the Alternatives***

34 The No Project Alternative (Alternative 1) would not result in an increase in GHG
35 emissions and associated potential to conflict with an applicable plan, policy, or
36 regulation adopted for reducing GHG emissions. Therefore, the No Project Alternative
37 (Alternative 1) would not make a cumulatively considerable contribution to a significant
38 cumulative impact.

39 As with the Proposed Project, the Reduced Project Alternative (Alternative 2) would not
40 conflict with any applicable plan, policy, or regulation adopted for the purpose of
41 reducing GHG emissions. Accordingly, impacts of the Reduced Project Alternative

1 (Alternative 2) would not make a cumulatively considerable contribution to an existing
2 significant cumulative impact related to applicable plans, policies, or regulations.

3 ***Mitigation Measures and Residual Cumulative Impacts***

4 Because the Proposed Project and alternatives would not result in a cumulatively consi-
5 derable contribution to significant cumulative impacts related to applicable plans,
6 policies, or regulations adopted for the purpose of reducing GHG emissions, no
7 mitigation is required. Therefore, the Proposed Project and alternatives would not make a
8 cumulatively considerable residual contribution to a significant cumulative impact.

9 **4.2.4. Hazards and Hazardous Materials**

10 **4.2.4.1. Scope of Analysis**

11 The geographic extent for the analysis of cumulative impacts related to hazardous
12 materials is limited to the Project site and the immediate vicinity surrounding the Project
13 site, which includes the adjacent harbor waters and land areas, and roadways adjacent to
14 and in the vicinity of the proposed Project. These geographic limits are appropriate to
15 consider the potential cumulative impacts, as the current and past land uses on the Project
16 site and those in the immediate vicinity of the Project site are the most important factors
17 in evaluating the potential for environmental contamination to occur or have occurred at
18 the Project site. Impacts would have the potential to occur during construction and would
19 be limited to the areas where and times when concurrent construction is occurring.

20 **4.2.4.2. Existing Cumulative Condition**

21 As discussed in Section 3.4.2, *Environmental Setting*, hazardous materials would be
22 encountered in soil or groundwater at the Project site during construction ground distur-
23 bing activities and construction would involve transport, handling, storage, and disposal
24 of soil and/or groundwater contaminated with hazardous materials. Additionally, several
25 known hazardous material sites are located nearby and adjacent to the Project site, but
26 most are sites that generate, use, store, and/or transport hazardous materials that are not
27 of environmental concern to the Project site due to status, types and volumes of hazar-
28 dous materials, and location (see Appendix C). Construction activities associated with the
29 Project and other current and reasonably foreseeable projects, either individually or
30 collectively, could result in hazardous materials being encountered in soils or ground-
31 water. Hazardous materials are potentially located in soil or groundwater in areas
32 adjacent to the Project site and throughout POLA. However, the Project would comply
33 with all applicable standards, regulations, and requirements to reduce potential impacts
34 from hazardous materials. It is anticipated that the listed current and reasonably
35 foreseeable projects would be implemented in a similar manner.

36 **4.2.4.3. Cumulative Impact Analysis**

37 **Cumulative Impact HAZ-1: Would the Proposed Project or alternatives**
38 **be located on a site which is included on a list of hazardous materials**
39 **sites compiled pursuant to Government Code § 65962.5 and, as a result,**
40 **would it create a significant hazard to the public or the environment,**

1 **that would make a cumulatively considerable contribution to a**
2 **significant cumulative impact?**

3 ***Impacts of Past, Present, and Reasonably Foreseeable Future Projects***

4 Table 4-1 provides a listing of current and reasonably foreseeable projects, including
5 other proposed or approved projects in the geographic area, such as POLA or POLB
6 authorized actions or activities, proposed or approved projects within areas under the
7 jurisdiction of the POLB, POLA, County of Los Angeles or surrounding cities, and other
8 actions or activities that the POLA consider reasonably foreseeable. Most of these
9 projects have either undergone independent environmental review pursuant to CEQA
10 and/or NEPA or will do so prior to approval. Even if environmental review has not been
11 completed for the projects described in Table 4-1, their effects were considered in the
12 cumulative impacts analyses in this EIR, as appropriate. Foreseeable future projects
13 identified for this analysis include POLA and POLB pier facility improvement, expan-
14 sion, modification, and development projects, decommissioning projects, channel deep-
15 ening projects, road and bridge replacement projects, transmission tower replacement
16 projects, and mixed-use development projects. The list was reviewed to identify cumu-
17 lative projects that are planned in the hazards and hazardous materials geographic extent.
18 Review of Table 4-1 identified no projects with cumulatively considerable impacts.

19 ***Contribution of the Proposed Project (Prior to Mitigation)***

20 Given that there is known contaminated soil and groundwater on the Project site, LAHD
21 would prepare a soil management plan for the Project site in accordance with applicable
22 regulatory requirements, which would direct the management of the specific contami-
23 nated media that could reasonably be expected to be encountered at the Project site. The
24 plan would identify known site contaminants, specify protocols for handling and man-
25 aging contaminated media, including necessary personnel training, the use of appropriate
26 personal protective equipment for construction personnel, stockpiling and testing of
27 excavated soils, and appropriate containment and disposal at appropriate licensed waste
28 disposal facilities. Implementation of the soil management plan would be a permit
29 condition. Furthermore, LAHD would comply with National Pollutant Discharge
30 Elimination System groundwater discharge requirements.

31 However, the Project site is located within a City-defined methane and methane buffer
32 zone, and soil vapors are known to be present on site. Ground-disturbing activities have
33 the potential to expose workers to elevated levels of methane gas, and soil vapor may
34 expose construction workers and on-site staff in buildings and enclosed structures during
35 operations.

36 Therefore, the potential for encountering contaminated soil, groundwater, or methane gas
37 conditions during construction and operation of the Proposed Project remains. As such,
38 impacts related to the Project site being located on or near a hazardous material site
39 would be significant. However, the individual, isolated contribution of the Proposed
40 Project's impact, while significant, would not be cumulatively considerable because the
41 cumulative projects do not result in cumulative impacts that could combine with the
42 Proposed Project.

Contribution of the Alternatives

The No Project Alternative (Alternative 1) would not involve any handling or disposal of the existing contaminated soil and groundwater and would therefore not make a cumulatively considerable contribution to a significant cumulative impact related to hazardous materials.

The Reduced Project Alternative (Alternative 2) would have substantially less ground disturbance and therefore would result in less contaminated materials being encountered. Similar to the Proposed Project, a soil management plan would be prepared in compliance with applicable regulatory requirements; any contaminated soil or groundwater would be handled, stored, transported, and disposed of in accordance with the soil management plan. Compliance with the LADBS Methane Mitigation Standards would also be required. NPDES groundwater discharge requirements would also be followed to ensure compliance. However, because the cumulative projects do not result in cumulatively considerable impacts, the individual, isolated contribution of the Reduced Project Alternative's (Alternative 2) impact, while locally significant, would not contribute to a significant cumulative impact.

Mitigation Measures and Residual Cumulative Impacts

With implementation of MM HAZ-1 (*Characterize Soil, Soil Vapor, and Groundwater Contamination*), impacts of the Proposed Project and Reduced Project Alternative (Alternative 2) would be reduced and would not make a cumulatively considerable contribution to a significant cumulative impact.

The No Project Alternative (Alternative 1) would not create a significant hazard, no mitigation is required and thus would not make a cumulatively considerable contribution to a significant cumulative impact.

4.3 Summary of Cumulatively Considerable Impacts

The following sections provide a summary of the resource area in which the Proposed Project and alternatives would make a cumulatively considerable and unavoidable contribution to a significant cumulative impact after mitigation and are based on the discussion in Section 4.2, *Cumulative Impact Analysis*. Table 4-2 summarizes residual impacts and the cumulative analysis for the Proposed Project and alternatives. Because the No Project Alternative (Alternative 1) would make no cumulatively considerable contributions to significant cumulative impacts to any resource area, as discussed in Section 4.2, *Cumulative Impact Analysis*, this alternative is not included in Table 4-2.

4.3.1. Proposed Project

The Proposed Project would make cumulatively considerable and unavoidable contributions to significant cumulative impact after mitigation (when applicable) in the following resource areas:

- Air Quality;
 - Emissions from operations would make a cumulatively considerable and unavoidable residual contribution to a significant cumulative impact related to operational NOx emissions.

4.3.2. Alternative 1 – No Project Alternative

Because site conditions would remain unchanged and there would be no construction or new operations at the site, the No Project Alternative (Alternative 1) would make no cumulatively considerable and unavoidable contributions to significant cumulative impacts to any resource area.

4.3.3. Alternative 2 – Reduced Project Alternative

The Reduced Project Alternative (Alternative 2) would result in construction and operation of about half the area of the Proposed Project and would produce half the emissions compared to the Proposed Project. Therefore, the Reduced Project Alternative (Alternative 2) would make no cumulatively considerable and unavoidable contributions to significant cumulative impacts to any resource area.

1 **Table 4-2: Summary Matrix of Residual Impacts, Cumulative Analysis, and Mitigation Measures for the Proposed Project**
 2 **and Alternatives**

Resource Area	Environmental Impacts	Proposed Project Residual Impacts	Applied Project Features/Mitigation Measures	Cumulative Analysis for Proposed Project	Cumulative Analysis for Alternative 2
Air Quality	AQ-1: Result in emissions that exceed the SCAQMD regional thresholds of significance for construction emissions	Less Than Significant	Mitigation Not Required	No cumulatively considerable contribution to an existing significant cumulative impact	Same as the Proposed Project
	AQ-2: Result in off-site ambient air pollutant concentrations that exceed the SCAQMD thresholds of significance	Less Than Significant	Mitigation Not Required	No cumulatively considerable contribution to an existing significant cumulative impact	Same as the Proposed Project
	AQ-3: Result in operational emissions that exceed SCAQMD peak day regional emission thresholds of significance	NOx emissions would be significant during operations	PF AQ-1: Zero-Emission Operational Equipment MM AQ-1: Zero-Emission Cargo-Handling Equipment	Cumulatively considerable contribution to an existing significant cumulative impact related to NOx emissions during operations	Less than the Proposed Project without the need for mitigation PF AQ-1: Zero-Emission Operational Equipment
	AQ-4: Result in off-site ambient air pollutant concentrations that exceed SCAQMD thresholds of significance	Less Than Significant	Mitigation Not Required	No cumulatively considerable contribution to an existing significant cumulative impact	Same as the Proposed Project
	AQ-5: Expose receptors to significant levels of TACs	Less Than Significant	Mitigation Not Required	No cumulatively considerable contribution to an existing significant cumulative impact	Same as the Proposed Project
	AQ-6: Conflict with or obstruct implementation of an applicable air quality plan	Less Than Significant	Mitigation Not Required	No cumulatively considerable contribution to an existing significant cumulative impact	Same as the Proposed Project

Resource Area	Environmental Impacts	Proposed Project Residual Impacts	Applied Project Features/Mitigation Measures	Cumulative Analysis for Proposed Project	Cumulative Analysis for Alternative 2
Energy	EN-1: Result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation	Less Than Significant	Mitigation Not Required PF AQ-1: Zero-Emission Operational Equipment MM AQ-1: Zero-Emission Cargo-Handling Equipment	No cumulatively considerable contribution to an existing significant cumulative impact	Mitigation Not Required PF AQ-1: Zero-Emission Operational Equipment
Greenhouse Gas Emissions	GHG-1: Generate greenhouse gas 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	No cumulatively considerable contribution to an existing significant cumulative impact	Mitigation Not Required PF AQ-1: Zero-Emission Operational Equipment
	GHG-2: Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases	Less Than Significant	Mitigation Not Required	No cumulatively considerable contribution to an existing significant cumulative impact	Same as the Proposed Project
Hazards and Hazardous Materials	HAZ-1: Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 and, as a result, would it create a significant hazard to the public or the environment	Significant impact from exposure to contaminated soil, groundwater, or methane gas.	MM HAZ-1: Characterize Soil, Soil Vapor, and Groundwater Contamination	No cumulatively considerable contribution to an existing significant cumulative impact	Same as the Proposed Project

1