

1

Executive Summary

2 ES.1 Introduction

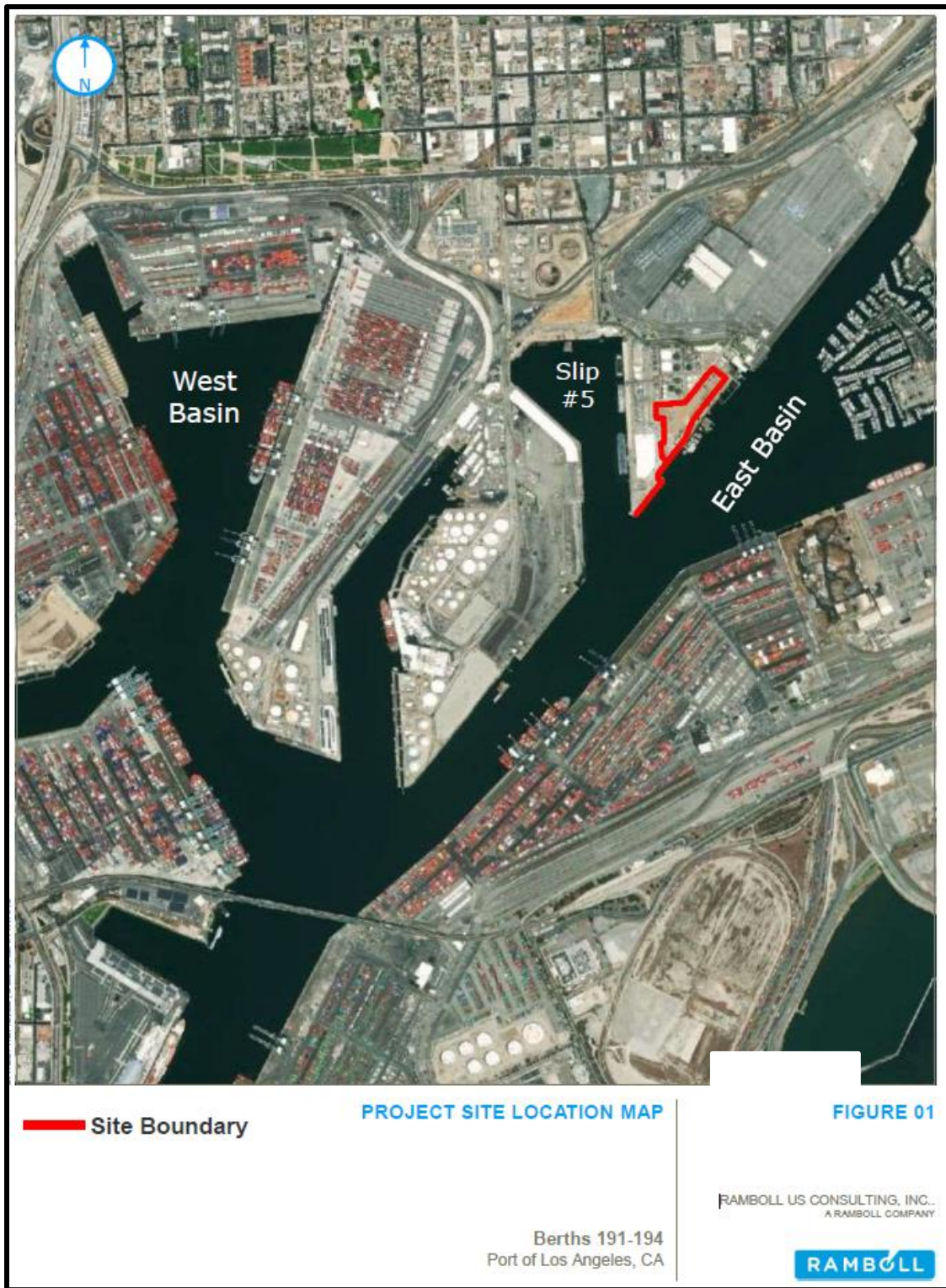
3 This Draft Environmental Impact Report (DEIR) has been prepared by Ramboll US
4 Consulting, Inc. under contract to Orcem and has been reviewed independently by Los
5 Angeles Harbor Department (LAHD) staff to evaluate environmental impacts related to
6 the construction and operation of the Berths 191-194 Low-Carbon Cement Processing
7 Facility Project (hereafter referred to as the “Proposed Project”) and alternatives. The
8 Project site (Figure ES-1) occupies approximately 6.1 acres adjacent to the East Basin of
9 Los Angeles Harbor within the City of Los Angeles. Ecocem Materials Ltd (“Ecocem”),
10 through its subsidiary Orcem California Inc., proposes to construct and operate a new
11 facility on the backlands adjacent to Berth 192-194 that would import raw materials by
12 ship and truck, produce a low-carbon binder (ground granulated blast furnace slag
13 [GGBFS]) as an alternative to traditional Portland cement in a processing facility on site,
14 and load third-party trucks that would transport the GGBFS to local consumers.

15 This Draft EIR has been prepared in accordance with the requirements of the California
16 Environmental Quality Act (CEQA) and the Guidelines for Implementation of the
17 California Environmental Quality Act of 1970 (State CEQA Guidelines). Specifically,
18 this Executive Summary has been prepared in accordance with Section 15123(b) of the
19 State CEQA Guidelines, which states that the EIR should contain a brief summary of the
20 proposed actions and its consequences and should identify: (1) each significant effect
21 with proposed mitigation measures and alternatives that would reduce or avoid that
22 effect; (2) areas of controversy known to the lead agency; and (3) issues to be resolved
23 including the choice among alternatives and whether or how to mitigate significant
24 effects. Throughout the Executive Summary are references to various chapters and
25 sections in the Draft EIR where detailed information and analyses can be reviewed.

26 ES.2 Purpose of this Draft EIR

27 This Draft EIR will be used to inform decision-makers and the public about the potential
28 significant environmental effects of the Proposed Project and alternatives. This Draft EIR
29 is also being provided to the public for review, comment, and participation in the
30 planning process. After public review and comment, a Final EIR will be prepared that
31 will include responses to comments on the Draft EIR received from agencies,
32 organizations, and individuals. The Final EIR will provide the basis for decision-making
33 by the CEQA lead agencies, as described below. Several other agencies (federal, state,
34 regional, and local) have jurisdiction over some part of the Proposed Project or a resource
35 area affected by the Proposed Project and are expected to utilize this EIR as part of their
36 approval or permit processes.

1 **Figure ES-1. Berths 191-194 Low-Carbon Cement Processing Facility Project Location**



2

1 **ES.2.1 CEQA Analysis Overview**

2 The LAHD operates the Port of Los Angeles (Port) under the legal mandates of the Port
3 of Los Angeles Tidelands Trust (Los Angeles City Charter, Article VI, Section 601;
4 California Tidelands Trust Act of 1911) and the California Coastal Act (PRC Division 20
5 Sections 30700 et seq.). The LAHD is chartered to develop and operate the Port to
6 benefit maritime uses, and it functions as a landlord by leasing Port properties to more
7 than 300 tenants.

8 The actions under consideration by LAHD involve physical changes to the environment
9 that would have potentially significant impacts, as determined in the Initial Study of the
10 Proposed Project (see Appendix A). In addition, comments provided by public agencies,
11 including responsible and trustee agencies, and the public in response to the Notice of
12 Preparation (NOP) have also indicated that the Proposed Project may have significant
13 impacts. Accordingly, an EIR is required. This Draft EIR evaluates the direct, indirect,
14 and cumulative impacts of the Proposed Project in accordance with the provisions set
15 forth in the State CEQA Guidelines. It will be used to address potentially significant
16 environmental issues.

17 The primary intended uses of this Draft EIR by LAHD are 1) to inform agencies
18 considering permit applications and other actions required to construct, lease, and operate
19 the selected alternative, 2) to inform the public of the potential environmental
20 consequences of the Proposed Project and alternatives, and 3) to adopt mitigation
21 measures that, where possible, will reduce or eliminate significant environmental
22 impacts. After public review and comment, a Final EIR will be prepared that will include
23 responses to comments on the Draft EIR received from agencies, organizations and
24 individuals. The Final EIR will then provide the basis for decision-making by the LAHD
25 and other concerned agencies.

26 **ES.2.2 Project Objectives**

27 The Proposed Project objective is to provide Southern California's construction industry
28 with a robust supply of a low-carbon-intensity binder, GGBFS, to help meet California's
29 2030 and 2045 net-zero cement emissions targets. GGBFS is categorized as a
30 supplementary cementing material (SCM) and has a lower embodied carbon footprint
31 than traditional Portland cement; SCMs are the primary resource to assure concrete
32 quality, particularly durability, for infrastructure projects. The Proposed Project would
33 build and operate a processing facility located at Berths 191-194 at the Port capable of
34 adapting to changes in raw material sources brought from overseas and using Ecocem's
35 cementitious technologies to produce GGBFS. The facility would be built and operated
36 by Ecocem's subsidiary, Orcem California, Inc.

37 **ES.2.3 Baseline**

38 Consistent with LAHD practice, the CEQA Baseline for the Proposed Project consists of
39 conditions in calendar year 2021, the first full calendar year preceding publication of the
40 NOP on March 10, 2022. In 2021, activity within the boundaries of the Project site (i.e.
41 the Berth 191 and the backlands at Berths 192-194) was minimal, consisting of LAHD
42 equipment storage uses; there were no vessel calls at Berth 191 in 2021. Activity on the
43 waterfront of B192-194 (i.e., adjacent to the Project site) consisted of operation of a
44 small-boat restoration operation. The baseline conditions for specific resource areas are
45 described in more detail in Chapter 2. However, for purposes of defining the CEQA

1 Baseline, it is considered that activities at the Project site during 2021 were negligible;
2 accordingly, the baseline for the CEQA analyses reflects zero activity.

3 **ES.3 Proposed Project**

4 **ES.3.1 Overview**

5 The Proposed Project includes construction of facilities on the backlands behind Berths
6 192-194, repairs to the wharf at Berth 191, and operation of the facility. Additional
7 elements of the Proposed Project include amendment of the Port Master Plan to change
8 the designated use of the Project site from liquid bulk to dry bulk (see Section 3.6 for
9 more detail) and issuance by the LAHD of a 30-year entitlement to Orcem. The
10 entitlement would require that the premises be used for activities related to operation of a
11 GGBFS processing facility and would require compliance with all applicable laws,
12 regulations, and policies.

13 The Project site is located at Berths 191-194 (Figure ES-1), which lies on the west side of
14 the Los Angeles East Basin and is generally bounded by the Vopak liquid bulk terminal
15 to the north and west, and the USC Boathouse and the East Basin to the south and east.
16 Road access is currently provided by Avalon Boulevard, Water Street and Yacht Street.

17 **ES.3.2 Project Construction**

18 The majority of the Proposed Project construction would be land-based, including
19 construction of the storage facilities, mill, and loading facilities in the backland Berths
20 192-194, and repairs to the wharf deck at Berths 191. However, in-water work is
21 expected at Berth 191 to replace damaged timber pilings and install an upgraded
22 fendering system, as well as minor clean-up dredging. Construction would take
23 approximately 18 months and is anticipated to begin in 2024.

24 Construction at Berths 192-194 would consist of site preparation and geotechnical
25 improvements; construction of the processing mill, fixed conveyance systems, and raw
26 material and product storage facilities; construction of ancillary buildings (workshop and
27 plant office) and a stormwater system; and improvement of utility (electrical and natural
28 gas) infrastructure, including a new electrical substation.

29 Construction at Berths 191 would consist of repairing and strengthening the wharf deck;
30 replacing timber structural piles; and bulkhead concrete patching and general concrete
31 repairs, as needed. In addition, approximately 47 new timber piles would be driven along
32 the wharf's edge to support the floating fender panel and Yokohama fenders necessary to
33 hold vessels several feet away from the wharf.

34 **ES.3.1 Project Operation**

35 Operation of the Proposed Project is described in detail in Section 2.5.3. The Orcem
36 facility would begin operation in 2025, following construction, and would reach full
37 operation in 2027 (Table ES-1 and Figure ES-2). At full operation, projected to be 97%
38 of capacity, the facility would produce approximately 775,000 metric tons of GGBFS per
39 year (note that all tonnage figures in this document are metric tons [1 metric ton = 2,204
40 pounds]), requiring approximately 800,000 metric tons of granulated blast furnace slag
41 (GBFS) and 39,500 metric tons of gypsum (the difference between the quantities of raw
42 materials and the quantity of product is due to moisture loss during processing). At that

level of activity, the facility would have 24 bulk vessel calls per year delivering the raw material GBFS, which would be stored in stockpiles in the backlands of Berths 192-194, and managed by a front-end loader and an excavator. The Proposed Project would generate approximately 65,950 truck one-way trips per year, mostly related to customers picking up the product, GGBFS, and approximately 3,950 truck trips related to receiving one of the raw materials, gypsum. The facility would operate up to 24 hours per day, 7 days per week, but trucks carrying product would arrive and depart largely during daylight hours 5 to 6 days per week. No rail operations would be conducted because the facility would not have rail access.

In accordance with CEQA, this Draft EIR must also evaluate a reasonable range of alternatives to the Proposed Project and briefly describe the rationale for selection and rejection of alternatives, compare the merits of the alternatives (see Chapter 5). Including the Proposed Project, seven alternatives were considered during the preparation of this Draft EIR. Of those, four (Proposed Project, No Project, Reduced Project, and Product Import Terminal Project) have been carried forward for analysis in Chapter 3, Environmental Analysis. Table ES-1 compares the Proposed Project and alternatives.

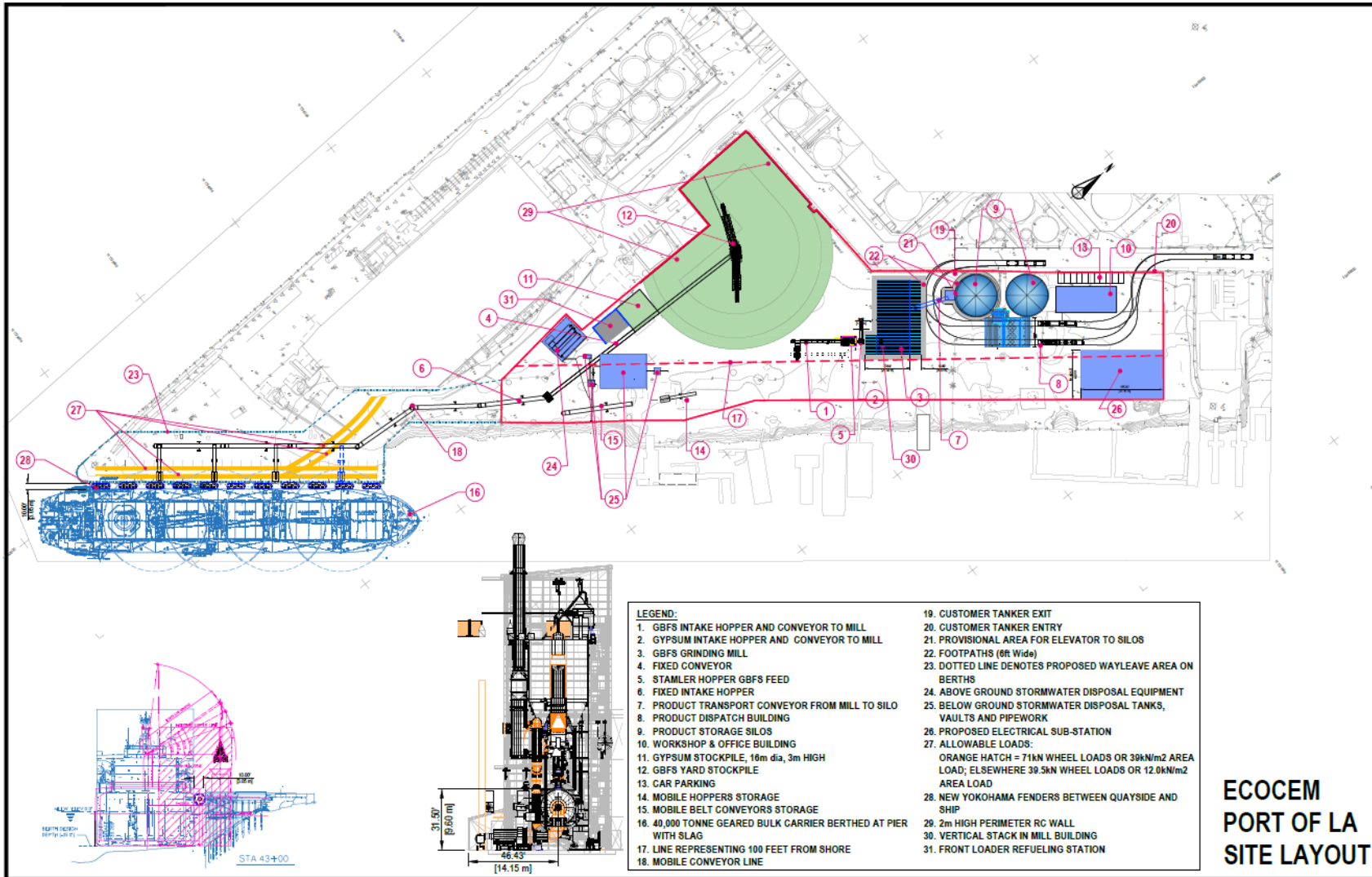
Table ES-1: Comparison of the Proposed Project and Alternatives

	Proposed Project	Alt 1: No Project	Alt. 2: Reduced Project	Alt.3: Product Import Terminal
GBFS Import (tons/year)	800,000	0	540,000	0
Gypsum Imports (tons/year)	39,500	0	26,700	0
GGBFS Production (tons/year)	775,000	0	522,950	775,000
Bulk Vessel Calls per year	24	0	16	23
Gypsum truck trips, one-way (trips/year)	3,950	0	2,670	0
GGBFS truck trips, one-way (trips/year)	62,000	0	41,836	62,000
Total Truck Trips (one-way/year)	65,950	0	44,506	62,000
Employees	26	0	18	12

Notes:

It is assumed that activity at the Project site during 2021 is negligible and the CEQA baseline has no activity. Throughput and activity values shown represent maximum levels expected to be reached by 2027

1 **Figure ES-2: Proposed Project Elements**



2
3

1 **ES.3.2 Alternative 1 – No Project**

2 State CEQA Guidelines Section 15126.6(e) requires the analysis of a no-project
3 alternative. This analysis must discuss the existing conditions as well as what would be
4 reasonably expected to occur in the foreseeable future if the Proposed Project is not
5 approved.

6 Under the No Project Alternative (Alternative 1), none of the proposed construction or
7 operational activities would occur. The existing Berths 192-194 backlands and the wharf
8 at Berth 191 would remain largely unused. Accordingly, activities under the No Project
9 Alternative would be the same as the CEQA Baseline, i.e., negligible, in the foreseeable
10 future.

11 **ES.3.3 Alternative 2 – Reduced Project**

12 In the Reduced Project Alternative (Alternative 2), all the elements of the Proposed
13 Project described above would be built, but the capacity of the facility to produce
14 GGBFS would be reduced. The logistics of stockpiling GBFS delivered by bulk vessels
15 and the economies that arise from operating a full-sized mill fewer hours per day mean
16 that it is likely that the Reduced Project Alternative would construct a facility very
17 similar in size and configuration to the Proposed Project that would operate at a lower
18 level of activity to produce a smaller amount of product than the Proposed Project (Table
19 ES-1).

20 **ES.3.4 Alternative 3 – Product Import Terminal**

21 In the Product Import Terminal Alternative (Alternative 3), raw materials would not be
22 imported and processed on site; instead, the finished GGBFS product and other
23 cementitious products would be produced overseas and transported by ocean-going bulk
24 vessels to Berth 191, where they would be off-loaded to storage silos by a vacuum
25 conveyor system. The facility's operations would essentially be the import of the product
26 and the loading of customer trucks. As shown in Table ES-1, the throughput and activity
27 levels of the Product Import Terminal Alternative (Alternative 3) would be similar to
28 those of the Proposed Project.

29 In the Product Import Terminal Alternative (Alternative 3), the office building and truck-
30 loading structures of the Proposed Project would be constructed, but there would be no
31 open storage piles for GBFS and gypsum and none of the mobile equipment needed to
32 manage the storage piles. Instead, this alternative would include a 60,000-ton bulk
33 storage structure, a fixed, enclosed vacuum suction conveyor system connecting Berth
34 191 to the storage structure, and another vacuum suction conveyor system connecting the
35 storage structure to the truck loading facility. The product would be stored in domes
36 located approximately where the Proposed Project's GBFS storage piles would
37 be. Construction would be similar, albeit shorter (about 15 months), to the Proposed
38 Project, as the bulk storage facility would require similar ground improvements,
39 foundations, and wharf repairs.

40 **ES.3.5 Alternatives Considered But Not Further Evaluated**

41 A number of alternatives were considered based on comments received on the NOP and
42 during preparation of this Draft EIR, but were eliminated from further discussion and

1 detailed, co-equal analysis. The alternatives that were considered but not carried into the
2 EIR were:

- 3 • Maximum Site Capacity Alternative;
- 4 • Rail-Based Product Distribution Alternative;
- 5 • Covered Stockpile Alternative;
- 6 • Recreational/Other Use Alternative; and
- 7 • Alternate Location Alternative.

8 **ES.4 Environmental Impacts**

9 Based on the Initial Study in the NOP (Appendix A), the following issues have been
10 determined to be potentially significant and are therefore evaluated in this Draft EIR:

- Air Quality
- Biological Resources
- Energy
- Geology
- Greenhouse Gas Emissions
- Land Use
- Noise
- Ground Transportation
- Tribal Cultural Resources

11 The criteria for determining the significance of environmental impacts are described for
12 each issue in Chapter 3, Environmental Analysis.

13 Chapter 4, Cumulative Analysis, discusses the cumulative impacts of the Proposed
14 Project and the alternatives. Chapter 5 compares the alternatives, Chapter 6 summarizes
15 the Proposed Project's significant, irreversible commitments of resources, and Chapter 7
16 discusses growth-inducing impacts. Summary descriptions of the impacts, mitigation
17 measures, and residual impacts for the Proposed Project and alternatives are provided in
18 Table ES-2.

19 **ES.4.1 Impacts Not Considered in This Draft EIR**

20 The scope of this Draft EIR was established based on the NOP issued by LAHD on
21 March 10, 2022, and on the comments received by agencies and the public. The NOP
22 concluded that certain topics would involve a less than significant or no significant
23 impact and need not be evaluated in the Draft EIR. Accordingly, the Draft EIR does not
24 analyze agriculture and forestry, aesthetics, cultural resources, hazards and hazardous
25 materials, hydrology and water quality, mineral resources, population and housing, public
26 services, recreation, utilities and service systems, and wildfire.

27 **ES.4.2 Impacts of the Proposed Project**

28 Impacts and mitigation measures are described in Table ES-2.

29 **ES.4.2.1 Unavoidable Significant Impacts**

30 This Draft EIR has determined that implementation of the Proposed Project would result
31 in significant and unavoidable impacts related to:

- 1 • **Air Quality:** NO_x emissions from operations for all analysis years; offsite
2 ambient annual and 24-hr PM₁₀ and 24-hr PM_{2.5} concentrations for all analysis
3 years.
- 4 • **Greenhouse Gases:** Greenhouse gas emissions would exceed the SCAQMD
5 mass emissions thresholds in all three analysis years.
- 6 • **Noise:** Construction activities that would exceed ambient noise levels by 5dBA
7 or more lasting more than 10 days in a 3-month period.

8 **ES.4.2.2 Summary of Significant Impacts that Can Be Mitigated, 9 Avoided, or Substantially Lessened**

10 This Draft EIR has determined that implementation of the Proposed Project would result
11 in significant impacts that can be mitigated related to:

- 12 • **Biological Resources:** substantial adverse effect, either directly or through
13 habitat modification on any identified species. Implementation of MM BIO-1
14 protect marine mammals would reduce a significant impact to less than
15 significant.

16 **ES.4.2.3 Summary of Less than Significant Impacts**

17 1. This Draft EIS/EIR has determined that implementation of the Proposed Project
18 would result in less than significant impacts without mitigation related to the issues
19 of:

- 20 • **Air Quality:** Construction emissions and related off-site ambient air pollution
21 concentrations; expose receptors to significant levels of TACs; health risks
22 associated with individual cancer risk, population cancer burden, chronic
23 noncancer hazard index, and acute noncancer hazard index; conflict with or
24 obstruction of implementation of an applicable AQMP.
- 25 • **Energy:** Environmental impacts due to wasteful, inefficient, or unnecessary
26 consumption of energy; conflict/obstruct state or local renewable energy plan.
- 27 • **Geology and Soils:** Located on unstable geologic unit or become unstable as a
28 result of project construction/operation.
- 29 • **Land Use:** Cause significant environmental impact due to conflict with any land
30 use plan, policy, or regulation.
- 31 • **Noise:** Operational noise; excessive groundborne vibration or noise from
32 construction and operation.
- 33 • **Ground Transportation:** Conflict or be inconsistent with CEQA Guidelines
34 section 15064.3, subdivision (b); conflict with a program, plan, ordinance or
35 policy addressing transit roadway, bicycle and pedestrian facilities; increase
36 hazards due to a geometric design feature or incompatible uses; result in
37 inadequate emergency access.
- 38 • **Tribal Cultural Resources:** Cause substantial adverse change in the significance
39 of a tribal cultural resource, as defined in Public Resources Code Section 21074
40 and is listed or eligible for listing in the California Register of Historical
41 resources as defined in Public Resources Code Section 5020.1 (k) or 5024.1.

1 **Table ES-2: Summary of Impacts and Mitigation for the Proposed Project and Alternatives**

Alternative	Environmental Impacts	Impact Determination	Applied Mitigation/Lease Measures or Controls	Residual Impacts
3.1 Air Quality				
Proposed Project	AQ-1: The Proposed Project would result in construction-related emissions that exceed an SCAQMD localized threshold of significance in Table 3.1-4	Less than significant	Mitigation not required although LM AQ-4: Port of Los Angeles Sustainable Construction would be applied	Less than significant
	AQ-2: Proposed Project construction would result in off-site ambient air pollutant concentrations that exceed a SCAQMD threshold of significance in Table 3.1-6	Less than significant	Mitigation not required although LM AQ-4: Port of Los Angeles Sustainable Construction would be applied	Less than significant
	AQ-3: The Proposed Project would result in operational emissions that exceed an SCAQMD regional threshold of significance in Table 3.1-7	Operation emissions would be significant for NOx in all operational years	LM AQ-1: Fleet Modernization for Cementitious Material Handling Equipment LM AQ-2: Periodic Review of New Technology LM AQ-3: At-Berth Vessel Emissions Control Pilot Study LM AQ-5: Vessel Speed Reduction Program (VSRP) LM AQ-6: Front End Loader Replacement Schedule	Impacts would remain significant and unavoidable for NOx in all operational years
	AQ-4: Proposed Project operations would result in offsite ambient air pollutant concentrations that exceed a SCAQMD threshold of significance in Table 3.1-8	Operation-related ambient pollutant concentrations would be significant in all years for annual and 24-hr PM ₁₀ and 24-hr PM _{2.5}	No additional mitigation measures applied, AP-42 guidance and BACT for dust collection and bag filters applied LM AQ-1: Fleet Modernization for Cementitious Material Handling Equipment LM AQ-2: Periodic Review of New Technology. LM AQ-3: At-Berth Vessel Emissions Control Pilot Study LM AQ-5: Vessel Speed Reduction Program (VSRP) LM AQ-6: Front End Loader Replacement Schedule	Impacts would remain significant and unavoidable for operation-related ambient pollutant concentrations in all years for annual and 24-hr PM ₁₀ and 24-hr PM _{2.5}
	AQ-5: The Proposed Project would expose receptors to significant levels of TACs	Less than significant	Mitigation not required although LM AQ-1, LM AQ-2, LM AQ-3, LM AQ-4, LM AQ-5 and LM AQ-6 would be applied	Less than significant
	AQ-6: The Proposed Project would not conflict with or obstruct implementation of an applicable AQMP	Less than significant	No mitigation is required	Less than significant

Alternative	Environmental Impacts	Impact Determination	Applied Mitigation/Lease Measures or Controls	Residual Impacts
Alternative 1 – No Project	AQ-1: Alternative 1 would not result in construction-related emissions that exceed an SCAQMD threshold of significance in Table 3.1-4	No impact	Not applicable	No impact
	AQ-2: Alternative 1 construction would not result in off-site ambient air pollutant concentrations that exceed a SCAQMD threshold of significance in Table 3.1-6	No impact	Not applicable	No impact
	AQ-3: Alternative 1 would result in operational emissions that exceed an SCAQMD threshold of significance in Table 3.1-7	No impact	Not applicable	No impact
	AQ-4: Alternative 1 operations would result in offsite ambient air pollutant concentrations that exceed a SCAQMD threshold of significance in Table 3.1-8	No impact	Not applicable	No impact
	AQ-5: Alternative 1 would not expose receptors to significant levels of TACs	No impact	Not applicable	No impact
	AQ-6: Alternative 1 would not conflict with or obstruct implementation of an applicable AQMP	No impact	Not applicable	No impact
Alternative 2 – Reduced Project	AQ-1: Alternative 2 would not result in construction-related emissions that exceed an SCAQMD threshold of significance in Table 3.1-4	Less than significant	LM AQ-4: Port of Los Angeles Sustainable Construction	Less than significant
	AQ-2: Alternative 2 construction would result in off-site ambient air pollutant concentrations that exceed a SCAQMD threshold of significance in Table 3.1-6	Less than significant	LM AQ-4: Port of Los Angeles Sustainable Construction	Less than significant
	AQ-3: Alternative 2 would result in operational emissions that exceed an SCAQMD threshold of significance in Table 3.1-7	Operational emissions would be significant for NOx in all years	LM AQ-1: Fleet Modernization for Cementitious Material Handling Equipment LM AQ-2: Periodic Review of New Technology LM AQ-3: At-Berth Vessel Emissions Control Pilot Study	Operational emissions would remain significant and unavoidable for NOx in all years

Alternative	Environmental Impacts	Impact Determination	Applied Mitigation/Lease Measures or Controls	Residual Impacts
			LM AQ-5: Vessel Speed Reduction Program (VSRP) LM AQ-6: Front End Loader Replacement Schedule	
	<p>AQ-4: Alternative 2 operations would result in offsite ambient air pollutant concentrations that exceed a SCAQMD threshold of significance in Table 3.1-8</p>	<p>Operation-related ambient pollutant concentrations would be significant for annual and 24-hr PM₁₀ in all years and 24-hr PM_{2.5} in 2027 and 2049</p>	<p>No additional mitigation measures applied, AP-42 guidance and BACT for dust collection and bag filters already applied LM AQ-1: Fleet Modernization for Cementitious Material Handling Equipment LM AQ-2: Periodic Review of New Technology LM AQ-3: At-Berth Vessel Emissions Control Pilot Study LM AQ-5: Vessel Speed Reduction Program (VSRP) LM AQ-6: Front End Loader Replacement Schedule</p>	<p>Impacts would remain significant and unavoidable for operation-related ambient pollutant concentrations for annual and 24-hr PM₁₀ in all years and 24-hr PM_{2.5} in 2027 and 2049</p>
	<p>AQ-5: Alternative 2 would not expose receptors to significant levels of TACs</p>	<p>Health risks would be below the significance threshold for all receptor types.</p>	<p>Mitigation not required although LM AQ-1, LM AQ-2, LM AQ-3, LM AQ-4, LM AQ-5 and LM AQ-6 would be applied</p>	<p>Less than significant</p>
<p>AQ-6: Alternative 2 would not conflict with or obstruct implementation of an applicable AQMP</p>	<p>Less than significant</p>	<p>No mitigation required</p>	<p>Less than significant</p>	
Alternative 3 – Product Import Terminal	<p>AQ-1: Alternative 3 would not result in construction-related emissions that exceed an SCAQMD threshold of significance in Table 3.1-4</p>	<p>Less than significant</p>	<p>Mitigation not required although LM AQ-4: Port of Los Angeles Sustainable Construction would be applied</p>	<p>Less than significant</p>
	<p>AQ-2: Alternative 3 construction would result in off-site ambient air pollutant concentrations that exceed a SCAQMD threshold of significance in Table 3.1-6</p>	<p>Less than significant</p>	<p>Mitigation not required although LM AQ-4: Port of Los Angeles Sustainable Construction would be applied</p>	<p>Less than significant</p>
	<p>AQ-3: Alternative 3 would result in operational emissions that exceed an SCAQMD threshold of significance in Table 3.1-7</p>	<p>Operational emissions would be significant for NOx in all years</p>	<p>LM AQ-1: Fleet Modernization for Cementitious Material Handling Equipment LM AQ-2: Periodic Review of New Technology LM AQ-3: At-Berth Vessel Emissions Control Pilot Study LM AQ-5: Vessel Speed Reduction Program (VSRP)</p>	<p>Impacts would remain significant and unavoidable for NOx in all years</p>

Alternative	Environmental Impacts	Impact Determination	Applied Mitigation/Lease Measures or Controls	Residual Impacts
			LM AQ-6: Front End Loader Replacement Schedule	
	<p>AQ-4: Alternative 3 operations would result in offsite ambient air pollutant concentrations that exceed a SCAQMD threshold of significance in Table 3.1-8</p>	<p>Operation-related ambient pollutant concentrations would be significant for annual and 24-hour PM₁₀ in all years</p>	<p>No additional mitigation measures applied, BACT for dust collection and bag filters already applied LM AQ-1: Fleet Modernization for Cementitious Material Handling Equipment LM AQ-2: Periodic Review of New Technology LM AQ-3: At-Berth Vessel Emissions Control Pilot Study LM AQ-5: Vessel Speed Reduction Program (VSRP)</p>	<p>Impacts would remain significant and unavoidable for operation-related ambient pollutant concentrations for annual and 24-hour PM₁₀ in all years</p>
	<p>AQ-5: Alternative 3 would not expose receptors to significant levels of TACs</p>	<p>Less than significant</p>	<p>Mitigation not required although LM AQ-1, LM AQ-2, LM AQ-3, LM AQ-4, and LM AQ-5 would be applied</p>	<p>Less than significant</p>
	<p>AQ-6: Alternative 3 would not conflict with or obstruct implementation of an applicable AQMP</p>	<p>Less than significant</p>	<p>No mitigation required</p>	<p>Less than significant</p>
3.2 Biological Resources				
<p>Proposed Project</p>	<p>BIO-1: Would the Proposed Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?</p>	<p>Potentially significant impact</p>	<p>MM BIO-1: Protect marine mammals, would be applied</p>	<p>Less than significant</p>
<p>Alternative 1 – No Project</p>	<p>BIO-1: Would Alternative 1 have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and</p>	<p>No impact</p>	<p>Not applicable</p>	<p>No impact</p>

Alternative	Environmental Impacts	Impact Determination	Applied Mitigation/Lease Measures or Controls	Residual Impacts
	Wildlife or U.S. Fish and Wildlife Service?			
Alternative 2 – Reduced Project	BIO-1: Would Alternative 2 have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	Potentially significant impact	MM BIO-1: Protect Marine Mammals	Less than significant
Alternative 3 – Product Import Terminal	BIO-1: Would Alternative 3 have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	Potentially significant impact	MM BIO-1: Protect Marine Mammals	Less than significant
3.3 Energy				
Proposed Project	EN-1: Would the Proposed Project result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	Less than significant	No mitigation is required	Less than significant
Alternative 1 – No Project	EN-1: Would Alternative 1 result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy	No impact	Not applicable	No impact

Alternative	Environmental Impacts	Impact Determination	Applied Mitigation/Lease Measures or Controls	Residual Impacts
	resources, during project construction or operation?			
Alternative 2 – Reduced Project	EN-1: Would Alternative 2 result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	Less than significant	No mitigation is required.	Less than significant
Alternative 3 – Product Import Terminal	EN-1: Would Alternative 3 result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	Less than significant	No mitigation is required.	Less than significant
3.4 Geology and Soils				
Proposed Project	GEO-1: Would the Proposed Project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslides, lateral spreading, subsidence, liquefaction, or collapse?	Less than significant	No mitigation is required	Less than significant
Alternative 1 – No Project	GEO-1: Would Alternative 1 be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslides, lateral spreading, subsidence, liquefaction, or collapse?	No impact	Not applicable	No impact
Alternative 2 – Reduced Project	GEO-1: Would Alternative 2 be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslides, lateral spreading, subsidence, liquefaction, or collapse?	Less than significant	No mitigation is required	Less than significant

Alternative	Environmental Impacts	Impact Determination	Applied Mitigation/Lease Measures or Controls	Residual Impacts
Alternative 3 – Product Import Terminal	GEO-1: Would Alternative 3 be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslides, lateral spreading, subsidence, liquefaction, or collapse?	Less than significant	No mitigation is required	Less than significant
3.5 Greenhouse Gases				
Proposed Project	GHG-1: Would the Proposed Project generate GHG emissions, either directly or indirectly, may have a significant impact on the environment?	GHG emissions would be significant under CEQA in 2025, 2027 and 2049 analysis years	LM GHG-1: GHG Credit Fund LM AQ-1: Fleet Modernization for Cementitious Material Handling Equipment LM AQ-2: Periodic Review of New Technology LM AQ-3: At-Berth Vessel Emissions Control Pilot Study LM AQ-4: Port of Los Angeles Sustainable Construction LM AQ-5: Vessel Speed Reduction Program (VSRP) LM AQ-6: Front End Loader Replacement Schedule	GHG emissions impacts would be significant and unavoidable for all analyzed years
Alternative 1 – No Project	GHG-1: Would Alternative 1 generate GHG emissions, either directly or indirectly, may have a significant impact on the environment?	No Impact	Not applicable	No Impact
Alternative 2 – Reduced Project	GHG-1: Would Alternative 2 generate GHG emissions, either directly or indirectly, may have a significant impact on the environment?	GHG emissions would be significant under CEQA in 2025, 2027 and 2049 analysis years	LM GHG-1: GHG Credit Fund LM AQ-1: Fleet Modernization for Cementitious Material Handling Equipment LM AQ-2: Periodic Review of New Technology LM AQ-3: At-Berth Vessel Emissions Control Pilot Study LM AQ-4: Port of Los Angeles Sustainable Construction LM AQ-5: Vessel Speed Reduction Program (VSRP) LM AQ-6: Front End Loader Replacement Schedule	GHG emissions impacts would be significant and unavoidable for analysis year 2027
Alternative 3 – Product Import Terminal	GHG-1: Would Alternative 3 generate GHG emissions, either directly or	Less than significant	Mitigation not required; however, the following lease measures would be applied: LM AQ-1: Fleet Modernization for Cementitious Material Handling Equipment	Less than significant

Alternative	Environmental Impacts	Impact Determination	Applied Mitigation/Lease Measures or Controls	Residual Impacts
	indirectly, may have a significant impact on the environment?		LM AQ-2: Periodic Review of New Technology LM AQ-3: At-Berth Vessel Emissions Control Pilot Study LM AQ-4: Port of Los Angeles Sustainable Construction would be applied LM AQ-5: Vessel Speed Reduction Program (VSRP)	
3.6 Land Use				
Proposed Project	LU-1: Would the Proposed Project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental impact?	Less than significant	No mitigation is required	Less than significant
Alternative 1 – No Project	LU-1: Would Alternative 1 cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental impact?	Less than significant	Not applicable	Less than significant
Alternative 2 – Reduced Project	LU-1: Would Alternative 2 cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental impact?	Less than significant	No mitigation is required	Less than significant
Alternative 3 – Product Import Terminal	LU-1: Would Alternative 3 cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental impact?	Less than significant	No mitigation is required	Less than significant
3.7 Noise				
Proposed Project	NOI-1: Would the Proposed Project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or			

Alternative	Environmental Impacts	Impact Determination	Applied Mitigation/Lease Measures or Controls	Residual Impacts
	noise ordinance, or applicable standards of other agencies?			
	NOI-1a: Daytime construction activities lasting more than 10 days in a 3-month period that would exceed existing ambient exterior noise levels by 5 dBA or more at a noise-sensitive/receptor	Significant	MM NOI-1: Noise Barriers Adjacent to Pile Driving Activities MM NOI-2: Noise Reduction of Landside Pile Driving	Significant and unavoidable
	NOI-1b: Construction activities could result in noise levels that would exceed the ambient noise level by 5 dBA at noise-sensitive receptors between the hours of 9:00 p.m. and 7:00 a.m., Monday through Friday, before 8:00 a.m. or after 6:00 p.m. on Saturday, or at any time on Sunday	Significant	MM NOI-1: Noise Barriers Adjacent to Pile Driving Activities MM NOI-2: Noise Reduction of Landside Pile Driving	Significant and unavoidable
	NOI-1c: For operational noise, a significant noise impact would occur if project operations cause the ambient noise level measured at the property line of affected uses (i.e., sensitive receptors) to increase by 3 dBA in CNEL to or within the 'normally unacceptable' or 'clearly unacceptable category,' or any increase in CNEL 5 dBA or greater	Less than significant	No mitigation is required	Less than significant
	NOI-1d: Would the Proposed Project result in generation of excessive groundborne vibration or groundborne noise levels?	Less than significant	No mitigation is required	Less than significant
Alternative 1 – No Project	NOI-1: Would Alternative 1 result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise			

Alternative	Environmental Impacts	Impact Determination	Applied Mitigation/Lease Measures or Controls	Residual Impacts
	ordinance, or applicable standards of other agencies?			
	NOI-1a: Daytime construction activities lasting more than 10 days in a 3-month period that would exceed existing ambient exterior noise levels by 5 dBA or more at a noise-sensitive/receptor	No impact	Not applicable	No impact
	NOI-1b: Construction activities could result in noise levels that would exceed the ambient noise level by 5 dBA at noise-sensitive receptors between the hours of 9:00 p.m. and 7:00 a.m., Monday through Friday, before 8:00 a.m. or after 6:00 p.m. on Saturday, or at any time on Sunday	No impact	Not applicable	No impact
	NOI-1c: For operational noise, a significant noise impact would occur if project operations cause the ambient noise level measured at the property line of affected uses (i.e., sensitive receptors) to increase by 3 dBA in CNEL to or within the 'normally unacceptable' or 'clearly unacceptable category,' or any increase in CNEL 5 dBA or greater	No impact	Not applicable	No impact
	NOI-1d: Would Alternative 1 result in generation of excessive groundborne vibration or groundborne noise levels?	No impact	Not applicable	No impact
Alternative 2 – Reduced Project	NOI-1: Would Alternative 2 result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			

Alternative	Environmental Impacts	Impact Determination	Applied Mitigation/Lease Measures or Controls	Residual Impacts
	NOI-1a: Daytime construction activities lasting more than 10 days in a 3-month period that would exceed existing ambient exterior noise levels by 5 dBA or more at a noise-sensitive/receptor	Significant	MM NOI-1: Noise Barriers Adjacent to Pile Driving Activities	Significant and unavoidable
	NOI-1b: Construction activities could result in noise levels that would exceed the ambient noise level by 5 dBA at noise-sensitive receptors between the hours of 9:00 p.m. and 7:00 a.m., Monday through Friday, before 8:00 a.m. or after 6:00 p.m. on Saturday, or at any time on Sunday	Significant	MM NOI-1: Noise Barriers Adjacent to Pile Driving Activities MM NOI-2: Noise Reduction of Landside Pile Driving	Significant and unavoidable
	NOI-1c: For operational noise, a significant noise impact would occur if project operations cause the ambient noise level measured at the property line of affected uses (i.e., sensitive receptors) to increase by 3 dBA in CNEL to or within the 'normally unacceptable' or 'clearly unacceptable category,' or any increase in CNEL 5 dBA or greater	Less than significant	No mitigation is required	Less than significant
	NOI-1d: Would Alternative 2 result in generation of excessive groundborne vibration or groundborne noise levels?	Less than significant	No mitigation is required	Less than significant
Alternative 3 – Product Import Terminal	NOI-1: Would Alternative 3 result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			

Alternative	Environmental Impacts	Impact Determination	Applied Mitigation/Lease Measures or Controls	Residual Impacts
	NOI-1a: Daytime construction activities lasting more than 10 days in a 3-month period that would exceed existing ambient exterior noise levels by 5 dBA or more at a noise-sensitive/receptor	Significant	MM NOI-1: Noise Barriers Adjacent to Pile Driving Activities MM NOI-2: Noise Reduction of Landside Pile Driving	Significant and unavoidable
	NOI-1b: Construction activities could result in noise levels that would exceed the ambient noise level by 5 dBA at noise-sensitive receptors between the hours of 9:00 p.m. and 7:00 a.m., Monday through Friday, before 8:00 a.m. or after 6:00 p.m. on Saturday, or at any time on Sunday	Significant	MM NOI-1: Noise Barriers Adjacent to Pile Driving Activities MM NOI-2: Noise Reduction of Landside Pile Driving	Significant and unavoidable
	NOI-1c: For operational noise, a significant noise impact would occur if project operations cause the ambient noise level measured at the property line of affected uses (i.e., sensitive receptors) to increase by 3 dBA in CNEL to or within the 'normally unacceptable' or 'clearly unacceptable category,' or any increase in CNEL 5 dBA or greater	Less than significant	No mitigation is required	Less than significant
	NOI-1d: Would Alternative 3 result in generation of excessive groundborne vibration or groundborne noise levels?	Less than significant	No mitigation is required	Less than significant
3.8 Ground Transportation				
Proposed Project	TRANS-1: Would the Proposed Project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	No impact	No mitigation is required	No impact
	TRANS-2: Would the Proposed Project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	No impact	No mitigation is required	No impact

Alternative	Environmental Impacts	Impact Determination	Applied Mitigation/Lease Measures or Controls	Residual Impacts
	TRANS-3: Would the Proposed Project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	No impact	No mitigation is required	No impact
	TRANS-4: Would the Proposed Project result in inadequate emergency access?	No impact	No mitigation is required	No impact
Alternative 1 – No Project	TRANS-1: Would Alternative 1 conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	No impact	Not applicable	No impact
	TRANS-2: Would Alternative 1 conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	No impact	Not applicable	No impact
	TRANS-3: Would Alternative 1 substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	No impact	Not applicable	No impact
	TRANS-4: Would Alternative 1 result in inadequate emergency access?	No impact	Not applicable	No impact
Alternative 2 – Reduced Project	TRANS-1: Would Alternative 2 conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	No Impact	No mitigation is required	No Impact
	TRANS-2: Would Alternative 2 conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	No impact	No mitigation is required	No impact

Alternative	Environmental Impacts	Impact Determination	Applied Mitigation/Lease Measures or Controls	Residual Impacts
	TRANS-3: Would Alternative 2 substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	No impact	No mitigation is required	No impact
	TRANS-4: Would Alternative 2 result in inadequate emergency access?	No impact	No mitigation is required	No impact
Alternative 3 – Product Import Terminal	TRANS-1: Would Alternative 3 conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	No Impact	No mitigation is required	No Impact
	TRANS-2: Would Alternative 3 conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	No impact	No mitigation is required	No impact
	TRANS-3: Would Alternative 3 substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	No impact	No mitigation is required	No impact
	TRANS-4: Would Alternative 3 result in inadequate emergency access?	No impact	No mitigation is required	No impact
3.9 Tribal Cultural Resources				
Proposed Project	TCR-1: Would the Proposed Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is i. listed or eligible for listing in the California Register of	Less than significant	No mitigation is required but SC TCR-1 would be employed	Less than significant

Alternative	Environmental Impacts	Impact Determination	Applied Mitigation/Lease Measures or Controls	Residual Impacts
	Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k).?			
	TCR-2: Would the Proposed Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?	Less than significant	No mitigation is required but SC TCR-1 would be employed	Less than significant
Alternative 1 – No Project	TCR-1: Would Alternative 1 cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is listed or eligible for listing in the California Register of Historical Resources, or in a local	No impact	Not applicable	No impact

Alternative	Environmental Impacts	Impact Determination	Applied Mitigation/Lease Measures or Controls	Residual Impacts
	<p>register of historical resources as defined in Public Resources Code Section 5020.1(k).?</p> <p>TCR-2: Would Alternative 1 cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?</p>	No impact	Not applicable	No impact
Alternative 2 – Reduced Project	<p>TCR-1: Would Alternative 2 cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as</p>	Less than significant	No mitigation is required but SC TCR-1 would be employed	Less than significant

Alternative	Environmental Impacts	Impact Determination	Applied Mitigation/Lease Measures or Controls	Residual Impacts
	<p>defined in Public Resources Code Section 5020.1(k).?</p>			
	<p>TCR-2: Would Alternative 2 cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.?</p>	<p>Less than significant</p>	<p>No mitigation is required but SC TCR-1 would be employed</p>	<p>Less than significant</p>
<p>Alternative 3 – Product Import Terminal</p>	<p>TCR-1: Would Alternative 3 cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is listed or eligible for listing in the California Register of Historical Resources, or in a local</p>	<p>Less than significant</p>	<p>No mitigation is required but SC TCR-1 would be employed</p>	<p>Less than significant</p>

Alternative	Environmental Impacts	Impact Determination	Applied Mitigation/Lease Measures or Controls	Residual Impacts
	register of historical resources as defined in Public Resources Code Section 5020.1(k).?			
	<p>TCR-2: Would Alternative 3 cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?</p>	Less than significant	No mitigation is required but SC TCR-1 would be employed	Less than significant

1

ES.4.2.4 Mitigation Measures

The following mitigation measures would be required by LAHD for the Proposed Project; these measures would also be required for the Reduced Project Alternative (Alternative 2) and Product Import Terminal (Alternative 3), as noted in Table ES-2. Mitigation cannot be applied to the No Project Alternative (Alternative 1) because there would be no discretionary actions that would allow the imposition of mitigation.

Biological Resources

MM BIO-1: Protect marine mammals. Although it is expected that marine mammals will voluntarily move away from the area at the commencement of “soft start” of pile-driving activities, as a precautionary measure, pile-driving activities occurring as part of the pile installation will include establishment of a safety zone, by a qualified marine mammal professional, and the area surrounding the operations (including the safety zones) will be monitored for marine mammals by a qualified marine mammal observer¹. The pile driving site will move with each new pile; therefore, the safety zones will move accordingly.

Noise

MM NOI-1: Noise Barriers Adjacent to Pile Driving Activities. Where feasible, erect temporary noise barriers around all landside pile driving equipment. The barriers should be installed directly between the pile driving equipment and the California Yacht Harbor so as to break line-of-sight. It is expected that MM NOI-1 will reduce sound levels from pile driving activity by at least 5dBA.

MM NOI-2: Noise Reduction of Landside Pile Driving. In place of impact pile driving systems, where feasible, require the use a vibratory pile driving system or other pile driving system limited to 95 dBA or less when measured at a distance of 50 feet for landside pile driving.

ES.4.2.5 Lease Measures and Standard Conditions of Approval

The following lease measures would be required by LAHD for the Proposed Project; these measures would also be required for the Reduced Project Alternative (Alternative 2) and Product Import Terminal (Alternative 3), as noted in Table ES-2.

Air Quality

LM AQ-1: Fleet Modernization for Cementitious Material Handling Equipment Handling Equipment. Tenant shall replace cementitious material handling equipment used for operation with the cleanest available equipment, that meets operating and safety requirements, anytime new or replacement equipment is purchased, with a first preference for zero-emission equipment, a second preference for near-zero equipment (such as, hybrid or low-NOx equipment), and third for the cleanest available if zero or near-zero equipment is not feasible, provided that LAHD shall conduct engineering assessments to confirm that such equipment is capable of installation at the facility.

¹ Marine mammal professional qualifications shall be identified based on criteria established by LAHD during the construction bid specification process. Upon selection as part of the construction award winning team, the qualified marine mammal professional shall develop site specific pile-driving safety zone requirements, which shall follow NOAA Fisheries Technical Guidance Assessing the Effects of Anthropogenic Sound on Marine Mammal Hearing (NOAA 2016) in consultation with the acoustic threshold white paper prepared for this purpose by LAHD (LAHD 2017). Final pile-driving safety zone requirements developed by the selected marine mammal professional shall be submitted to LAHD Construction and Environmental Management Divisions prior to commencement of pile-driving.

1 Tenant may make a recommendation to LAHD for LAHD's concurrence as to which
2 equipment is available and is feasible.

3 Starting one year after the effective date of a new entitlement between the Tenant and the
4 LAHD, Tenant shall submit to the Port an equipment inventory and 5-year procurement
5 plan for new equipment, and infrastructure, and will update the procurement plan
6 annually in order to assist with planning for transition of equipment to zero emissions in
7 accordance with the foregoing paragraph.

8 **LM AQ-2: Periodic Review of New Technology.** The Tenant will conduct a periodic
9 review of any Port-identified or other new emissions-reducing technology and report to
10 the LAHD on the feasibility of any new technology advancements that may reduce
11 emissions not less frequently than once every five years following the effective date of
12 the entitlement. The technology review would be subject to approval by LAHD and
13 would involve consulting with appropriate resources (e.g., consultants, engineers,
14 regulators) to validate the findings. If the review demonstrates the new technology would
15 be effective in reducing emissions and is determined by the LAHD to be feasible,
16 including but not limited to, financial, technical and operational considerations, the
17 Tenant will implement the new air quality technological advancements, subject to mutual
18 agreement, which shall not be unreasonably withheld.

19 **LM AQ-3: At-Berth Vessel Emission Control Pilot Study.** The Tenant shall complete
20 a pilot study to evaluate the feasibility of implementing an at-berth vessel emissions
21 capture and control system within 3 years of entitlement execution. If proven to be
22 feasible, including but not limited to financial, technical, and operational considerations,
23 and upon California Air Resources Board certification, the Tenant will be required to
24 implement the technology when operationally feasible as described in Tenant's pilot
25 study. This measure will rely on the Tenant's pilot study evaluation and determination,
26 and is subject to mutual agreement between the Tenant and LAHD, which shall not be
27 unreasonably withheld or unreasonably required.

28 **LM AQ-4: Port of Los Angeles Sustainable Construction would be applied** The
29 project shall implement and comply with all measures as required by the Los Angeles
30 Harbor Department's Sustainable Construction Guidelines adopted in February 2008 and
31 updated in November 2009 during Project construction activities. These requirements
32 shall be stipulated in the construction contracts and bid documents.

33 **LM AQ-5: Vessel Speed Reduction Program (VSRP).** 95 percent of vessels calling at
34 the Ecocem Dry Bulk Processing Facility will be required to comply with the expanded
35 VSRP at 12 knots between 40 nautical miles (nm) from Point Fermin and the
36 Precautionary Area.

37 **LM AQ-6: Front End Loader Replacement Schedule.** The tenant shall maintain a
38 replacement schedule of the off-road diesel front end loader of every two years, where an
39 equivalent new piece that meets operational requirements and meets Tier 4 Final
40 standards or cleaner, would be procured.

41 **Greenhouse Gas**

42 **LM GHG-1: GHG Credit Fund.** LAHD shall establish a Greenhouse Gas Fund, which
43 LAHD shall have the option to accomplish through a Memorandum of Understanding
44 (MOU) with the California Air Resources Board (CARB) or another appropriate entity.
45 The fund shall be used for GHG-reducing projects and programs approved by the Port of
46 Los Angeles, or through the purchase of emission reduction credits from a CARB
47 approved offset registry. It shall be the responsibility of the Tenant to contribute to the

1 fund to mitigate 11,298 MT at the existing market rate of \$35.20 per carbon credit. Fund
2 contribution shall be a one-time payment of \$397,690 payable upon substantial
3 completion of Project construction. If LAHD is unable to establish the fund within one
4 year prior to when payment is due, the Tenant shall instead purchase emission reduction
5 credits from a CARB approved GHG offset registry.

6 **LM AQ-1, LM AQ-2, LM AQ-3, LM AQ-4, LM AQ-5, and LM AQ-6** are also
7 expected to have co-benefits for greenhouse gases.

8 **Tribal Cultural Resources**

9 **SC TCR-1: Stop Work in the Area if Prehistoric and/or Archaeological Resources**
10 **are Encountered.** In the unlikely event that any prehistoric artifact of historic period
11 materials or bone, shell, or non-native stone is encountered during construction, work
12 shall be immediately stopped, the area secured, and work relocated to another area until
13 the found materials can be assessed by a qualified archaeologist. Examples of such
14 cultural materials might include historical trash pits containing bottles and/or ceramics; or
15 structural remains or concentrations of grinding stone tools such as mortars, bowls,
16 pestles, and manos; chipped stone tools such as projectile points or choppers; and flakes
17 of stone not consistent with the immediate geology such as obsidian or fused shale. The
18 contractor shall stop construction within 30 feet of the exposure of these finds until a
19 qualified archaeologist can be retained to evaluate the find (see 36 CFR 800.11.1 and 14
20 CCR 15064.5(f)). If the resources are found to be significant, they shall be avoided or
21 shall be mitigated consistent with Section 106 of the NHPA or State Historic Preservation
22 Officer Guidelines.

23 **ES.4.2.6 Cumulative Impacts**

24 This Draft EIR defines cumulative impacts as the changes in the environment resulting
25 from the incremental impact of the Proposed Project and alternatives when added to other
26 closely related recent, current, and reasonably foreseeable future projects. This definition
27 is consistent with State CEQA Guidelines Section 15355(b). Cumulative impacts can
28 result from individually minor but collectively significant projects taking place over a
29 period of time.

30 Forty-eight related projects in the general area of the Berths 191-194 Terminal could
31 contribute to impacts that could be cumulatively significant. The Proposed Project and
32 the alternatives were analyzed in conjunction with those related projects for their
33 potential to contribute to significant cumulative impacts. The analysis was conducted for
34 the future years considering the predicted activity levels for those years without the
35 Proposed Project (termed the future baseline). This approach differs from the analyses
36 summarized above, which assess impacts relative to the CEQA baseline, which for this
37 project is negligible.

38 Cumulative impact evaluations for each resource are included in Chapter 4 of this Draft
39 EIR. The Proposed Project includes the construction and operations of a low-carbon-
40 intensity binder processing facility which consists of improving the structural
41 characteristics of the soil in preparation for site development. The Proposed Project
42 and/or the Alternatives would make cumulatively considerable contributions to
43 significant cumulative impacts in the following resource areas under CEQA:

- 44 • Air Quality and Meteorology;
- 45 • Noise;

- Greenhouse Gas Emissions.

Alternative 1 (No Project Alternative), Alternative 2 (Reduced Project Alternative), and Alternative 3 (Product Import Terminal Alternative) would contribute to fewer cumulatively considerable impacts than the Proposed Project under CEQA. The cumulative considerable contributions to a significant impact from the Proposed Project and alternatives are further described below:

Proposed Project Cumulatively Considerable Impacts

The following are cumulative considerable and unavoidable impacts for the Proposed Project after mitigation (if applicable, as described in section ES 5.2.4):

Air Quality and Meteorology

- Emissions from operations would make a cumulatively considerable and unavoidable contribution to a significant cumulative impact for NO_x emissions and for offsite ambient pollutant concentrations of PM₁₀ and PM_{2.5}.
- The Proposed Project would make a cumulatively considerable and unavoidable contribution to a significant cumulative impact for cancer risk for residential, sensitive and occupational receptors, for chronic and acute hazard indices, and for population cancer burden.

Greenhouse Gas Emissions

- GHG emissions would add to existing global GHG levels and, therefore, would make a cumulatively considerable and unavoidable contribution to a significant cumulative impact relative to climate change.

Noise

- Construction of the Proposed Project, if it occurred at the same time as construction of the nearby Vopak project, would make a cumulatively considerable and unavoidable contribution to a significant cumulative impact.

Alternative 1 (No Project Alternative) Cumulatively Considerable Impacts

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 in any resource area.

Alternative 2 (Reduced Project Alternative) Cumulatively Considerable Impacts

Like the Proposed Project, the Reduced Project Alternative (Alternative 2) would make cumulatively considerable and unavoidable contributions to significant cumulative impact after mitigation in the following resource areas:

Air Quality and Meteorology

- Emissions from the Reduced Project Alternative (Alternative 2) operations would make a cumulatively considerable and unavoidable contribution to a significant cumulative impact for NO_x emissions and for offsite ambient pollutant concentrations of PM₁₀ and PM_{2.5}.

- 1 • The Reduced Project Alternative (Alternative 2) would make a cumulatively
2 considerable and unavoidable contribution to a significant cumulative impact for
3 cancer risk for residential, sensitive, and occupational receptors, for occupational
4 chronic and acute hazard indices, and for population cancer burden.

5 ***Greenhouse Gas Emissions***

- 6 • GHG emissions from the Reduced Project Alternative (Alternative 2) would add
7 to existing levels and, therefore, would make a cumulatively considerable and
8 unavoidable contribution to a significant cumulative impact relative to climate
9 change.

10 ***Noise***

- 11 • Construction of the Reduced Project Alternative (Alternative 2), if it occurred at
12 the same time as construction of the nearby Vopak project, would make a
13 cumulatively considerable and unavoidable contribution to a significant
14 cumulative impact.

15 The Reduced Project Alternative (Alternative 2)'s contributions to cumulative impacts
16 would be less than those of the Proposed Project due to its reduced level of operations.

17 **Alternative 3 (Product Import Terminal Alternative) Cumulatively**
18 **Considerable Impacts**

19 Like the Proposed Project, the Product Import Terminal (Alternative 3) would make
20 cumulatively considerable and unavoidable contributions to significant cumulative
21 impact after mitigation in the following resource areas:

22 ***Air Quality and Meteorology***

- 23 • Emissions from the Product Import Terminal Alternative (Alternative 3)
24 construction would make a cumulatively considerable and unavoidable
25 contribution to a significant cumulative impact for NO_x emissions.
- 26 • Emissions from the Product Import Terminal Alternative (Alternative 3)
27 operations would make a cumulatively considerable and unavoidable
28 contribution to a significant cumulative impact for NO_x emissions and for offsite
29 ambient pollutant concentrations of PM₁₀.
- 30 • The Product Import Terminal Alternative (Alternative 3) would make a
31 cumulatively considerable and unavoidable contribution to a significant
32 cumulative impact for cancer risk for residential, sensitive, and occupational
33 receptors, for occupational chronic and acute hazard indices, and for population
34 cancer burden.

35 ***Greenhouse Gas Emissions***

- 36 • GHG emissions from the Reduced Project Alternative (Alternative 2) would add
37 to existing levels and, therefore, would make a cumulatively considerable and
38 unavoidable contribution to a significant cumulative impact relative to climate
39 change.

40 ***Noise***

- 41 • Construction of the Product Import Terminal Alternative (Alternative 3), if it
42 occurred at the same time as construction of the nearby Vopak project, would

1 make a cumulatively considerable and unavoidable contribution to a significant
2 cumulative impact.

3 The Product Import Terminal Alternative (Alternative 3)'s contributions to cumulative
4 impacts would be less than those of the Proposed Project due to its reduced level of
5 operations, including the absence of product milling.

6 **Less than Cumulatively Considerable or No Cumulatively** 7 **Considerable Impacts**

8 The Proposed Project and alternatives would not contribute to cumulatively considerable
9 impacts under CEQA for the following resource areas:

- 10 • Air Quality (offsite ambient air pollution, exposure of receptors to significant
11 levels of toxic air contaminants)
- 12 • Biological Resources
- 13 • Energy
- 14 • Geology and Soils
- 15 • Land Use
- 16 • Noise (groundborne vibration or groundborne noise levels)
- 17 • Ground Transportation:
- 18 • Tribal Cultural Resources:

19 **ES.4.2.7 Socioeconomic and Growth-Inducing Impacts**

20 The Proposed Project would generate up to 735 short-term (i.e., construction) jobs. Long-
21 term (i.e., operational) employment associated with the Proposed Project would total
22 approximately 242 jobs, including those directly related to operating the facility
23 (approximately 26 on-site employees) and associated jobs such as trucking and
24 stevedoring. Construction and operation would support approximately 450 secondary
25 jobs (i.e., off-site jobs created by the purchases of goods and services associated with the
26 Proposed Project's direct jobs) throughout the Southern California region comprising Los
27 Angeles, Orange, Riverside, San Bernardino, and Ventura Counties.

28 While the economic impacts of the Proposed Project would be beneficial, the increase in
29 jobs, output, and tax revenues attributable to the Proposed Project would be small
30 compared to current and projected future employment in the larger economic region.
31 Similarly, because the number of jobs involved would be small relative to regional
32 employment, the effect of the Proposed Project on housing supply and values would
33 likewise be insubstantial. Given its small size relative to the regional economy and
34 population, the Proposed Project would not directly or indirectly induce substantial
35 growth in the region.

36 **ES.4.2.8 Significant Irreversible Changes to the Environment**

37 Implementation of the Proposed Project would require the use of non-renewable
38 resources, including energy (fossil fuels and electricity) and non-renewable construction
39 materials. Most of the energy uses would represent irretrievable expenditures of non-
40 renewable resources, although some electricity would be provided by renewable sources
41 and would not represent an irretrievable and irreversible commitment.

1 Non-recoverable energy and materials would be used during operation, but the amounts
2 needed would be accommodated by existing supplies. As with construction, some of the
3 electrical energy would be supplied by renewable sources. Although the increase in
4 energy used would be limited, those energy supplies would nevertheless be unavailable
5 for other uses. The minimal irreversible changes likely would be justified by the
6 economic growth in trade, which the Proposed Project would provide. The impact of
7 irreversible changes associated with the Proposed Project and alternatives are considered
8 justified under CEQA.

9 **ES.4.3 Environmentally Superior Alternative**

10 CEQA requires identification of an environmentally superior alternative. The
11 environmentally superior alternatives were determined based on a ranking system that
12 assigned numerical scores comparing the impacts under each resource area for each
13 alternative relative to the Proposed Project. Table 5-2 in Chapter 5 present a comparison
14 of the Proposed Project and each alternative by those resource areas with significant and
15 unavoidable impacts.

16 The No Project Alternative (Alternative 1) is identified as having the fewest impacts
17 because no construction or operations would occur. However, CEQA requires that if the
18 environmentally superior alternative is the No Project (Alternative 1), another alternative
19 be identified as environmentally superior. Accordingly, the Reduced Project (Alternative
20 2) and the Product Import Terminal (Alternative 3) were evaluated. Based on the
21 comparison, the Reduced Project (Alternative 2) impacts would be less severe than those
22 of the Proposed Project, and the Product Import Terminal (Alternative 3), because of its
23 lower operational activity levels, would have the lowest severity of impacts. Accordingly,
24 the Product Import Terminal (Alternative 3) is deemed to be the environmentally superior
25 alternative.

26 The Reduced Project (Alternative 2) and the Product Import Terminal (Alternative 3)
27 would meet the main Proposed Project objectives set forth in Section 2.3 to produce the
28 lowest-carbon binder to replace a substantial fraction of the cement consumed in
29 California by facilitating the development and use of improved low-carbon, high-
30 performance binders at varying levels. Both alternatives would require the construction of
31 facilities at Berth 191-194, but they vary in the scale of facility construction and product
32 throughput. The Reduced Project (Alternative 2) would maintain all elements of the
33 Proposed Project but would have a lower capacity, and the Product Import Terminal
34 (Alternative 3) would not process any raw material onsite but instead import finished
35 product from overseas to be distributed from the facility. Under Product Import Terminal
36 (Alternative 3), the scale of construction would be similar to the Proposed Project and the
37 overall throughput would be the same, but the actual structures, site configuration, and
38 possibly products imported, would be different.

39 **ES.5 Public Comment**

40 During the NOP scoping process, individuals and organizations provided comments on
41 the scope and content of the Draft EIR. The scoping period lasted from March 10, 2022,
42 until May 11, 2022, and included one scoping meeting on March 30, 2022.

43 Table 1-2 in Chapter 1 presents a summary of the relevant comments on the NOP and
44 where a particular comment would be addressed in this Draft EIR. Key comments
45 requested that the document explain why the Proposed Project is water-related, considers

1 the issue of underwater noise, discuss covering the stockpiles, and that an extended array
2 of alternatives be considered.

3 **ES.6 Issues to be Resolved**

4 Section 15123(b)(3) of the State CEQA Guidelines requires that an EIR contain issues to
5 be resolved; this includes whether or how to mitigate significant impacts. This section
6 discusses the major issues to be resolved regarding the Proposed Project. The major
7 issues to be resolved include decisions by the lead agency as to whether:

- 8 • This Draft EIR adequately describes the environmental impacts of the Proposed
9 Project;
- 10 • The recommended mitigation and lease measures should be adopted or modified;
- 11 • Additional mitigation measures need to be applied to the Proposed Project; or
- 12 • The Proposed Project should or should not be approved for implementation.