

Chapter 1 Introduction

1.1 Final Supplemental Environmental Impact Report Organization

This chapter presents background and introductory information for the Revised Project, the continued operation of the China Shipping (CS) Container Terminal, located in the Port of Los Angeles (Port), under new or revised mitigation measures. This chapter also describes the Revised Project and its purpose under CEQA, and presents the authorities of the Los Angeles Harbor Department (LAHD or Port), the Lead Agency preparing this Supplemental Environmental Impact Report (SEIR), the scope and content of the SEIR, and the public outreach for the Revised Project. Chapter 2, “Response to Comments”, presents information regarding the distribution of and comments on the Draft SEIR and Recirculated Draft SEIR, and responses of the lead agency. Chapter 3 presents changes made to the Recirculated Draft SEIR.

1.2 CEQA Review Process

CEQA was enacted by the California Legislature in 1970 and requires public agency decision makers to consider the environmental effects of their actions. When a state or local agency determines that a proposed project has the potential for significantly adverse environmental effects after mitigation, an EIR is required to be prepared. The purpose of an EIR is to identify potentially significant adverse effects of a proposed project on the environment, to identify alternatives to the proposed project, and to indicate the manner in which those significant effects can be mitigated or avoided.

In accordance with CEQA Guidelines §15121(a), the purpose of an EIR is to serve as an informational document that: “will inform public agency decision-makers and the public generally of the significant environmental effect of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project.” The Revised Project requires discretionary approval from the LAHD and, therefore, it is subject to the requirements of CEQA.

The LAHD has prepared this SEIR to supplement and update the Berths 97-109 [China Shipping] Container Terminal Project Environmental Impact Statement/Environmental Impact Report (EIS/EIR) certified by the City of Los Angeles Board of Harbor Commissioners on December 18, 2008 (LAHD and USACE 2008). The 2008 EIS/EIR evaluated the environmental impacts of the construction and operation of the CS Container Terminal (the “Approved Project”) at Berths 97-109. Construction of the Approved Project was completed in 2013.

1 A Supplemental EIR, as its name implies, supplements an EIR that has already been
2 certified for a project, to address project changes, changed circumstances, or new
3 information that was not known, and could not have been known with the exercise of
4 reasonable diligence at the time the prior document was certified. The purpose of a
5 Supplemental EIR is to provide the additional information necessary to make the
6 previously certified EIR adequate for the project as revised. Accordingly, the
7 Supplemental EIR need only contain the information necessary to respond to the project
8 changes, changed circumstances or new information that triggered the need for additional
9 environmental review (CEQA Guidelines, Section 15163.) A Supplemental EIR does not
10 “re-open” a previously certified EIR or reanalyze the environmental impacts of a project
11 as a whole; the analysis is limited to whether the project changes result in new or
12 substantially more severe significant impacts.

13 The Revised Project makes minor changes to the continued operation of the CS Container
14 Terminal by modifying 10 mitigation measures and one lease measure that were
15 originally adopted based on the 2008 EIS/EIR. This SEIR analyzes the impacts of these
16 modifications to those mitigation measures, in light of conclusions of the certified 2008
17 EIS/EIR for the CS Container Terminal.

18 This Final SEIR has been prepared in accordance with the requirements of the California
19 Environmental Quality Act (CEQA) (Pub. Res. Code §21000 et seq.) and the State
20 CEQA Guidelines (Cal. Code of Regs. Tit. 14, §15000 et seq.). This SEIR will be used:
21 to inform decision-makers and the public about the environmental effects associated with
22 operation of the Revised Project and to propose mitigation measures that would avoid or
23 reduce the significant adverse environmental effects of the Revised Project.

24 **1.2.1 Notice of Preparation and Scoping Process**

25 **1.2.1.1 Notice of Preparation**

26 On September 18, 2015, the LAHD issued a Notice of Preparation (NOP) and Initial
27 Study (IS) to inform responsible and trustee agencies, public agencies, and the public that
28 the LAHD was preparing a Supplemental EIR for the Revised Project, pursuant to
29 CEQA. The NOP/IS (State Clearinghouse Number 2003061153) was circulated for a 30-
30 day comment period from September 18, 2015, to October 19, 2015, to neighboring
31 jurisdictions, responsible agencies, other public agencies, and interested individuals in
32 order to solicit input on the scope of the environmental analysis to be included in the EIR.
33 The LAHD held a public scoping meeting on October 7, 2015. Two individuals
34 commented at the public meeting and 20 letters commenting on the NOP/IS or supporting
35 or opposing the Project were received during the public comment period. Table 1-3 in
36 Section 1.6 of the Draft SEIR presents a summary of the key comments received during
37 the public comment period on the NOP/IS.

38 **1.2.1.2 Scope of Analysis**

39 This SEIR has been prepared in conformance with CEQA, the State CEQA Guidelines,
40 and Port of Los Angeles Guidelines for the Implementation of CEQA; it includes all of
41 the sections required by CEQA. This SEIR relies on policies and guidelines of the City
42 of Los Angeles, including the Port of Los Angeles.

43 The criteria for determining the significance of environmental impacts in this SEIR
44 analysis are described in the section titled “Significance Criteria” (also referred to as the

1 “threshold of significance”) under each resource topic in Chapter 3 of the Recirculated
2 Draft EIR. A “Threshold of Significance” is an identified “quantitative, qualitative or
3 performance level of a particular environmental effect, non-compliance with which
4 means the effect will normally be determined to be significant by the agency and
5 compliance with which means the effect normally will be determined to be less than
6 significant” (CEQA Guidelines §15064.7 (a)). Except as noted in particular sections of
7 the document, the City of Los Angeles CEQA Thresholds Guide (City of Los Angeles,
8 2006) are used for purposes of this SEIR, although some criteria were adapted to the
9 specific circumstances of this project.

10 The following issues have been determined to be potentially significant and, therefore,
11 are evaluated in this SEIR:

- 12 • Air Quality
- 13 • Greenhouse Gases and Climate Change
- 14 • Transportation

15 In addition to the above, cumulative impacts are evaluated in the SEIR. No alternatives
16 are considered in this SEIR because, as described in Section 1.7 of the Recirculated Draft
17 SEIR, a supplemental EIR is not required to consider alternatives to a component of the
18 project. Rather, the alternatives analysis in the 2008 EIS/EIR appropriately considered
19 alternatives to the project as a whole. The proposed modifications to the mitigation
20 measures in the Revised Project do not change the Approved Project as a whole and do
21 not require that an alternative be developed that specifically addresses those particular
22 modifications.

23 The scope of the document, methods of analyses, and conclusions represent the
24 independent judgment of the LAHD. Staff members from the LAHD and consultants
25 who helped prepare this EIR are identified in Chapter 6 of the Draft SEIR (List of
26 Preparers and Contributors).

27 **1.2.2 Draft SEIR and Public Review**

28 The Draft SEIR was released for public review on June 14, 2017 for a 45-day comment
29 period, which was extended by 60 days at the request of several interested parties. A
30 public hearing was held on July 18, 2017, and the comment period ended on September
31 29, 2017. LAHD received oral and written comments on the Draft SEIR from 36
32 agencies, organizations, and individuals.

33 **1.2.3 Recirculated Draft SEIR and Public Review**

34 In response to comments received on the Draft SEIR circulated in 2017, the LAHD
35 determined to add significant new information to the environmental review, requiring that
36 the Draft SEIR be recirculated. In summary, the CEQA baseline year was changed from
37 2014 to 2008, some of the mitigation measures in the Revised Project were altered to
38 incorporate new technology and to align their implementation dates with the date of the
39 new lease amendment, and the project description was revised to include years between
40 2008 and 2019 as the “partial implementation period” when some of the mitigation
41 measures were not fully complied with.

42 On September 28, 2018, the LAHD released the Recirculated Draft SEIR for a 45-day
43 comment period ending November 13, 2018. Because the LAHD revised and

1 recirculated only certain portions of the Draft SEIR, the Notice of Availability of the
2 Recirculated Draft EIR advised reviewers when submitting comments to limit their
3 comments to the Recirculated Draft SEIR only, consistent with CEQA Guidelines
4 Section 15088.5(f)(2). One oral comment was received at the public hearing held on
5 October 25, 2018, and nine written comments were received by the end of the public
6 review period. The issues raised in the comments were taken into consideration, and a
7 number of changes were made when preparing the Final SEIR.

8 **1.2.4 Final SEIR and Certification**

9 This Final SEIR has been provided to the public for review, comment, and participation
10 in the planning process. This Final SEIR is being distributed to provide the basis for
11 decision making by the CEQA lead agency, as described in Section 1.8 of the Draft
12 SEIR, and other concerned agencies. Certification of the SEIR for the Revised Project
13 must precede Project approval. Project approval requires that the Board review and
14 consider the SEIR; adopt Findings of Fact on the significant environmental effects of the
15 Revised Project and the feasibility of mitigation measures; adopt a Statement of
16 Overriding Considerations; approve the Project analyzed in the EIR; and adopt a
17 Mitigation Monitoring and Reporting Program (MMRP).

18 **1.3 Existing Environmental Setting**

19 **1.3.1 Regional Setting**

20 The Port of Los Angeles (POLA) is the leading seaport in North America in terms of
21 shipping container volume and cargo value, generating more than 830,000 regional jobs
22 (this equates to 1 in 9 jobs in the five-county area) and \$35 billion in annual wages and
23 tax revenues. Operating for more than a century, POLA has been a center for global
24 trade, national cargo transportation and related industrial uses. Together with the Port of
25 Long Beach, it handles up to 64% of all shipping on the West Coast, and about 35% of all
26 shipping in the United States. In Fiscal Year (FY) 2014-2015, POLA handled more than
27 8.1 million TEUs (twenty-foot equivalent units, a standardized maritime industry
28 measurement used when counting cargo containers of varying lengths) of cargo through
29 its terminals.

30 LAHD operates the Port under the legal mandates of the Port of Los Angeles Tidelands
31 Trust (Los Angeles City Charter, Article VI, Section 601) and the California Coastal Act
32 (PRC Division 20, Section 30700 et seq.), which identify the Port and its facilities as a
33 primary economic and coastal resource of the State of California and an essential element
34 of the national maritime industry for the promotion of commerce, navigation, fisheries,
35 and harbor operations. Activities should be water dependent, and LAHD must give
36 highest priority to navigation, shipping, and necessary support and access facilities to
37 accommodate the demands of foreign and domestic waterborne commerce. LAHD is
38 chartered to develop and operate the Port to benefit maritime uses. It functions as a
39 landlord by leasing Port properties to more than 300 tenants.

40 The United States and China are the two largest trading countries in the world, and the
41 two countries exchange significant amounts of cargo annually. POLA, as the nation's
42 leading seaport, is a critical hub for facilitating trade from Asia, and China in particular.

1 1.3.2 Overview of the CS Container Terminal

2 Among the LAHD's tenants is China Shipping, which leases premises at Berths 97-109
 3 to operate a marine container terminal (the "CS Terminal"). The CS Terminal is operated
 4 by the West Basin Container Terminal Company under a lease agreement (Permit No.
 5 999) between China Shipping (North America) Holding Co., Ltd. ("China Shipping") and
 6 LAHD. The premises assigned to China Shipping are located at 2050 John S. Gibson
 7 Boulevard, within an industrial area in the vicinity of the West Basin and Turning Basin
 8 in Los Angeles Harbor (Figure 1-1).

9 **Figure 1-1. The Berths 97-109 (China Shipping) Container Terminal.**



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 11 The CS Terminal was constructed in several phases between 2004 and 2013, began
 12 operation in 2005, and has operated more or less continuously since then. The terminal is
 13 described in more detail in Section 2.5.1 of the Recirculated DSEIR. Briefly, however, it
 14 consists of two berths, ten wharf cranes for ship loading, a container yard, and a gate
 15 complex. The terminal has access to an on-dock intermodal railyard (the West Basin
 16 Intermodal Container Transfer Facility [WBICTF]) in the adjacent Yang Ming Terminal.

17 The CS Terminal handles imported and exported cargo containers. In 2008 (the
 18 Recirculated DSEIR's baseline year for the analysis under CEQA) the terminal handled

1 387,004 twenty-foot-equivalent units (TEUs: twenty-foot equivalent units, a measure of
2 containerized cargo capacity) of containerized cargo, or approximately 215,000
3 containers. The majority of imported containers left the terminal by truck, whether to
4 transload destinations in the region for ultimate placement on eastbound trains, to near-
5 dock and off-dock railyards, or to warehouses and distribution centers for consumption
6 within the region. The remainder were placed directly onto trains at the WBICTF for
7 transport out of the southern California region. Export containers (those leaving the
8 terminal on ships) made the reverse moves in roughly the same proportions. In total,
9 these activities involved approximately 319,000 truck one-way trips, 350 train trips to
10 and from the WBICTF, and 26 vessel calls.

11 **1.3.3 Project History and Previous Environmental** 12 **Reviews**

13 The full background of the CS Terminal is described in detail in sections 1.1.2 and 1.2.3 of
14 the Recirculated DSEIR. In summary, the LAHD previously prepared and certified the
15 West Basin Transportation Improvements Program EIR (LAHD, 1997) that assessed the
16 proposed construction and operation of terminal and infrastructure improvements in the
17 West Basin of the Port. The document programmatically analyzed the impacts of the
18 development of three separate container terminals in the West Basin: the CS Terminal, the
19 Yang Ming Terminal, and the TraPac Terminal.

20 In March 2001, based on the WBTIP EIR, the Port issued a permit to construct the CS
21 Terminal in a three-phased project and entered into a lease for China Shipping to occupy
22 the terminal. The lease (Permit No. 999) granted China Shipping nonexclusive use of
23 72.48 acres at Berths 100-102 for operation of a container terminal facility for a term of
24 twenty-five years with three five-year options to extend, exercisable by China Shipping.
25 LAHD would develop and construct the terminal, designed to optimize operations at Berths
26 97-109, for its tenant, China Shipping.

27 In 2001, opponents of the project filed suit in Los Angeles Superior Court alleging, among
28 other things, that LAHD did not comply with CEQA in approving the construction of the
29 CS Terminal Project. The lawsuit was settled in 2004 through an Amended Stipulated
30 Judgement (ASJ) in which the LAHD committed to preparing a new, project-specific EIR,
31 agreed to mitigation measures, and established a \$50 million community impact fund.
32 Accordingly, in 2008 the U.S. Army Corps of Engineers (USACE) and the LAHD released
33 the Draft Environmental Impact Statement/Environmental Impact Report (LAHD and
34 USACE, 2008) that evaluated the environmental impacts of the construction and operation
35 of the Berths 97-109 (China Shipping) Container Terminal Project. The 2008 EIS/EIR
36 included 52 mitigation measures to reduce the impacts of construction and operation of the
37 CS Terminal. The City of Los Angeles Board of Harbor Commissioners certified the Draft
38 EIS/EIR and approved the project on December 18, 2008 (the Approved Project).

39 The major elements of the original development analyzed in the 2008 EIS/EIR included:
40 constructing a new wharf at Berth 102 and lengthening the wharf at Berth 100, with
41 minor dredging to match the West Basin channel depth of -53 feet MLLW; the addition
42 of 10 wharf cranes for vessel loading and unloading; installation of shore power (AMP)
43 facilities at both berths; the expansion and development of 142 acres of terminal
44 backlands; the construction of container terminal buildings, gate facilities and accessory
45 structures; the construction of two new bridges over the Southwest Slip to connect the
46 Berth 97-109 Container Terminal to the Berth 121-131 Marine Terminal; relocation of

1 the Catalina Express Terminal; and the construction of road improvements in the vicinity.
2 The new wharves would accommodate the largest vessels then envisioned (10,000 TEU
3 capacity). Construction was largely completed by 2013 (two terminal buildings have yet
4 to be constructed), and operations are ongoing.

5 The 2008 EIS/EIR assumed that at full capacity, in 2030, the CS Container Terminal
6 would handle approximately 1,551,000 TEUs per year, which is roughly equivalent to
7 838,000 standard shipping containers per year. That throughput would require
8 approximately 1,500,000 truck trips, 234 vessel calls, and 817 train trips per year. Those
9 numbers were based on cargo forecasting performed in 2005. The document assumed
10 that at full capacity approximately 83% of the containers would be moved in and out of
11 the terminal by truck (including to and from regional intermodal railyards) and the rest
12 would be moved by trains from the WBICTF.

13 On September 18, 2015, the LAHD issued a Notice of Preparation (NOP) to inform
14 responsible and trustee agencies, public agencies, and the public that the LAHD was
15 preparing a Draft Supplemental Environmental Impact Report (Draft SEIR) to
16 supplement and update the 2008 EIS/EIR. The scope and purpose of a supplemental EIR
17 are fully described in Section 1.1.4 of the Recirculated DSEIR. To summarize, a
18 supplemental EIR is prepared to address project changes, changed circumstances, or new
19 information that was not known, and could not have been known at the time the prior
20 document was certified, and need only contain the information necessary to respond to
21 those changes. The purpose of a supplemental EIR is to provide the additional
22 information necessary to make the previously certified EIR adequate for the project as
23 revised.

24 The new information that prompted the LAHD to prepare a supplemental EIR included 1)
25 issues raised by China Shipping regarding the feasibility of some of the mitigation
26 measures in the 2008 EIS/EIR; 2) changed traffic and roadway conditions that called into
27 question the need for some of the transportation-related mitigation measures; and 3) the
28 partial implementation of some of the mitigation measures. The details of the partial
29 implementation of mitigation measures are presented in Section 2.5.1 of the Recirculated
30 DSEIR. China Shipping did not sign an amendment to the lease that incorporated the
31 mitigation measures related to operation of the CS Terminal, and as a result the Port was
32 unable to ensure implementation of those measures. In subsequent negotiations, China
33 Shipping raised a number of feasibility and economic issues related to mitigation
34 measures aimed at reducing air pollution from ships, cargo-handling equipment, and
35 trucks (see Section 1.2.4 of the Recirculated Draft SEIR).

36 Operations between 2005 and 2017 included implementation of ASJ requirements and
37 most of the mitigation measures imposed in the 2008 EIS/EIR, but, as described in Table
38 1-1, some mitigation measures were incompletely implemented or not implemented at all
39 beginning in 2008. Those mitigation measures included MM AQ-9 (AMP), MM AQ-10
40 (VSRP), MM AQ-15 (Yard Tractors), MM AQ-16 (Railyard CHE), MM AQ-17 (Berth
41 97-109 CHE), and MM AQ-20 (LNG Drayage Trucks).

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1 **Table 1-1. Summary of 2008 EIS/EIR mitigation and lease measures for the CS Container**
 2 **Terminal being re-evaluated in this SEIR.**

2008 EIR/EIS Measure	Description	Status through 2017
MM AQ-9 Alternative Maritime Power	China Shipping ships calling at Berths 97-109 must use AMP in the following percentages while hoteling in the Port. Jan-Jun 2005: 60%; July 2005: 70%; Jan 2010: 90%; Jan 2011: 100%. Additionally, by 2010, all ships retrofitted for AMP shall be required to use AMP while hoteling at a 100 percent compliance rate, with the exception of circumstances when an AMP-capable berth is unavailable due to utilization by another AMP-capable ship.	Compliance (% of China Shipping operated vessel calls): 2008: 86% 2009: 78% 2010: 72% 2011: 66% 2012: 12% 2013: 30% 2014: 93% 2015: 92% 2016: 99% 2017: 96%
MM AQ-10 Vessel Speed Reduction Program	Starting in 2009, all ships calling at Berths 97-109 shall comply with the expanded VSRP of 12 knots between 40 nm from Point Fermin and the Precautionary Area.	Compliance (% of all call to Berths 97-109): 2008: 97% within 20 nm and 24% within 40 nm 2009: 99% within 20 nm and 20% within 40 nm 2010: 97% within 20 nm and 42% within 40 nm 2011: 99% within 20 nm and 41% within 40 nm 2012: 93% within 20 nm and 47% within 40 nm 2013: 99% within 20 nm and 89% within 40 nm 2014: 99% within 20 nm and 96% within 40 nm 2015: 99% within 20nm and 98% within 40nm 2016: 100% within 20nm and 96% within 40nm 2017: 96% within 20 nm and 91% within 40 nm
MM AQ-15 Yard Tractors at Berth 97-109 Terminal	All yard tractors operated at the Berth 97-109 terminal shall run on alternative fuel (LPG) beginning September 30, 2004, until December 31, 2014 Beginning January 1 2015, all yard tractors operated at the Berths 97-109 terminal shall be the cleanest available NO _x alternative-fueled engine meeting 0.015 gm/hp-hr for PM (Tier 4 Final).	From 2004 through 2014, all yard tractors met requirement to run on LPG. As of December 31, 2017 all yard tractors are alternative-fueled LPG, but they do not meet Tier 4 Final standard requirements.
MM AQ-16 Yard Equipment at Berth 121-131 Rail Yard	By the end of 2012, all equipment less than 750 hp shall meet the USEPA Tier 4 on-road or Tier 4 non-road engine standards. By December 31, 2014, all diesel-powered equipment operated at the Berth 121-131 terminal rail yard that handles containers moving through the Berth 97-109 terminal shall meet USEPA Tier 4 non-road engine standards.	During 2012, not all equipment less than 750 hp that operates at the railyard met Tier 4. During 2014, not all equipment that operates at the railyard met Tier 4 as shown in MM AQ-17 below. As of the end of 2017, not all equipment that operates at the railyard met Tier 4 as shown in MM AQ-17 below.

2008 EIR/EIS Measure	Description	Status through 2017
<p>MM AQ-17 Yard Equipment at Berth 97-109 Terminal</p>	<p>Starting September 30, 2004: All diesel-powered toppicks and sidepicks operated at the Berth 97-109 terminal shall run on emulsified diesel fuel plus a DOC (ASJ Requirement).</p> <p>Starting January 1, 2009, all RTGs shall be electric, all toppicks shall have the cleanest available NO_x alternative fueled engines meeting 0.015 gm/hp-hr for PM, and all equipment purchases other than yard tractors, RTGs, and toppicks shall be either (1) the cleanest available NO_x alternative-fueled engine meeting 0.015 gm/hp-hr for PM or (2) the cleanest available NO_x diesel-fueled engine meeting 0.015 gm/hp-hr for PM. If there are no engines available that meet 0.015 gm/hp-hr for PM, the new engines shall be the cleanest available (either fuel type) and will have the cleanest VDEC.</p> <p>By the end of 2012: all terminal equipment less than 750 hp other than yard tractors, RTGs, and toppicks shall meet USEPA Tier 4 on-road or off-road engine standards.</p> <p>By the end of 2014: all terminal equipment other than yard tractors, RTGs, and toppicks shall meet USEPA Tier 4 non-road engine standards.</p> <p>In addition to the above requirements, the tenant at Berth 97-109 shall participate in a 1-year electric yard tractor [truck] pilot project. As part of the pilot project, two electric tractors will be deployed at the terminal within 1 year of lease approval. If the pilot project is successful in terms of operation, costs and availability, the tenant shall replace half of the Berth 97-109 yard tractors with electric tractors within 5 years of the feasibility determination.</p>	<p>During 2008, toppicks and side-picks had DOCs and run on emulsified fuel, meeting the requirement for 2008.</p> <p>As of the end of 2014, none of the RTGs were electric (one is hybrid diesel-electric and the others are diesel), none of the toppicks were alternative-fueled; and only four met the 0.015 gm/hp-hr PM standard, and none of the other equipment covered by MM AQ-17 met Tier 4.</p> <p>As of the end of 2017, none of the RTGs are electric (six are hybrid diesel-electric and the rest are diesel), none of the toppicks are alternative-fueled; and not all of the equipment covered by MM AQ-17 meets Tier 4 standards.</p> <p>The 1-year electric yard tractor [truck] pilot project was not implemented.</p>
<p>MM AQ-20 LNG Trucks</p>	<p>Heavy-duty trucks entering the Berth 97-109 Terminal shall be LNG fueled in the following percentages: 50% in 2012 and 2013, 70% 2014 through 2017, 100% in 2018 and thereafter.</p>	<p>In 2012, 10% of truck calls at WBCT (including the CS terminal) were made by LNG trucks.</p> <p>In 2014, 6% of truck calls at WBCT (including the CS terminal) were made by LNG trucks, which is lower than the port-wide average of 10%.</p>
<p>LM AQ-23 Throughput Tracking</p>	<p>If the Project exceeds project throughput assumptions/projections anticipated through the years 2010, 2015, 2030, or 2045, staff shall evaluate the effects of this on the emissions sources (ship calls, locomotive activity, backland development, and truck calls) relative to the EIS/EIR. If it is determined that these emission sources exceed EIS/EIR assumptions, staff would evaluate actual air emissions for comparison with the EIS/EIR and if the criteria pollutant emissions exceed those in the EIS/EIR the new or additional mitigations</p>	<p>LAHD Wharfingers throughput data was reported as 690,597 TEUs in 2010 and 1,074,788 TEUs in 2015. Actual TEU throughput slightly exceeded the 2008 EIR projection of 605,200 TEUs for 2010 but did not exceed the projection of 1,164,400 TEUs for 2015.</p>

2008 EIR/EIS Measure	Description	Status through 2017
	would be applied through MM AQ-22 Periodic Review of New Technology Regulations.	
MM TRANS-2 Alameda and Anaheim Streets	Provide an additional eastbound through-lane on Anaheim Street. This measure shall be implemented by 2015.	Not implemented.
MM TRANS-3 John S. Gibson Boulevard and I- 110 NB Ramps	Provide an additional southbound and westbound right-turn lane on John S. Gibson Boulevard and I-110 NB ramps. Reconfigure the eastbound approach to one eastbound through-left-turn lane, and one eastbound through-right-turn lane. Provide an additional westbound right-turn lane with westbound right-turn overlap phasing. This measure shall be implemented by 2015.	Most of the requirement is being met through the completion of the John S. Gibson Blvd/I-110 Access Ramps and SR-47/I-110 Connector Improvements Project except to provide an additional westbound right-turn lane with westbound right-turn overlap phasing by 2015.
MM TRANS-4 Fries Avenue and Harry Bridges Boulevard	Provide an additional westbound through-lane on Harry Bridges Boulevard. Provide an additional northbound, eastbound, and westbound right-turn lane on Fries Avenue and Harry Bridges Boulevard. This measure shall be implemented by 2015.	Not implemented.
MM TRANS-6 Navy Way and Seaside Avenue	Provide an additional eastbound through-lane on Seaside Avenue. Reconfigure Modify Navy Way/Seaside Ave	Not implemented.

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3 The Draft SEIR and the Recirculated Draft SEIR evaluated the continued operation of the
4 CS Terminal under new and/or modified mitigation measures and also analyzed the
5 impacts of the increased future throughput of the CS Terminal compared to the
6 projections in the 2008 EIS/EIR. These changes are collectively referred to as the
7 “Revised Project.” The term “Revised Project” is used throughout the SEIR to
8 encompass the broadest set of modifications to the Approved Project, the details of which
9 are described in Section 2.5 of the Draft SEIR.

10 USACE was the federal lead agency for the Approved Project under the National
11 Environmental Policy Act (NEPA) (U.S. Code [USC Title 42, Section 4341 et seq.) and
12 in conformance with the Council for Environmental Quality (CEQ) Guidelines.
13 However, because the Revised Project does not include any elements requiring federal
14 action, including approvals, a NEPA document is not required and was not prepared.

15 1.4 Revised Project

16 This section describes the Revised Project, including its objectives and its key elements.

17 1.4.1 Revised Project Overview

18 Most of the mitigation measures in the 2008 EIS/EIR have either been completed or will
19 be completed within the time period for implementation; in addition, all of the
20 requirements of the ASJ have been met. Accordingly, those measures and the ASJ

1 requirements are outside of the scope of the Revised Project and are not considered in
2 this SEIR.

3 Of the 52 measures adopted in the 2008 EIS/EIR, 10 mitigation measures and one lease
4 measure have not yet been fully implemented (Table 1-1). A re-evaluation of those
5 measures, based on the feasibility of some of the measures, the subsequent availability of
6 alternative technologies, and the actual need, has indicated that some may be
7 unnecessary, others have been superseded by advances in technology, and still others
8 need to be either modified to ensure their feasibility.

9 LAHD has proposed certain changes to the operational mitigation measures in Table 1-1
10 as the Revised Project, and the impacts of those potential changes to the CS Container
11 Terminal's operations are analyzed and disclosed in this SEIR. For the Revised Project,
12 some of the mitigation measures in Table 2-1 would be eliminated or modified, as
13 described in Section 1.4.3, below. Some of these modifications differ from the measures
14 described in the 2017 Draft SEIR in order to incorporate more recent technological
15 developments, changes in technical analysis methodology, points raised in public
16 comments received on the 2017 Draft SEIR, and the passage of time since the Draft SEIR
17 was prepared.

18 The SEIR analyzes the impacts of the Revised Project under the assumption that
19 throughput at the CS Container Terminal will be incrementally higher than was assumed
20 in the 2008 EIS/EIR, consistent with LAHD's re-assessment of terminal capacity. The
21 SEIR examines whether the proposed modifications to mitigation measures can be further
22 revised, or if there are any additional feasible mitigation measures that could be adopted,
23 to address such impacts. If the proposed modifications to the mitigation measures, other
24 changes to the mitigation measures, or entirely new mitigation measures are
25 recommended as a result of the SEIR, the Board of Harbor Commissioners will consider
26 amending Permit No. 999 for operations at Berths 97-109 accordingly.

27 **1.4.2 Proposed Project Objectives**

28 In the 2008 EIS/EIR, the LAHD's overall objectives for the CS Container Terminal were
29 threefold: (1) provide a portion of the facilities needed to accommodate the projected
30 growth in the volume of containerized cargo through the Port; (2) comply with the
31 Mayor's goal for the Port to increase growth while mitigating the impacts of that growth
32 on the local communities and the Los Angeles region by implementing pollution control
33 measures, including the elements of the Clean Air Action Plan (CAAP) applicable to the
34 proposed Project; and (3) comply with the Port Strategic Plan to maximize the efficiency
35 and capacity of terminals while raising environmental standards through application of all
36 feasible mitigation measures.

37 The overall purpose of the Revised Project is to further the second and third objectives by
38 eliminating some previously adopted measures that have proved to be infeasible or
39 unnecessary; instituting new, feasible, mitigation measures; and modifying other existing
40 measures to enhance their effectiveness.

1.4.3 Revised Project Elements

1.4.3.1 Proposed Modifications to 2008 EIR Mitigation Measures and Lease Measures

MM AQ-9 – Alternative Maritime Power (AMP)

MM AQ-9 (LAHD and USACE, 2008) required that China Shipping ships calling at Berths 97-109 must use AMP in the following percentages while hoteling in the Port: January 1 –June 30 2005: 60% of total ship calls; 1 July 2005: 70% of total ship calls (ASJ requirement); 1 January 2010: 90% of ship calls; 1 January 2011 and thereafter: 100% of ship calls. Additionally, by 2010, all ships retrofitted for AMP shall be required to use AMP while hoteling at a 100 percent compliance rate, with the exception of circumstances when an AMP-capable berth is unavailable due to utilization by another AMP-capable ship.

Several factors affect the ability of a container terminal to achieve the goal of having 100% of vessel calls use shore power. These factors, recognized by CARB, are the reason why CARB’s shore power requirement is 50% of calls until 2017 and is capped at 80 percent of vessel calls by 2020. First, very few terminals service only the vessels of a single shipping line; most, including the CS Terminal, have a core business of vessels belonging to one shipping company or those of a consortium (“alliance”) of a few shipping companies, but also accept third-party business. The core line of the CS Terminal, for example, is China Shipping, but the terminal accepts a number of third-party vessels, including Yang Ming and alliance members UASC and CMA-CGM. This business is important to international commerce and to the financial viability of individual terminals. This third-party business may involve vessels that have not been equipped to use shore power. Accordingly, some proportion of vessel calls cannot use AMP because the vessels are not equipped to do so.

Second, situations arise that prevent an AMP-capable vessel from utilizing AMP. These include emergency situations, as defined in 17 CCR Section 93118.3(c)14, involving either the vessel or the electric utility, and equipment failure involving the vessel, the AMP facility at the berth, or the electric utility.

Finally, a small percentage of the vessels that call at a given container terminal are operated by shipping lines that do not meet the CARB required minimum of 25 annual calls (CARB, 2007a, b); those vessels tend not to be outfitted to connect to shore power. For these vessels, alternative emissions control technology is the only possible option.

Although the goal of the Approved Project was 100 percent compliance for China Shipping vessels, the LAHD (as well as CARB) recognizes that the factors summarized above may prevent China Shipping from always achieving that goal. The Revised Project requires that:

Starting on the effective date of a new lease amendment between the Tenant and the LAHD and annually thereafter, all ships calling at Berths 97-109 must use AMP while hoteling in the Port, with a 95 percent compliance rate. Exceptions may be made if one of the following circumstances or conditions exists:

- 1) Emergencies
- 2) An AMP-capable berth is unavailable

- 1 3) An AMP-capable ship is not able to plug in
- 2 4) The vessel is not AMP-capable.

3 In the event one of these circumstances or conditions exist, an
4 equivalent alternative at-berth emission control capture system shall
5 be deployed, if feasible, based on availability, scheduling,
6 operational feasibility, and contracting requirements between the
7 provider of the equivalent alternative technology and the terminal
8 operator. The equivalent alternative technology must, at a minimum,
9 meet the emissions reductions that would be achieved from AMP.

10 For analysis purposes, compliance with this mitigation measure is assumed not to exceed
11 95%, in order to accommodate the exceptional circumstances in 1-4, above. The revised
12 measure is consistent with the 2017 CAAP, as described above, and AMP requirements
13 in recently certified EIRs.

14 **MM AQ-10 – Vessel Speed Reduction Program**

15 MM AQ-10 (LAHD and USACE, 2008) required that as of 2009, 100% of oceangoing
16 vessels calling the CS Container Terminal comply with the Vessel Speed Reduction
17 Program (VSRP) within a 40-nautical-mile (nm) radius of Point Fermin. The VSRP was
18 initially (2005) established as a 20-nm-radius, but MM AQ-10 extended the radius to 40
19 nautical miles.

20 From 2008 through 2014 vessels calling the CS Container Terminal had very high
21 compliance rates (93-99%) within the 20-mile zone but much lower rates in the 40-mile
22 zone. Compliance in the 40-mile zone was particularly low in 2008 – 2012 (from 20% in
23 2009 to 47% in 2012) but rose to 89% in 2013 and 96% in 2014. While the high rates of
24 compliance in 2014 were consistent with the other container terminals in the Port, they
25 fell somewhat short of the 100% required by the mitigation measure.

26 The need to slow down vessels within the VSRP 40 nm radius is built in to the voyage
27 plans of most shipping lines. Vessels calling the Port's major container terminals
28 typically achieve high rates of compliance, some maintaining 100% compliance in the
29 inner portion of the VSRP radius (20 nm) and several, including China Shipping,
30 achieving or approaching 100% throughout the entire VSRP.

31 Although the compliance rate of vessels calling the CS Terminal has approached 100% in
32 many years, not all vessels will be able to comply with VSRP requirements due to
33 unavoidable practical need to increase speed for various reasons. Non-compliance with
34 the VSRP is typically the result of pressure on vessel schedules caused by weather, port
35 delays, and mechanical problems. In addition, meeting scheduled time slots for shorter
36 voyages (e.g., to or from Oakland) may require higher vessel speeds: if, despite operating
37 at higher than economic speeds outside the VSRP area, a vessel is still behind schedule as
38 it approaches Los Angeles Harbor, it may have to continue at a higher speed in some part
39 of the VSRP control radius. For example, operating at 17 knots instead of 12 knots
40 would allow a vessel to make up an hour of time in the 40-mile zone. In addition, vessel
41 schedules are coordinated to avoid incurring container terminal labor standby costs, so
42 that increased speed may be necessary to arrive at a berth in time to utilize labor
43 efficiently. Accordingly, while 100% compliance may be achieved in any given year,
44 that rate cannot be sustained over a period of years.

1 For MM AQ-10, the Revised Project requires that:

2 Starting on the effective date of a new lease amendment between the
3 Tenant and the LAHD and annually thereafter, at least 95 percent of
4 vessels calling at Berths 97-109 shall comply with the expanded
5 VSRP of 12 knots between 40 nm from Point Fermin and the
6 Precautionary Area.

7 Note that the Revised Project's MM AQ-10 analyzed in the Draft SEIR and the
8 Recirculated Draft SEIR included a provision that the tenant could submit an alternative
9 compliance plan that achieved equal or greater emissions reductions. However, in
10 response to comments on the Recirculated Draft SEIR the LAHD modified MM AQ-10
11 to eliminate that provision.

12 The 95% requirement at 40 nm is consistent with recent POLA EIRs and with how
13 shipping lines at terminals have been performing at POLA. It incorporates the realities of
14 oceangoing cargo vessel operation and the need to maintain economic competitiveness.
15 Furthermore, the actual effect on air quality and public health of requiring 95% rather
16 than 100% would be negligible given the relatively small contribution of at-sea vessel
17 emissions on health risk and the already-high level of compliance with the 12-knot
18 requirement.

19 **MM AQ-15 –Yard Tractors**

20 MM AQ-15 (LAHD and USACE, 2008) required all yard tractors to run on alternative
21 fuel (LPG) between September 30, 2004, and December 31, 2014, and that beginning
22 January 1, 2015, all yard tractors must be the cleanest available NO_x alternative-fueled
23 engine meeting 0.015 gm/hp-hr for PM.

24 As of the end of 2014, all yard tractors operating at the CS Container Terminal were
25 alternative fuel-powered, and thus complied with the provision of MM AQ-15 requiring
26 alternative-fuel power.

27 In light of changes in engine technology since the 2008 EIS/EIR was prepared, the 2017
28 Draft SEIR proposed that MM AQ-15 be revised to require yard tractors to meet Tier 4
29 standards for all criteria pollutants. Subsequent developments, however, have indicated
30 that new engines can meet an ultra-low NO_x standard; accordingly, the measure was
31 further revised in the Recirculated Draft EIR to incorporate that standard.

32 **Revised Project Modification**

33 For the Revised Project, MM AQ-15 requires that:

- 34 • No later than one year after the effective date of a new lease amendment between
35 the Tenant and the LAHD, all LPG yard tractors of model years 2007 or older
36 shall be replaced with alternative-fuel units that meet or are lower than a NO_x
37 emission rate of 0.02 g/bhp-hr and Tier 4 final off-road emission rates for other
38 criteria pollutants.
- 39 • No later than five years after the effective date of a new lease amendment
40 between the Tenant and the LAHD, all LPG yard tractors of model years 2011 or
41 older shall be replaced with alternative fuel units that meet or are lower than a
42 NO_x emission rate of 0.02 g/bhp-hr and Tier 4 final off-road engine emission
43 rates for other criteria pollutants.

44 The revised mitigation measure takes into account the uncertainty in the timing of the
45 measure given the time needed to certify the SEIR and execute a new lease amendment.

1 The measure will ensure that the CS Terminal will transition to the current cleanest
2 available yard tractor technology within five years of the new lease amendment. For the
3 longer term, however, the 2017 CAAP envisions that by 2030 the Port will rely on zero-
4 and near-zero-emissions technologies for all cargo-handling equipment, consistent with
5 CARB's March, 2017, initiative to amend the cargo-handling regulation to achieve up to
6 100% zero-emissions by 2030. In order to meet that goal, current yard tractors will need
7 to be replaced by zero-emissions (i.e., electric-powered) tractors over the next ten years.
8 At the time of publication of this SEIR, as discussed in the 2017 CAAP, zero-emissions
9 tractors have not been demonstrated to be operationally feasible in a container terminal
10 setting, but through the 2017 CAAP the Port has committed to an aggressive program of
11 testing electric yard tractors at terminals.

12 The 2017 CAAP also obligates the Port and the terminal operators, including WBCT (the
13 operator of the CS Terminal), to a firm process of evaluating terminal equipment and
14 developing a ten-year procurement schedule for new cargo-handling equipment; the
15 terminals are required to submit their schedules by January 1, 2019 and to update the
16 schedules annually. By working with the terminals through their procurement schedules,
17 grant funding, and lease terms, and taking into account the results of periodic feasibility
18 assessments, the Port will ensure that terminal operators purchase the cleanest available
19 equipment, emphasizing zero- and near-zero-emissions equipment. For the Revised
20 Project, LM AQ-1 (see Section 1.4.3.2) requires the CS Terminal to participate in the
21 CAAP's equipment procurement process.

22 **MM AQ-16 – Railyard Cargo-Handling Equipment**

23 In accordance with the ASJ, MM AQ-16 required that the CHE at the WBICTF on-dock
24 railyard be exclusively LPG-fueled from 2004 to 2014. The measure further required that
25 by end of 2014, all such equipment meet Tier 4 off-road or on-road engine standards.
26 The equipment used at the railyard is the same CHE used in the container yards of the CS
27 and YM terminals, i.e., yard tractors that transfer containers between the container yard
28 and the railyard, and toppicks that load and unload trains and trucks. Accordingly, the
29 intent of this measure is fulfilled by controlling yard tractors and CHE through MM AQ-
30 15 and MM AQ-17.

31 **Revised Project Modification**

32 MM AQ-16 has been combined with MM AQ-17 because there is no feasible way to
33 identify railyard, as opposed to container yard, equipment, and because implementation
34 of AQ-15 and AQ-17 will control emissions associated with CHE handling CS cargo.

35 **MM AQ-17 – Cargo Handling Equipment**

36 In accordance with the ASJ, MM AQ-17 required that by September 30, 2004 all
37 toppicks be equipped with diesel oxidation catalysts (DOCs) and use emulsified diesel
38 fuel. MM AQ-17 further required that, beginning in 2009, all RTGs must be electric
39 powered, all toppicks must have cleanest available NO_x alternative fuel engine meeting
40 EPA Tier 4 standards for PM, and new equipment purchases must be either cleanest
41 alternative fuel or cleanest diesel with cleanest verified control equipment; by the end of
42 2012, all equipment less than 750 hp (which includes all CHE at the CS terminal) must
43 meet EPA Tier 4 off-road or on-road engine standards; and by the end of 2014, all
44 equipment must meet Tier 4 non-road engine standards.

45 By 2004, all of the forklifts and top handlers met the ASJ requirements for emulsified
46 diesel and DOCs. Since the further provisions of MM AQ-17 were not in effect until
47 2009, the CHE working at the CS Terminal in 2008 complied with the measure's

1 requirements. The requirements for all-electric RTGs and cleanest-available top-picks in
2 2009 were not met. The implementation dates for the conversion of all other CHE to Tier
3 4 non-road standards were also not met.

4 All-electric RTGs are not only much more expensive to purchase than either diesel-
5 powered or hybrid units, but their installation at a container terminal requires substantial
6 and costly modifications of the container yard to accommodate the necessary power
7 trenches and transformers. In addition, space constraints in much of the container yard
8 prevent the installation of electric RTGs throughout the terminal; in most of the container
9 yard the RTGs operate on short rows of containers which precludes the efficient
10 deployment of electric RTGs because the electrical infrastructure does not permit electric
11 RTGs to operate on multiple rows.

12 As described in Section 1.2.4.2 of the Recirculated Draft SEIR, China Shipping informed
13 the Port that replacing the top-picks and side-picks with Tier 4 non-road standard
14 compliant units would be prohibitively expensive and require the retirement of units with
15 useful life remaining. The same economic constraints would apply to other cargo-
16 handling equipment such as forklifts.

17 To achieve the objectives of the 2017 CAAP and of the original 2008 EIS/EIR, existing
18 equipment must be replaced by equipment that meets more stringent emissions standards,
19 including zero- and near-zero emission units as feasible. In the case of RTGs, WBCT
20 confirmed that four electric RTGs could be deployed in what is known as the “surcharge
21 area” at the terminal because this area has the necessary infrastructure. The surcharge
22 area is a block area in the northern portion of the terminal that lies south of the waterway
23 and bridges connecting to the adjacent YM Terminal. In the remainder of the terminal,
24 the all-diesel RTGs could be replaced by diesel-electric hybrids. In fact, six of WBCT’s
25 RTGs in 2016 were diesel-electric hybrid models. These hybrids, called EcoCranes,
26 provide significant emission reductions compared to diesel RTGs (74% PM and 84%
27 NO_x reduction).

28 With regard to the other CHE, engines meeting EPA Tier 4 off-road standards are
29 available for heavy-duty forklifts and top-picks. Accordingly, the 2017 Draft SEIR
30 revised MM AQ-17 to require replacement of existing top-picks and heavy-duty forklifts
31 with units meeting Tier 4 standards, the replacement of lighter-duty forklifts with electric
32 units, and the replacement of sweepers with cleanest-available units, and the replacement
33 of shuttle buses with zero-emissions units by 2025. The replacement schedule for CHE
34 incorporated the useful economic service life of the existing equipment and the high
35 capital costs (e.g., \$650,000 per unit for top-picks; LAHD, 2016) but accelerated the
36 replacement. The Recirculated Draft SEIR further revises the measure to replace the
37 calendar day compliance dates with dates related to the execution of a new lease
38 amendment.

39 **Revised Project Modification**

40 For the Revised Project, MM AQ-17 is revised as follows: All yard equipment at the
41 terminal except yard tractors shall implement the following requirements:

42 Forklifts:

- 43 • By one year after the effective date of a new lease amendment between the
44 Tenant and the LAHD, all 18-ton diesel forklifts of model years 2004 and older
45 shall be replaced with units that meet or are lower than Tier 4 final off-road
46 engine emission rates for PM and NO_x.

- 1 • By two years after the effective date of a new lease amendment between the
2 Tenant and the LAHD, all 18-ton diesel forklifts of model years 2005 and older
3 shall be replaced with units that meet or are lower than Tier 4 final off-road
4 engine emission rates for PM and NOx.
- 5 • By two years after the effective date of a new lease amendment between the
6 Tenant and the LAHD, all 5-ton forklifts of model years 2011 or older shall be
7 replaced with zero-emission units.
- 8 • By three years after the effective date of a new lease amendment between the
9 Tenant and the LAHD, all 18-ton diesel forklifts of model years 2007 and older
10 shall be replaced with units that meet or are lower than Tier 4 final off-road
11 engine emission rates for PM and NOx.

12 Toppicks:

- 13 • By one year after the effective date of a new lease amendment between the
14 Tenant and the LAHD, all diesel top-picks of model years 2006 and older shall
15 be replaced with units that meet or are lower than Tier 4 final off-road engine
16 emission rates for PM and NOx.
- 17 • By three years after the effective date of a new lease amendment between the
18 Tenant and the LAHD, all diesel top-picks of model years 2007 and older shall
19 be replaced with units that meet or are lower than Tier 4 final off-road engine
20 emission rates for PM and NOx.
- 21 • By five years after the effective date of a new lease amendment between the
22 Tenant and the LAHD, all diesel top-picks of model years 2014 and older shall
23 be replaced with units that meet or are lower than Tier 4 final off-road engine
24 emission rates for PM and NOx.

25 Rubber-Tired Gantries:

- 26 • By three years after the effective date of a new lease amendment between the
27 Tenant and the LAHD, all diesel RTG cranes of model years 2003 and older shall
28 be replaced with diesel-electric hybrid units with diesel engines that meet or are
29 lower than Tier 4 final off-road engine emission rates for PM and NOx.
- 30 • By five years after the effective date of a new lease amendment between the
31 Tenant and the LAHD, all diesel RTG cranes of model years 2004 and older shall
32 be replaced with diesel-electric hybrid units with diesel engines that meet or are
33 lower than Tier 4 final off-road engine emission rates for PM and NOx.
- 34 • By seven years after the effective date of a new lease amendment between the
35 Tenant and the LAHD, four RTG cranes of model years 2005 and older shall be
36 replaced with all-electric units, and one diesel RTG crane of model year 2005
37 shall be replaced with a diesel-electric hybrid unit with a diesel engine that meets
38 or is lower than Tier 4 final off-road engine emission rates for PM and NOx.

39 Sweepers:

- 40 • Sweeper(s) shall be alternative fuel or the cleanest available by six years after the
41 effective date of a new lease amendment between the Tenant and the LAHD.

42 Shuttle Buses:

- 43 • Gasoline shuttle buses shall be zero-emission units by seven years after the
44 effective date of a new lease amendment between the Tenant and the LAHD.

45 The revised mitigation measure takes into account the uncertainty in the timing of the
46 measure given the time needed to certify the SEIR and execute a new lease amendment.

1 The phase-in schedules for the various equipment types take into account the economics
2 of the useful life of the existing equipment and the realities of acquiring large numbers of
3 new equipment.

4 The revised measure will ensure that the CS Terminal will transition to the then-current
5 cleanest available technology for most major cargo-handling equipment within five years
6 of the new lease amendment. For the longer term, however, the 2017 CAAP envisions
7 that by 2030 the Port will rely on zero- and near-zero-emissions technologies for all
8 cargo-handling equipment, consistent with CARB's March, 2017, initiative to amend the
9 cargo-handling regulation to achieve up to 100% zero-emissions by 2030. In order to
10 meet that goal, current equipment will need to be replaced by zero-emissions (i.e.,
11 electric-powered) equipment over the next ten years. At the time of publication of this
12 SEIR, zero-emissions toppicks and heavy-duty forklifts have not been demonstrated to be
13 operationally feasible in a container terminal setting, but through the 2017 CAAP the Port
14 has committed to an aggressive program of testing such equipment at terminals. Electric
15 mobile gantry cranes (rubber-tired and rail-mounted) are commercially available, but
16 because they require substantial supporting infrastructure their deployment is more
17 involved than for forklifts and toppicks. Nevertheless, some are already in use in the
18 Port, and the 2017 CAAP commits the Ports to increasing the deployment of all-electric
19 cranes.

20 The 2017 CAAP also obligates the Port and the terminal operators, including WBCT (the
21 operator of the CS Terminal), to a firm process of evaluating terminal equipment and
22 developing a ten-year procurement schedule for new cargo-handling equipment; the
23 terminals are required to submit their schedules by January 1, 2019 and to update the
24 schedules annually. By working with the terminals through their procurement schedules,
25 grant funding, and lease terms, and taking into account the results of periodic feasibility
26 assessments, the Port will ensure that terminal operators purchase the cleanest available
27 equipment, emphasizing zero- and near-zero-emissions equipment. For the Revised
28 Project, LM AQ-1 (see Section 1.4.3.2) requires the CS Terminal to participate in the
29 CAAP's equipment procurement process.

30 **MM AQ-20 – LNG Trucks**

31 The 2008 EIS/EIR proposed MM AQ-20 to reduce the emissions of drayage trucks
32 arriving at and departing from the CS Container Terminal. The measure required that
33 LNG-fueled drayage trucks be used to convey containers to and from the terminal. The
34 requirement has three phases: from 2012 through 2014, at least 50% of drayage trucks
35 calling the terminal must be LNG-powered, from 2015 through 2017 at least 70%, and
36 thereafter 100%. The 2008 EIS/EIR envisioned that LAHD would be responsible for the
37 trucks and WBCT (the terminal operator) would be responsible for necessary gate
38 modifications and operations to ensure compliance.

39 By the end of 2008, there were no LNG-fueled drayage trucks calling the CS Container
40 Terminal because none were in service yet (the Port's LNG truck program was launched
41 in 2009); note, however, that MM AQ-20 did not require LNG trucks until 2012.
42 Accordingly, the CS Terminal was in compliance with MM AQ-20. As described in a
43 study of the port drayage industry conducted by LAHD (LAHD, 2017), the requirement
44 of MM AQ-20 is considered infeasible at the time of publication of this SEIR because of
45 industry structural constraints, truck technology constraints, and financial constraints.
46 These factors are described in detail in Section 2.5.2.1 of the Recirculated Draft SEIR.

1 Revised Project Modification

2 There is no feasible substitute or replacement measure for requiring a terminal-specific
3 drayage truck fleet. Accordingly, the Revised Project does not include MM AQ-20.

4 With the implementation of a new port-wide Clean Trucks Program as required by the
5 2017 CAAP's goal to transition to zero-emissions technologies by 2035, future emission
6 reductions from drayage would be achieved; however, no credit can be taken at this time.
7 Furthermore, the Revised Project includes a new lease measure, LM AQ-2, below, that is
8 expected to further reduce emissions from drayage trucks.

9 LM AQ-23 Throughput Tracking

10 The 2008 EIS/EIR included MM AQ-23, which required China Shipping to provide
11 records of terminal throughput, in order to be able to assess whether actual future
12 operations of the CS Container Terminal exceeded throughput assumptions on which the
13 impact assessments, and therefore the mitigation measures, were based. If it was
14 determined that these emissions sources exceed 2008 EIS/EIR assumptions, then staff
15 would evaluate actual air emissions for comparison with the 2008 EIS/EIR. If that
16 evaluation showed that criteria pollutant emissions exceeded those in the 2008 EIS/EIR,
17 then new or additional mitigations would be applied through MM AQ-22 Periodic
18 Review of New Technology and Regulations.

19 The measure was re-designated a lease measure (LM AQ-23) in the 2008 FEIR because it
20 did not mitigate an identified impact. LM AQ-23 was to be applied through the LAHD's
21 lease with China Shipping. Although the lease amendment was never implemented, the
22 throughput tracking occurs through standard Port data collection.

23 Actual throughput has generally exceeded the projections in the 2008 EIS/EIR.
24 However, the new analysis in the SEIR already takes into account the maximum capacity
25 of the terminal and growth in TEU volume and applies all feasible mitigation measures to
26 address future air quality impacts. Accordingly, periodic reviews of throughput are
27 unnecessary. Furthermore, new technologies would continue to be considered and
28 applied under Lease Measure AQ-22 Periodic Review of New Technology and
29 Regulations, since this requirement is not being changed. Finally, new Lease Measure
30 AQ-1, below, would ensure a regular check-in process and evaluation of the cleanest
31 available technology when equipment is purchased or replaced by the tenant.

32 Revised Project Modification

33 LM AQ-23 is not included in the Revised Project.

34 MM TRANS-2, TRANS-3, TRANS-4, and TRANS-6

35 The 2008 EIS/EIR included several mitigation measures related to roadway
36 improvements needed to reduce the impacts of project truck traffic at certain Port-area
37 intersections. Three of those measures were not implemented by the dates specified in
38 the measures. In addition, as described more fully in Section 3.3.2.2, conditions have
39 changed since the certification of the 2008 EIS/EIR, which calls into question the need
40 for and/or effectiveness of some of these mitigation measures.

41 MM TRANS-2 requires LAHD to provide an additional eastbound through lane on
42 Anaheim Street at the intersection with Alameda Street by 2015. That project was never
43 implemented and is not currently part of any planned or approved infrastructure project.
44 A screening analysis conducted by LAHD (Appendix D of the Recirculated Draft SEIR)
45 indicated that this location would no longer experience a traffic impact. Accordingly, the

1 Revised Project as originally proposed would have eliminated MM TRANS-2. (MM
2 TRANS-2 appears in the Mitigation Monitoring and Reporting Program in its original
3 form except with a revised implementation schedule because it was re-imposed in this
4 SEIR as mitigation for the Revised Project's traffic impacts).

5 MM TRANS-3 requires that LAHD, by 2015, 1) provide additional southbound and
6 westbound right-turn lanes on John S. Gibson Boulevard and I-110 NB ramps; 2)
7 reconfigure the eastbound approach to one eastbound through-left-turn lane, and one
8 eastbound through-right-turn lane; and 3) provide an additional westbound right-turn lane
9 with westbound right-turn overlap phasing. The first two elements have been addressed
10 by the John S. Gibson/I-110 Project, but the third one (westbound lane with westbound
11 overlap phasing) was not part of the Gibson/I-110 Project and has not been completed. A
12 screening analysis conducted by LAHD (Appendix D of the Recirculated Draft SEIR)
13 indicated that this location would no longer experience a traffic impact. Accordingly, the
14 Revised Project as originally proposed would have eliminated MM TRANS-3. (MM
15 TRANS-3 appears in the Mitigation Monitoring and Reporting Program in its original
16 form except with a revised implementation schedule because it was re-imposed in this
17 SEIR as mitigation for a cumulative impact of the Revised Project).

18 MM TRANS-4 was intended to modify the intersection at Fries Avenue and Harry
19 Bridges Boulevard by providing an additional westbound through-lane on Harry Bridges
20 Boulevard and additional northbound, eastbound, and westbound right-turn lanes on Fries
21 Avenue and Harry Bridges Boulevard. The measure was supposed to have been
22 implemented by 2015, but has not been completed and is not part of any approved or
23 planned infrastructure project. A screening analysis conducted by LAHD (Appendix D
24 of the Recirculated Draft SEIR) indicated that this location would no longer experience a
25 traffic impact. Accordingly, MM TRANS-4 would not be implemented under the
26 Revised Project.

27 MM TRANS-6 required the LAHD to modify the Navy Way/Seaside Avenue
28 intersection on Terminal Island by providing an additional eastbound through-lane on
29 Seaside Avenue and reconfiguring the westbound approach to one left-turn lane and three
30 through-lanes. The measure has not been completed and is not part of any approved or
31 planned infrastructure project. However, a related transportation improvement project,
32 the Navy Way and Seaside Interchange Project, would construct a new flyover connector
33 from northbound Navy Way to westbound Seaside Avenue. The flyover improvement
34 would provide direct ramp connections for existing left-turn movements, thereby
35 eliminating conflicts between left-turn and through traffic. The improvement is
36 scheduled to be implemented before 2026. Accordingly, MM TRANS-6 would not be
37 implemented under the Revised Project.

38 **Revised Project Modification**

39 All four 2008 EIS/EIR mitigation measures related to transportation are not included in
40 the Revised Project.

41 **1.4.3.2 Revised Project New Lease Measures and New** 42 **Mitigation Measure**

43 **LM AQ-1: Cleanest Available Cargo Handling Equipment**

44 Subject to zero and near-zero emissions feasibility assessments that shall be carried out by
45 LAHD, with input from Tenant as part of the CAAP process, Tenant shall replace cargo

1 handling equipment with the cleanest available equipment anytime new or replacement
2 equipment is purchased, with a first preference for zero-emission equipment, a second
3 preference for near-zero equipment, and then for the cleanest available if zero or near-zero
4 equipment is not feasible, provided that LAHD shall conduct engineering assessments to
5 confirm that such equipment is capable of installation at the terminal.

6 Starting one year after the effective date of a new lease amendment between the Tenant and
7 the LAHD, tenant shall submit to the Port an equipment inventory and 10-year procurement
8 plan for new cargo-handling equipment, and infrastructure, and will update the
9 procurement plan annually in order to assist with planning for transition of equipment to
10 zero emissions in accordance with the forgoing paragraph.

11 LAHD will include a summary of zero and near-zero emission equipment operating at the
12 terminal each year as part of mitigation measure tracking.

13 This new lease measure would ensure a regular check-in process and evaluation of the
14 cleanest available technology in order to be consistent with, and address, 2017 CAAP goals
15 for near-zero and zero-emissions equipment.

16 **LM AQ-2: Priority Access for Drayage**

17 A priority access system shall be implemented at the terminal to provide preferential access
18 to zero- and near-zero-emission trucks.

19 Priority access would enable drivers with the cleanest trucks to get access to the terminal
20 more quickly, thus allowing them to make more daily moves – called “turns” – and earn
21 more revenue. Faster moves and higher earning potential could incentivize drivers and
22 trucking companies to accelerate the investment in zero- and near-zero-emission trucks and
23 to send these cleaner trucks to the CS Terminal because it would increase their business and
24 reduce their fuel and idling time costs. Preferential access could involve giving drivers of
25 clean trucks the first choice of coveted appointment/reservation slots, as envisioned in the
26 2017 CAAP, although other measures could be considered. An enhanced terminal
27 appointment system would allow appointment-making rules resulting in increased
28 efficiency and goods movement optimization measures. WBCT already operates an
29 appointment system for all imported cargo and, for some time periods, for export cargo.
30 The reduction in idling time and the increased use of clean trucks would reduce the overall
31 emissions from drayage at the CS Terminal. The emissions reductions from this measure
32 cannot be quantified at the time of publication of this SEIR.

33 **LM AQ-3: Demonstration of Zero Emissions Equipment**

34 Tenant shall conduct a one-year zero emission demonstration project with at least ten units
35 of zero-emission cargo handling equipment. Upon completion, tenant shall submit a report
36 to LAHD that evaluates the feasibility of permanent use of the tested equipment. Tenant
37 shall continue to test the zero-emission equipment and provide feasibility assessments and
38 progress reports in 2020 and 2025 to evaluate the status of zero-emission equipment
39 technologies and infrastructure as well as operational and financial considerations, with a
40 goal of 100% zero-emission cargo handling equipment by 2030.

41 **MM GHG-1: LED Lighting**

42 All lighting within the interior of buildings on the premises and outdoor high mast terminal
43 lighting will be replaced with LED lighting or a technology with similar energy-saving
44 capabilities within two years after the effective date of a new lease amendment between the
45 Tenant and the LAHD or by no later than 2023.

LM GHG-1: GHG Credit Fund

LAHD shall establish a Greenhouse Gas Fund, which LAHD shall have the option to accomplish through a Memorandum of Understanding (MOU) with the California Air Resources Board (CARB) or another appropriate entity. The fund shall be used for GHG-reducing projects and programs approved by the Port of Los Angeles, or through the purchase of emission reduction credits from a CARB approved offset registry. It shall be the responsibility of the Tenant to make contributions to the fund in the amount of \$250,000 per year, for a total of eight years, for the funding of GHG reducing projects or the purchase of GHG emission reduction credits, commencing after the date that the SEIR is conclusively determined to be valid, either by operation of Public Resources Code Section 21167.2 or by final judgment or final adjudication (“Conclusive Determination of Validity Date”), as described below. The fund contribution amount is established as follows: (i) the peak year of GHG operational emissions (2030), after application of mitigation, that exceed the established threshold for the Revised Project, estimated in the SEIR to be 129,336 metric tons CO₂e, multiplied by (ii) the current (2019) market value of carbon credits established by CARB at \$15.62 per metric ton CO₂e. The payment for the first year shall be due within ninety (90) days of the Conclusive Determination of Validity Date, and the payment for each successive year shall be due on the anniversary of the Conclusive Determination of Validity Date. If LAHD is unable to establish the fund through an MOU with CARB within one year prior to when any year’s payment is due, the Tenant shall instead apply that year’s payment, using the same methodology described in parts (i) and (ii) above, to purchase emission reduction credits from a CARB approved GHG offset registry.

1.5 Changes to the Recirculated Draft EIR

The Final SEIR discusses changes and modifications that have been made to the Recirculated Draft SEIR. Actual changes to the text, organized by chapters, sections, and appendices, are presented in Chapter 3, “Modifications to the Recirculated Draft EIR,” of this Final SEIR.

Changes noted in Chapter 3 are identified by text strikeout and underline. These changes are referenced in Chapter 2, “Response to Comments,” of this Final SEIR, where applicable. The changes and clarifications presented in Chapter 3 were reviewed to determine whether or not they warranted recirculation of the EIR prior to certification according to CEQA Guidelines and Statutes. The changes would not result in any new significant environmental impacts or a substantial increase in the severity of an existing environmental effect.

Below is a brief summary of key changes made, which are described in more detail in Chapter 3 of this Final SEIR.

- Mitigation measure MM AQ-10 was revised in response to a comment to eliminate the option for an alternative compliance plan for the Vessel Speed Reduction Program.
- Lease Measure LM GHG-1 was revised in response to comments to alter the formula by which the funding amount is calculated, to increase the funding amount, and to revise the implementation mechanism and schedule.
- The air quality analysis (Section 3.1) was supplemented to provide additional information regarding potential health effects of project-related criteria pollutant emissions on local and regional populations.

- 1 • The analysis of future emissions from ocean-going vessels was revised in
2 response to comments pointing out discrepancies in the treatment of hoteling
3 emissions. The re-analysis did not change the impact determinations.
4 • Minor text changes were made to correct inconsistencies and typographical errors
5 in the document.

6 The above changes are consistent with the findings contained in the Recirculated Draft
7 SEIR, as modified. There would be no new or increased significant effects on the
8 environment due to the changes in the Revised Project. Therefore, recirculation is not
9 required consistent with Public Resources Code Section 21092.1 and CEQA Guidelines
10 Section 15088.5.

11 **1.6 References for Chapter 1**

12 CARB, 2007a. Regulations to Reduce Emissions from Diesel Auxiliary Engines on
13 Ocean-Going Vessels while At-Berth at a California Port; Technical Support Document.
14 www.arb.ca.gov/regact/2007/shorepwr07/tsd.pdf.

15 CARB, 2007b. Final Statement of Reasons for Rulemaking. Public Hearing to Consider
16 the Adoption of Proposed Regulations to Reduce Emissions from Diesel Auxiliary
17 Engines on Ocean-Going Vessels While At-Berth at a California Port.
18 <http://www.arb.ca.gov/regact/2007/shorepwr07/fsor2007.pdf>.

19 LAHD, 1997. West Basin Transportation Improvements Program EIR. Prepared by the
20 Environmental Management Division with Assistance from Science Applications
21 International Corporation.

22 LAHD, 2016. Cost Scenarios for Expenditure on Cargo-Handling Equipment. Internal
23 LAHD data. July, 2016

24 LAHD, 2017. Assessment of the Feasibility of Requiring Alternative-Technology
25 Drayage Trucks at Individual Container Terminals. Final Report. Prepared by Ramboll
26 Environ. April, 2017.

27 LAHD and USACE, 2008. Final EIS/EIR for the Port of Los Angeles Berths 97-109
28 China Shipping Container Terminal Project.
29 https://www.portoflosangeles.org/EIR/ChinaShipping/FEIR/feir_china_shipping.asp