APP No. 150224-504 • SCH No. 20030611153

BERTHS 97-109 [CHINA SHIPPING] CONTAINER TERMINAL PROJECT

Final Revised Supplemental Environmental Impact Report (RSEIR)



THE PORT OF LOS ANGELES

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Chapter 1
Introduction

1.1 Organization of the Final Revised Supplemental Environmental Impact Report

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 Revised Supplemental Environmental Impact Report (RSEIR), the scope and content of the RSEIR in compliance with the Writ of Mandate (Writ) issued by San Diego County Superior Court on May 24, 2024, 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 Revised Draft SEIR.

1.2 CEQA Process

1.2.1 CEQA and the Purpose of an EIR

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.

A Supplemental EIR, as its name implies, supplements an EIR that has already been certified for a project, to address project changes, changed circumstances, or new information that was not known, and could not have been known with the exercise of reasonable diligence at the time the prior document was certified. The purpose of a

Supplemental EIR is to provide the additional information necessary to make the previously certified EIR adequate for the project as revised. Accordingly, the Supplemental EIR need only contain the information necessary to respond to the project changes, changed circumstances or new information that triggered the need for additional environmental review (CEQA Guidelines, Section 15163). A Supplemental EIR does not "re-open" a previously certified EIR or reanalyze the environmental impacts of a project as a whole; the analysis is limited to whether the project changes result in new or substantially more severe significant impacts.

Whether project changes will result in a new or substantially more severe significant impact is often not known until the supplemental analysis is completed. Therefore, the fact that a RSEIR is being prepared does not necessarily imply a conclusion that the changed project components will result in new or more severe significant impacts. The analysis for this RSEIR was conducted and is presented here for purposes of full disclosure where the changes to the mitigation measures appeared to have the potential to create new or more severe impacts.

1.2.2 CS Container Terminal CEQA History

The LAHD has prepared this RSEIR to supplement and update the Berths 97-109 [China Shipping] Container Terminal Project Supplemental Environmental Impact Report certified by the City of Los Angeles Board of Harbor Commissioners on October 8, 2019 (2019 SEIR). That document supplemented and updated the 2008 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. The 2008 EIS/EIR was challenged in court, and as a result of the ensuing litigation, the LAHD revised the Approved Project to incorporate new operational parameters and cargo forecasts and new and revised mitigation measures addressing air quality, greenhouse gases, and transportation. The 2019 SEIR evaluated the continued operation of the CS Container Terminal under the new and/or modified mitigation measures (2019 Revised Project).

The certification of the 2019 SEIR was challenged in court, and after a period of litigation, the California Court of Appeal ruled that certain portions of the 2019 SEIR did not comply with CEQA. The San Diego County Superior Court issued a Peremptory Writ of Mandate (Writ) ordering the LAHD to: 1) amend its permit with China Shipping to incorporate the 2008 EIS/EIR's mitigation and lease measures; 2) set aside certification of the 2019 SEIR; 3) prepare circulate, and certify a revised SEIR (RSEIR) to address the deficiencies identified by the Court of Appeal and Superior Court; and 4) ensure that mitigation measures adopted in the RSEIR are fully enforceable.

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

1.2.3 RSEIR Notice of Preparation and Scope of Analysis

Notice of Preparation

The scope of this court-ordered RSEIR was established based on the requirements of the Writ and is informed by the comments received during the Notice of Preparation (NOP) review process. The NOP was posted on August 22, 2024, and the public review period was August 22 to September 20, 2024.

Scope of the Revised Supplemental EIR

This document is a court-ordered Draft RSEIR, limited to providing the additional information, analysis, and disclosure related to the portions of the 2019 SEIR identified by the Court of Appeal and Superior Court to be non-compliant with CEQA. On May 24, 2024, the Superior Court issued the Writ that, inter alia, required LAHD and China Shipping to enter into the Sixth Amendment to implement and make enforceable the Adopted Mitigation Measures and Lease Measures, specifically including all measures identified in the 2008 FEIS/FEIR Mitigation Monitoring and Reporting Program, as modified by the 2019 SEIR Mitigation Monitoring and Reporting Program, except for those measures that are fully completed and thus moot (e.g., completed construction) and the three measures identified below (which have been reinstated by the Court of Appeal or Superior Court):

- 2008 EIR MM AQ-9, Alternative Maritime Power.
- 2008 EIR MM AQ-10, Vessel Speed Reduction Program.
- 2008 EIR MM AQ-17, as it applies to a 1-year electric yard tractor pilot project only.

The Writ also directed LAHD to analyze the air quality and GHG impacts of continued operation of the CS Container Terminal under the Adopted Mitigation Measures and Lease Measures and to include in the RSEIR the following additional information, analyses, and/or disclosures:

- LM GHG-1, GHG Credit Fund: To determine if any mitigation measures are available, feasible, and enforceable.
- MM AQ-9, Alternative Maritime Power: To determine if any other mitigation measures for at-berth emissions (in addition to AMP) are available, feasible, and enforceable.
- The 2019 SEIR Emissions Impact Analysis: To update the analysis of the impacts of the continued operation of the CS Container Terminal starting from the time of the adoption of the Sixth Amendment and to disclose the impacts of the "partial implementation period" time period to 2024, when the Sixth Amendment was adopted.

The Writ did not require that the RSEIR re-evaluate the Adopted Mitigation Measures and Lease Measures, including whether new or additional mitigation should be adopted for those impacts, except as specifically identified in the Writ for LM GHG-1 and MM AQ-9 at-berth emissions. As a result, except for LM GHG-1 and MM AQ-9 at-berth emissions, the RSEIR does not analyze whether the Adopted Mitigation Measures and

Lease Measures should be replaced or updated with any new or additional mitigation measures.

The Revised Project analyzed in this RSEIR involves the continued operation of the CS Container Terminal under certain of the Adopted Mitigation Measures and Lease Measures and the Proposed Mitigation Measures and Lease Measures that result from the additional information, analyses, and/or disclosures of this Draft RSEIR (Table 1-1), as directed by the Writ. Accordingly, the Revised Project consists of the 2019 Revised Project with MM AQ-9 and MM AQ-10 replaced by MM AQ-9 and MM AQ-10 of the 2008 EIS/EIR, the pilot project component of MM AQ-17 re-instated, and a further evaluation of mitigation related to at-berth emissions and greenhouse gas emissions.

The evaluation discloses impacts from the beginning of full implementation of the Revised Project, assumed to be 2026, until the end of the lease period, assumed to be 2045. In these measures, the "effective date of a new lease amendment" in the 2019 SEIR was 2019, whereas in this Draft RSEIR it is assumed to be July 2024, when LAHD and China Shipping executed the Sixth Amendment to Permit No. 999, incorporating the Adopted Mitigation Measures and Lease Measures. This Revised SEIR also analyzes operation of the CS Terminal from 2018 to 2023 (called the Additional Period of Non-Compliance" in this RSEIR) in order to disclose the impacts of the period during which some of the 2008 EIS/EIR's air quality mitigation measures were not being fully implemented (the impacts from the period 2008 to 2018 were disclosed in the 2019 SEIR). This RSEIR also includes an analysis of the FEIR Mitigated Scenario, which describes impacts that would have occurred had all of the mitigation measures included in the 2008 EIS/EIR been fully implemented throughout project operation (i.e., through 2045).

The analyses in this RSEIR incorporate regulatory and methodological changes that have occurred since the 2019 SEIR was prepared. The key regulatory changes include, but are not limited to: 1) CARB's at-berth regulation, which affects oceangoing vessels; 2) EPA's Clean Trucks Plan and CARB's Clean Truck Check (heavy-duty vehicle inspection and maintenance (HD I/M) and Advanced Clean Fleet and Advanced Clean Truck regulations, which affect onroad mobile sources such as drayage trucks; and 3) updated GHG emission standards for heavy-duty vehicles, which may affect cargo-handling equipment and onroad mobile sources.

In addition to these regulations, calculations in this Revised SEIR use the latest methodology presented in CARB's EMFAC model, the latest Port of Los Angeles Air Emissions Inventory, CARB's latest CHE and CHC models, and San Pedro Bay Ports Emission Inventory Methodology Report Version 4.

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

1.2.4 Draft RSEIR Process

LAHD released the Draft RSEIR for review by agencies and the public on June 26, 2025; the review period ended on August 11, 2025. A public hearing was held on July 22, 2025.

Comments on the Draft RSEIR were received by letter from the California Air Resources Board (joined by the California Attorney General), China Shipping North America Holdings Company, Natural Resources Defense Council et al., and the South Coast Air

Quality Management District. One oral comment, by Joe Lyou, was received at the public hearing. The comment letters and a transcript of the oral comment, as well as LAHD's responses to those comments, are included in Chapter 2 of this Final RSEIR.

1.2.5 Final RSEIR and Certification

This Final RSEIR has been provided to the public for review, comment, and participation in the planning process. This Final RSEIR is being distributed to provide the basis for decision making by the CEQA lead agency, as described in Section 1.8 of the Draft SEIR, and other concerned agencies. Certification of the RSEIR for the Revised Project must precede Project approval. After certification of the RSEIR and 2019 SEIR, as revised by the RSEIR, approval of the Revised Project requires that the Board adopt Findings of Fact on the significant environmental effects of the Revised Project and the feasibility of mitigation measures; adopt a Statement of Overriding Considerations; approve the Revised Project analyzed in the RSEIR by adopting project approval documents; and adopt a Revised Supplemental Mitigation Monitoring and Reporting Program (MMRP). As required by CEQA Guidelines Section 15126.4(a)(2), mitigation measures must be "fully enforceable through permit conditions, agreements, or other legally binding instruments," typically through the project approval documents.

Table 1-1. Mitigation Measures and Lease Measures Considered in this Draft RSEIR.

Measure	Status
2008 EIR MM AQ-9. Alternative Maritime Power (AMP)	Included in this RSEIR but subject to additional analysis with respect to at-berth emissions (see below)
2008 SEIR MM AQ-10. Vessel Speed Reduction Program (VSRP)	Included in this RSEIR
2008 SEIR MM AQ-11: Low-Sulfur Fuel	Included in this RSEIR
2008 SEIR MM AQ-12: Slide Valve	Included in this RSEIR
2008 SEIR MM AQ-13: Reroute Cleaner Ships	Included in this RSEIR
2008 SEIR MM AQ-14: New Vessel Build	Included in this RSEIR
2019 SEIR MM AQ-15. Yard Tractors	Included in this RSEIR
2019 SEIR MM AQ-17. Cargo Handling Equipment (Replacement schedule and emissions standards for yard equipment)	Included in this RSEIR
2008 EIR MM AQ-17 (1-year electric yard tractor pilot project only)	Included in this RSEIR
2008 EIR MM AQ-19: Clean Truck Program	Included in this RSEIR
2008 EIR MM AQ-21: Truck Idling Reduction Measure	Included in this RSEIR
2019 SEIR LM AQ-1. Cleanest Available Cargo Handling Equipment.	Included in this RSEIR
2019 SEIR LM AQ-2. Priority Access for Drayage	Included in this RSEIR
2019 SEIR LM AQ-3. Demonstration of Zero-Emissions Equipment	Included in this RSEIR
2008 EIR LM AQ-22: Periodic Review of New Technology and Regulations	Included in this RSEIR
2008 EIR LM AQ-24: General Mitigation Measure	Included in this RSEIR
2019 SEIR MM GHG-1. LED Lighting	Included in this RSEIR
2019 SEIR LM GHG-1. GHG Credit Fund.	Included in this RSEIR but subject to revision/ replacement (see below)
2008 EIR MM AQ-26: Compact Fluorescent Light Bulbs	Included in this RSEIR
2008 EIR MM AQ-27: Energy Audit	Included in this RSEIR
2008 EIR MM AQ-29: Recycling	Included in this RSEIR
2025 RSEIR MM AQ–31 Additional At-Berth Emissions	Proposed new measure in this RSEIR
2025 RSEIR MM/LM GHG-2	Proposed new measure in this RSEIR

1.3 Existing Environmental Setting

1.3.1 Regional Setting

The Port of Los Angeles (POLA) is the leading seaport in North America in terms of shipping container volume and cargo value, generating more than 1,000,00 regional jobs (this equates to 1 in 8 jobs in the five-county area) in 2024. Operating for more than a century, POLA has been a center for global trade, national cargo transportation and related industrial uses. Together with the Port of Long Beach, it handles up to 76% of all shipping on the West Coast, and about one-third of container shipping in the United States. In 2022, POLA handled almost 10 million TEUs (twenty-foot equivalent units, a standardized maritime industry measurement used when counting cargo containers of varying lengths) of cargo through its terminals.

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

1.3.2 Overview of the CS Container Terminal

Among the LAHD's tenants is China Shipping, which leases premises at Berths 97-109 to operate a marine container terminal (the "CS Terminal"). The CS Terminal is operated by the West Basin Container Terminal Company under a lease agreement (Permit No. 999) originally entered between China Shipping (North America) Holding Co., Ltd. ("China Shipping") and LAHD. The premises assigned to China Shipping are located at 2050 John S. Gibson Boulevard, within an industrial area in the vicinity of the West Basin and Turning Basin in Los Angeles Harbor (Figure 1-1). The terminal occupies approximately 142 acres at Berths 97-109 under LAHD Permit No. 999, as amended.

The site is near the communities of San Pedro and Wilmington, approximately 20 miles south of downtown Los Angeles. The site is generally bounded on the north by the Berths 121-131 container terminal; on the east by the West Basin and the Main Channel; on the south by the passenger cruise terminal and State Route 47; and on the west by the I-110 Freeway and the community of San Pedro. Land uses in the vicinity support a variety of cargo handling operations; commercial fishing and seafood processing; a power plant (Harbor Generating Station); Port administration and maintenance facilities; maritime support uses; and recreational and residential uses.

The CS Container Terminal integrates several different physical components and operational processes to load and unload oceangoing vessels and to move the cargo through the terminal to and from trucks and trains as cost-effectively as possible. The physical components consist of marine container vessels, berths/wharves (docks), cranes, backland storage areas (container yard), entrance and exit gates, rail facilities (usually), and maintenance and administrative buildings. The operational processes include shipping, stevedoring (loading/unloading ships), container storage and management, in-

terminal drayage (hauling), on-dock rail operations, and trucking to offsite locations such as warehouses and rail yards.

The CS Terminal was constructed in several phases between 2001 and 2013 and began operation in 2004. The terminal consists of two berths, ten wharf cranes for ship loading, and a container yard. The terminal shares its gate complex and an on-dock intermodal railyard (the West Basin Intermodal Container Transfer Facility [WBICTF]) with the adjacent Berths 121-131 Terminal. For a fuller description of the existing terminal see Section 2.5.1 of the 2019 SEIR (LAHD 2019).

In 2023 the CS Terminal handled 943,335 TEUs of containerized cargo, or approximately 524,000 containers. Most imported containers left the terminal by truck, whether to destinations in the region or to near-dock and off-dock railyards. The remainder were placed directly onto trains at the WBICTF for transport out of the southern California region. Export containers (those leaving the Terminal on ships) made the reverse moves in roughly the same proportions. In total, these activities involved approximately 446,460 truck one-way trips, 333 train trips to and from the WBICTF, and 157 vessel calls.

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



Chapter 2
Responses to Comments

2.1 Distribution of the Draft RSEIR

The Draft Revised Supplemental Environmental Impact Report (RSEIR) prepared for the Los Angeles Harbor Department (LAHD) was distributed to the public and regulatory agencies on June 26, 2025, for a 45-day review period, ending on August 11, 2025. Printed copies of the Draft RSEIR were available for review at the Los Angeles Harbor Department, Environmental Management Division, 425 S. Palos Verdes Street, San Pedro, CA 90731. In addition to printed copies of the Draft EIR, digital copies were made available. Due to the size of the document, the digital copies were prepared as a series of PDF files to facilitate downloading and printing and were available on the Port web site at https://www.portoflosangeles.org/environment/environmental-documents. Interested parties were required to provide written comments on the Draft RSEIR, which must have been postmarked by August 11, 2025.

The LAHD conducted a virtual public hearing regarding the Draft RSEIR on July 22, 2025, to provide an overview of the Revised Project and to accept public comments on the environmental document.

The public comment and response component of the California Environmental Quality Act (CEQA) process serves an essential role. It allows the respective lead agencies to assess the impacts of a project based on the analysis of other responsible, concerned, or adjacent agencies and interested parties, and it provides an opportunity to amplify and better explain the analyses that the lead agencies have undertaken to determine the potential environmental impacts of a project. To that extent, responses to comments are intended to provide complete and thorough explanations to commenting agencies and individuals, and to improve the overall understanding of the Project for the decision-making bodies.

One person provided verbal comments at the public hearing and the LAHD received four comment letters on the Draft RSEIR during the public review period. Table 2-1 presents a list of those agencies, organizations, and individuals who commented on the Draft RSEIR. Consolidated responses to general issues raised in the comments are presented in Section 2.2 and responses to specific comments are presented in Sections 2.3 and 2.4; the comment letters are presented in Section 2.6 in the order in which the responses are presented.

Table 2-1. Public Comments Received on the Draft RSEIR

Letter Code	Date	Organization/Individual
Organizations		
CARB		California Air Resources Board
CSNAH		China Shipping North American Holding Company
NRDC		Natural Resources Defense Counsel
SCAQMD		South Coast Air Quality Management District
Individuals		
PH		Joe Lyou

2.2 Consolidated Responses

The comments received on the Draft RSEIR include a number of common themes and issues, including the scope and purpose of the document, demands for additional mitigation measures on project elements not considered in this document, the appropriate CEQA baseline for this document, the need to revise and recirculate the document, and issues associated with future enforcement. These consolidated responses provide detailed discussions on these issues and are referred to as appropriate in the following responses to comments, in order to avoid repetition and redundancy. Individual responses to all comment letters/comments received on the RSEIR are presented following the Consolidated Response to Comments and may refer to the Consolidated Responses in total or in part.

Consolidated Response 1: Scope of the RSEIR and Res Judicata

This Consolidated Response addresses comments challenging the focused scope of the Draft RSEIR and seeking to broaden LAHD's required evaluation beyond the specific issues identified by the Peremptory Writ of Mandate (Writ) issued by the San Diego Superior Court (Superior Court) as a result of litigation over the 2019 SEIR (see Draft RSEIR, Section 1.1.1).

Consistent with the requirements of PRC Section 21168.9, which address court rulings, revised EIRs need only address those issues specified in the Writ. CEQA requires that a writ issued pursuant to Section 21168.9 must "include only those mandates which are necessary to achieve compliance with [CEQA]" and shall be limited to those specific project activities that are not in compliance if noncomplying parts of a project are severable from the remainder of the project. This statutory limitation on the scope of a writ when a CEQA deficiency is found acts as a corresponding limitation on what is required to satisfy a writ issued under this provision.

In this matter, the Writ required that the LAHD prepare, circulate, and certify a revised SEIR that addresses the following deficiencies in the 2019 SEIR identified by the Court of Appeal and the Superior Court (Courts): setting aside 2019 SEIR's new MM AQ-9, MM AQ-10, MM AQ-17 (omission of electric yard tractor pilot project only) and LM GHG-1; evaluating other mitigation for at-berth emissions; and updating the time period of analysis beyond 2019 to reflect the timing of the revised project (described in more detail in Section 1.1.2). The Writ directs that the RSEIR must "at a minimum" evaluate the specific issues with the 2019 SEIR discussed above. This directive is narrowly

focused on correcting the specific deficiencies identified by the Courts in the 2019 SEIR; mitigation measures and lease measures from 2019 SEIR upheld by the Courts do not need to be re-analyzed. The Writ also does not require a comprehensive re-evaluation of the entire environmental analysis for operations at the CS Terminal.

To comply with the Writ, LAHD addressed these deficiencies in the RSEIR by: (1) reverting back to (and updating) the 2008 EIS/EIR MM AQ-9, MM AQ-10, and MM AQ-17 (electric yard tractor pilot project only); (2) replacing LM GHG-1 with MM GHG-2 to fully mitigate for the Revised Project's GHG impacts; (3) analyzing whether other mitigation measures for at-berth emissions (in addition to AMP) are available, feasible, and enforceable to mitigate such impacts; and (4) providing updated analysis and/or disclosures of emissions impacts after 2019 through 2024.

Several comments raised issues found by the Courts to have been adequately addressed in the 2019 SEIR. Examples include the feasibility of zero-emission technologies for cargo-handling equipment, clean locomotives, zero-emission drayage trucks, and clean technology for oceangoing vessels and harbor craft (see, e,g., Responses to Comments CARB-22, CARB-23, CARB-24, CARB-26, NRDC-10, and SCAQMD-17). As stated above, LAHD was not required to re-evaluate these issues because they are beyond the scope of the deficiencies identified in the Writ. Furthermore, as explained below, the litigation background and LAHD's decision to revise only those portions of the 2019 SEIR that were deficient as directed by the Writ limit the scope of future legal challenges that may ultimately be raised regarding the legal adequacy of the RSEIR. To the extent LAHD has relied on the portions of the 2019 SEIR that were either unchallenged or found to be adequate by the courts, that data, analyses, and conclusions are not appropriate subjects for commenters to demand further analysis in the Draft RSEIR. Rather, LAHD need only address those comments on the adequacy of the Draft RSEIR that involve information and material that are new and were not already included in the 2019 SEIR. Although LAHD received comments stating that it should revisit those issues that were unchallenged or found to be adequate by the Courts, those comments are not consistent with CEQA.

Also, the doctrine of res judicata bars objections to the Draft RSEIR that were either litigated and resolved, or could have been litigated and resolved, in the case of *Natural Resources Defense Council, Inc. v. City of Los Angeles* (2023) 98 Cal.App.5th 1176. (*Sierra Club v. County of Fresno* (2020) 57 Cal.App.5th 979, 990; *Ione Valley Land, Air, and Water Defense Alliance, LLC v. County of Amador* (2019) 33 Cal.App.5th 165, 170; *Citizens for Open Government v. City of Lodi* (2015) 205 Cal.App.4th 296, 325-327.) Under res judicata, once a particular issue or finding of fact is determined by a court in a final ruling, then that issue or fact is considered settled, and parties are generally precluded from relitigating that issue or fact. Res judicata is founded on the principle that allowing claims to be relitigated would impose significant burdens on parties and the courts, could lead to inconsistent rulings or judgments, and would be unfair to the party that has already obtained a final ruling in its favor.

These principles are relevant to the scope of the RSEIR. The 2019 SEIR addressed the full range of issues requiring analysis under CEQA. The lawsuits filed by NRDC, SCAQMD, and CARB/Attorney General (Petitioners) challenged certain aspects of the 2019 SEIR's analysis but did not challenge all. Areas where Petitioners did not challenge the 2019 SEIR (such as the methodology for analyzing cumulative impacts, see, e.g., Comment SCAQMD-19) cannot be raised for the first time in connection with the court-ordered RSEIR. Accordingly, commenters (all of whom were Petitioners) may not raise

new issues in their comments on the Draft RSEIR regarding matters that were not challenged in the 2019 SEIR.

In addition, in the litigation, Petitioners prevailed on some of their arguments but did not prevail on others. For example, Petitioners did not prevail on their arguments challenging LAHD's infeasibility conclusions for zero-emission technologies for cargo-handling equipment (such as top handlers and large forklifts) on accelerated schedules, or LNG requirements or other alternative measures (such as zero- or near-zero-emission truck technology) for the drayage truck fleet calling at the Terminal to utilize LNG. (*Natural Resources Defense Council, Inc. v. City of Los Angeles* (2023) 98 Cal.App.5th 1176, 1205-1207, 1218-1224.) The Courts also rejected Petitioners' challenge to LAHD's decision not to appoint an independent monitor to track mitigation compliance, and it sufficiently responded to the comment requesting appointment of an independent monitor. (*Natural Resources Defense Council, Inc. v. City of Los Angeles* (2023) 98 Cal.App.5th 1176, 1213-1217.) As a result, commenters (who were all Petitioners) may not raise these issues again in commenting on the Draft RSEIR.

In sum, LAHD prepared the RSEIR to address the CEQA adequacy deficiencies identified in the Writ, providing supplemental information, mitigation measures and new analysis as needed to comply with CEQA. Contents of the 2019 SEIR that the Courts found to be adequately addressed, and/or that were not subject to the litigation, are properly not included in the RSEIR, in compliance with CEQA and the Writ. Under the principles outlined above, LAHD need not respond to comments raising issues that were resolved in LAHD's favor, or that could have been raised but were not, in the prior litigation. Specifically, challenges to the data, analyses, and conclusions in the 2019 SEIR, or requests to re-evaluate, or consider additional or alternative methods for the impacts addressed by mitigation measures and lease measures from the 2019 SEIR or 2008 EIS/EIR, that were upheld by the Courts or were not challenged, may not be raised by commenters and do not need to be addressed. To the extent LAHD responds to any such comments, it is for informational purposes and not a waiver of any of the principles outlined above. Comments on the Draft RSEIR that address the new or revised mitigation measures and additional analysis prepared in response to the Writ are appropriate subjects for comment and are addressed in this chapter.

Consolidated Response 2: Requirements for Mitigation Measures in the RSEIR

Several comments questioned whether the Draft RSEIR identifies all feasible mitigation measures to reduce impacts to the maximum extent feasible. This Consolidated Response outlines CEQA's general requirements for identification and consideration of mitigation measures and explains how the Writ and Court decisions limit the RSEIR's analysis of additional mitigation measures.

Mitigation is required only for significant environmental impacts (PRC Section 21100(b)(3); CEQA Guidelines Sections 15126.4(a)(1)(A) and 15064(e)). CEQA requires that an EIR identify ways in which significant environmental impacts can be lessened in severity or avoided, including by the adoption of feasible and effective mitigation measures (CEQA Guidelines Section 15126.4). To this end, mitigation measures must reduce the severity of potentially significant impacts, their effectiveness must be clear, and they must be enforceable (CEQA Guidelines Section 15126.4(a)). An EIR should focus on mitigation measures that are feasible, practical, and effective (PRC Section 21003(c); *Napa Citizens for Honest Govt. v. Napa County Bd. of Supervisors* (2001) 91 Cal.App.4th 342, 365).

An agency may reject mitigation measures if it finds them to be "infeasible" (PRC Section 21081(a)(3); CEQA Guidelines Section 15091(a)(3)). CEQA defines "feasible" as "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors" (PRC Section 21061.1; CEQA Guidelines Section 15364). This definition is relevant to the development of mitigation measures, given the requirement to "describe feasible measures which could minimize significant adverse impacts" (CEQA Guidelines Section 15126.4(a)(1)). Measures are also required to be consistent with applicable constitutional requirements, including being "roughly proportional" to the impacts and legal for the Lead Agency to impose (CEQA Guidelines Section 15126.4(a)(4&5).

Feasibility is also relevant to the findings that agencies must adopt at the time of project approval based on the certified EIR and other evidence in the record (Section 15091(a)). As in Consolidated Response 5, below, the lead agency, when it approves a project, must find that "specific economic, legal, social, technical, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures… identified in the final EIR (PRC 15091(a)(3)). Consideration of feasibility of mitigation measures may also be based on practicality (*No Slo Transit, Inc. v. City of Long Beach* (1987) 197 Cal.App.3d 241, 257). CEQA "does not demand what is not realistically possible, given the limitation of time, energy and funds" (*Concerned Citizens of South Central Los Angeles v. Los Angeles Unified Sch. Dist.* (1994) 24 Cal.App.4th 826, 841).

In accordance with these requirements, LAHD has fulfilled its legal obligation under CEQA by identifying feasible measures to substantially lessen or avoid significant environmental effects to air quality and greenhouse gas emissions in the Draft RSEIR. The mitigation measures presented in the Draft RSEIR represent the expert opinions of the preparers of the Draft RSEIR regarding how best to effectively, and feasibly, substantially reduce or avoid the Revised Project's significant environmental effects. The Draft RSEIR contains mitigation measures that LAHD, as the lead agency, believes are necessary to address significant impacts and that are feasible to implement. Further, those mitigation measures have been subjected to public review and scrutiny through the Draft RSEIR process.

As discussed in Consolidated Response 1, however, LAHD was not required to re-evaluate, or consider additional or alternative methods for the impacts address by, those mitigation measures and lease measures from the 2019 SEIR that were upheld by the Courts or were not challenged. This includes 2019 SEIR MM AQ-15 (Yard Tractors Replacement schedule and emissions standards for yard tractors); 2019 SEIR MM AQ-17 (Cargo Handling Equipment Replacement schedule and emissions standards for yard equipment); 2019 SEIR LM AQ-1 (Cleanest Available Cargo Handling Equipment replacement); 2019 SEIR LM AQ-2 (Priority Access for Drayage Priority access system for zero and near-zero trucks); 2019 SEIR LM AQ-3 (Demonstration of Zero-Emissions Equipment 1-year zero-emissions demonstration); 2019 SEIR MM GHG-1 (LED Lighting LED Lighting replacement); 2019 SEIR MM TRANS-2 (Alameda and Anaheim Streets Additional eastbound through-lane on Anaheim Street); and 2019 SEIR MM TRANS-3 (John S. Gibson Boulevard and I-110 N/B Ramps). Also, mitigation measures and lease measures from the 2008 EIS/EIR currently imposed on the Project are final and valid, and, thus, also are not subject to re-evaluation here. This includes 2008 EIS/EIR MM AQ-9 (Alternative Maritime Power); 2008 EIS/EIR MM AQ-10 (Vessel Speed Reduction Program); 2008 EIS/EIR MM AQ-17 (1-year electric yard tractor pilot project only); 2008 EIS/EIR AQ-18 (Yard Locomotives at Berth 121-131 Rail Yard); 2008

EIS/EIR AQ-19 (Clean Truck Program); 2008 EIS/EIR AQ-21 (Truck Idling Reduction Measure); 2008 EIS/EIR LM AQ-22 (Periodic Review of New Technology and Regulations); and 2008 EIS/EIR LM AQ-24 (General Mitigation Measure Update), among others. Per the Writ, these mitigation and lease measures have already been implemented and enforced in the sixth amendment to Permit No. 999, approved by the City in July 2024.

The Writ directed LAHD to analyze all feasible mitigation measures for at-berth emissions (in addition to 2008 MM AQ-9) and GHG impacts. In compliance with the Writ, the Draft RSEIR considers whether any additional feasible mitigation measures could supplement the 2008 EIS/EIR and the 2019 SEIR mitigation measures for these impacts, and proposes to incorporate all feasible mitigation measures for these impacts, in compliance with the Writ (See sections 3.1.4.4 [i.e. 3.1-48 to 3.1-50] and 3.2.4.5 [i.e. 3.2-27 to 3.2-29.]). To that end, the Draft RSEIR identifies two new mitigation measures, MM AQ-31 and MM GHG-2, to address those impacts, and revisions to 2008 MM AQ-9 and MM AQ-10 to update and provide clarity. No additional mitigation measures have been determined to be feasible to reduce significant impacts disclosed in the Draft RSEIR. Additionally, MM AQ-9, MM AQ-31, and MM GHG-2 have been modified in response to comments, as specified below in Consolidated Responses 3 and 7, respectively. The feasibility of other specific suggested measures is discussed in the individual responses below, as appropriate. However, as noted above and in Consolidated Response 1, LAHD was not required to re-evaluate, or consider additional or alternative methods for the impacts addressed by, those mitigation measures and lease measures from the 2019 SEIR or 2008 EIS/EIR that were upheld by the Courts or were not challenged, and any comments requesting such measures do not need to be addressed. To the extent LAHD responds to any such comments, it is for informational purposes and not a waiver of any of the principles outlined above.

Comments on the new or revised mitigation measures included in the Draft RSEIR (the revised MM AQ-9 and MM AQ-10, and the newly added MM AQ-31 and MM GHG-2) are appropriate subjects for comment and are addressed in this chapter. LAHD recognizes that comments frequently offer thoughtful suggestions regarding how a commenter believes that a particular proposed mitigation measure can be modified, or perhaps changed significantly, in order to more effectively, in the commenter's view, reduce the severity of environmental effects. In addition, while a lead agency is required to respond to comments proposing concrete, obviously feasible mitigation measures, it is not required to accept suggested mitigation measures (*A Local and Regional Monitor v. City of Los Angeles* (1993) 12 Cal. App. 4th 1773, 1809). In determining whether to accept a commenter's suggested changes, either in whole or in part, LAHD has considered, among others, the following factors: (i) whether the proposed revisions are feasible from an economic, technical, operational, legal, environmental, or other standpoint; (ii) whether the proposed revisions represent a clear improvement, from an environmental standpoint, over the draft language that a commenter seeks to replace; and (iii) whether the proposed revisions are sufficiently clear as to be easily understood by those who will implement them.

LAHD took seriously every suggestion made by commenters and appreciated the effort that went into the formulation of suggestions. LAHD staff and consultants spent significant time carefully considering proposed suggestions for new and revised mitigation measures and in some instances adopted some of what a commenter suggested. Please Consolidated Response 3 and 6 on the changes based on comments

made to MM AQ-9, MM-31 and MM GHG-2. Consistent with CEQA Guidelines Section 15088(c), each individual response indicates where a suggested strategy has been incorporated into existing mitigation measures or contains a reasoned analysis as to why a suggested strategy has not been included based on the standards discussed above.

Consolidated Response 3: Alternative Maritime Power, Global Shipping Regulation and Changes to MM AQ-9 and MM AQ-31

Comments questioned whether the Draft RSEIR adequately addresses at-berth emissions, specifically questioning the effectiveness of the use of alternative maritime power ("AMP") required under MM AQ-9 and MM AQ-31. This Consolidated Response provides additional background and information on global shipping regulation and AMP at the Port and the CS Terminal. This Consolidated Response also addresses comments requesting revisions to MM AQ-9 and MM AQ-31 to clarify terms, exceptions and reporting.

Background on Global Shipping Regulation and AMP

Comments suggested that LAHD impose shore power requirements on all Ocean-Going Vessels (OGVs). This part of the Consolidated Response explains the regulatory framework for international shipping and the history of AMP at the Port.

The maritime industry is a global network of vessels, ports and activities necessary for international trade, transportation and goods movement. The industry is shaped and governed by international associations that set worldwide shipping standards, regulations, safety requirements, fair trade practices and other policies among countries. The United Nation's International Maritime Organisation (IMO) regulatory framework covers international conventions, codes, and guidelines that set universal standards for OGVs. These global standards are then enforced by the national maritime and coast guard agencies of individual member countries. Under IMO, the Marine Pollution (MARPOL) Convention treaty sets international regulations to prevent pollution from OGVs. This includes technology for managing sewage, garbage, and ballast water, as well as limits on air emissions. The IMO also uses the Energy Efficiency Design Index (EEDI) to set energy efficiency requirements for new ships.

The U.S. Coast Guard (USGS) is the primary federal agency regulating vessel technology in the United States. It promulgates and enforces regulations for vessel equipment, construction, and operation in U.S. waterways. The USCG is also the primary federal agency regulating vessels for IMO compliance through inspections of registered ships that call at ports. The Federal Maritime Commission (FMC) is an independent U.S. agency that regulates the country's international ocean transportation system. While focused on commercial practices, it works with other agencies to ensure a reliable shipping system. In addition to government bodies, non-governmental classification societies such as the American Bureau of Shipping, establish and maintain technical standards for the construction and operation of ships and offshore structures.

In general, emissions from OGVs can be divided into three operational phases: emissions from cruising (open sea), maneuvering, and docking at the berth. Emissions from the docking phase, during cargo loading/unloading operations, are a serious concern for ports because such emissions can affect workers and neighboring communities. LAHD addressed this serious concern with AMP (also called shoreside power, cold ironing, or High Voltage Shore Connection (HVSC) Systems), a long-running air quality program that focuses on reducing emissions from vessels docked at the Port. Instead of running on

diesel power while docked at berth, AMP-equipped ships "plug in" to shore side electrical power.

Berth 100 at the CS Terminal was the first container terminal in the world to use this technology for container ships when it opened in June 2004. Nearly two months later on August 9, 2004, the world's first container vessel to be built with AMP specifications already in mind, the *NYK Atlas*, arrived at the terminal. Since then, the Port has invested millions of dollars in equipping its terminals for AMP. As of 2024, the Port has 80 AMP vaults, more than any other port in the world.[1] The Port also invested other resources, such as staff expertise and time, to promote and develop the AMP systems and support other ports to follow suit.

Despite air quality benefits of shore power, there were concerns from port and vessel operators about installing and using shore power systems. These concerns include power reliability, operational consistency issues and safety problems from voltage and frequency specifications, connection procedures, and electric shock hazards. (J. Mar. Sci. Eng. 2024, 12(2), 322, https://doi.org/10.3390/jmse12020322.) To ensure compatibility for vessels and ports worldwide, the International Electrotechnical Commission (IEC), the International Organization for Standardization (ISO), and the Institute of Electrical and Electronics Engineers (IEEE) worked to establish specifications for equipment, including power supplies, outlets, cables, and conversions. Port staff worked with other ports around the world to develop the international IEEE/IEC/ISO 80005 standards for shore power, as well as the regulatory process at the IMO, to ensure standardized international requirements that provide guidance and stability for operators. As a result, LAHD has become a world leader in the use of shore power and has extensive expertise on its use and development.

Requiring Vessels to Use AMP

Comments suggested that all vessels calling at the CS Terminal should connect to shore power and requested that LAHD modify MM AQ-9 to make this a requirement. Other comments suggested that LAHD impose other requirements on OGVs. This part of the Consolidated Response explains the legal and operational restrictions on LAHD to impose such requirements, making them infeasible.

According to the EPA, as of 2022, there were approximately 4,500 commercial vessels in the world that are currently equipped for shore power.[2] This represents approximately 15% of container vessels worldwide, according to the British Ports Association.[3] On the land-side, as of June 2020, 45 major ports worldwide are equipped with the capability to use shore power (J. Mar. Sci. Eng. 2024, 12(2), 322, https://doi.org/10.3390/jmse12020322.) The number of terminals and vessels capabilities continue to grow, but vary significantly by vessel type and region, often depending upon regional requirements. For example, in the Pacific region, China recently revised its Marine Environmental Protection Law (MEPL), effective January 2024, to require shipping companies and port operators to install and utilize shore power systems.[4] Combined with CARB's At-Berth Regulations, which requires commercial ships docking in the state's major ports to use either shore electrical power or a CARB-approved

[1] https://www.portoflosangeles.org/environment/air-quality/alternative-maritime-power-(amp)
[2] Shore Power Technology Assessment at U.S. Ports – 2022 Update (EPA-420-R-22-037, December 2022), at page 10. https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P1016C86.pdf
[3] British Ports Association. Reducing Emissions from Shipping in Ports: Examining the Barriers to Shore Power, at page 50.
[4] https://safety4sea.com/new-requirements-to-apply-for-the-use-of-shore-power-in-chinese-ports/; see also NRDC, China Taking Further Steps to Clean Up Shipping Pollution, at https://www.nrdc.org/bio/barbara-finamore/china-taking-further-steps-clean-shipping-pollution

capture and control system, this results in greater number of vessels equipped to use shore power within the Pacific area as compared to other parts of the world.[5]

New ships can be constructed to use shore power. However, existing OGVs must be retrofitted with infrastructure to connect to shore power systems, which can be a complicated and costly process involving installation of extensive equipment, and modifications of switchboards, power and other management systems. On average, the lifespan of OGVs range from 10-25 years (for tankers, containers, and Ro-Ros) to 40–50 years (bulk carriers).[6] Typically, retrofitting can take weeks or months, during which the ship cannot be used, with costs starting at $1 million per vessel. Operators that rent ships, rather than maintaining their own fleets, often opt out of investing in retrofitting for shore power, choosing instead to rely on other emissions capture and control systems, certified by CARB and other regulators, that provide more flexibility and less upfront modification costs. Vessel operators that do not maintain consistent routes to ports that have shore power are also less likely to be retrofitted.[7] However, once retrofitted, vessels have strong incentives to use shore power rather than onboard fuel sources, especially when there are legal requirements to do so and fuel costs are greater than electricity costs.[8]

Commenters requested that MM AQ-9 be revised to require that all vessels visiting the CS Terminal connect to AMP. This would require LAHD to prohibit any non-AMP capable vessel from visiting the CS Terminal. As explained below, LAHD cannot legally restrict vessels from docking at the Port; this power rests within federal law. (See *United States v. Locke* (2000) 529 U.S. 89, 90; *Kelly v. Washington* (1937) 302 U.S. 1, 4 [“The federal acts and regulations with respect to vessels on the navigable waters of the United States are elaborate.”].)

LAHD does not have direct regulatory authority to impose any specific emissions reduction technology for OGVs. Rather, as noted above, the IMO in combination with national and quasi-governmental organizations regulates OGV technologies. The vast majority of vessels visiting the Port are internationally flagged and owned; LAHD cannot constitutionally interfere with interstate or international commerce. See also Draft RSEIR at page 3.1-50. Only USGS has the authority to regulate anchorage at the Port, not LAHD. (See, e.g., 46 U.S.C. § 70006 et seq.) LAHD cannot turn away vessels bound for the Port on grounds that they are not AMP-capable; that responsibility lies with the USGS for regulatory and security factors governed by maritime law. The same would be true for non-foreign ships that are governed by federal regulations involving numerous agencies such as the US Coast Guard, U.S. EPA, U.S. Maritime Administration (MARAD), Occupational Safety and Health Administration (OSHA), and the US Federal Communications Commission (FCC). Thus, to ensure that OGVs visiting the Port are equipped with emissions controls, LAHD and other ports must rely on federal agencies and CARB, which can impose regulatory requirements on emissions for mobile sources within its jurisdiction subject to the preemption waivers it has received from U.S. EPA, such as through the At-Berth Regulations.

Furthermore, as explained in the Draft RSEIR Section 3.1.4.4 regarding “Feasibility of Additional Mitigation Measures for At-Berth Emissions”, vessel deployment decisions are solely the responsibility of the shipping lines and involve complex issues of international commerce, goods movement, economic planning and regulatory

[5] Shore Power Technology Assessment at U.S. Ports – 2022 Update (EPA-420-R-22-037, December 2022), at pages 11-12.
[6] https://www.transportation.gov/sites/dot.gov/files/2024-12/Maritime%20Plan.pdf
[7] https://www.staxengineering.com/stax-hub/shore-power-vs-capture-control-for-ship-emissions-reduction/
[8] https://www.staxengineering.com/stax-hub/shore-power-vs-capture-control-for-ship-emissions-reduction/

compliance. As noted above, the IMO is the main regulatory body in the international shipping industry and sets global standards for OGVs, but countries may have additional requirements. Vessel owners and operators must ensure compliance with all applicable international, national, and regional regulations for each voyage. They must make decisions on how to maintain, construct and retrofit vessels to meet applicable standards depending upon route considerations, cost-benefit analyses and other factors. As noted above, this includes making vessels AMP-capable, which requires significant investment and planning. Even if a shipping line has vessels that have been constructed or retrofitted to satisfy environmental standards (such as AMP), the deployment of those vessels by the shipping line involves a complex array of internal and external factors, including market demand, physical vessel characteristics, operational efficiency, and regulations, to assign the right ship to the right route. Neither LAHD nor the marine terminals are able to mandate that these shipping companies deploy only the cleanest vessels to San Pedro Bay.

Even setting aside USGS primacy over dockage issues, from an operational perspective, LAHD does not have the ability to reroute or turn away vessels. LAHD provides pilotage activities related to the navigation of vessels in local waters where the port pilot acts as an advisor to the master of the vessel. Port pilots must offer this service when a request for pilotage is made within a minimum of two hours' advance notice as required under Section 3 Pilotage of the Port of Los Angeles Tariff No. 4 (see https://kentico.portoflosangeles.org/getmedia/e8422394-263f-4972-8944-666ede90ed0b/sec03). Ignoring or rejecting a request for pilotage to purposefully exclude the arrival of a vessel at a terminal would be in direct conflict with the Port's Tariff. Furthermore, a vessel operator or owner can elect to hire a different pilotage service and would make that arrangement directly with the USCG, which has oversight over pilotage and regulates federal pilot licensing requirements. In that instance, as noted, LAHD would not be able to interfere with the pilotage by purposefully excluding the arrival of a vessel at a terminal. This information was confirmed in an interview with Captain John Betz, Port Pilot, on September 18, 2025.

Also, when AMP was initially introduced at the Port and the original MM AQ-9 was adopted in the 2008 EIS/EIR, the relationship between shipping lines and terminals was more direct, with specific lines generally calling at specific terminals, with tenants as both owners of the shipping line and operators of the terminal.[9] This allowed for planning of AMP systems to specific fleets of vessels, such as for the CS Terminal, and for lease provisions that require the terminal operator to use AMP for its fleet. For example, for the 2008 EIS/EIR MM AQ-9, the phase-in schedule was tailored to China Shipping's plans for retrofitting and updating its fleet consistent with the Amended Stipulated Judgment, which was expected to use the CS Terminal equipped with AMP. (See 2008 Final EIR, at p 2-186.) It was anticipated that, by requiring all China Shipping vessels to be AMP-capable by a certain year, that all vessels visits at the CS Terminal would eventually connect to AMP. However, over time, changes in alliances among the shipping lines have led to vessels calling at alternate terminals, and the vessel visits at the CS Terminal are not limited to vessels owned, operated, or chartered by China Shipping. As noted above, LAHD cannot prohibit these vessels from docking at the Port, including the CS Terminal, nor can it require these vessels to retrofit for AMP. However, LAHD can require China Shipping, under Permit No. 999, to require the use of shore power for all AMP-capable ships docking at the CS Terminal and, thus, MM AQ-9 implements this requirement and LAHD enforces it as part of the terms of Permit No. 999.

[9] Shore Power Technology Assessment at U.S. Ports – 2022 Update (EPA-420-R-22-037, December 2022).

Connecting/Disconnecting to AMP and Reporting

Comments raised concerns with the process involved with vessels connecting and disconnecting to AMP, suggesting there are intentional and unexplained delays. This part of the Consolidated Response explains the process for connecting and disconnecting vessels to shore power, and how that process is documented by LAHD and CARB.

LAHD has a detailed process that must be followed for all vessels to connect to AMP, with documentation requirements at each stage.[10] The Port's AMP is a state-of-the-art system using high voltage electricity complying with the specifications of the IEC/ISO/IEEE 80005-1 international standard, with shore-side power supply of 6,600 volts (6.6 kV) 3 phase power, utilizing heavy cables and sensitive infrastructure. While connecting to AMP, the protection of equipment and personnel is the highest priority, which requires real-time monitoring to ensure a stable power supply and to promptly address any safety issues (J. Mar. Sci. Eng. 2024, 12(2), 322, https://doi.org/10.3390/jmse12020322.) Special care needs to be used to connect to and disconnect from this system, with actions required to be followed and documented by LAHD, terminal operators, vessel operators, and other agencies.

Generally, LAHD is responsible for the physical infrastructure supporting AMP, such as providing the vault infrastructure and functional berths with electricity for vessel plug-ins. LAHD also provides the necessary qualified staff for timely connection and disconnection of AMP equipment to the vessels when a scheduling request is made by the shipping agent. The Marine Exchange of Southern California (MXSOCAL), in partnership with USCG, is responsible for coordinating vessel movements and berth availability at the Port via its Vessel Traffic Service (VTS) system. Terminal operators are responsible for managing their terminals to have shore power connections available for vessels. They also manage the implementation of shore power at their specific docks and work with vessels to ensure they are equipped to connect. Vessel operators are responsible for their vessels to connect to shore power when visiting a terminal.

Vessels are required to be "commissioned" by LAHD before they can plug in to the AMP system. The commissioning process requires confirmation that the vessel to be IEC/ISO/IEEE 80005-1 compliant, or to have been previously cleared to use the Port's AMP system. The commissioning process involves a visual and operational inspection to verify the condition and functionality of the connection and cable management systems. LAHD will also test the vessel during commissioning to confirm functionality and connection of control equipment and protection devices on the vessel and shoreside.[11] See also Draft RSEIR at page 3.1-18.

A vessel visiting the Port must order AMP service no less than 7 days prior to the ship arrival as required by CARB's At-Berth Regulations. On the designated day and time, a vessel will be connected to AMP, a HVSC Power Transfer Conference will take place between the ship's Person in Charge (PIC) and the Port PIC. The "HVSC Power Transfer Conference" checklist will be completed and signed by the Ship PIC and Port PIC. This checklist includes specific requirements to ensure all necessary equipment is secured and in working order, and there are no safety or other issues that may come up during the

[10] AMP General Program Details: https://kentico.portoflosangeles.org/getmedia/f94553bc-0356-4772-830a-e255dcc10813/AMP_General_Program_Details and AMP Connect Procedures: https://kentico.portoflosangeles.org/getmedia/ed786894-8379-4445-a458-7e511c15d673/AMP_Connect_Procedures

[11] AMP System Safety Verification: https://kentico.portoflosangeles.org/getmedia/b05ac7c1-5c7c-4b2d-9f72-a165d6416e17/AMP_System_Safey_Verification

high voltage ship to shore power transfer.[12] The disconnection procedures also follow a checklist and are similarly detailed and safety-oriented.[13]

In accordance with CARB's terminal operator visit report template for the At-Berth Regulation (https://ww2.arb.ca.gov/our-work/programs/ocean-going-vessels-berth-regulation/berth-reporting-templates), CARB collects data for each vessel visit including details such as terminal visited, berth visited, arrival and departure date and time, vessel shift if moved to a different berth, the type of CARB approved emission control strategy used, exceptions used under the At-Berth Regulations, shore power connection/disconnection power meter readings, emission control start date and time, emission control end date and time, details on the exceptions used involving vessel commissioning, vessel incident events, terminal incident events, safety events, and other reporting requirements. CARB considers shore power to be "the 'gold standard' in reducing emissions from ocean-going vessels in California and does not require any additional CARB approval to use for compliance with" the At-Berth Regulations. (See CARB 2023).

Revisions to MM AQ-9

CARB and NRDC provided comments requesting revisions to MM AQ-9 to clarify undefined terms, such as "China Shipping ships" or "hoteling". The comments suggested using definitions provided in the May 15, 2025 Order from the San Diego Superior Court, LAHD appreciates these comments and other suggestions on ways to ensure MM AQ-9's requirements are clear and consistent with its purpose, which is to require that all China Shipping vessels and all AMP-capable vessels connect to shore power, or AMP, while at-berth at the CS Terminal. LAHD also acknowledges that using standardized definitions would provide clarity, and, thus, modifies MM AQ-9 to include the suggested definitions from commenters or references to definitions in CARB's At-Berth Regulations. In response to these comments, MM AQ-9 on page 3.1-42 on the Draft RSEIR has been revised and updated as follows (additions are underlined and deletions are crossed out):

MM AQ-9: Alternative Maritime Power (AMP).

All vessels owned, chartered or operated by China Shipping ~~ships~~ calling at Berths 97-109 shall use AMP while docked at the berth ~~hoteling in the Port~~ for 100-percent of ~~ship calls~~vesssel visits.

Additionally, all vessels~~ships~~ retrofitted for or capable of using AMP calling at Berths 97-109 shall use AMP while docked at the berth ~~hoteling in the Port~~ for 100-percent ~~compliance~~ of ~~ship calls~~vessel visits.

"Vessels", "berth" and "visits" shall be defined as provided in California Code of Regulations, Title 17, section 93130.8, subdivision (c), and applicable future regulations that may be promulgated by CARB regarding at-berth emissions.

The following exceptions apply to this measure:

(1) ~~When an AMP-capable berth is unavailable due to utilization by another AMP-capable ship.~~

~~(2)~~ During any portion of a vessel visit that qualifies as a "safety and emergency event" under California Code of Regulations, Title 17, section 93130.8, subdivision (a).

[12] AMP Power Transfer Conference: https://kentico.portoflosangeles.org/getmedia/c85eed58-2034-4197-9e88-85af73bf25a3/AMP_Power_Transfer_Conference

[13] AMP Disconnect Procedures: https://kentico.portoflosangeles.org/getmedia/f329bfad-7d6e-4105-badb-18db0b967db3/AMP_Disconnect_Procedures

(23) During any portion of a vessel visit that qualifies as "commissioning" under California Code of Regulations, Title 17, section 93130.8, subdivision (c).
(34) During any portion of a vessel visit that occurs during either a vessel-side equipment failure or a terminal-side equipment failure. A "terminal-side equipment failure" shall be deemed to occur when the terminal or Respondents have installed shoreside control equipment and maintains that equipment according to manufacturer recommendations, but that equipment experiences an unexpected failure at the time during the vessel visit for which the equipment failure is claimed. In addition, a "terminal-side equipment failure" cannot be claimed unless arrangements are promptly made to ensure that repair, replacement, or servicing of the failed equipment will be completed as soon as possible. A "vessel-side equipment failure" shall be deemed to occur when a vessel owner or operator has installed on-board equipment to connect with shoreside control equipment and maintains that onboard equipment according to manufacturer recommendations, but that on-board equipment experiences an unexpected failure at the time during the vessel visit for which the equipment failure is claimed. In addition, a "vessel-side equipment failure" cannot be claimed unless arrangements are promptly made to ensure that repair, replacement, or servicing of the failed on-board equipment will be completed as soon as possible. Necessary documentation to substantiate these exceptions includes, at minimum, the dates and times of the failure(s); any relevant correspondence documenting the equipment failure consistent with the definitions above; evidence that the equipment at issue has been maintained according to manufacturer recommendations; evidence that the equipment failure was unexpected at the time during the vessel visit for which the equipment failure is claimed; and evidence that arrangements have been made to ensure that repair, replacement, or servicing will be completed as soon as possible.

If a vessel visit qualifies for an exception above, but can still feasibly control emissions using a CARB-certified alternative control technology (i.e., a barge-based capture and control system), the vessel shall use that strategy, consistent with the requirements of MM AQ-31.

Revisions to MM AQ-31

LAHD further acknowledges that MM AQ-31 should also be clarified to avoid undefined terms and to ensure MM AQ-31's requirements are clear and consistent with its purpose, which is to ensure that vessels that are not required by MM AQ-9 connect to AMP (i.e., are not AMP-capable or fall under a valid exception) are complying with the At-Berth Regulations and employ additional CARB-approved emission control strategies (CAECS) to reduce at-berth emissions. In response to these comments, MM AQ-31 on page 3.1-49 on the Draft RSEIR has been revised and updated as follows (additions are underlined and deletions are crossed out):

MM AQ-31: At-Berth Regulations. All vesselsships calling at Berths 97-109 shall be subject to all applicable provisions of the At-Berth Regulations (CCR Title 17, Sections 93130-93130.22), and applicable future regulations that may be promulgated by CARB regarding at-berth emissions, while docked at the berthhoteling in the Port.

Consolidated Response 4: Baseline Issues

Some commenters asserted that the 2008 baseline used in the Draft RSEIR is incorrect. This Consolidated Response explains the CEQA requirements for establishing the appropriate baseline for the subsequent review and analysis presented in the Draft RSEIR.

As explained in section 2.6.1 of the Draft RSEIR, CEQA provides for an EIR to assess the significance of a project's impacts in comparison to a baseline that consists of existing physical environmental conditions at or near the project site. Baseline conditions are normally the physical environmental conditions existing at the time of commencement of environmental review; however, a departure from this norm is allowed under certain circumstances. A lead agency has discretion to decide exactly how, and in which time period, existing conditions can most realistically be measured. (CEQA Guidelines, § 15125(a).) Under CEQA, the use of historical conditions as the environmental baseline is appropriate when a project has not been constructed at the time of the analysis. (*Benton v. Board of Supervisors (1991)* 226 Cal.App.3d 1467, 1479-1480; see also *Fat v. County of Sacramento* (2002) 97 Cal.App.4th 1270, 1280.)

Moreover, under CEQA, the purpose of a supplemental EIR is limited to determining whether proposed changes to a previously reviewed project result in environmental impacts that were not already and previously analyzed in a prior EIR. (Public Resources Code § 21166.) Therefore, as discussed in section 2.6.1 of the Draft RSEIR, a supplemental EIR typically would adopt as its baseline the full build-out of the approved project as analyzed under the prior EIR and would disclose the incremental change in environmental impacts between revised project and the prior approved project, regardless of whether that project has been fully constructed. (*Communities for a Better Environment v. South Coast Air Quality Management Dist.* (2010) 48 Cal.4th 310, 326 ["*CBE*"].) Here, the Draft RSEIR discloses, and analyzes for significance under CEQA, impacts of the Revised Project in comparison to the 2008 Baseline. Consistent with this approach, this Draft RSEIR appropriately applies the 2008 baseline, as established in the 2019 SEIR. (*CBE, supra,* at 48 Cal.4th 326.) This reflects the earliest date on which a prior EIR was certified and the original project was approved. However, as discussed in section 2.6.1, LAHD determined that factual circumstances unique to the Revised Project required divergence from this typical approach for the analysis of the health risk assessment impacts. For those impacts, the Draft RSEIR used a floating Future Baseline cancer risk that uses 2008 activity levels, but uses emission factors, projected over 25-, 30-, and 70-year exposure periods that incorporate the effects of existing air quality regulations. This is the approach for such impact analyses required of LAHD by the SCAQMD.

Some comments (e.g. CARB-6) assert that the Draft RSEIR must use a baseline based on existing conditions in 2024, when the Notice of Preparation (NOP) for this RSEIR was released. Comment SCAQMD-4 asserts that the use of the future floating baseline for the HRA and the static baseline for the emissions analyses is inconsistent, and that "the Port should adopt a consistent methodological framework that incorporates a future-adjusted baseline," implying that the entire air quality analysis should be re-done for the Final RSEIR. Comment CARB-4 raises a similar concern. However, under CEQA Guidelines Section 15125, LAHD has the discretion to select an appropriate baseline that provides the most informative environmental analysis. In this case, the 2008 baseline is consistent with the analysis conducted in the 2019 SEIR and previously certified 2008 EIS/EIR and is therefore appropriately applied in this Draft RSEIR. As stated in Consolidated Response 1, the Writ directed LAHD to update only certain parts of the analysis in the 2019 SEIR but left other analyses and measures in place. It is consistent with the Writ to continue to use the same 2008 baseline, based on the 2008 EIS/EIR, for the Draft RSEIR as was used for the 2019 RSEIR.

Furthermore, the 2019 RSEIR applied a 2008 Baseline (rather than the 2014 baseline from the applicable NOP) in response to comments that the 2008 Baseline was more

appropriate of a supplemental document and should be used instead. No one challenged the 2008 Baseline as used in the 2019 RSEIR and the Courts did not order the Draft RSEIR to use a different baseline. LAHD was not required to re-evaluate, or consider challenges to the data, analyses, and conclusions in the 2019 SEIR that were brought or could have been brought in the prior litigation. Please see Consolidated Responses 1 and 2.

Consolidated Response 5: Next Steps Following RSEIR Certification and Enforceability of New Mitigation and Lease Measures

Some comments questioned how LAHD will enforce the new measures in the RSEIR. This Consolidated Response address comments about how LAHD will enforce and implement the revised and new mitigation measures in the Final RSEIR in the future. To address this issue, it is important to note how CEQA and the Writ addresses certification of the RSEIR as a separate and required first step before approval of the project, which is when mitigation measures are implemented and enforced.

Approval of a project under CEQA requires three steps: (1) certification of the environmental review document; (2) adoption of CEQA findings regarding the environmental impacts of the project and adoption of mitigation measures; and (3) approval of the project. (CEQA Guidelines, § 15092(a).)

With respect to certification, Public Resources Code section 21151(a) provides that "[a]ll local agencies shall prepare ... and certify the completion of[ ] an environmental impact report on any project that they intend to ... approve which may have a significant effect on the environment." CEQA Guidelines section 15090(a) identifies what the agency must find to certify an EIR: that the final EIR has been completed in compliance with CEQA; that the final EIR was presented to its decision-making body and that body reviewed and considered the information in the final EIR prior to approving the project; and the final EIR reflects the lead agency's independent judgment and analysis. (CEQA Guidelines, § 15090(a)(2), (a)(3).)

After the lead agency has certified the EIR, the agency considers whether to approve the project. This stage triggers CEQA's requirement for the agency to mitigate or avoid significant environmental impacts of the project when it is feasible to do so. (PRC, §§ 21002, 21081.) The lead agency must make specific findings with respect to the environmental impacts identified in the EIR in relation to the specific project being approved. These findings (often called the CEQA findings) may include: whether the project impacts are less than significant, less than significant with mitigation or significant and unavoidable; that feasible mitigation measures will reduce the environmental impacts to less than significant and the project is approved as mitigated; that a project alternative would avoid significant environmental impacts and is either infeasible or approved instead of a project; that significant environmental impacts cannot be reduced by feasible mitigation measures or an alternative but project benefits outweigh such unavoidable impacts, and, therefore, the project is approved based on a statement of overriding considerations; or that the project's environmental impacts are unacceptable and the project should be denied. (PRC, § 21081; CEQA Guidelines § 15091.) The lead agency must adopt CEQA findings when it makes its first project approval. (*Save Panoche Valley v. San Benito County* (2013) 217 Cal.App.4th 503, 530.) When a project is approved on the basis of an EIR, the lead agency must also adopt a Mitigation Monitoring and Reporting Program (MMRP) for any mitigation measures imposed on the project. (CEQA Guidelines §15097(a).) As required by

CEQA Guidelines Section 15126.4(a)(2), mitigation measures must be "fully enforceable through permit conditions, agreements, or other legally binding instruments," typically through the project approval documents.

After the lead agency "approves or determines to carry out a project" that is subject to CEQA, the agency may file a Notice of Determination (NOD) within five working days which triggers CEQA's 30-day statute of limitations. (PRC, § 21152(a).) The NOD must reflect the agency's determination as to whether the project will have a significant effect on the environment and must state whether an EIR has been prepared. (PRC, §§ 21108(a), 21152(a).) "The purpose of these filings is to alert the public about environmental decisions." (*Committee for Green Foothills v. Santa Clara* (2010) 48 Cal.4th 32, 43.) The NOD is not effective until after the lead agency approves the project. (See *County of Amador v. El Dorado County Water Agency* (1999) 76 Cal.App.4th 931, 962-963 [NOD filed before project approval not valid].) Thus, as noted above, certification of an EIR, by itself, does not complete the CEQA process. The CEQA process is complete when the lead agency adopts the necessary CEQA findings for approving the proposed project, adopts mitigation measures and MMRP, and takes action on the project. Thus, the issues analyzed in the EIR—the environmental impacts of the proposed project and whether such impacts can be feasibly mitigated by mitigation measures—do not get finally resolved until the lead agency adopts the CEQA findings for approval of the specific project.

This two-step process is also reflected in the Writ. The Writ required the following:

- That LAHD, within 18 months of the Writ, prepare, circulate, and certify a revised SEIR (this Final Revised SEIR) with certain additional information, analyses, and/or disclosures, to address the deficiencies identified by the Courts.
- That LAHD timely ensure that any mitigation measures adopted in the Revised SEIR are fully enforceable through permit conditions, agreements, or other legally binding instruments.

Here, under CEQA and the Writ, the Board of Harbor Commissioners must consider the first step of the process—certification of the RSEIR and the 2019 SEIR, as revised by the RSEIR—before "approving" any project that would be subject to the mitigation measures in the RSEIR. As noted above, the Writ required Board to certify a revised SEIR by a set deadline—within 18 months of the Writ.

After the Board has certified the RSEIR and the 2019 SEIR, as revised by the RSEIR, the Board will then consider approval of the "Revised Project." Approval of the Revised Project would occur if the Board approves an amendment to Permit No. 999, which LAHD will negotiate with China Shipping. The amendment, along with the required CEQA findings and statement of overriding based on the certified RSEIR, and updated Revised MMRP, will be brought to the Board for consideration per the direction of the Board in compliance with the Writ, after certification of the RSEIR.

Comments, such as CARB-27, NRDC-12, and SCAQMD-20, assert that mitigation measures provided in the Draft RSEIR are not sufficiently enforceable through a legally binding means. This will occur after certification of the RSEIR and the 2019 SEIR, as revised by the RSEIR.

When considering the amendment to Permit No. 999, CEQA requires the Board to adopt certain findings, including a finding that "changes or additions have been required in, or incorporated into, the project" to avoid significant impacts, and findings regarding whether those changes are within the jurisdiction of the agency when it approves a

project. (CEQA Guidelines § 15091(a).) This requirement ensures that the mitigation measures included in the RSEIR are considered by decision makers and adopted as a requirement of the project unless the decision makers determine that the measures are infeasible or find them to be in the jurisdiction of another agency. All measures in the Draft RSEIR, as amended in the Final RSEIR, would be adopted by the Board as part of the amendment to Permit No. 999 unless they are determined by the Board to be infeasible based on "specific economic, legal, social, technological, or other considerations" supported by substantial evidence in the record at the time of project approval (CEQA Guidelines § 15091(a)(3), 15091(b)). By including the measures in an amendment to Permit No. 999, the mitigation and lease measures in the RSEIR will be "fully enforceable" through a legal binding instrument as required by CEQA Guidelines Section 15126.4(a)(2).

As above, a related requirement in CEQA Guidelines Section 15097 requires the lead agency to adopt a MMRP that establishes how the agency would monitor implementation of the adopted mitigation measures when it approves a project. The adequacy of a MMRP is evaluated according to the "rule of reason" with deference to the lead agency. (*Natural Resources Defense Council, Inc. v. City of Los Angeles* (2023) 98 Cal.App.5th 1176, 1217.) When it approves the amendment to Permit No. 999, the Board will adopt an updated Revised MMRP, identifying the project sponsor, its agents, or successors as the parties responsible for implementing each mitigation measure, and indicate when the measure is to be implemented.

The updated Revised MMRP will specify the timing, reporting and other requirements of all mitigation measures and lease measures, including those from the 2008 EIS/EIR and 2019 SEIR that, as required by the Writ, have already been implemented and enforced in the sixth amendment to Permit No. 999, approved by the City in July 2024. The timing of those measures is not expected to change and will continue under a future amendment to Permit No. 999; this means that the future amendment will not reset the start dates of the 2008 EIS/EIR and 2019 SEIR that have already been implemented and enforced in the sixth amendment to Permit No. 999. The timing for new measures included in the Final RSEIR would be based on the approval date of a future amendment, which the RSEIR assumes to be 2026, consistent with the requirements of the Writ. For additional details, please refer to a draft of the updated Revised MMRP which is provided for informational purposes until a formal action is brought to the Board for adoption.

Consolidated Response 6: Mitigation for GHG Impacts and Changes to MM GHG-2

Comments claim the Draft RSEIR does not properly mitigate for GHG impacts. For example, comments CARB-7 and NRDC-14 allege MM GHG-2 impermissibly defers mitigation because it fails to identify greenhouse gas offsets that are "'real, additional, quantifiable, permanent, verifiable, and enforceable.' (Cal. Code Regs., tit. 17, § 95802, subd. (a); see also *Golden Door Props., LLC v. Cnty. of San Diego* (2020) 50 Cal.App.5th 467, 486.)." CSNAF-2 comments on the feasibility of GHG MM-2's offset credits requirement.

This Consolidated Response clarifies questions raised with respect to the formulation of MM GHG-2 and generally explains how MM GHG-2 complies with CEQA requirements regarding the contents of mitigation. This Consolidated Response also addresses comments requesting revisions to MM GHG-2 to clarify certain provisions. Singular, more focused questions are addressed by individual responses below, as appropriate.

CEQA's Requirements for Mitigation of GHG Impacts

CEQA requires that an EIR identify ways in which significant environmental impacts can be lessened in severity or avoided, including by the adoption of feasible and effective mitigation measures (CEQA Guidelines Section 15126.4). To this end, mitigation measures must reduce the severity of potentially significant impacts, their effectiveness must be clear, and they must be enforceable (CEQA Guidelines Section 15126.4(a)).

CEQA Guidelines also provide specific provisions for mitigating significant impacts of GHG emissions. Specifically, CEQA Guidelines, section 15126.4(c) provides:

> (c) Mitigation Measures Related to Greenhouse Gas Emissions. Consistent with section 15126.4(a), lead agencies shall consider feasible means, supported by substantial evidence and subject to monitoring or reporting, of mitigating the significant effects of greenhouse gas emissions. Measures to mitigate the significant effects of greenhouse gas emissions may include, among others:
>
> (1) Measures in an existing plan or mitigation program for the reduction of emissions that are required as part of the lead agency's decision;
>
> (2) Reductions in emissions resulting from a project through implementation of project features, project design, or other measures, such as those described in Appendix F;
>
> (3) Off-site measures, including offsets that are not otherwise required, to mitigate a project's emissions;
>
> (4) Measures that sequester greenhouse gases ….

CEQA also provides that mitigation may include "[c]ompensating for the [significant environmental] impact by replacing or providing substitute resources or environments"" (CEQA Guidelines, § 15370(e).) As with all mitigation measures, off-site measures "must be fully enforceable through permit conditions, agreements, or other legally binding instruments." (CEQA Guidelines, § 15126.4(a)(2).)

It is not uncommon for mitigation measures for GHG impacts to include a combination of the types of measures identified in CEQA Guideline section 15126.4(c), allowing for a selection of a menu of options for mitigating such impacts. In such cases, CEQA provides that lead agencies must adopt specific performance standards for mitigation measures that are developed after project approval, when it is impractical or infeasible to include those details during the project's environmental review. This ensures that the mitigation will be successful in achieving the desired reductions. Although formulation of mitigation measures cannot be deferred until some future time, CEQA Guidelines Section 15126.4(a)(1)(B) provides:

> The specific details of a mitigation measure, however, may be developed after project approval when it is impractical or infeasible to include those details during the project's environmental review, provided that the agency (1) commits itself to the mitigation, (2) adopts specific performance standards the mitigation will achieve, and (3) identifies the type(s) of potential action(s) that can feasibly achieve that performance standard that will be considered, analyzed, and potentially incorporated in the mitigation measure.

As explained in *Golden Door Properties v. Cnty of San Diego* (2020) 50 Cal.App.5th 467 and similar cases, if an EIR includes a mitigation measure that allows for final details of proposed mitigation to be further refined, the EIR should include the following information as evidence that (1) it was necessary to defer final articulation of the

measure's features, and (2) the proposed mitigation will serve to effectively mitigate the identified effect:

- An explanation of why proposed future studies cannot be provided at the current time.
- Realistic performance standards or criteria that will ensure that the measure will be effective in mitigating the significant effect.
- A list of specific contents, standards, or alternative actions to be included in the future plan.
- An explanation or analysis of the effectiveness and feasibility of the measure and its potential for success in reducing or avoiding the identified impact.
- Commitment that the project proponent will complete the proposed studies/plan and implement actions to achieve the performance standard.
- A requirement that advancement of future site-specific project approvals will be contingent on ensuring that those components of the project meet the success/performance criteria.

The Draft RSEIR's MM GHG-2 fully complies with requirements for mitigation, as provided in CEQA Guidelines and confirmed in recent cases.

At the outset, MM GHG-2 imposes a requirement on the tenant to fully mitigate for the Revised Project's GHG impacts on a yearly basis throughout the lifetime of Permit No. 999 (year 2045). MM GHG-2 provides that this can be achieved through the purchase of offset credits from a CARB-certified registry. As stated above, this is expressly provided for under CEQA Guidelines and the use of CARB-certified offsets have been upheld repeatedly by the courts. CARB is charged with monitoring and regulating sources of emissions of GHG in order to reduce emissions pursuant to state law and policy. (Health & Saf. Code § 38510.) CARB has pursued several strategies for reducing GHG emissions, including a cap-and-trade program resulting in availability of CARB-approved offset credits for purchase. (Cal. Code Regs., tit. 17, §§ 95801-96022; *Association of Irritated Residents v. State Air Resources Bd.* (2012) 206 Cal.App.4th 1487, 1498, fn. 6 ["*AIR*"].) CARB developed offset protocols for use in the state's cap-and-trade program. (Cal. Code Regs., tit. 17, §§ 95970-95989; *AIR, supra,* at 1502 fn. 11.) The cap-and-trade program applies to specific "covered entities" with associated GHG emissions that meet certain thresholds. (Cal. Code Regs., tit. 17, §§ 95811 and 95812.) Covered entities looking to purchase offsets must adhere to CARB's standards. As the court in *Golden Door* acknowledged, CARB-approved offsets must be "real, permanent, quantifiable, verifiable, and enforceable by the [State Air Resources Board]" and the reduction must be "in addition to any greenhouse gas emission reduction otherwise required by law or regulation, and any other greenhouse gas emission reduction that otherwise would occur." (Health & Saf. Code, § 38562(d)(1) and (2); Cal. Code Regs., tit. 17, § 95802, subd. (a).)

MM GHG-2 also provides for the development of additional mitigation details in the future, as LAHD is in the process of establishing a Greenhouse Gas Program. This program will provide tenants, including CS, the option to purchase and retire carbon offsets through LAHD's program to reduce greenhouse gas emissions attributable to their operations. This is not deferred mitigation. The language in MM GHG-2 on page 3.2-27 of the Draft RSEIR clearly states "The LAHD is in the process of developing a Greenhouse Gas Program. The Program shall be used for GHG-reducing projects and

programs approved by the Port of Los Angeles. If that Program is established during the term of the Permit, the Tenant shall have the option to offset the required amount of GHG emissions through a funding contribution to the Greenhouse Gas Program rather than towards purchasing carbon offsets from a CARB-recognized registry." It also clearly states "While the LAHD Greenhouse Gas Program is currently under development, the Tenant shall purchase and retire carbon offsets from a CARB-recognized offset registry". As such, MM GHG-2 does in fact require the tenant to purchase carbon offsets from a CARB-recognized registry since the LAHD Greenhouse Gas Program is not yet established.

Moreover, MM GHG-2 in the Draft RSEIR requires specific actions with predictable results and includes clear performance standards—that is, required outcomes in the reduction of greenhouse gas emissions—that must be achieved through a combination of mandatory measures or a menu of optional additional measures outlined in the mitigation measure. The comments appear to misunderstand these requirements and the Draft RSEIR's compliance with such standards. Some comments (e.g., Comment CARB-7) also incorrectly assert that mitigation measures and the quantification of impacts are "deferred…and there is no assurance that such a program will achieve quantifiable or timely reductions." (CARB-7.) That is not the case. The Draft RSEIR describes and analyzes the extent of the impact and whether the impact is significant based on applicable thresholds. MM GHG-2 sets a defined quantitative performance standard, requiring mitigation for greenhouse gas emissions that exceed 10,000 metric tons per year (see Draft RSEIR pp. 3.2-27 to 3.2-29). The LAHD Greenhouse Gas Program, if established during the term of the Revised Project, will offer an alternative way to purchase carbon offsets, with oversight and accountability mechanisms comparable to those in the existing menu of measures. This includes ensuring that offsets are additional, quantifiable, and verifiable offsets by an independent third-party. The program would also incorporate enforcement mechanisms to ensure compliance (see also Consolidated Response 5 and Response to Comment CARB-7).

Revisions to MM GHG-2

CARB, NRDC and WBCT provided comments on the MM GHG-2 regarding the feasibility of MM GHG-2, including the to-be developed LAHD Greenhouse Gas Program (CARB-7 and NRDC-14). LAHD appreciates these comments and other suggestions for ensuring that MM GHG-2's requirements are clear and consistent with its intended purpose— to provide an alternative to purchasing greenhouse gas offsets from a CARB-approved registry to achieve GHG emission reductions. In further response to these comments, MM GHG-2 on pages 3.2-27 to 3.2-28 has been revised and updated as follows (additions are underlined and deletions are crossed out):

MM GHG-2. GHG Reduction Offsets. The Tenant shall be required to purchase and retire carbon offsets related to activities that reduce, avoid, destroy, or sequester an amount of GHG emissions in an off-site location to offset the equivalent amount of GHG emissions generated by the Project in excess of the City's significance threshold of 10,000 metric tons. From the first year of the Permit amendment, in 2026, through the end of the term of the Permit in 2045, the Tenant shall purchase and retire carbon offsets each year in an amount that would be the equivalent of the Project's estimated residual GHG emissions. The estimated residual emissions for each calendar year shall be based upon the calculations in Appendix C of the Final Revised SEIR prepared for the Revised Project except as adjusted in accordance with paragraph a) or b), below.

The LAHD is in the process of developing a Greenhouse Gas Program. The Program shall be used for GHG-reducing projects and programs approved by the Port of Los

Angeles. If that Program is established during the term of the Permit, the Tenant shall have the option to offset the required amount of GHG emissions through a funding contribution to the Greenhouse Gas Program rather than towards purchasing carbon offsets from a CARB-recognized registry.

While the LAHD Greenhouse Gas Program is currently under development, the Tenant shall purchase and retire carbon offsets from a CARB-recognized offset registry as follows:

Carbon offsets: The Tenant shall purchase and retire carbon offsets from a CARB-recognized registry to ensure that offsets will result in real, permanent, additional, quantifiable, verifiable, and enforceable reductions. The carbon offsets shall be verifiable by the City and enforceable in accordance with the registry's current applicable standards, practices, or protocols. The order of priority for purchasing (any one or more) carbon offsets shall be considered as follows:

- Originating within the local area;
- Originating within the South Coast Air Basin;
- Originating within the state of California; or
- If sufficient local and in-state offsets are not available, the Tenant shall purchase conforming national offsets registered with a CARB-recognized registry.

Adjustment of Tenant's Required Offsets through Other Verified GHG Emission Reductions: The Tenant may pursue the following modifications to the Project's total estimated GHG emissions identified in this measure. These modifications may be pursued in conjunction with or independent of each other on an up to annual basis.

a) Adjustment in GHG Emissions

In the event of changes in activities, efficiency, reduced operations, regulations or for any other purpose, the Tenant may request an adjustment of the required carbon offsets based on an evaluation of actual GHG emissions rather than future projected GHG emission calculations in this RSEIR. If the actual GHG emissions, minus the 2008 Actual Baseline, do not exceed the significance threshold of 10,000 mty, no carbon offsets shall be required. To adjust the Tenant's required number of carbon offsets for purchase, the Tenant shall make a request in writing to the LAHD for review and approval for the calendar year under consideration and shall submit a report within 60 days that quantifies the actual greenhouse gas emissions by an expert or an independent, qualified third-party, in accordance with CARB-registry standards. The evaluation of actual greenhouse gas emissions must be performed using acceptable industry standards and protocols—to show emissions are real, quantifiable, and verifiable— for all sources that were included in the Project's GHG emissions calculations under Impact GHG-1. LAHD review shall occur within 30 days of receipt of the submitted report. Any expenses incurred by LAHD in processing the Tenant's request, including retaining an independent third-party verifier to peer review the report, shall be borne by the Tenant.

or

b) Implementation of Additional GHG Reduction Methods

In addition, the Tenant may request a reevaluation of required carbon offsets to be purchased according to this paragraph. The Tenant may implement different and additional GHG reduction methods if new technology and/or other feasible measures become available during the term of the Permit (including, but not limited to, onsite technologies such as Zero Emission equipment and/or supporting infrastructure). To

adjust the Tenant's required number of carbon offsets for purchase, the Tenant shall identify such additional GHG reduction actions and must quantify the GHG emission reductions from these GHG reduction actions by an independent, qualified third-party verifier to ensure the offsets are real, additional, quantifiable, permanent, verifiable, and enforceable. Once the GHG reduction actions are found to be feasible and are reviewed and approved by LAHD staff, the Tenant may request that LAHD reduce its required purchase of carbon offsets by the equivalent amount of demonstrated reduction. Any expenses incurred by LAHD in processing the Tenant's request, including retaining a third-party verifier, shall be borne by the Tenant.

Consolidated Response 7: Recirculation

Some comments request or assert that the Draft RSEIR should be revised to address issues raised in the comments and then republished and recirculated for additional public comment. As a threshold issue, as noted in Consolidated Response 5, the Writ required the Port to prepare and certify a revised SEIR within 18 months of the Writ. The Writ was served on the Port on May 31, 2024; 18 months from that date is Sunday, November 30, 2025, which is not a business day, making December 1, 2025, the deadline for the Board to certify the revised SEIR. It is not conceivable that a revised draft RSEIR could be prepared and recirculated by that deadline. As a result, comments requesting recirculation of a revised Draft RSEIR ask LAHD to violate the terms of the Writ.

Furthermore, as this Consolidated Response explains below, the circumstances under CEQA that trigger the requirement for recirculation are not present here.

A lead agency is required to recirculate a Draft EIR when the agency adds "significant new information" to the EIR after the close of the public comment period but prior to certification of the Final EIR (Public Resources Code Section 21092.1; State CEQA Guidelines Section 15088.5). "New information added to an EIR is not 'significant' unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project's proponents have declined to implement" (State CEQA Guidelines Section 15088.5(a)). "Significant" new information includes information showing that "(1) [a] new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented[;] or (2) [a] substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance" (State CEQA Guidelines Section 15088.5 (a)(1), (a)(2)).

The Resources Agency adopted Section 15088.5 of the State CEQA Guidelines in order to incorporate the California Supreme Court's decision in *Laurel Heights Improvement Assn. v. Regents of the Univ. of Cal*. (1993) 6 Cal.4th 1112. According to the Supreme Court, the rules governing recirculation of a Draft EIR are "not intend[ed] to promote endless rounds of revision and recirculation of EIRs" (*Laurel Heights II*, *supra*, 6 Cal.4th at p. 1132). Instead, recirculation is "an exception, rather than the general rule" (*Mount Shasta Bioregional Ecology Center v. County of Siskiyou* (2012) 210 Cal.App.4th 184, 221).

Under these standards, a change to a proposed project, made in response to comments on a Draft EIR, generally does not trigger the obligation to recirculate the Draft EIR. "The CEQA reporting process is not designed to freeze the ultimate proposal in the precise mold of the initial project; indeed, new and unforeseen insights may emerge during investigation, evoking revision of the original proposal" (*County of Inyo v. City*

of Los Angeles (1977) 71 Cal.App.3d 185, 199; see *River Valley Preservation Project v. Metropolitan Transit Development Bd.* (1995) 37 Cal.App.4th 154, 168, fn. 11).

As these cases recognize, CEQA encourages the lead agency to respond to concerns as they arise, by adjusting a project or developing mitigation measures, as necessary. That a project evolves to address such concerns is evidence of an agency performing meaningful environmental review. A rule requiring recirculation of the Draft EIR any time a project changes would have the perverse unintended effect of calcifying or freezing the original proposal, and of penalizing the lead agency or the project sponsor for revising the project in ways that may be environmentally benign or even beneficial. In light of this policy concern, the courts uniformly hold that the lead agency need not recirculate the Draft EIR merely because the proposed project evolves during the environmental review process (see, e.g., *Citizens for a Sustainable Treasure Island v. City and County of San Francisco* (2014) 227 Cal.App.4th 1036, 1061-1065 [project modification requiring consultation with Coast Guard regarding building designs did not require recirculation of Draft EIR]; *South County Citizens for Smart Growth v. County of Nevada* (2013) 221 Cal.App.4th 316, 329-332 [identification of staff-recommended alternative after publication of Final EIR did not trigger obligation to recirculate Draft EIR because alternative resembled other alternatives that the EIR had already analyzed]; *Western Placer Citizens for an Agricultural and Rural Environment v. County of Placer* (2006) 144 Cal.App.4th 890, 903-906 [revision in phasing plan did not trigger recirculation requirement because revision addressed environmental concerns identified during EIR process]).

Similarly, information that clarifies or expands on information in the Draft RSEIR does not require recirculation (see, e.g., *North Coast Rivers Alliance v. Marin Municipal Water Dist. Bd. of Directors* (2013) 216 Cal.App.4th 614, 654-656 [addition of a hybrid alternative to the Final EIR did not trigger duty to recirculate the Draft EIR]; *Clover Valley Foundation v. City of Rocklin* (2011) 197 Cal.App.4th 200, 219-224 [information regarding presence of cultural resources on property did not require recirculation because information amplified on information that was already in Draft EIR]; *California Oak Foundation v. Regents of Univ. of Cal.* (2010) 188 Cal.App.4th 227, 266-268 [letters addressing seismic risks did not trigger duty to recirculate Draft EIR, where letters recommended further analysis but did not contradict conclusions in Draft EIR]; *Cadiz Land Co. v. Rail Cycle, L.P.* (2000) 83 Cal.App.4th 74, 97 [commenter's disagreement with analysis of groundwater flow in EIR did not require recirculation because substantial evidence supported EIR's analysis; lead agency had discretion regarding which expert to rely upon]; *Marin Municipal Water Dist. v. KG Land California Corp* (1991) 235 Cal.App.3d 1652, 1666-1668 [clarifying information regarding potential length of moratorium was not "significant new information"]).

The following discussion applies these standards to the comments stating that the LAHD should recirculate the Draft RSEIR. In particular, the discussion focuses on whether the information provided in the comments is new, and whether that information discloses:

- A new significant impact that the project or mitigation would cause,
- An impact that would be substantially more severe unless mitigation is adopted that avoids the impact,
- A feasible project alternative is available that would avoid a significant impact, but the applicant will not adopt it, or
- That the Draft EIR is "fundamentally and basically inadequate" such that meaningful public comment was precluded (CEQA Guidelines Section 15088.5(a)).

In the instance of the Draft RSEIR, a number of comments were provided on nearly every impact addressed in the Draft RSEIR. The responses to comments are extensive, in large part because the comments were also extensive. The responses to comments provide the following information:

- First and foremost, the responses address the environmental concerns raised by the comments, and describe how they are addressed in the document;
- They provide corrections to the text, where such corrections are warranted;
- They expand on or provide minor clarifications to information already included in the Draft RSEIR in those instances where comments question this information; and
- They result in proposals for new mitigation measures that may more effectively reduce already identified significant environmental impacts of the project.

However, none of the conditions warranting recirculation of a Draft RSEIR, as specified in State CEQA Guidelines Section 15088.5 and described above, has occurred. As a result of responses to comments and the addition of new information, no new significant impacts would result, there is no increase in the severity of a significant impact identified in the Draft RSEIR, following mitigation, and as to the Draft RSEIR adequacy, the LAHD believes the RSEIR is complete and fully compliant with CEQA.

2.3 Organizations

California Air Resources Board

Comment Letter

See Section 2.6.

Responses

Response to Comment CARB-1:

Thank you for your comments on the Draft RSEIR. This is a general comment that includes introductory remarks and serves to introduce the more specific comments that are responded to in detail below. The comment is general and does not identify any specific deficiencies of the Draft RSEIR, and, therefore, no further response is required (PRC, § 21091(d); CEQA Guidelines § 15204(a)). The comment will be part of the record for Final RSEIR and made available to the decision-makers for their consideration prior to taking any action on the Revised Project.

Response to Comment CARB-2:

This is a general comment that summarizes the history of the Berths 97-109 terminal project and the CEQA review conducted for the continued operations at the terminal from 2008 to date.

The comment is general and does not identify any specific deficiencies of the Draft RSEIR, and, therefore, no further response is required (Public Resources Code §21091(d); CEQA Guidelines §15204(a)). The comment will be part of the record for the Final RSEIR and made available to the decision-makers for their consideration prior to taking any action on the Revised Project.

Response to Comment CARB-3:

The comment summarizes the legal challenge to the 2019 SEIR and the subsequent court actions resulting in preparation of this Revised SEIR.

The comment is general and does not identify any specific deficiencies of the Draft RSEIR, and, therefore, no further response is required (Public Resources Code §21091(d); CEQA Guidelines §15204(a)). The comment will be part of the record for Final RSEIR and made available to the decision-makers for their consideration prior to taking any action on the Revised Project.

Please also see Consolidated Response 1.

Response to Comment CARB-4:

The comment requests justification for the use of a 2008 baseline for the health risk assessment.

Please see Consolidated Response 4 and Response to Comment SCAQMD-4.

Response to Comment CARB-5:

The comment expresses concern that the predicted health risks disclosed in the RSEIR are substantially lower than the risks predicted in the 2019 SEIR. The comment suggests that these differences could be the result of inappropriate methodology, particularly whether emission factors were appropriately and consistently applied across the Static Baseline, Floating Baseline, and Revised Project scenarios. The comment also suggests that, because the mitigation measures for CHE, heavy-duty trucks, and OGVs for the Revised Project are similar as what was analyzed in the 2019 SEIR, there are no changes significant enough to justify the large reduction in reported health risks.

There are two primary reasons for the differences in predicted health risks in the Draft RSEIR and the 2019 SEIR, both of which related to updates in methodology. First, the maximum residential cancer risk increment is lower in the Draft RSEIR compared to the 2019 SEIR and 2008 EIS/EIR because the 30-year residential exposure period for the Revised Project changed. Specifically, the Draft RSEIR evaluated a Revised Project exposure period of 2019-2048 (see Section 3.1.4.1, third bullet and Page 3.1-34, starting at Row 47), whereas the 2019 SEIR and 2008 EIS/EIR evaluated a Project exposure period of 2009-2038. The later residential exposure period in this Draft RSEIR and the use of updated models (e.g., EMFAC2021, AERMOD version 24142, and OFFROAD2021, see Draft RSEIR Section 3.1.4.1) incorporate emission factors that represent cleaner fleets of trucks, automobiles, CHE, locomotives, and harbor craft due to fleet turnover, regulatory requirements, and mitigation measures (such as MM AQ-9, MM AQ-10, and MM AQ-17) extending to 2048, compared to the earlier exposure period in the 2019 SEIR and 2008 EIS/EIR. The change also ensured that the health risk analysis included the full lifetime of the Revised Project, through the expiration of Permit No. 999 in 2045

Second, the difference between the reported cancer risk results in this Draft RSEIR compared to the 2019 SEIR and 2008 EIS/EIR was due to a change in a receptor classification. In the previous versions, the residential cancer risk value of 140.7 in a million for the Revised Project was predicted to occur at a receptor grid point located in the middle of a modeled roadway. Because that location was not a residential receptor, the reported value did not reflect the actual residential cancer risk. The receptor grid was refined in this Draft RSEIR to remove the roadway location and instead report the highest cancer risk at a residential receptor. This change alone lowered the cancer risk value by 19.1 per million.

Response to Comment CARB-6:

The comment states that the RSEIR should be revised to quantify health risks using a 2024 baseline and to provide a comparison with the results from the 2018 Draft RSEIR.

Please see Consolidated Response 4.

Also, as discussed in the Draft RSEIR section 3.1.4.1 Methodology, the Revised Project's health risk impacts were projected over 25-, 30-, and 70-year exposure periods. 2019 was selected as the start year for the cancer risk exposure period to best capture the health effects associated with the additional period of non-compliance (2015-2023) and the subsequent full implementation of the Revised Project (starting in 2026 up to the last analysis year of 2045) (see Draft RSEIR pp. 3.1-34 to 3.1-35). The Port decided not to use a 2009-2038 exposure period (as was the case in the 2019 SEIR) because it would have included only 13 years (2026-2038) of future Revised Project emissions for residential cancer risk and only 8 years (2026-2033) for occupational cancer risk. By contrast, the 2019-2048 exposure period used in this Draft RSEIR includes 23 years (2026-2048) of future Revised Project emissions for residential cancer risk and 18 years (2026-2043) for occupational cancer risk. Therefore, the later exposure period is the correct approach from a disclosure and analysis standpoint as it more fully captures the effects of the future Revised Project and corresponding mitigation and lease measures.

It would also not be possible to recalculate the HRA using a 2024 baseline that reflects actual operational emissions from the China Shipping terminal and broader port activities as suggested by the comment. The Port relies on the Emissions Inventory (EI) data to calculate the HRA and the 2024 data was not available at the time the HRA was calculated in order to meet the court-ordered timeline for the preparation of this document. Please see Consolidated Response 5 regarding the Writ's timing requirements. Indeed, at the time of this Final RSEIR, the 2024 data is still not available to use on the Port's website (see https://www.portoflosangeles.org/environment/air-quality/air-emissions-inventory).

Response to Comment CARB-7:

The comment states that MM GHG-2 relies entirely on off-site carbon offsets instead of relying on feasible on-site reductions and points out that the measure terminates at the end of the permit period, in 2045, whereas the terminal could operate beyond that date. The comment also suggests that the "self-reporting" provision of MM GHG-2 fails to meet the CEQA requirement for measurable and enforceable mitigation.

Please see Consolidated Response 6.

The commenter misstates the requirements of CEQA, the Writ, and MM GHG-2 in several respects. First, there is no requirement under CEQA that limits the application of off-site carbon offsets as mitigation for GHG impacts. CEQA Guidelines, section 15126.4(c)(3) provides "[m]easures to mitigate the significant effects of greenhouse gas emissions may include, among others: . . . Off-site measures, including offsets that are not otherwise required, to mitigate a project's emissions…." CEQA Guidelines also provides that mitigation may include "[c]ompensating for the [significant environmental] impact by replacing or providing substitute resources or environments ...." (Guidelines, §15370, subd. (e).) The Guidelines also permit off-site mitigation of GHG emissions so long as the measures are supported by "substantial evidence and subject to monitoring or reporting." (Guidelines, § 15126.4, subd. (c).) In addition, the assessment of a fee may constitute an appropriate form of mitigation, as long as it is linked to a specific mitigation plan or program designed to address a cumulative impact. (*Natural Resources Defense Council, Inc. v. City of Los Angeles* (2023) 98 Cal.App.5th 1176, 1211-1212.)

Furthermore, the Draft RSEIR's analysis accounts for measures that have GHG reduction co-benefits. In the case of MM AQ-9: AMP and MM AQ-10: VSRP, these mitigations were quantified in the analysis. As stated in Section 3.2.4.5 of the Draft RSEIR on page 3.2-21, all other 2008 EIS/EIR/EIS GHG mitigation measures and lease measures that have either already been implemented, have been modified by the 2019 SEIR, have been determined to be infeasible or not applicable, or are not quantified for purposes of calculating GHG emissions under the Revised Project are described in Table 1-1. Most of these measures are on-site and would contribute to reducing GHG emissions; however, many of these measures could not be quantified in the 2008 EIS/EIR and 2019 SEIR.

Specifically, the 2008 EIS/EIR evaluated GHG emissions as a subset of impacts under Air Quality. In the Findings of Fact on page 92, the 2008 Final EIS/EIR identifies that "MMs AQ-9, 10, 17, 20 and AQ-21 (listed previously), and AQ-25 through AQ-30 are identified as reducing GHG emissions from construction and operation." In summary, these measures include AMP, VSR, CHE replacement, LNG Trucks (not feasible and omitted by the 2019 SEIR as upheld by the Courts, see Consolidated Responses 1 and 2), truck idling, Leadership in Energy and Environmental Design (LEED) building standards, lighting standards, energy audit, solar panels, and recycling. In the 2019 SEIR, new MM GHG-1 LED Lighting and LM GHG-1 GHG Credit Fund were added. LM GHG-1 has now been replaced by the new MM GHG-2 GHG Reduction Offsets in the RSEIR, as directed by the Writ. Unlike LM GHG-1, which required a one-time payment to compensate for a single peak year of the Revised Project's GHG emissions impacts, MM GHG-2 requires that residual GHG emissions impacts in excess of the SCAQMD significance threshold of 10,000 mty be mitigated through the annual purchase of carbon offsets for each year of operations through the end of the lease in 2045. As a result, in total, there are ten (10) on-site mitigation measures to reduce GHG impacts plus one new mitigation measure for off-site carbon offsets under MM GHG-2. MM GHG-2 is not meant to substitute on-site GHG measures and is applied as an additional mitigation measure as required by the Writ, as explained on pages 1-3, 2-9, and 3.2-7 of the Draft RSEIR.

Second, MM GHG-2 does not rely entirely on offsite carbon offsets. The wording of the measure prioritizes the purchase of local area offsets over off-site credits, specifically stating that only "[i]f local and in-state offsets are not available, the Tenant shall purchase conforming national offsets registered with a CARB-recognized registry." (Draft RSEIR p. 3.2-28.) Even those offsets, then, would be as readily enforceable and verifiable as locally derived offsets. The measure further prioritizes local mitigation by allowing the tenant to purchase emissions credits through the Port's developing Greenhouse Gas Program, once it becomes established. The order of priority for the purchase of carbon offsets is based on CARB's Scoping Plan Appendix D, Section 4.1 GHG Mitigation Hierarchy guidance found at https://ww2.arb.ca.gov/sites/default/files/2022-11/2022-sp-appendix-d-local-actions.pdf.

Third, the comment's suggestion that MM GHG-2 is deferred mitigation, which is prohibited under CEQA, because it lacks standardized methodology, transparency, or adequate third-party verification, does not reflect the actual wording of the measure. The measure allows for a reevaluation of actual GHG emissions, rather than projected GHG emissions, and specifically requires that any adjustment in emissions calculations be undertaken and verified by "an independent, third party." This process allows the tenant to "true up" the amount of GHG emissions and carbon offsets required to be purchased from a verified CARB-recognized registry based on a quantified and verified re-calculation of the Revised Project's actual GHG emissions. The reevaluation also allows

for an adjustment to the amount of carbon offsets the tenant will be required to purchase in the future in the event the tenant implements new technologies or other feasible measures (i.e., ZE equipment or supporting infrastructure) that either become available or whose GHG reduction is not fully known or quantified at this time.

In terms of methodology, the measure specifies "The evaluation of actual greenhouse gas emissions must be performed using acceptable industry standards and protocols for all sources that were included in the Project's GHG emissions calculations under Impact GHG-1" of the Draft RSEIR. The standard applied in the measure is based on the "amount of GHG emissions generated by the Project in excess of the City's significance threshold of 10,000 metric tons", which is measured as metric tons of CO2e on an annual basis. Per the comment's suggestion, MM GHG-2 has been modified to clarify that any recalculation of GHG emissions or offset credits required under the measure must in accordance with CARB-registry standards and are real, quantifiable, verifiable and enforceable. Please see Consolidated Response 6.

Regarding the time frame of MM GHG-2, the measure extends through 2045 to align with the projected term of the Revised Project and Permit No. 999, which expires in 2030 with three five-year options to extend to 2045 if exercised by the tenant. The measure will be enforced through the lease and during any holdover provisions that would allow China Shipping to continue to operate. If the lease were to be extended, it would constitute a new project subject to discretionary approval and would require a separate environmental review under CEQA to evaluate the potential impacts of continued operations. (See *Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692, 739 [EIR not required to analyze beyond 20-year term of existing contract].) Furthermore, 2045 was the lease term used in the 2019 SEIR and was not challenged in the prior litigation; commenter cannot raise an issue that could have been addressed then. Please see Consolidated Response 1.

Finally, it is unclear what other onsite reductions the commenter considers feasible and should be used instead of MM GHG-2, beyond those already incorporated into the Revised Project as previously stated. The additional measures cited in the comment (i.e., zero-emissions trucks, equipment, locomotives, and harbor craft) have been demonstrated to be infeasible at the terminal level (see, for example, 2008 EIS/EIR Appendix C Section 4.12 and RTCs 1-10, 10-14, 10-13 and 15-6 [electric locomotives, drayage trucks], 2018 Draft Recirculated SEIR Section 3.1.4.4 [drayage trucks, harbor craft], and 2019 FSEIR Section 2.3.1.2 [zero- and near-zero-emission technologies] Section 2.3.1.3 [port-wide emission reduction systems] and RTCs SCAQMD-11 and NRDC-34 through 37 [drayage trucks]). These infeasibility findings were upheld by the Courts. LAHD was not required to re-evaluate or consider additional or alternative methods for the impacts addressed by mitigation measures and lease measures from the 2019 SEIR or 2008 EIS/EIR that were upheld by the Courts or were not challenged. This includes the zero-emission technologies suggested by the commenter. Please see Consolidated Responses 1 and 2.

LAHD notes that since the release of the 2019 SEIR, the latest feasibility assessment has identified zero-emission technologies to be commercially available and capable of meeting duty-cycle requirements for several categories of cargo-handling equipment (Burns & McDonnell 2025). The Revised Project contains provisions for incorporating those technologies into the operation of the CS Terminal, specifically LM AQ-22 Periodic Review of New Technology and Regulations, LM AQ-1 Cleanest Available Cargo-Handling Equipment, and LM AQ-3 Zero Emission Equipment Demonstration and Feasibility Assessment, both of which have already been imposed by the Sixth Amendment to Permit No. 999, making them contractually enforceable against China

Shipping. Accordingly, feasible zero-emission cargo-handling equipment will be incorporated into terminal operations as existing equipment is replaced and the necessary support infrastructure (e.g., charging stations and electrical supply, see Response to Comment CARB-8) is installed.

The comment also suggests that offset credits are used, they should be geographically constrained to the South Coast Air Basin or California to ensure local co-benefits. As mentioned, the measure prioritizes local area offsets over off-site credits, specifically stating that only if local and in-state offsets are not available can the tenant turn to national offsets, and those must be purchased from a CARB-recognized registry. It is not possible to require that only local or regional based offsets be used because those offsets depend on the volume available to purchase on the voluntary market, which fluctuates due to factors such as market demand, changes in regulatory frameworks, the number of active offset-generating projects, etc.[14]

Specifying the qualifications of CARB-recognized registries and the protocols used by those entities for listing, reporting, and verification of offset projects is not a required component of MM GHG-2 as there are many prominent voluntary registries, including the American Carbon Registry and the Climate Action Reserve, that are recognized on CARB's website (see https://ww2.arb.ca.gov/our-work/programs/compliance-offset-program/offset-project-registries).

Response to Comment CARB-8:

The comment suggests that the LAHD should incorporate non-specific GHG reduction strategies from Appendix D of CARB's 2022 Scoping Plan.

LAHD was not required to re-evaluate or consider additional or alternative methods for the impacts address by mitigation measures and lease measures from the 2019 SEIR or 2008 EIS/EIR that were upheld by the Courts or were not challenged. Please see Consolidated Responses 1 and 2. This includes the zero-emission technologies suggested by the commenter. Also, as mentioned in Response to Comment CARB-7, LM-1 and LM-3, which are already imposed on the tenant under the Sixth Amendment to Permit No. 999, ensure that the CS Terminal incorporates zero-emission cargo-handling equipment.

Furthermore, as stated in Response to Comment CARB-7, the Draft RSEIR already accounts for the mitigation and lease measures from the 2008 EIS/EIR and 2019 SEIR that would have GHG emissions reduction co-benefits. As suggested in the comment, the measures include the deployment of zero-emission equipment under the 2019 SEIR MM AQ-17 (Cargo Handling Equipment replacements) and, when feasible, under 2008 EIS/EIR MM AQ-17 (Electric Yard Tractor Pilot Project) and 2019 SEIR LM AQ-3 (Demonstration of Zero-Emissions Equipment). The suggestion for increased use of shore power or zero-emission alternatives at berth is covered under 2008 EIS/EIR MM AQ-9 (AMP) and Draft RSEIR MM AQ–31 (At-Berth Emissions).

LAHD is also engaged with Port-wide strategies that are aligned with CARB's 2022 Scoping Plan. In terms of providing support infrastructure that enables electrification, the Port is engaged in infrastructure planning for a port-wide Electrical Infrastructure Improvement Program to provide the necessary future power demand required for the West Basin area where the China Shipping terminal is located. The Los Angeles Department of Water and Power (LADWP) and the Port have partnered with Electric

[14] See, e.g., Executive Order, "Protecting American Energy From State Overreach," April 8, 2025; Legislative Analyst's Office, California's Cap-and-Trade Program: Frequently Asked Questions, October 24, 2023, lao.ca.gov/Publications/Report/4811.

Power Research Institute (EPRI) to assess current and future electrification needs to meet the CAAP zero emissions CHE goal.

As a result of the Zero-Emission Planning and Grid Assessment for the Port of Los Angeles study dated June 2023, the Port has been working with LADWP to define the scope and budget for the new electrical power distribution systems and expansion. In April 2024, the Port identified a budget of $500 million for the port-wide program, which involves upgrades to the main LADWP receiving station in Wilmington and construction of distribution lines, substructures, conduits, and electrical infrastructure to the West Basin area, including a new electrical network station at the China Shipping terminal. The timeline for constructing and commissioning the new power distribution system and the supporting network stations is dependent on securing all necessary permitting and approvals. The LADWP is the lead agency and will be preparing the CEQA document for the port-wide electrical program and is responsible for the design and construction of that program. LAHD notes, however, that this port-wide electrification project will ensure that AMP is available to all vessels but that it is not appropriate mitigation for the impacts of a single terminal and cannot be imposed on an individual project.

Response to Comment CARB-9:

The comment states that MM AQ-9 needs revisions to ensure that mitigation of at-berth emissions is comprehensive and enforceable.

This is a general comment that introduces more specific comments that are responded to in detail below. As a result, no specific response is provided here. Please see Consolidated Responses 3 and 7, and Responses to Comments CARB-10 through CARB-16.

Response to Comment CARB-10:

The comment recommends that the LAHD define the terms “China Shipping ships” and “hoteling” as set forth in Exhibit B of the Writ.

Please see Consolidated Response 3. Per the comment’s suggestion, MM AQ-9 has been modified to omit those undefined terms, clarifying that the measure applies to “all vessels owned, chartered or operated by China Shipping” and replacing “hoteling” with terms with standard definitions under CARB’s At-Berth Regulations.

Response to Comment CARB-11:

The comment recommends that MM AQ-9 be revised to apply to all applicable vessel types and to all vessels calling at the terminal.

Please see Consolidated Response 3. Per the comment’s suggestion, MM AQ-9 has been modified to include the definition of “vessels” in CARB’s At-Berth Regulations.

Furthermore, LAHD notes that the new mitigation measure proposed in this RSEIR, (MM AQ-31: At-Berth Regulations) would require all vessels calling at the Berths 97-109 Terminal to comply with all provisions of CARB’s At-Berth Regulation and any future applicable regulations. Future emissions were calculated for the Revised Project Scenario assuming 97% compliance with the At-Berth Regulation, as required by MM AQ-31 (see Draft RSEIR page 3.1-42 and Appendix B1, page B1-11). Accordingly, MM AQ-9 does not require the revisions suggested by the comment.

Response to Comment CARB-12:

The comment claims, based on CARB data, that the China Shipping Terminal has three berths and points out that the third berth must have AMP infrastructure.

The RSEIR accurately reported that China Shipping operates two berths at the terminal. CARB's comment does not identify what specific CARB data has been reported that suggests there are three berths at the China Shipping terminal. LAHD researched the CARB data publicly available at https://ww2.arb.ca.gov/our-work/programs/ocean-going-vessels-berth-regulation/terminal-and-port-plan-submissions. Based on that research, the approved West Basin Container Terminal At Berth Plan for the China Shipping (CS) Terminal identifies there are two berths at the terminal, identified as Berth 100 and Berth 102, that are equipped with AMP infrastructure (see Los Angeles - WBCT (Berths 100, 102) - Original Plan (non-ADA).pdf). This is also consistent with POLA data regarding AMP connections/disconnections performed at the two active berths.

There is no third berth that is considered to be active or planned for use by China Shipping. LAHD is not aware of any other CARB data that would suggest a third berth location but notes that a draft Revised Terminal Plan posted on CARB's website (see Los Angeles - WBCT (Berths 100, 102) - Revised Plan (non-ADA).pdf), dated December 2021, has incorrectly identified a portion of the backlands area of the terminal under "Berths included in this Plan". LAHD believes this location, identified as number "3. West Basin Container Terminal (CS)" with the following GPS coordinates "33.756491978297944, - 118.2883656707375," is an error in the draft plan. That plan is posted but not signed or approved by the responsible parties.

Response to Comment CARB-13:

The commenter states that mitigation measure MM AQ-9 lacks clear direction on what the bi-annual "compliance forms" to be submitted to LAHD's Environmental Management Division must include, and on the detail regarding what the standards for evaluating compliance are (for example, what constitutes noncompliance). The commenter notes that in past court-filed mitigation compliance reporting, LAHD has indicated the terminal is in compliance with the mitigation measures even when some aspects of the mitigation measures have not been satisfied. The commenter also recommends that MM AQ-9 be updated to require more detailed reporting and expanded records retention and that terminal operators be assigned clear responsibility for maintaining AMP infrastructure, coordinating berth availability, and ensuring that shore power connections are available to all qualifying ships under MM AQ-9.

Please see Consolidated Response 3.

The commenter's suggestions relate to the reporting and monitoring of compliance of MM AQ-9, which is part of the Revised MMRP that would be adopted in the future when the Board of Harbor Commissioners considers approval of the amendment to Permit No. 999. See Consolidated Response 5. CEQA does not require that an EIR analyze or describe the mitigation monitoring or reporting program (See Practice Under the California Environmental Quality Act (2d ed. Cal. CEB 2025) §18.12). As a result, commenters' request that MM AQ-9 be revised to include specific reporting requirements is not supported under CEQA; however, LAHD will note the comment when it updates the Revised MMRP after certification of the RSEIR (see Consolidated Response 5) and provides additional information on the monitoring and reporting process below.

In Section 3.1.5 of the Draft RSEIR, the Mitigation Monitoring table specifies that the tenant shall document compliance with MM AQ-9 and "such documentation shall include all reports sent to CARB and any responses from CARB in compliance with the At-Berth Regulations." The CARB data is very extensive and provides sufficient detail for the tenant to demonstrate compliance with MM AQ-9. It also streamlines reporting requirements by having the tenant submit the same CARB documentation to LAHD

rather than recreate the information using another reporting template. These reporting requirements will be included in the compliance forms that are incorporated into the permit with the tenant.

LAHD is responsible for verifying the tenant has complied with MM AQ-9 based on the compliance form and supporting documentation submitted by the tenant. It would not be possible for the LAHD to determine in advance what constitutes non-compliance without first conducting a proper review and analysis of the documentation submitted by the tenant during the required semi-annual reporting period.

LAHD confirms compliance with all mitigation measures and lease measures, including MM AQ-9 as originally adopted in 2008, pursuant to the environmental requirements contained in Permit No. 999 with the tenant. LAHD prepares semi-annual compliance reports under penalty of perjury that are filed with the court.

Regarding the request to update MM AQ-9's reporting requirements, the mitigation monitoring requirements for MM AQ-9 already require reported CARB data that satisfies the documentation verification for this measure, as described above. The tenant is responsible for maintaining the documents listed and is otherwise required to demonstrate compliance with MM AQ-9. The tenant must maintain the records on-site at the terminal and records submitted to LAHD's Environmental Management Division must be kept for a minimum of five years in accordance with LAHD's record retention requirements. LAHD retains discretion to use an independent third-party verifier when deemed necessary.

LAHD concurs that the terminal operator responsibility activities listed in the comment are all necessary actions, which have been in place since AMP was installed at the CS Terminal. Those actions continue to be governed by the terminal operator, the Port, agency partners, and applicable rules and regulations. Specifically, the Port is responsible for the physical infrastructure supporting AMP, such as providing the vault infrastructure and functional berths with electricity for vessel plug-ins. LAHD also provides the necessary qualified staff for timely connection of AMP equipment to the vessels when a scheduling request is made by the shipping agent. While LAHD maintains its own records and forms for AMP scheduling, connection/disconnection procedures, and safety checks (see https://www.portoflosangeles.org/environment/air-quality/alternative-maritime-power-(amp)), the AMP data and information supplied by the tenant to CARB is more comprehensive and LAHD relies on that information to determine the compliance status.

The bi-annual compliance reporting documentation filed with the court is already made available publicly on the Port's public website at https://www.portoflosangeles.org/environment/environmental-documents under the Certified Projects Title "Berths 97-109 [China Shipping] Container Terminal Project" and under the header "Compliance Reports on Status of Mitigation Measures and Lease Measures".

Response to Comment CARB-14:

The comment states that MM AQ-9 should allow CARB-approved alternative technologies for non-AMP visits.

Per the comment's suggestion, MM AQ-9 has been modified to require those vessels that qualify for an exception under the measure but can still feasibly control emissions by using CARB-certified alternative technologies to do so, consistent with MM AQ-31. Please see Consolidated Response 3. To the extent the At-Berth Regulations allow and/or

require alternative emissions control technology, MM AQ-31 would allow all vessels calling at the terminal to use such technology. The emissions calculations in the Draft RSEIR incorporate the application of MM AQ-31 (see Response to Comment CARB-11).

Response to Comment CARB-15:

The comment suggests that MM AQ-9's exception language should be clarified and include enforceability and reporting to LAHD and CARB.

Per the comment's suggestion, MM AQ-9 has been modified to provide additional requirements for the exceptions. Please see Consolidated Response 3. Also, please see Response to Comment CARB-13 regarding the reporting requirements to LAHD and CARB in the updated Revised MMRP.

Response to Comment CARB-16:

The comment states that MM AQ-9 must include non-specific enforcement mechanisms and penalties, including monetary fines and corrective actions.

CEQA does not mandate specific requirements for a mitigation program, but rather provides substantial flexibility to lead agencies, such as LAHD, to adopt monitoring and reporting programs and tailor them to specific projects. Monetary penalties are not required by CEQA to be included as enforcement mechanisms in a mitigation program. The LAHD does not agree that including mechanisms such as fines or penalties for addressing non-compliance with MM AQ-9 would be effective mitigation designed to minimize the Revised Project's significant environmental impacts (Public Resources Code §§ 21002.1(a), 21100(b)(3).) Providing a penalty or other mechanism could encourage non-compliance with the mitigation measures, as an operator could opt to pay the penalty rather than comply with the mitigation measure.

Per CEQA, LAHD will adopt an updated Revised MMRP designed to ensure compliance with mitigation measures during the implementation of the Revised Project. As stated in the Draft RSEIR, LAHD implements mitigation measures on container terminal projects by including them in leases with its tenants. Although there are procedural requirements and approvals related to implementation or non-implementation of the Revised Project, the lease amendment process to incorporate and enforce mitigation measures is a separate action, requiring the Board's approval, that would be subject to a negotiation process and LAHD's leasing policy. Currently, LAHD's leasing policy does not contain any provisions for penalties or fees associated with non-compliance with mitigation measures or environmental requirements. The leasing policy requires tenants to comply with all applicable environmental standards including, but not limited to, federal, state, and local laws and regulations. It allows environmental deposits to be created, depending on risk factors associated with the tenant's use of the leasehold. These policies are all subject to a negotiation process until such time a lease amendment is brought to the Board for consideration and approval. Nonetheless, for non-CEQA purposes, the comment is noted and is hereby part of the Final RSEIR, and is therefore before the decision-makers for their consideration prior to taking any action on the Revised Project.

Please also see Consolidated Responses 3, 5 and 7. Also, to the extent the commenter is stating that LAHD should be required to include penalties and monetary remedies in its mitigation measure, that argument was raised and rejected during the prior litigation, and cannot be re-asserted in response to the RSEIR. Please see Consolidated Responses 1 and 2.

Response to Comment CARB-17:

The comment claims that the Revised Project is not consistent with the 2022 Air Quality Management Plan (AQMP) because it would result in increased emissions rather than the decrease in emissions emphasized in the AQMP.

The Draft RSEIR's analysis for consistency with the 2022 AQMP on page 3.1-71 is not only narrowly limited to including the Revised Project cargo forecast and related emissions in the General Conformity budgets established in the Final 2022 AQMP as the comment suggests. The analysis also includes a discussion of the various control measures related to ports (e.g., Emission Reductions at Commercial Marine Ports, Tier 4 Commercial Harbor Craft Standards, At-Berth Regulation Amendments, Accelerated Retirement of Older On-Road Heavy-Duty Vehicles, Pacific Rim Initiative for Maritime Emission Reductions, Emission Reductions from Incentive Programs, and Zero Emission Infrastructure for Mobile Sources) and concludes that the Revised Project would not conflict with or obstruct implementation of the AQMP control measures which is all that CEQA requires for this impact determination based on Appendix G of the State CEQA Guidelines.

The comment points out that air pollutant emissions generated by the Revised Project are adding to and worsening air quality conditions in the region. The Draft RSEIR includes a "Discussion of Health Effects Related to Pollutant Impacts" starting on page 3.1-73 which provides supplemental information related to the Revised Project's emissions of priority pollutants identified in Impact AQ-3 and ambient pollutant concentrations identified in Impact AQ-4. For CO, the analysis concludes that "According to the 2022 AQMP, the total CO emissions within the SCAB in the AQMP's base year of 2018 were 1,658 tons/day (SCAQMD 2022, Table 3-2). By comparison, the highest CO emissions increment associated with Revised Project operations was 1.0 ton/day, on a peak day in 2014, which is 0.06 percent of the total SCAB emissions". For NOx, "According to the 2022 AQMP, the total NOx emissions within the SCAB in the AQMP's base year of 2018 were 351 tons/day. By comparison, the highest NOx emissions increment associated with Revised Project operations was 2.6 tons/day, on a peak day in 2014, which is 0.7 percent of the total SCAB emissions." For NOx and VOC which are ozone precursors, the analysis states "According to the 2022 AQMP, the total VOC emissions within the SCAB in the AQMP's base year of 2018 were 406 tons/day (SCAQMD 2022). By comparison, the highest VOC emissions increment associated with Revised Project operation was 0.16 ton/day, on a peak day in 2014, which comprises 0.04 percent of the total SCAB emissions. As discussed above for NO2, the Revised Project's greatest NOx emissions increment was 0.7 percent of the total SCAB emissions." Based on the data cited here, the Revised Project is not expected to generate significant air pollutant emissions associated with freight transport that would interfere with the 2022 AQMP as suggested by the commenter.

Also, to the extent the commenter is stating that the AQMP requires LAHD to evaluate additional mitigation measures for reducing emissions, LAHD was not required to re-evaluate, or consider additional or alternative methods for the impacts addressed by mitigation measures and lease measures from the 2019 SEIR or 2008 EIS/EIR that were upheld by the Courts or were not challenged. Please see Consolidated Responses 1 and 2.

Response to Comment CARB-18:

The comment suggests that by relying largely on compliance with regulations the Revised Project is inconsistent with the AQMP because that document "calls for accelerated and ambitious measures in the port sector" with "mandatory, improvements."

To the extent the commenter is stating that the AQMP requires LAHD to evaluate additional mitigation measures for reducing emissions, LAHD was not required to re-evaluate, or consider additional or alternative methods for the impacts addressed by mitigation measures and lease measures from the 2019 SEIR or 2008 EIS/EIR that were upheld by the Courts or were not challenged. Please see Consolidated Responses 1 and 2. This includes the infeasibility findings related to zero-emissions technologies referenced by the commenter. Regarding port-wide efforts to reduce emissions, please also see Response to Comment CARB-8. Also, the Board will enforce and implement the mitigation measures included in the RSEIR when it timely considers the adoption by an amendment to Permit No. 999 with China Shipping after certification of the RSEIR, as required by the Writ. Please see Consolidated Response 5.

The LAHD notes that the AQMP is a regional, programmatic document that does not specifically incorporate or mention each and every project in the region. Instead, the SCAQMD relies on growth and activity forecasts provided by local entities, including the Port of Los Angeles, to develop its forecasts of future regional emissions, necessary emissions reductions, and general strategies to achieve those reductions. The LAHD provides its forecasts of anticipated cargo growth and activity levels from all Port terminals, including the China Shipping Terminal, to the Southern California Association of Governments (SCAG), which in turn provides them to SCAQMD via the Regional Transportation Plan. The SCAQMD, employing its own modeling tools and assumptions, uses those forecasts to develop the AQMP. The comment on page 10 acknowledges that "Development occurring at the local level, that is consistent with the growth projections in the General Plans for counties and cities in South Coast AQMD's jurisdiction and confirmed by SCAG for the inclusion in their respected RTP, is considered to be consistent with the 2022 AQMP."

Additionally, the comment fails to recognize that the AQMP measures aimed at reducing emissions from OGVs are categorized as "primarily-federally and internationally regulated sources" where federal action is needed by the US EPA (see page 2022 AQMP page 4-40). As explained in the Draft RSEIR (page 3.1-50) the Port does not have the authority to impose any specific emissions reduction technology on OGVs as they are internationally flagged vessels subject only to IMO regulations and furthermore, the Port does not have the ability to mandate the deployment of the cleanest vessels to the China Shipping terminal or any terminal. More recently, in the South Coast Air Quality Management District's Potential Cooperative Agreement with the Ports of Long Beach and Los Angeles announced on September 16, 2025, the draft document states, "Absent further federal actions including federal waivers and authorizations for applicable CARB regulations, state and local actions are limited in achieving substantial yet necessary emission reductions from port-related mobile sources." (see https://www.aqmd.gov/docs/default-source/planning/fbmsm-docs/2025-07-18---ports-cooperative-agreement_draft.pdf?sfvrsn=51d26e7e_2). This evidence demonstrates that additional OGV measures (beyond MM AQ-8, MM AQ-9 and MM AQ-31, as evaluated in the Draft RSEIR) are not legally feasible. Thus, the Revised Project is in alignment with the AQMP because it incorporates all feasible mitigation measures, does not interfere with attainment goals, and is consistent with the projections utilized in the formulation of the AQMP (see Draft RSEIR pages 3.1-71 to 3.1-73.). Please also see Consolidated Response 3.

Response to Comment CARB-19:

The comment claims that the Revised Project is not consistent with the 2017 Clean Air Action Plan because it does not include measures to reach the CAAP goals for zero-emissions technologies for CHE and drayage trucks.

LAHD was not required to re-evaluate or consider additional or alternative methods for the impacts addressed by mitigation measures and lease measures from the 2019 SEIR or 2008 EIS/EIR that were upheld by the Courts or were not challenged. This argument related to the 2017 Clean Air Action Plan was raised in the prior litigation and rejected, and cannot be re-asserted in response to the RSEIR. Please see Consolidated Response 1 regarding the scope of this RSEIR and Consolidated Response 2 regarding the need for additional mitigation measures in this RSEIR.

Furthermore, LAHD notes that the comment appears to conflate the CAAP's port-wide goals with project-specific issues. These are not the same and cannot be addressed with the same tools. For example, transitioning the drayage truck fleet to zero-emissions technology cannot be achieved by mitigation measures imposed on individual terminals (as LAHD has repeatedly explained in the CEQA documents prepared for the Revised Project, see Response to Comment CARB-7) or even by the efforts of a single port. Instead, it is a regional issue that must be addressed through broad, comprehensive programs implemented by multiple entities (e.g., the CAAP's drayage truck programs and CARB's incentive and regulatory efforts).

The comment's claim that the Revised Project is not consistent with the zero-emissions goals of the CAAP is also incorrect. MM AQ-17, which requires certain units to be replaced with electric-powered models by date certain and LM AQ-1, which requires equipment replacements to be cleanest available, have already been imposed by the Sixth Amendment to Permit No. 999, making them contractually enforceable against China Shipping. As electric-powered CHE becomes feasible (see Response to Comment CARB-7 regarding current zero-emissions CHE feasibility and its incorporation into CS Terminal operations), these measures will accomplish the goals of the CAAP. In addition, the Electrical Infrastructure Improvement Program (see Response to Comment CARB-8), to be implemented on a port-wide basis, will enable the electrification of all CHE.

Response to Comment CARB-20:

The comment claims that by continuing to rely on diesel technology, the Revised Project is not consistent with the port-area Community Emissions Reduction Program (CERP) for Wilmington and nearby neighborhoods.

To the extent the commenter is stating that the CERP requires LAHD to evaluate additional mitigation measures for reducing emissions, LAHD was not required to re-evaluate, or consider additional or alternative methods for the impacts addressed by mitigation measures and lease measures from the 2019 SEIR or 2008 EIS/EIR that were upheld by the Courts or were not challenged (please see Consolidated Responses 1 and 2). This includes the infeasibility findings related to zero-emissions technologies referenced by the commenter. Please see Response to Comment CARB-7 regarding current zero-emissions CHE feasibility and its incorporation into CS Terminal operations and Response to Comment CARB-8 regarding port-wide efforts to reduce emissions.

Furthermore, the Draft RSEIR (p. 3.1-72 et seq.) describes the Revised Project's consistency with the relevant emissions reduction priorities in the CERP. The CERP includes recommended actions to address those priorities: Action 2 targeting ships and harbor craft and Action 3 targeting cargo-handling equipment and drayage trucks. Both actions include measures such as supporting the Port's clean air initiatives and CAAP

measures, identifying and implementing demonstration and incentive programs, and supporting and enforcing CARB rules and rule development.

As stated in the Draft RSEIR, the Revised Project is consistent with Action 3 of the CERP because it includes, through MM AQ-17, LM AQ-1, and LM AQ-3 (which have already been imposed by the Sixth Amendment to Permit No. 999, making them contractually enforceable against China Shipping), the deployment of the cleanest available equipment (i.e., cleanest diesel tier CHE in the near term, ZE equipment by 2035 or sooner). In terms of the vessels, the Revised Project is consistent with Action 2 of the CERP because the terminal would comply with CARB rules regarding vessel emissions (see, e.g., MM AQ-31), and three mitigation measures (MM AQ-9, MM AQ-10, and MM AQ-31) would specifically apply to vessels.

Response to Comment CARB-21:

The comment summarizes the mitigation measures proposed in the RSEIR, introducing subsequent comments regarding the adequacy of those measures.

The comment is general and does not identify any specific deficiencies of the Draft RSEIR, and, therefore, no further response is required (Public Resources Code §21091(d); CEQA Guidelines §15204(a)). The comment will be part of the record for Final RSEIR and made available to the decision-makers for their consideration prior to taking any action on the Revised Project.

Response to Comment CARB-22:

The comment recommends that LAHD and China Shipping plan for the use of zero-emissions trucks and cleanest available locomotives and oceangoing vessels within the terminal.

LAHD agrees on the importance of addressing the issue of goods movement emissions. However, the specific issues raised in the comment are largely outside the scope of this RSEIR; the commenter is referred to Consolidated Response 1 regarding the scope of this RSEIR, Consolidated Response 2 regarding the need for additional mitigation measures in this RSEIR, and Consolidated Response 6 regarding changes made to MM GHG-2. Please also see Responses to Comments CARB-23 (drayage trucks) and CARB-24 (locomotives).

LAHD also notes that the Revised Project already includes all feasible measures that are within LAHD's authority to impose with regard to emissions control technology for oceangoing vessels (i.e., MM AQ-12 Slide Valves, MM AQ-13 Reroute Cleaner Ships, MM AQ-14 New Vessel Build) in addition to feasible measures designed to reduce operational emissions (i.e., MM AQ-9 Alternative Maritime Power and MM AQ-10 Vessel Speed Reduction Program). It is unclear what additional measures CARB would suggest that LAHD and China Shipping employ to use cleanest-available oceangoing vessels within the CS Terminal. Please also see Consolidated Response 3. LAHD was not required to re-evaluate, or consider additional or alternative methods for the impacts addressed by mitigation measures and lease measures from the 2019 SEIR or 2008 EIS/EIR that were upheld by the Courts or were not challenged (please see Consolidated Responses 1 and 2). This includes the infeasibility findings related to zero-emissions technologies referenced by the commenter. Please see Response to Comment CARB-7 regarding current zero-emissions CHE feasibility and its incorporation into CS Terminal operations and Response to Comment CARB-8 regarding port-wide efforts to reduce emissions.

Response to Comment CARB-23:

The comment states that "[t]he RSEIR should include a mitigation measure requiring the phased adoption of electric drayage trucks serving the China Shipping container terminal."

LAHD was not required to re-evaluate or consider additional or alternative methods for the impacts addressed by mitigation measures and lease measures from the 2019 SEIR or 2008 EIS/EIR that were upheld by the Courts or were not challenged (please see Consolidated Responses 1 and 2). This includes the infeasibility findings related to zero-emissions technologies referenced by the commenter.

In any case, the proposed measure is infeasible for several reasons, primarily industry structural constraints and financial constraints. These constraints were discussed in detail in the 2018 Recirculated Draft SEIR (Section 2.5.2.1) in connection with the 2008 EIS/EIR's mitigation measure requiring the CS terminal to be served by LNG-fueled drayage trucks, on a phased-in schedule culminating in 100% by 2017. That discussion, which relied on a study titled "Assessment of the Feasibility of Requiring Alternative-Technology Drayage Trucks at Individual Container Terminals" (Drayage Truck Study, LAHD 2017), demonstrated that the structure of the drayage truck industry serving the ports and of the overall goods movement system is wholly incompatible with such a requirement. In addition, the substantial added cost of using those trucks would prompt cargo owners and shipping lines to divert cargo to terminals that do not have such requirements.

The constraints analyzed by the Drayage Truck Study for requiring an individual terminal to employ LNG-fueled trucks in 2017 apply equally to electric drayage trucks in 2025 and the measure is equally infeasible now. LAHD regards the comment's claims regarding the current status of electric truck technology as overly optimistic in the context of drayage duty but would concur that the technology is almost ready. However, the exact status of the technology is irrelevant to the measure proposed in the comment: transitioning the drayage fleet serving the China Shipping Terminal to zero emissions technology can only be accomplished by transitioning the entire San Pedro Bay drayage truck fleet. That will be accomplished through the CAAP and programs by SCAQMD and CARB; it cannot be accomplished by the China Shipping Terminal alone or by the Port of Los Angeles alone. See also Response to Comment CARB-19.

Response to Comment CARB-24:

The comment states that the RSEIR should include mitigation measures requiring the use of the "cleanest available switcher and line-haul locomotives, including transitioning to zero-emissions technologies as they become commercially viable," and "recommends that LAHD and China Shipping consider electrifying key segments of rail corridors serving the Revised Project."

LAHD was not required to re-evaluate or consider additional or alternative methods for the impacts addressed by mitigation measures and lease measures from the 2019 SEIR or 2008 EIS/EIR that were upheld by the Courts or were not challenged (please see Consolidated Responses 1 and 2). This includes the infeasibility findings related to zero-emissions technologies referenced by the commenter.

The LAHD acknowledges and supports CARB's urgent mandate to reduce locomotive emissions in California and more specifically in the Los Angeles region. LAHD and CARB have partnered in several locomotive-related technology advancement and demonstration projects and LAHD is committed to continuing that collaboration to achieve the goals of the CAAP. As discussed below, the LAHD believes that applying

mitigation measures to individual terminal projects is not an effective way to address the problem of locomotive emissions; instead, projects and programs at the area-wide, regional, and national levels are necessary.

As discussed in Consolidated Response 1 regarding the scope of this RSEIR and Consolidated Response 2 regarding the need for additional mitigation measures in this RSEIR, locomotive emissions are not within the scope of this RSEIR. Furthermore, the LAHD notes that neither LAHD nor China Shipping has a role in decisions concerning deployment of locomotives either by PHL or by the Class I line-haul railroad companies (UP and BNSF) that serve the port area and the on-dock railyard used by China Shipping. Accordingly, a mitigation measure requiring the deployment of specific technology at a specific terminal is not feasible.

Although the 2008 EIS/EIR included MM AQ-18 Yard Locomotives at Berth 121-131 Rail Yard, that measure was limited to requiring diesel particulate filters on PHL's switching locomotive fleet. The measure was implemented back in 2015 and LAHD continues to work with PHL (already the cleanest rail company in the country with a fleet of Tier 3+ units) to ensure that the cleanest switcher locomotives serve Port of Los Angeles terminals, including China Shipping. In addition, as noted in the 2017 CAAP, the ports are working with private entities to develop near-zero- and zero-emissions switching locomotives, and PHL has already committed to deploying 5 battery-electric switchers in regular service as soon as they are produced.

Although the comment points to CARB's In-Use Locomotive Regulation which "projects that zero-emission passenger, switcher, and industrial locomotives will be commercially available by 2030, and freight line-haul locomotives by 2035", it fails to acknowledge that on January 13, 2025, CARB withdrew its request for authorization of the In-Use Locomotive Regulation from U.S. EPA, due to the unlikelihood of approval (see https://ww2.arb.ca.gov/sites/default/files/barcu/board/books/2025/062625/prores25-4.pdf). The timeline for CARB's projection of near-zero and zero-emissions technologies for rail is not supported without implementation of the Regulation and, thus, it is unlikely to achieve any emission reductions without U.S. EPA authorization. CARB is well aware that neither LAHD nor the China Shipping Terminal has the authority to control line-haul locomotive technology or deployment. Emissions control of line-haul locomotives, which are operated by interstate Class I railroads, is not under the jurisdiction of local government (i.e., the City of Los Angeles), let alone private companies such as China Shipping or the West Basin Container Terminal Company. Such control is only possible at the federal, and possibly state, levels. Accordingly, the suggestion that the Revised Project should include a mitigation measure requiring "cleanest available…line-haul locomotives" is not applicable at the project level.

Similarly, the suggestion that China Shipping participate in "electrifying key segments of rail corridors" ignores that company's lack of authority to modify trackage owned by others, including Class I railroads, and LAHD notes that such an action would greatly exceed that company's proportionate obligation to mitigate impacts. LAHD could electrify trackage within its harbor district but as there are no locomotives in service in the port area that could use the electrification, it is not clear what would be accomplished. If by "electrifying key segments of rail corridors" the comment means also converting PHL's locomotives to electric technology, that, too, is an undertaking that would not be appropriate mitigation for a single container terminal project.

Response to Comment CARB-25:

The comment points out that the original reporting dates in lease measure LM-3 have already passed and should be updated.

LAHD was not required to re-evaluate or consider additional or alternative methods for the impacts addressed by mitigation measures and lease measures from the 2019 SEIR or 2008 EIS/EIR that were upheld by the Courts or were not challenged. This includes the infeasibility findings related to zero-emissions technologies referenced by the commenter (please see Consolidated Responses 1 and 2). LM AQ-3 was not challenged in the prior litigation and was imposed on China Shipping, as required by the Writ, in the Sixth Amendment to Permit No. 999 adopted in July 2024.

However, to the extent commenter suggests updating the dates for LM AQ-3 in the MMRP, LAHD will note the comment when it updates the Revised MMRP after certification of the RSEIR (see Consolidated Response 5). The demonstration project is required to test the equipment for a period of at least one year and document any feasibility concerns on operation, cost, and availability for permanent use at the terminal. Please see Response to Comment CARB-7 regarding current zero-emissions CHE feasibility and its incorporation into CS Terminal operations.

Response to Comment CARB-26:

The comment requests "more robust justification" for the LAHD's position that it lacks authority to require cleanest available control technology on oceangoing vessels (OGVs). The comment requests that the LAHD adopt a mitigation measure requiring China Shipping vessels to employ such technology when calling the CS Terminal.

As noted by the commenter, the LAHD does not have direct regulatory authority to impose any specific emissions reduction technology for OGVs. Please see Consolidated Response 3 and Response to Comment CARB-22.

The commenter notes that China Shipping does have the ability to set environmental standards for its own fleet and encourages LAHD and China Shipping to adopt a mitigation measure that requires all China Shipping vessels calling at the terminal to utilize the cleanest available technologies. LAHD was not required to re-evaluate or consider additional or alternative methods for the impacts addressed by mitigation measures and lease measures from the 2019 SEIR or 2008 EIS/EIR that were upheld by the Courts or were not challenged. This includes the infeasibility findings related to OGVs referenced by the commenter (please see Consolidated Responses 1 and 2). Furthermore, mitigation measures encouraging the cleanest available technologies for OGVs at the CS Terminal have already been imposed under the 2008 EIS/EIR in order to meet regulations that were in place at that time and are still part of the Revised Project. These include:

- MM AQ-11: Low sulfur fuel in OGV auxiliary engines, main engines, and boilers, which was required by CARB regulation as of July 1, 2009.
- MM AQ-12: Slide Valves or equivalent on main engines, which was introduced by MAN-B&W engines in early 2000 and became more prominent in 2004 as one of the technologies to meet IMO Tier I standards.
- MM AQ-13: Reroute Cleaner Ships, which establishes that 75 percent of all ship calls to the Berth 97-109 Terminal meet IMO MARPOL Annex VI NOX emissions limits for Category 3 engines.

- MM AQ-14: New Vessel Build, which encourages the purchaser of new vessels to confer with ship designer and engine manufacturers to determine the feasibility of incorporating all emission reduction technology and/or design options and when ordering new ships bound for the Port of Los Angeles. The design considerations include 1) Selective Catalytic Reduction (SCR), which is regulated as a method to reduce nitrogen oxide (NOx) emissions to meet IMO Tier III standards, 2) Exhaust Gas Recirculation (EGR), which is also regulated for reducing NOx emissions to meet IMO emission standards, 3) Diesel Particulate Filters (DPFs) or exhaust scrubbers, which are regulated as methods to reduce particulate matter (PM) and sulfur oxide (SOx) emissions, 4) Low NOx Burners for Boilers, which is regulated as a technology to limit NOx emissions from boilers, 5) Common Rail, which is necessary for marine diesel engines to meet the increasingly stringent NOx emission standards, such as IMO Tier II and III, 6) In-line fuel emulsification technology, which may be used to help meet fuel quality standards or emission targets, 7) Implement fuel economy standards by vessel class and engine, which is established by IMO and US EPA regulations related to energy efficiency for vessels, and 8) Diesel-electric pod propulsion systems, which are subject to general regulations concerning the safety and operation of marine electrical systems.

All of these measures have been and will continue to be implemented by China Shipping and are not being modified as part of the Revised SEIR.

Response to Comment CARB-27:

The comment requests that the mitigation measures be made legally binding, for example by being incorporated into the Tenant's lease.

The Board will enforce and implement the mitigation measures included in the RSEIR when it timely considers the adoption by an amendment to Permit No. 999 with China Shipping after certification of the RSEIR, as required by the Writ. Please see Consolidated Response 5.

Response to Comment CARB-28:

The comment summarizes the points raised in previous comments and requests that the RSEIR be revised to address those points.

This is a general comment that serves to summarize the more specific comments that are responded to in detail above. The comment is general and does not identify any specific deficiencies of the Draft RSEIR, and, therefore, no further response is required (PRC, § 21091(d); CEQA Guidelines § 15204(a)). The comment will be part of the record for Final RSEIR and made available to the decision-makers for their consideration prior to taking any action on the Revised Project. Please see Consolidated Responses 1, 2, 4, and 5.

China Shipping North America Holding (CSNAH)

Comment Letter

See Section 2.6.

Responses

Response to Comment CSNAH-1:

The comment states that the comments are "submitted by West Basin Container Terminal (WBCT) on behalf of China Shipping (North America) Holding Co. Ltd (China Shipping, also Tenant). WBCT serves as China Shipping's terminal operator for the facilities and berths 97-109 under Permit 999 ("Terminal")." The comment makes general statements concerning the role of China Shipping in the Port of Los Angeles and the global economy.

Thank you for your comments on the Draft RSEIR. The comment is general and does not identify any specific deficiencies of the Draft RSEIR, and, therefore, no further response is required (PRC § 21091(d); CEQA Guidelines §15204(a)). The comment will be part of the record for Final RSEIR and made available to the decision-makers for their consideration prior to taking any action on the Revised Project.

Response to Comment CSNAH-2:

The comment cites portions of CEQA related to the legal requirements for mitigation measures to be feasible, proportionate, and non-duplicative.

This comment is a summary of CEQA provisions. The comment is general and does not identify any specific deficiencies of the Draft RSEIR, and, therefore, no further response is required (PRC, § 21091(d); CEQA Guidelines § 15204(a)). The comment will be part of the record for Final RSEIR and made available to the decision-makers for their consideration prior to taking any action on the Revised Project.

Response to Comment CSNAH-3:

The comment cites CEQA case law that requires lead agencies to consider a project's impacts on the human environment, specifically economic impacts, and states that the Draft RSEIR does not contain such a consideration.

This comment is a summary of CEQA provisions and case law. The comment is general and does not identify any specific deficiencies of the Draft RSEIR, and, therefore, no further response is required (PRC, § 21091(d); CEQA Guidelines § 15204(a)). The comment will be part of the record for Final RSEIR and made available to the decision-makers for their consideration prior to taking any action on the Revised Project.

Response to Comment CSNAH-4:

The comment claims that mitigation measure MM GHG-2 is not feasible on economic grounds and presents data regarding costs of carbon offset credits and terminal operating costs to support that claim.

Please see Consolidated Responses 2 and 6. The data provided in the comment suggest the pricing for carbon offsets reached some of the lowest levels reported since 2021 ($25.87/ton) but will rise steadily from 2026 onward (to $60-$180/ton), especially under tighter supply scenarios. Additionally, the data provided in the comment on the Minimum Annual Guarantee (MAG) per TEU required by Permit No. 999 (i.e., the compensation the Tenant pays to the Port) suggest that the costs associated with implementation of MM GHG-2 would increase the terminal's overall costs (i.e., 5-12% of the Tenant's MAG

obligations), but they do not demonstrate that such increased costs would make the terminal non-competitive or force it out of business. Instead, the comment makes a general claim that costs "substantially exceeding the 3–5% operating margin typical for West Coast container terminals" would effectively force the terminal to operate into negative margins. As described on page 5 of the comment letter, the relationship with terminal operators and vessel alliances who may have a financial interest or investment in the terminal is highly complex. Under Permit No. 999, LAHD does not have a business relationship with WBCT as the terminal operator, only with China Shipping (North America) Holding Co., Ltd. Similarly, Permit No. 999 requirements are only with China Shipping but not with affiliated shipping lines. LAHD does not have sufficient information with respect to costs levied on business relationships between the terminal operator, China Shipping, or affiliated shipping lines.

LAHD understands that this comment was intended to encourage LAHD to reconsider the requirements in MM GHG-2; LAHD does not have sufficient information to evaluate whether it is financially infeasible for China Shipping to comply with MM GHG-2, as written, based on the information provided in this comment. The Draft RSEIR contains mitigation measures, including MM GHG-2, that LAHD, as the lead agency, believes are necessary to address significant impacts and that are feasible to implement, based on substantial evidence in the record. PRC section 21081(a)(3), invests the lead agency's governing body (here, the Board of Harbor Commissioners) with the authority, before a project is approved, to determine whether a mitigation measure is actually feasible by requiring the agency to find that "[s]pecific economic, legal, social, technological, or other considerations . . . make infeasible the mitigation measures . . . in the [EIR]." CEQA does not require that the analysis of economic feasibility be contained in the EIR. (*Sierra Club v. County of Napa* (2004) 121 Cal.App.4th 1490, 1511.) The decisionmaker is entitled to consider matters contained in the entire administrative record in determining whether mitigation measures are not economically feasible. (*Id.* at 1511-12.) Accordingly, the comment will be part of the record for Final RSEIR and made available to the decision-makers for their consideration prior to taking any action on the Revised Project.

Response to Comment CSNAH-5:

The comment claims that MM GHG-2 would increase the terminal's handling costs (THCs), making it non-competitive with other U.S. ports and promoting cargo diversion from POLA, and presents cost data in support of that claim.

Please see Consolidated Responses 2 and 6, and Response to Comment CSNAH-4. The THC data provided in the comment compares San Pedro Bay terminals at the Ports of Los Angeles and Long Beach to other world ports rather than to comparable competitive terminals at U.S. ports. LAHD understands that this comment was intended to encourage LAHD to reconsider the requirements in MM GHG-2; LAHD does not have sufficient information to evaluate whether it is financially infeasible for China Shipping to comply with MM GHG-2, as written, based on the information provided in this comment. The Draft RSEIR contains mitigation measures, including MM GHG-2, that LAHD, as the lead agency, believes are necessary to address significant impacts and that are feasible to implement, based on substantial evidence in the record; however, under CEQA, the ultimate decisionmaker (here, the Board of Harbor Commissioners) has the authority, before a project is approved, to determine whether a mitigation measure is actually feasible. Accordingly, the comment will be part of the record for Final RSEIR and made available to the decision-makers for their consideration prior to taking any action on the Revised Project.

Response to Comment CSNAH -6:

The comment claims that cargo diversion (alluded to in Comment CSNAH-5) would result in significant impacts on the human environment, including employment and economic wellbeing, without reducing GHG emissions.

Please see Consolidated Responses 2 and 6, and Response to Comment CSNAH-4. LAHD notes that cargo diversion only has a local employment impact if the diversion is to other ports outside the region. Cargo diversion from one terminal in the San Pedro Bay port complex to another would not have a significant local employment impact, assuming similar staffing levels at all terminals. Market share loss does not, in itself, necessarily mean job loss. Market share loss only means job losses in an environment with no cargo growth. A port with growing cargo volumes (i.e., Los Angeles) would see employment growth even if other competing ports were growing faster. In that case, what would be lost would be *potential* jobs – the additional jobs that could have been gained if the port also maintained its market share.

LAHD understands that this comment was intended to encourage LAHD to reconsider the requirements in MM GHG-2; LAHD does not have sufficient information to evaluate whether it is financially infeasible for China Shipping to comply with MM GHG-2, as written, based on the information provided in this comment. The Draft RSEIR contains mitigation measures, including MM GHG-2, that LAHD, as the lead agency, believes are necessary to address significant impacts and that are feasible to implement, based on substantial evidence in the record; however, under CEQA, the ultimate decisionmaker (here, the Board of Harbor Commissioners) has the authority, before a project is approved, to determine whether a mitigation measure is actually feasible. Accordingly, the comment will be part of the record for Final RSEIR and made available to the decision-makers for their consideration prior to taking any action on the Revised Project.

Response to Comment CSNAH -7:

The comment claims that MM GHG-2 would have economic consequences for the CS Terminal that would lead directly to regional job losses.

Please see Consolidated Responses 2 and 6, and Response to Comment CSNAH-4 and CSNAH-6. LAHD understands that this comment was intended to encourage LAHD to reconsider the requirements in MM GHG-2; LAHD does not have sufficient information to evaluate whether it is financially infeasible for China Shipping to comply with MM GHG-2, as written, based on the information provided in this comment. The Draft RSEIR contains mitigation measures, including MM GHG-2, that LAHD, as the lead agency, believes are necessary to address significant impacts and that are feasible to implement, based on substantial evidence in the record; however, under CEQA, the ultimate decisionmaker (here, the Board of Harbor Commissioners) has the authority, before a project is approved, to determine whether a mitigation measure is actually feasible. Accordingly, the comment will be part of the record for Final RSEIR and made available to the decision-makers for their consideration prior to taking any action on the Revised Project.

Response to Comment CSNAH -8:

The comment states that the order of priority for purchasing carbon offsets is vague and does not allow flexibility to prioritize purchase sources based on price.

Please see Consolidated Responses 2 and 6, and Response to Comment CARB-7 and CSNAH-4. Additionally, MM GHG-2 specifies that "the order of priority for purchasing (any one or more) carbon offsets shall be considered as follows: i. Originating within the

local area; ii. Originating within the South Coast Air Basin; iii. Originating within the state of California; or iv. If sufficient local and in-state offsets are not available, the Tenant shall purchase conforming national offsets registered with a CARB-recognized registry." The language in the measure is meant to allow for the purchase of any number of carbon offsets in the categories listed based on availability and pricing at the time of purchase. LAHD does not sell or purchase carbon offsets and is unable to provide the appropriate triggers and fair pricing as suggested by the commenter. LAHD also has no control over the availability or volume of offsets on the market. Carbon offset pricing and availability in the local, regional, and statewide markets is handled by verified and CARB-recognized registries that the tenant would select and work with directly.

LAHD understands that this comment was intended to encourage LAHD to reconsider the requirements in MM GHG-2; LAHD does not have sufficient information to evaluate whether it is financially infeasible for China Shipping to comply with MM GHG-2, as written, based on the information provided in this comment. The Draft RSEIR contains mitigation measures, including MM GHG-2, that LAHD, as the lead agency, believes are necessary to address significant impacts and that are feasible to implement, based on substantial evidence in the record; however, under CEQA, the ultimate decisionmaker (here, the Board of Harbor Commissioners) has the authority, before a project is approved, to determine whether a mitigation measure is actually feasible. Accordingly, the comment will be part of the record for Final RSEIR and made available to the decision-makers for their consideration prior to taking any action on the Revised Project.

Response to Comment CSNAH -9:

The comment claims that MM GHG-2 is duplicative of other measures, including California's cap-and-trade program, the At-Berth Regulation, and the IMO MARPOL Annex VI measures

Please see Consolidated Responses 2, 3 and 6, and Response to Comment CSNAH-4. The LAHD has concluded that the amounts of GHG emissions that must be offset have been correctly calculated. Those amounts do not include emissions from the CS Terminal's electricity consumption because those emissions have already been offset by LADWP, the Port's electrical power provider. LADWP is a covered entity under the Cap-and-Trade Program and is required to offset its greenhouse gas emissions that come from burning fuel to make electricity through the purchase of allowances. According to the California Public Utilities Commission, these costs are typically passed on to the consumer and reflected in customers' electricity rates in the portion of electricity bills that represent the costs to generate electricity (see https://www.cpuc.ca.gov/industries-and-topics/natural-gas/greenhouse-gas-cap-and-trade-program). Due to the robust regulations such as the Renewable Portfolio Standards (RPS) and programs such as LADWP's Power Strategic Long-Term Resource Plan (SLTRP) to transition to a 100% clean energy supply by 2035 and the cap-and-trade program for which LADWP is a covered entity, off-site mitigation in the form of carbon offset purchases on the voluntary market by LAHD or its tenants is not recommended for GHG emissions associated with electricity consumption already covered by LADWP's offsets.

However, CEQA Guidelines section 15126.4, subdivision (c)(3), provides that feasible "[o]ff-site measures ... to mitigate a project's emissions" include "offsets that are not otherwise required." That would include, in this case, emissions from mobile sources such as CHE, OGVs, harbor craft, on-site trucks, etc. The comment provides no evidence to confirm the amount and types of land-based emissions that it represents were "included and covered" in the cap-and-trade program for the China Shipping terminal. Based on LAHD's research on CARB's website, port operation emissions were provided

to CARB for development of the 1990 baseline for transportation sources such as vessels, trucks, and rail. Emissions from container terminal operations such as China Shipping were not reported individually. Furthermore, the Port of Los Angeles' emissions are mainly governed by regulations and programs outside of the Cap-and-Trade Program whereas entities covered by cap-and-trade are required to report emissions to CARB under the program. The CS Terminal is not considered a covered entity under CARB's program, and the Port is unaware of what specific emissions the commenter is claiming are included and covered without verifying the actual emissions data.

With regard to vessel GHG emissions at berth, MM AQ-31 (At-Berth Regulations) is already accounted for in the Draft RSEIR analysis, which found that GHG emissions associated with operation of the Revised Project are significant and that additional mitigation under MM GHG-2, including in the form of carbon offsets, would reduce GHG emissions to a less than significant level.

With regard to IMO's GHG measures, MM GHG-2 part (a) allows for recalculation and adjustment of GHG emission reductions due to "regulations, or for any other purpose" and therefore, adopted and enforceable IMO regulations that limit or reduce GHG emissions from vessels as suggested by the commenter would qualify under this provision of MM GHG-2. The Draft RSEIR Section 3.1.3 as it relates to air quality and Section 3.2.3 as it relates to greenhouse gases, rely on current rules and regulations in place at the time of the analysis and do not ignore binding measures and requirements as suggested by the commenter. Because the analysis is based on future projections of greenhouse gas emissions, the tenant may elect to recalculate and adjust their greenhouse gas emissions if additional environmental benefits, technologies become available, or emissions reductions occur in the future based on new rules and regulations or for any other purpose as described in the measure. This would avoid double counting of emissions that are anticipated to be reduced in the future as suggested by the commenter. Per the comment's suggestion, MM GHG-2 has been modified to make clear that the GHG impacts of the Revised Project to be mitigated can be readjusted based on a showing, supported by substantial evidence and third-party verification, of a reduction from, but not limited to, onsite technologies such as Zero Emission equipment and/or supporting infrastructure. Please see Consolidated Response 6.

LAHD understands that this comment was intended to encourage LAHD to reconsider the requirements in MM GHG-2; LAHD does not have sufficient information to evaluate whether it is financially infeasible for China Shipping to comply with MM GHG-2, as written, based on the information provided in this comment. The Draft RSEIR contains mitigation measures, including MM GHG-2, that LAHD, as the lead agency, believes are necessary to address significant impacts and that are feasible to implement, based on substantial evidence in the record; however, under CEQA, the ultimate decisionmaker (here, the Board of Harbor Commissioners) has the authority, before a project is approved, to determine whether a mitigation measure is actually feasible. Accordingly, the comment will be part of the record for Final RSEIR and made available to the decision-makers for their consideration prior to taking any action on the Revised Project.

Response to Comment CSNAH -10:

The comment recommends that the RSEIR focus on on-site emissions reductions measures, modify MM GHG-2 to recognize the points in Comment CSNAH-9, withdraw MM AQ-9 and adopt MM AQ-31, and make other changes related to the finances of implementing MM GHG-2.

Please see Consolidated Responses 2, 3, and 6, and Response to Comment CSNAH-4. Please also see Response to Comment CARB-7 regarding local emission reductions. As explained in Consolidated Responses 1 and 2, the Writ requires that this RSEIR re-consider MM AQ-9 and develop additional feasible mitigation for at-berth emissions. The revised MM AQ-9, and new MM GHG-2 and MM AQ-31 are the result of that re-consideration. Because the Writ explicitly included MM AQ-9 in the Revised Project and this RSEIR, MM AQ-9 cannot be withdrawn.

Please see Response to Comment CSNAH-9 regarding regulatory redundancy. Furthermore, as demonstrated in the Draft RSEIR Section 3.2.4.5 page 3.2-27, impacts from GHG emissions during operation of the Revised Project would be significant even with full compliance with applicable rules and regulations including AB 32, CARB At-Berth rule, and IMO regulations. As shown in Table 3.2-2 Operational GHG Emissions–Revised Project (mty), the largest sources of GHG emissions in future years are from OGVs (transit and anchoring) and drayage trucks. On-site mitigation measures related to OGVs such AMP, VSR, and IMO vessel engine requirements would not be sufficient to reduce GHG emissions below the 10,000 metric ton threshold, and since the use of carbon offsets is feasible, MM GHG-2 would reduce GHG emissions to a less than significant level.

Please see Response to Comment CSNAH-8 regarding flexible price-based guidance explaining that the Port has no control over pricing or availability of carbon offsets on the voluntary market. Since the Draft RSEIR analysis is based on future projections of GHG emissions associated with operation of the Revised Project, it is possible that actual throughput levels and activity would be less than what was analyzed in the document. In such a case, the tenant may elect to re-evaluate the GHG emissions associated with operational efficiencies or for any other purpose in accordance with MM GHG-2 and adjust the amount of carbon offset purchases, subject to LAHD review and approval.

LAHD understands that this comment was intended to encourage LAHD to reconsider the requirements in MM GHG-2; LAHD does not have sufficient information to evaluate whether it is financially infeasible for China Shipping to comply with MM GHG-2, as written, based on the information provided in this comment. The Draft RSEIR contains mitigation measures, including MM GHG-2, that LAHD, as the lead agency, believes are necessary to address significant impacts and that are feasible to implement, based on substantial evidence in the record; however, under CEQA, the ultimate decisionmaker (here, the Board of Harbor Commissioners) has the authority, before a project is approved, to determine whether a mitigation measure is actually feasible. Accordingly, the comment will be part of the record for Final RSEIR and made available to the decision-makers for their consideration prior to taking any action on the Revised Project.

Response to Comment CSNAH-11:

The comment summarizes the comment letter and reiterates the recommendations in Comment CSNAH-10.

This is a general comment that serves to summarize the more specific comments that are responded to in detail above. The comment is general and does not identify any specific deficiencies of the Draft RSEIR, and, therefore, no further response is required (PRC, § 21091(d); CEQA Guidelines § 15204(a)). The comment will be part of the record for Final RSEIR and made available to the decision-makers for their consideration prior to taking any action on the Revised Project.

LAHD understands that this comment was intended to encourage LAHD to reconsider the requirements in MM GHG-2; LAHD does not have sufficient information to evaluate

whether it is financially infeasible for China Shipping to comply with MM GHG-2, as written, based on the information provided in this comment. The Draft RSEIR contains mitigation measures, including MM GHG-2, that LAHD, as the lead agency, believes are necessary to address significant impacts and that are feasible to implement, based on substantial evidence in the record; however, under CEQA, the ultimate decisionmaker (here, the Board of Harbor Commissioners) has the authority, before a project is approved, to determine whether a mitigation measure is actually feasible. Accordingly, the comment will be part of the record for Final RSEIR and made available to the decision-makers for their consideration prior to taking any action on the Revised Project.

Natural Resources Defense Council et al. (NRDC)

Comment Letter

See Section 2.6.

Responses

Response to Comment NRDC-1:

Thank you for your comments on the Draft RSEIR. The comment introduces points made later in the comment letter and recommends the RSEIR be revised and recirculated.

This is a general comment that includes introductory remarks and serves to introduce the more specific comments that are responded to in detail below. The comment is general and does not identify any specific deficiencies of the Draft RSEIR, and, therefore, no further response is required (PRC, § 21091(d); CEQA Guidelines § 15204(a)). The comment will be part of the record for Final RSEIR and made available to the decision-makers for their consideration prior to taking any action on the Revised Project.

Please refer to the responses to comments below that address specific comments regarding adequacy of the RSEIR. With regard to the accusation that LAHD has been using CEQA to delay implementation, this claim is unfounded and mischaracterizes the purpose and requirements of the CEQA process. LAHD is legally obligated to comply with CEQA, which mandates a thorough and evidence-based evaluation of potential environmental impacts, and to pursue feasible emission reduction strategies and mitigation measures to avoid or minimize significant environmental effects where possible. Please see Consolidated Responses 1 and 5.

Regarding the request to recirculate the Draft RSEIR, please see Consolidated Response 7.

Response to Comment NRDC-2:

The comment provides general legal background on CEQA and states that the RSEIR incorrectly limits its analysis of mitigation measures to AMP and greenhouse gases and that it should have considered a much broader set of mitigation measures.

This comment contains a summary of CEQA provisions and case law. The comment is general and does not identify any specific deficiencies of the Draft RSEIR, and, therefore, no further response is required (PRC, § 21091(d); CEQA Guidelines § 15204(a)). The comment will be part of the record for Final RSEIR and made available to the decision-makers for their consideration prior to taking any action on the Revised Project.

LAHD was not required to re-evaluate, or consider additional or alternative methods for the impacts addressed by mitigation measures and lease measures from the 2019 SEIR or 2008 EIS/EIR, or challenges to the data, analyses, and conclusions in the 2019 SEIR that

were brought or could have been brought in the prior litigation (please see Responses to Comments 1 and 2). To the comment's observation that the Port must evaluate the incorporation of future technologies, the Revised Project already includes such measures (i.e., MM AQ-17, LM AQ-1, LM AQ-3, LM AQ-22), which have already been imposed by the Sixth Amendment to Permit No. 999, making them contractually enforceable against China Shipping.

Response to Comment NRDC-3:

The comment states that the RSEIR fails to analyze all feasible mitigation because it only considers the 2008 EIS/EIR AMP measure. Furthermore, the trial court specifically directed the Port to consider control measures in addition to MM AQ-9.

Per the comment's suggestion, MM AQ-9 has been modified to clarify certain terms and definitions. Please see Consolidated Response 3.

Regarding the need for and feasibility of additional at-berth mitigation measures as directed by the Writ, the Draft RSEIR included MM AQ-31, and the feasibility of other requirements suggested by commenter, such as requiring 100% of vessels to connect to AMP and addressing perceived delays in connecting to shore power, please see Consolidated Response 3.

Response to Comment NRDC-4:

The comment states that MM AQ-9 should apply to all vessels, not just China Shipping vessels and further states that the Port should exclude non-AMP-capable vessels from the terminal.

Please see Consolidated Response 3. The commenter claims LAHD has the authority to control which ships call at the CS Terminal through the lease with the tenant because it has already done so for other requirements such as AMP and VSRP mitigation measures. The AMP and VSRP comparison made by the commenter is flawed because those mitigation measures were developed based on meeting higher performance standards of existing port-wide programs that have been in place for more than 20 years. Specifically, LAHD's voluntary Vessel Speed Reduction Program (VSRP) has been in effect since 2001 to encourage ocean-going vessels to voluntarily reduce their speeds at designated distances from the port to lower emissions and improve air quality. The VSRP was enhanced in 2008 by offering financial incentives to shipping lines and operators (see https://www.portoflosangeles.org/environment/air-quality/vessel-speed-reduction-program).

As noted in Consolidated Response 3, LAHD's AMP program began in 2004 at the CS Terminal with the installation of the world's first shore-side AMP infrastructure, and the Port has continued to invest in this technology, significantly expanding its AMP capabilities to meet CARB regulations since 2014 (see https://wwwL.portoflosangeles.org/environment/air-quality/alternative-maritime-power-(amp)). LAHD imposed higher (100%) AMP and VSR compliance rates in the permit with China Shipping based on data and information collected (see Appendix B1, p. B1-11 for AMP and VSRP assumptions used in the Draft RSEIR) As stated in Consolidated Response 3 and Response to Comment CARB-26, there are no feasible mitigation measures that can mandate the type of vessel deployed at the terminal.

Response to Comment NRDC-5:

The comment speculates that MM AQ-9 exempts non-China Shipping vessels because applying it would lead to a loss in revenue or increased costs.

Please see Consolidated Response 3 and Response to Comment CARB-11. As explained in Consolidated Response 3, LAHD has expended hundreds of millions of dollars installing AMP at the Port and ensuring that shore power is a standardized procedure worldwide. Based on LAHD's early investment in the technology and its role as a global expert in the use of shore power, LAHD has strong economic, policy and operational incentives to promote the use of AMP, not discourage it as suggested by the commenter.

Additionally, the evidence in the administrative record, dating back to when MM AQ-9 was established in the 2008 EIS/EIR, highlights the reasons why MM AQ-9 imposed the 100% AMP requirement specifically for China Shipping vessels. Those reasons do not make any claims regarding economic infeasibility or loss in revenue.

- 2018 Recirculated Draft EIS/EIS page 3.2-67 states "The Superior Court of California in Los Angeles County issued an Amended Stipulated Judgment in March 2004 that identifies how China Shipping, in concert with the container terminal operator and the LAHD, will implement measures to mitigate air emissions from sources associated with the operation of the Berth 97-109 Container Terminal. Portions of MM AQ-9, MM AQ-15, and MM AQ-17 represent the Project-level mitigation measures required by the Amended Stipulated Judgment." Consistent with the ASJ, the first two phase-in requirements of MM AQ-9 identified as "ASJ requirements" were specifically for China Shipping vessels.
- 2018 Recirculated Draft EIS/EIS page 3.2-279 provides an evaluation of Alternatives to the Project, and in describing the impacts of Alternative 6 (Omni Terminal) and proposed mitigation measures, it states, "AMP implementation for Alternative 6 would differ from the other alternatives because Alternative 6 would have a different terminal operator, and as such the Settlement Agreement measures would not apply." As such, MM AQ-9: AMP (Alternative 6 only) would have placed requirements on all vessels, not just China Shipping vessels, as shown in the measure below.

  For Alternative 6, the following AMP requirements shall apply to general cargo vessels (break-bulk cargo) and container vessels:

  - *10 percent of ship calls starting January 1, 2010*
  - *40 percent of ship calls starting January 1, 2015*
  - *80 percent of ship calls starting January 1, 2020*

  The strategy for this AMP mitigation measure clearly shows that non-China Shipping ships under Alternative 6 would have been required to AMP but only up to 80% of ships calls, which was found to be feasible. This mitigation measure was not imposed because Alternative 6 was ultimately not selected.
- 2018 Recirculated Draft EIS/EIR, Appendix C page C-2, Section C.1.3 OGV3 – Alternative Maritime Power describes the measure, stating, "This measure would implement alternative maritime power (AMP) requirements. Approximately 70 percent of ship calls at the China Shipping Terminal currently use AMP." "AMP compliance will be increased as part of the mitigation strategy." This statement was developed in response to the Port Community Advisory Committee (PCAC) No Net Increase (NNI) Task Force's list of recommended control measures that were used to develop project specific mitigation measures beyond the original requirements of the ASJ.

- 2008 Final EIS/EIR page 3-57, MM AQ-9 includes an additional AMP requirement as shown in bold text which states, "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." This additional AMP requirement is the only part of the mitigation measure that applies to non-China Shipping vessels and could be applied because China Shipping, as the operator of the CS Terminal, could be required, as a term of Permit No. 999, to provide the AMP capabilities to any vessel docking at the CS Terminal. See Consolidated Response 3. This does not mean that LAHD could require China Shipping prohibit non-AMP capable vessels from visiting the CS Terminal, as suggested by commenter.
- Findings of Fact and Statement of Overriding Considerations for the 2008 EIS/EIR, page 62 states, "This mitigation measure satisfies paragraph VIII.A.3 of the ASJ, which provides that LAHD shall install, as mitigation, necessary electrical infrastructure to provide shoreside power for ship hoteling (Alternative Maritime Power [AMP]) and cause the retrofitting of China Shipping marine container ships to accommodate the use of AMP while hoteling; that LAHD shall require, as mitigation, that two China Shipping container ships be retrofitted to accept shoreside electrical power by August 2004, three ships be retrofitted for AMP by January 2005, four ships retrofitted for AMP by March 31, 2005; and that 30 percent of ships docking at Berths 97-109 use shoreside electric power for hoteling from August 1, 2004, to January 1, 2005, 60 percent from January 1, 2005, through July 1, 2005, and 70 percent after July 1, 2005." These findings for MM AQ-9 confirm that the strategy for AMP phase-in requirements was specifically designed for China Shipping vessels.
- Findings of Fact and Statement of Overriding Considerations for the 2008 EIS/EIR, page 69 summarizes the numerous public comments received on AMP and states, "While a large portion of the ships in China Shipping's current Port of Los Angeles service are retrofitted with AMP, only a few (four) of the larger ships in their worldwide fleet are retrofitted (while China Shipping will order some brand new ships to service the Port, some of the ships will also be repositioned from existing vessel strings elsewhere). To comply with the ASJ and to achieve the proposed AMP levels in MM AQ-9, these ships will also need to be retrofitted. The phase-in schedule allows for such retrofits to occur and therefore, the mitigation measure was not changed."

Response to Comment NRDC-6:

The comment points out that MM AQ-9's exemption provision based on an AMP-capable berth being unavailable is "nonsensical."

Per the comment's suggestion, MM AQ-9 has been modified to omit this exception. Please see Consolidated Response 3.

Response to Comment NRDC-7:

The comment states that MM AQ-9 does not define key terms.

Per the comment's suggestion, MM AQ-9 has been modified to omit those undefined terms and replacing "hoteling" with terms with standard definitions under CARB's At-Berth Regulations. Please see Consolidated Response 3.

Response to Comment NRDC-8:

The comment points out that MM AQ-9 does not include a requirement to use barge-based systems during exceptions, if possible. The comment also demands that the Port must use the cleanest available "bonnets" and observes that zero-emissions bonnets are in development.

Per the comment's suggestion, MM AQ-9 has been modified to require those vessels that qualify for an exception under the measure but can still feasibly control emissions by using CARB-certified alternative technologies to do so, consistent with MM AQ-31. Please see Consolidated Response 3 and Response to Comment CARB-11 regarding the vessel types subject to at-berth regulations. To the extent the At-Berth Regulations allow and/or require alternative emissions control technology, MM AQ-31 would allow all vessels calling at the terminal to use such technology. The emissions calculations in the Draft RSEIR incorporate the application of MM AQ-31 (see Response to Comment CARB-11).

LAHD acknowledges that near-zero-emission bonnets are in development, per the comment letter's exhibits C and D, although LAHD notes that neither system described in the exhibits can truly be characterized as zero-emissions, as both rely on fossil fuel-based technologies (methanol and natural gas). Furthermore, "in development" does not mean feasible. Neither technology has been demonstrated in real-world service, and neither has been certified for use by CARB. Accordingly, LAHD cannot regard either technology as a feasible mitigation measure. When the technology becomes available, it will be considered for deployment per the requirements of LM AQ-22 (which has already been imposed by the Sixth Amendment to Permit No. 999, making it contractually enforceable against China Shipping) and, if certified and ordered by CARB in the At-Berth Regulations, in compliance with MM AQ-31.

Response to Comment NRDC-9:

The comment offers a revised version of MM AQ-9 for immediate adoption and implementation.

Per the comment's suggestion, MM AQ-9 has been modified to include many of the suggestions provided by the commenter. Those suggestions not adopted are addressed with other changes. Please see Consolidated Response 3.

Response to Comment NRDC-10:

The comment points out that the implementation schedule for MM AQ-15 and MM AQ-17 have already passed and requests that the measures be revised to be tiered off the date of the new lease amendment and that the implementation status of those measures be disclosed.

LAHD was not required to re-evaluate or consider additional or alternative methods for the impacts address by mitigation measures and lease measures from the 2019 SEIR or 2008 EIS/EIR that were upheld by the Courts or were not challenged. Please see Consolidated Responses 1, 2, and 5. MM AQ-15 and MM AQ-17 were upheld by the Courts and are already imposed on the tenant under the Sixth Amendment to Permit No. 999; the dates for the implementation schedule are correct in Permit No. 999.

This comment appears to be based on typographical errors in Section 3.1.5 of the Draft RSEIR for the implementation dates cited for MM AQ-15 and MM AQ-17. Because those measures were not required by the Writ to be re-evaluated, MM AQ-15 and MM AQ-17 have been removed from the table in Section 3.1.5 in the Final RSEIR. Please see Chapter 3.

Response to Comment NRDC-11:

The comment states that the RSEIR's estimates of emissions reductions from MM AQ-15 and MM AQ-17 are not supported by substantial evidence because the assumption that those measures have been implemented is not substantiated by data.

LAHD was not required to re-evaluate or consider additional or alternative methods for the impacts address by mitigation measures and lease measures from the 2019 SEIR or 2008 EIS/EIR that were upheld by the Courts or were not challenged. Please see Consolidated Responses 1, 2, and 5.

This comment appears to be based on typographical errors in Section 3.1.5 of the Draft RSEIR for the implementation dates cited for MM AQ-15 and MM AQ-17 . See Response to Comment NRDC-10 regarding changes made in Chapter 3 to address typographical errors in MM AQ-15 and MM AQ-17 in Section 3.1.5 of the Draft RSEIR.

As summarized in the Draft RSEIR Section 1.1.1 on page 1-2, the Sixth Amendment to Permit No. 999 was approved on July 2, 2024 (with an effective date of July 3, 2024), implementing and making contractually enforceable against China Shipping the Adopted Mitigation Measures and Lease Measures, including the 2019 SEIR MM AQ-15 (Yard Tractors) and 2019 SEIR MM AQ-17 (Cargo Handling Equipment). The timelines set forth in the mitigation measures are based on replacement schedules starting from the effective date of the lease amendment with the tenant, which in this case is July 3, 2024. Since both of these measures were upheld by the Court and are not being revised per the Writ, the start date would remain as July 3, 2024. The substantial evidence to support the assumptions that MM AQ-15 and MM AQ-17 would be implemented in accordance with the timelines set forth in the Draft RSEIR is based on the following:

- The Draft RSEIR Section 3.1.4.1 on page 3.1-31 states "WBCT supplied a detailed list of CHE equipment operating at the terminal in 2023. Because this included recent purchases and modernized equipment that was installed between 2014 and 2023, the 2023 equipment list was used as the basis for developing future-year 2026-2045 CHE emissions."
- Appendix B1 Section 3.4.1 on page B1-15, indicates "Future year equipment list is based on 2023 cargo handling equipment inventory provided by WBCT. This is to account for pieces scrapped and replaced between the baseline and the time this study was prepared." In Table B1-E. Proposed Mitigation Replacement Schedule for CHE (Revised Project), the data supplied by WBCT is reported for each piece of equipment by type, horsepower, model year, quantity, proposed mitigation replacement, and proposed replacement schedule by year.
- For MM AQ-15, the data in Table B1-E shows that 16 model year 2004 LPG yard tractors and 54 model year 2007 LPG yard tractors would be replaced within the first year of the mitigation schedule for the oldest units (2007 and older). For analytical purposes only, this was assumed to occur in year 2026. For the second part of the measure, the data shows that 37 model year 2008 yard tractors and 20 model year 2011 yard tractors would be replaced within five years of the mitigation schedule for the next set of units (model year 2011 or older). For analytical purposes only, this was assumed to occur in year 2030. Since the inventory reflects the entire CHE fleet at WBCT that is shared between the Berth 121-131 and China Shipping terminals, the Draft RSEIR analysis apportioned the CHE fleet based on terminal activity and throughput at the China Shipping terminal. The purpose of the Draft RSEIR's analysis is to estimate future air quality emissions of the Revised Project and to quantify the benefit of

implementing MM AQ-15 at the China Shipping terminal based on the data available at the time of the analysis. The commenter's assertion that the Port has overestimated the emission reductions from MM AQ-15 by assuming full implementation without substantial evidence is incorrect when in fact the analysis is supported by factual data and conservatively takes credit for MM AQ-15 in years 2026 and 2030.

- Similarly, for MM AQ-17 the data in Table B1-E shows replacement schedules assumed for CHE based on WBCT's 2023 equipment inventory. For analytical purposes only, the replacement schedules are assumed to occur in future years 2026-2030 for all equipment types based on the requirements of the measure and by natural turnover after 2030. The commenter's assertion that the Port has overestimated the emission reductions from MM AQ-17 by assuming full implementation without substantial evidence is incorrect because in fact the analysis is supported by factual data and conservatively takes credit in future years 2026-2030.

Response to Comment NRDC-12:

The commenter is requesting that the RSEIR clarify that lease measures LM AQ-1, LM AQ-2, and LM AQ-3 are enforceable or explain why they are not and suggests redesignating them as CEQA mitigation measures.

LAHD was not required to re-evaluate or consider additional or alternative methods for the impacts address by mitigation measures and lease measures from the 2019 SEIR or 2008 EIS/EIR that were upheld by the Courts or were not challenged. LM AQ-1, LM AQ-2, and LM AQ-3 were not challenged in the prior litigation. Please see Consolidated Responses 1, 2, and 5.

The comment correctly points out that these three lease measures have already been incorporated into the Sixth Amendment to Permit No. 999, making them contractually enforceable against China Shipping. Because those measures were not required by the Writ to be re-evaluated, LM AQ-1, LM AQ-2, and LM AQ-3 have been removed from the table in Section 3.1.5 in the Final RSEIR. Please see Chapter 3.

The comment points out that the lease measures have been characterized in a few instances as "mitigation measures" on pages 3.1-42 and 3.1-85 of the Draft RSEIR and that they be redesignated as such. Revisions have been made to the Final RSEIR in response to comments to correctly characterize the adopted measures as "Lease Measures" rather than "Mitigation Measures". However, LAHD declines the commenter's request for the redesignation on the basis that the adopted lease measures were upheld by the Court and are not subject to a re-evaluation in accordance with the Writ.

Furthermore, the lease measures have already been incorporated into Permit No. 999 requiring that they be implemented by the tenant. As to disclosing the current implementation status of these measures in the Draft RSEIR, the status and progress of the lease measures is outside the scope of the RSEIR and is required by the Writ to be reported to the Court in semi-annual compliance reports.

Response to Comment NRDC-13:

The comment summarizes the Court's rejection of the 2019 SEIR's LM GHG-1, GHG Credit Fund, demands that the LAHD analyze and adopt all feasible mitigation measures for GHG impacts, and contends the RSEIR uses an improper baseline for its GHG analysis.

This comment contains a summary of CEQA provisions, the prior litigation and the Draft RSEIR. The comment is general and does not identify any specific deficiencies of the Draft RSEIR, and, therefore, no further response is required (PRC, § 21091(d); CEQA Guidelines § 15204(a)). The comment will be part of the record for Final RSEIR and made available to the decision-makers for their consideration prior to taking any action on the Revised Project.

See also Consolidated Responses 1, 2, and 6, and Response to Comment CARB-7 for a discussion on all feasible mitigation measures that were considered in the Draft RSEIR including the addition of a new mitigation measure MM GHG-2 GHG Reduction Offsets that replaces LM GHG-1 rejected by the Court. The comment further alleges that MM GHG-2 violates CEQA and is based on a faulty baseline.

With respect to the claim regarding the baseline, the comment suggests that a zero baseline should be used for the Draft RSEIR rather than a 2008 baseline. Please see Consolidated Response 4.

Response to Comment NRDC-14:

The comment asserts that MM GHG-2 is deferred mitigation because it would allow offsets from a yet-to-be-developed Port greenhouse gas program rather than requiring carbon offsets from a CARB-recognized registry.

Please Consolidated Response 6.

Response to Comment NRDC-15:

The comment states that MM GHG-2 should not cease at the end of the lease term, in 2045, but rather extend to the full operational life of the CS terminal.

Please see Response to Comment CARB-7. The measure will be enforced through the lease term and during any holdover provisions that would allow China Shipping to continue to operate.

Response to Comment NRDC-16:

The comment states that the first priority for purchasing carbon offsets would be "the local area," but is unclear what that means under MM GHG-2. The comment further states that GHG offsets should "benefit the most affected communities surrounding the Port" and should therefore prioritize reducing emissions at the Port, not just in the local area.

Please see Consolidated Response 6 and Response to Comment CARB-7. Moreover, the Draft RSEIR on page 3.2-4 confirms that GHG emissions constitute a global impact, not a local one. It is unclear on what basis the commenter regards the Revised Project's GHG emissions as affecting local communities more than distant communities. Mitigation for GHG impacts is intended to reduce the contribution of local sources to a global issue.

Response to Comment NRDC-17:

The comment alleges that the Port is using the CEQA process to delay implementation of feasible mitigation and recommends that the LAHD revise and recirculate the RSEIR with mitigation beyond the scope of the Draft RSEIR.

This is a general comment that serves to summarize the more specific comments that are responded to in detail above. The comment is general and does not identify any specific deficiencies of the Draft RSEIR, and, therefore, no further response is required (PRC, § 21091(d); CEQA Guidelines § 15204(a)). The comment will be part of the record for Final RSEIR and made available to the decision-makers for their consideration prior to taking any action on the Revised Project. Please also see Consolidated Responses 1, 2, and 5.

South Coast Air Quality Management District (SCAQMD) Comment Letter

See Section 2.6.

Responses

Response to Comment SCAQMD-1:

The comment makes summary statements concerning the scope of the RSEIR and the requirements of the Writ.

Thank you for your comment on the Draft RSEIR. This is a general comment that includes introductory remarks. The comment is general and does not identify any specific deficiencies of the Draft RSEIR, and, therefore, no further response is required (PRC, § 21091(d); CEQA Guidelines § 15204(a)). The comment will be part of the record for Final RSEIR and made available to the decision-makers for their consideration prior to taking any action on the Revised Project.

Please also see Consolidated Responses 1 and 2.

Response to Comment SCAQMD-2:

The comment alleges a number of deficiencies in the Draft RSEIR, including the air quality analyses, the analysis of consistency with planning documents, recommended mitigation, and implementation mechanisms for adopted mitigation measures. The comment also introduces the specific SCAQMD comments on each of those issues and recommends recirculation of the Draft RSEIR.

This is a general comment that includes introductory remarks and serves to introduce the more specific comments that are responded to in detail below. The comment is general and does not identify any specific deficiencies of the Draft RSEIR, and, therefore, no further response is required (PRC, § 21091(d); CEQA Guidelines § 15204(a)). The comment will be part of the record for Final RSEIR and made available to the decision-makers for their consideration prior to taking any action on the Revised Project. Please see also Responses to Comments SCAQMD-4 through SCAQMD-24 for detailed responses to the general issues raised in this comment.

Response to Comment SCAQMD-3:

The comment summarizes the Revised Project considered in the Draft RSEIR.

This is a general comment that includes introductory remarks. The comment is general and does not identify any specific deficiencies of the Draft RSEIR, and, therefore, no further response is required (PRC, § 21091(d); CEQA Guidelines § 15204(a)). The comment will be part of the record for Final RSEIR and made available to the decision-makers for their consideration prior to taking any action on the Revised Project.

Response to Comment SCAQMD-4:

The comment states that the Draft RSEIR applies an inconsistent methodology by relying on different baselines for the criteria pollutant analysis and the health risk analysis (HRA). The comment claims that the air quality analysis selectively applied baselines by using both a historical 2008 baseline and a future baseline for the health risk assessment but only a historical 2008 baseline for criteria pollutants. The comment contends that the air quality analysis should also use a future baseline for criteria pollutants.

Please see Consolidated Response 4. Regarding the commenter's issues with the 2019 SEIR, LAHD was not required to re-evaluate, or consider additional or alternative methods for the impacts addressed by mitigation measures and lease measures from the 2019 SEIR or 2008 EIS/EIR, or challenges to the data, analyses, and conclusions in the 2019 SEIR that were brought or could have been brought in the prior litigation (please see Consolidated Responses 1 and 2).

Please also see Response to Comments CARB-4 and CARB-5 regarding the health risk assessment. Cancer risk is unique among air quality- and TAC-related impacts because it involves very long exposure periods of 25, 30, and 70 years depending on the receptor type. As a result, the evaluation of cancer risk associated with historical 2008 baseline emissions (referred to as the "static baseline") could be seen as paradoxical because it assumed that emissions that occurred at a fixed point in time (2008) would continue for 25, 30, or 70 years. Holding baseline emissions constant for the entire exposure period can lead to relatively high baseline cancer risk estimates, which would result in correspondingly low Revised Project cancer risk increments. To resolve this issue, this Draft RSEIR also evaluated baseline cancer risk by assuming constant 2008 activity levels coupled with emission factors that decrease over the 25-, 30-, and 70-year exposure periods in response to the future effects of existing air quality regulations (referred to as the "floating future baseline"). See Page 3.1-38, lines 25-33 for additional discussion of the baseline evaluation approach for cancer risk.

The approach of using two baseline cancer risk estimates to assess the significance of cancer risk is conservative, as the floating future baseline describes lower emissions over time than does the static baseline, and therefore results in higher Revised Project incremental cancer risk impacts. The use of a floating future baseline was not necessary for any other air quality- or TAC-related impact because all other impacts were based on historical emissions that existed during the static baseline year of 2008.

As previously explained, the use of a 2008 baseline has been consistently used throughout this document and the prior 2019 SEIR and 2008 EIS/EIR for air quality and all other resource impact areas evaluated.

Response to Comment SCAQMD-5:

The comment alleges deficiencies in the Draft RSEIR's consideration of the future oceangoing vessels (OGV) fleet that will service the Berths 97-109 Container Terminal, specifically whether vessel size is the primary driver of reduced call frequency and how the emissions profile and vessel numbers relate to "historical or previously projected values." The comment suggests that the RSEIR should include details of the future fleet, including a quantitative comparison of vessel sizes, clarification of fuel types, IMO tier levels, and vessel class, and "a discussion of how these changes influence overall emissions and air quality impacts."

LAHD was not required to re-evaluate or consider challenges to the data, analyses, and conclusions in the 2019 SEIR that were brought or could have been brought in the prior litigation (please see Consolidated Responses 1 and 2).

The comment correctly notes that fewer vessels conveying more containers implies that vessels are expected to increase in size. As stated in the RSEIR (Appendix B-1), "The mix of older and newer ships calling at CS in future years (2026-2045) was predicted using POLA's CEQA Terminal Level Container Ship Forecast for Tier 3 Engines (POLA 2015)." That forecast was developed subsequent to the publication of the 2008 EIS/EIR and thus represents an updated prediction concerning the sizes of vessels expected to call in future years. The details of the vessel sizes assumed in the analyses are presented in

Appendix B1 (e.g., tables on pages B1-71 and B1-79) and the tier levels of those sizes and associated emission factors are also presented in Appendix B1. A comparison with the tables in the 2008 EIS/EIR confirms that average vessel size in terms of TEU capacity has increased since the 2008 EIS/EIR and is projected to continue to increase in the future. In the 2019 SEIR, details on IMO NOx tier levels for vessel engines (see page 3.1-15 of Recirculated Draft SEIR), CARB regulations related to fuel (see page 3.1-21 of Recirculated Draft SEIR), key operational assumptions for container vessels in terms of size, fuel types, tier levels, and class (see page 3.1-31 of Recirculated Draft SEIR), and a discussion on emission trends for container ships including the statement confirming that "Container ship size would increase" (see page 3.1-53 of Recirculated Draft SEIR) all provide detailed information the commenter is requesting is needed to ensure an accurate estimation of operational emissions from OGVs.

Lastly, the comment requests "a discussion of how these changes influence overall emissions and air quality impacts" due to increased vessel sizes relative to historical or previously projected values. As stated on page 3.1-4 of the Draft RSEIR, the analysis relies on the most current data sets, models, and tools available at the time of the analysis. It would not be possible or accurate to estimate emissions using outdated models, tools, or assumptions related to OGVs based on previously projected values in prior documents. It would also not be possible to directly compare air quality impacts presented in the 2008 EIS/EIR for the Approved Project with impacts calculated in this Draft RSEIR for the same reasons noted above and therefore, no further response to the commenter's request is needed.

Response to Comment SCAQMD-6:

The comment states that the air quality analysis in the RSEIR should have used a truck idling time of 30 minutes.

LAHD was not required to re-evaluate or consider challenges to the data, analyses, and conclusions in the 2019 SEIR that were brought or could have been brought in the prior litigation (please see Consolidated Responses 1 and 2).

Response to Comment SCAQMD-7:

The comment claims that the locomotive nighttime release heights were artificially inflated because they were obtained from CARB's 2004 Roseville Rail Yard Study, which used the ISCST3 model instead of the current AERMOD model. The AQMD claims that AERMOD inherently incorporates time-of-day meteorology when processing hourly data, whereas ISCST3 "lacked the capability to account for time-of-day variations in meteorological conditions". The comment suggests that assumption would inflate night-time release heights and underestimate near-field exposure.

LAHD was not required to re-evaluate or consider challenges to the data, analyses, and conclusions in the 2019 SEIR that were brought or could have been brought in the prior litigation (please see Consolidated Responses 1 and 2).

Nevertheless, for informational purposes, LAHD notes that in the Draft RSEIR, locomotives were modeled in AERMOD as non-buoyant line sources. The dispersion algorithms used by AERMOD for non-buoyant line, area, and volume sources have no allowance for plume rise. This means that when applying atmospheric conditions to emissions from those sources to predict their downwind dispersion, AERMOD assumes the emission plumes have zero upward momentum and neutral buoyancy. Therefore, for non-buoyant line, area, and volume sources, it is appropriate to manually adjust the

vertical starting point for a plume in cases where momentum- or buoyancy-related plume rise is expected.

Because locomotives release their exhaust with upward momentum and thermal buoyancy, AERMOD's source release heights were manually adjusted upward to equal the expected plume heights instead of the locomotive exhaust port heights. This same approach was used in health risk assessments for major rail yards prepared between 2007 and 2009 pursuant to the 2005 Statewide Railyard Agreement. For example, the analysis for the Dolores and ICTF Rail Yards (UPRR 2007), which was reviewed and approved by CARB, used AERMOD with source release heights for off-site locomotives that were identical to those used in this Draft RSEIR.

SCAQMD commented that AERMOD inherently incorporates time-of-day meteorology, implying that it is inappropriate to adjust plume heights differently between daytime and nighttime because AERMOD already does it internally (By "time-of-day" capability, we assume that SCAQMD is referring to AERMOD's ability to model variable emission rates and source parameters and pair them with hourly meteorological conditions). However, for non-buoyant line sources, AERMOD's time-of-day capability has nothing to do with plume rise because plume rise is not calculated by AERMOD. Therefore, daytime and nighttime plume rise adjustments for AERMOD non-buoyant line sources are appropriate.

The method for determining plume heights for moving locomotives was first developed by CARB in the Roseville Rail Yard Study (CARB 2004). At that time, the approved regulatory dispersion model was ISCST3. However, the principle of adjusting a non-buoyant source release height upward to equal the plume height is the same whether the dispersion model is ISCST3 or its successor, AERMOD. CARB accounted for the differences in atmospheric stability between daytime and nighttime conditions (specifically, the effects of stability on plume rise) to calculate different daytime and nighttime locomotive plume heights. As a result, different AERMOD source heights were used in the Draft RSEIR for daytime versus nighttime. Without this adjustment, the pollutant concentrations predicted by AERMOD for locomotives would have been overstated because the modeled exhaust plumes would have been too low. Therefore, pollutant concentrations were appropriately predicted, health risks have not been understated and no revision of the RSEIR is necessary.

Response to Comment SCAQMD-8:

The comment requests supporting documentation and evidence demonstrating that the release heights for volume, area, and line sources in Table B2-1 that were adjusted to account for plume rise are appropriate.

LAHD was not required to re-evaluate or consider challenges to the data, analyses, and conclusions in the 2019 SEIR that were brought or could have been brought in the prior litigation (please see Consolidated Responses 1 and 2).

Nevertheless, for informational purposes, LAHD notes that the volume source heights for ships in transit, turning, and docking were obtained from the 2008 EIS/EIR. They are based on a series of visual observations of containership exhaust plumes near the Port of Los Angeles (SAIC 2006). The average plume heights were estimated to be 25 percent above vessel stack height for fairway and precautionary area transit, percent above vessel stack height for harbor transit, and 100 percent above vessel stack height for turning and docking. The higher plume rise at slower ship speeds is the result of lower apparent (i.e., actual plus vessel motion) wind speeds. The resulting modeled plume heights, which range from 49.1 to 78.6 m above water, as shown in Table B2-1, agree reasonably well

with the limited published literature that could be found, such as Liu et al. (2000) (240-300 m above water), CARB (2006) (50 m above water), Frick and Hoppel (2000) (200 m above water), Beecken et al. (2014) (50-70 m above water), and Murphy et al. (2009) (30-55 m above water). The volume source height for ships at anchorage was conservatively set at 44.5 m, which is the auxiliary engine stack height, because there was no visual plume observation made for ships at anchorage.

The methodologies for adjusting the line and area source heights for the remaining source types in Table B2-1 are as follows. The average plume heights above water or ground for tugboats, cargo handling equipment (except RTGs), and trucks were estimated through visual observations by Port staff to be 50 feet (15.2 m), 15 feet (4.57 m), and 15 feet (4.57 m), respectively (LAHD 2008). These heights account for the exhaust port height plus a modest amount of plume rise due to thermal buoyancy and upward momentum. The source height for rubber-tired gantry (RTG) cranes of 41 feet (12.5 m) is the average exhaust port height, which was provided by equipment manufacturers as reported by UPRR (2007). The source height for worker vehicles of 2 feet (0.61 m) is based on the CARB Risk Reduction Plan (CARB 2000) and recommendations from CARB staff, as reported in Appendix C2 of the Southern California International Gateway Project FEIR (LAHD 2013).

Response to Comment SCAQMD-9:

The comment claims that a divisor of 4.3 instead of 2.15 should have been used to derive the initial vertical dimension for locomotive sources, based on Table 3-3 of the AERMOD User's Guide.

LAHD was not required to re-evaluate or consider challenges to the data, analyses, and conclusions in the 2019 SEIR that were brought or could have been brought in the prior litigation (please see Consolidated Responses 1 and 2).

Nevertheless, for informational purposes, LAHD notes that in modeling locomotives, the Port chose to follow precedent set by CARB because the application of Table 3-3 of the AERMOD User's Guide requires some guidance interpretation on the user's part when modeling adjusted source release heights due to plume rise. Therefore, as documented on Page 40 of the Roseville Rail Yard Study (CARB 2004) and Table 7 of the Diesel Particulate Matter Exposure Assessment Study for the Ports of Los Angeles and Long Beach (CARB 2006), the initial vertical dimension for locomotives was set equal to the source release height divided by 2.15. Accordingly, no revision of the RSEIR is necessary.

Response to Comment SCAQMD-10:

The comment states that the air quality analysis used meteorological data from 2012 to 2016 that was processed by AERMET version 16216, whereas the AQMD's AERMOD-ready meteorological data files are newer and were processed with AERMET version 22112. The comment states that the Port should re-run the dispersion modeling using more recent meteorological data processed by the most recent version of AERMET (version 24142).

LAHD was not required to re-evaluate or consider challenges to the data, analyses, and conclusions in the 2019 SEIR that were brought or could have been brought in the prior litigation (please see Consolidated Responses 1 and 2).

Nevertheless, for informational purposes, LAHD notes that the dispersion modeling for criteria pollutants and the HRA in the Draft RSEIR was performed using the most recent publicly available version of AERMOD (version 24142) at the time of the analysis. To

predict ambient pollutant and TAC concentrations, AERMOD used actual hourly meteorological data collected from January 1, 2012 through December 31, 2016, at the Wilmington Community Station (WCS) at Saints Peter and Paul School. This meteorological data set was processed by the Port in 2018 using the most recent version of AERMET at the time, version 16216.

The WCS is part of the Port's site-specific monitoring network and is located 1.6 mile north of the China Shipping Terminal. It is considered the most representative meteorological station for the China Shipping terminal, in accordance with the "Sphere of Influence" analysis conducted by POLA and POLB as part of the 2010 Clean Air Action Plan update (POLA and POLB 2010). The purpose of the Sphere of Influence analysis was to fully characterize the varying conditions found in different areas of the Ports' operations. The study evaluated over fifteen meteorological stations (including stations processed by the AQMD for use in AERMOD) located within a 20-kilometer radius of the Ports and investigated several selection criteria, including the influence of geographic features on prevailing wind patterns to determine representativeness of the surface meteorological stations. Based on the results of that analysis, the WCS was recommended for projects in the inner harbor area for CEQA purposes; the same station has been used for other Port projects in the same area in past EIRs.

The U.S. EPA's *Guideline on Air Quality Models* (GOAQM) does not set an age limit on meteorological data used in dispersion modeling (U.S. EPA 2024). Rather, the GOAQM places the most emphasis on geographical representativeness and data completeness, both of which are satisfied by the 2012-2016 WCS data set. Because the collection, validation, missing data handling, and AERMET processing tasks are rigorous, agencies typically don't re-process meteorological data every time a new year of data is collected or a new version of AERMET is released. For example, the AQMD re-processes meteorological data for use in AERMOD approximately every five years even though AERMET is often updated more frequently. Similarly, the Port also periodically updates its meteorological data sets and is currently in the planning stage for a new update.

The 2012-2016 meteorological data set used in the Draft RSEIR coincides with two project analysis years (2012 and 2014) within the first period of non-compliance, which occurs between the 2008 CEQA baseline year and the additional period of non-compliance (2019-2023). As such, the 2012-2016 period of the meteorological data set is well suited for use in the Draft RSEIR, and there is no need to update the meteorological data for this document.

The Draft RSEIR used the most recent available AERMOD-ready meteorological data set from the WCS at the time the dispersion modeling analysis was performed. AERMET Model Change Bulletins #8 through #14 (https://www.epa.gov/scram/meteorological-processors-and-accessory-programs) document the updates to AERMET since the 2012-2016 WCS data set was processed by the Port. The AERMET updates included various enhancements, bug fixes, and minor corrections but did not include substantial changes to the main meteorological data processing algorithms. As a result, the Port expects that the 2012-2016 WCS meteorological data set and resulting health risk results would not change substantially if the same meteorological data were re-processed with the most recent version of AERMET. Re-running the dispersion modeling and revising the health risk analysis is not a reasonable request by the commenter because the Port would not be able to complete the RSEIR within the 18-month schedule required by the Writ.

Response to Comment SCAQMD-11:

The comment claims that the technical file provided by the Port for the Draft RSEIR's health risk assessment (HRA) indicates that the third trimester exposure window was excluded from the cancer risk assessment, which is incorrect.

The HRA did include the third trimester in the exposure assessment for residential cancer risk. The technical file provided by the Port to the SCAQMD, as well as the HARP output filenames, used abbreviated labels (i.e., "yr1-2") for the sub-period representing the third trimester to age two. As seen in the HARP output files ("*_rs_yr1-2_Output.txt"), the HARP risk assessment tool appropriately modeled residential exposure starting in the third trimester (Start Age = -0.25).

Regarding the commenter's issues with the 2019 SEIR, LAHD was not required to re-evaluate or consider additional or alternative methods for the impacts addressed by mitigation measures and lease measures from the 2019 SEIR or 2008 EIS/EIR, or challenges to the data, analyses, and conclusions in the 2019 SEIR that were brought or could have been brought in the prior litigation (please see Consolidated Responses 1 and 2).

Please also see Response to Comments CARB-4 and CARB-5 regarding the health risk assessment.

Response to Comment SCAQMD-12:

The comment points out that the Draft RSEIR's HRA predicted that the maximum residential cancer risk increment would be less than significant, whereas the 2008 Draft EIR/EIS and the 2019 Recirculated Draft Supplemental EIR predicted that the maximum residential cancer risk increment would be significant. The SCAQMD requests a detailed justification for these revised findings.

Regarding the commenter's issues with the 2019 SEIR, LAHD was not required to re-evaluate or consider additional or alternative methods for the impacts addressed by mitigation measures and lease measures from the 2019 SEIR or 2008 EIS/EIR, or challenges to the data, analyses, and conclusions in the 2019 SEIR that were brought or could have been brought in the prior litigation (please see Consolidated Responses 1 and 2).

Please also see Response to comments CARB-4 and CARB-5 regarding the health risk assessment.

Response to Comment SCAQMD-13:

The comment suggests that the Revised Project is inconsistent with the AQMP and that the RSEIR needs an in-depth analysis of how, given its significant unavoidable air quality impacts, the Revised Project is consistent with each measure or projection in the 2022 AQMP.

To the extent the commenter is stating that the AQMP requires LAHD to evaluate additional mitigation measures for reducing emissions, LAHD was not required to re-evaluate or consider additional or alternative methods for the impacts addressed by mitigation measures and lease measures from the 2019 SEIR or 2008 EIS/EIR that were upheld by the Courts or were not challenged (please see Consolidated Response 1 and 2). This includes the infeasibility findings related to zero-emissions technologies referenced by the commenter. Regarding port-wide efforts to reduce emissions, please also see Response to Comment CARB-8. Also, the Board will enforce and implement the mitigation measures included in the RSEIR when it timely considers the adoption by an

amendment to Permit No. 999 with China Shipping and an updated Revised MMRP after certification of the RSEIR, as required by the Writ (please see Consolidated Response 5 and Response to Comment CARB-13).

Furthermore, the Draft RSEIR's analysis on page 3.1-71 includes a discussion of the various control measures related to ports (e.g., Emission Reductions at Commercial Marine Ports, Tier 4 Commercial Harbor Craft Standards, At-Berth Regulation Amendments, Accelerated Retirement of Older On-Road Heavy-Duty Vehicles, Pacific Rim Initiative for Maritime Emission Reductions, Emission Reductions from Incentive Programs, and Zero Emission Infrastructure for Mobile Sources) and concludes that the Revised Project would not conflict with or obstruct implementation of the AQMP control measures which is all that CEQA requires for this impact determination based on Appendix G of the State CEQA Guidelines.

The Draft RSEIR also includes a "Discussion of Health Effects Related to Pollutant Impacts" starting on page 3.1-73 which provides supplemental information related to the Revised Project's emissions of priority pollutants identified in Impact AQ-3 and ambient pollutant concentrations identified in Impact AQ-4. For CO, the analysis concludes that "According to the 2022 AQMP, the total CO emissions within the SCAB in the AQMP's base year of 2018 were 1,658 tons/day (SCAQMD 2022, Table 3-2). By comparison, the highest CO emissions increment associated with Revised Project operations was 1.0 ton/day, on a peak day in 2014, which is 0.06 percent of the total SCAB emissions". For NOx, "According to the 2022 AQMP, the total NOx emissions within the SCAB in the AQMP's base year of 2018 were 351 tons/day. By comparison, the highest NOx emissions increment associated with Revised Project operations was 2.6 tons/day, on a peak day in 2014, which is 0.7 percent of the total SCAB emissions." For NOx and VOC, which are ozone precursors, the analysis states "According to the 2022 AQMP, the total VOC emissions within the SCAB in the AQMP's base year of 2018 were 406 tons/day (SCAQMD 2022). By comparison, the highest VOC emissions increment associated with Revised Project operation was 0.16 ton/day, on a peak day in 2014, which comprises 0.04 percent of the total SCAB emissions. As discussed above for NO_2, the Revised Project's greatest NOx emissions increment was 0.7 percent of the total SCAB emissions." Based on the data cited here, the Revised Project is not expected to generate significant air pollutant emissions associated with freight transport that would interfere or conflict with the 2022 AQMP as suggested by the commenter.

Response to Comment SCAQMD-14:

The comment states that the RSEIR's consistency analysis should be expanded to evaluate not only consistency with the 2022 AQMP but also four different SCAB attainment plans for $PM_{2.5}$ and PM_{10} and five different Coachella Valley plans and documents that are not applicable to the SCAB.

To the extent the commenter is stating that the AQMP requires LAHD to evaluate additional mitigation measures for reducing emissions, LAHD was not required to re-evaluate or consider additional or alternative methods for the impacts addressed by mitigation measures and lease measures from the 2019 SEIR or 2008 EIS/EIR that were upheld by the Courts or were not challenged (please see Consolidated Response 1 and 2). This includes the infeasibility findings related to zero-emissions technologies referenced by the commenter. Regarding port-wide efforts to reduce emissions, please also see Response to Comment CARB-8. Also, the Board will enforce and implement the mitigation measures included in the RSEIR when it timely considers the adoption by an amendment to Permit No. 999 with China Shipping and an updated Revised MMRP after

certification of the RSEIR, as required by the Writ. Please see Consolidated Response 5 and Response to Comment CARB-13 and SCAQMD-13.

Based on SCAQMD's own comparison of proposed control measures in the $PM_{2.5}$ Plan with control measures in the 2022 AQMP (see https://www.aqmd.gov/docs/default-source/clean-air-plans/pm2.5-plans/final-pm2.5-plan/appendix-viii---ceqa.pdf), there is no difference. Accordingly, performing a consistency analysis of this plan as suggested by the commenter would be redundant to the analysis already contained in the RSEIR. The second document referenced in the comment is an attainment redesignation request and maintenance plan by SCAQMD to the U.S. EPA. under the Clean Air Act, which is not considered an appropriate or applicable air quality plan for a project-level consistency analysis under CEQA. The remaining two documents referenced are also not considered relevant or applicable to a project-level consistency analysis and the commenter gives no indication of how an older 2006 $PM_{2.5}$ standard with an attainment deadline that has already passed (December 31, 2019) and an older PM_{10} redesignation request to the U.S EPA (due back in July 2021) could even be used to determine consistency with the most recent 2022 AQMP. The Coachella Valley is part of the Salton Sea Air Basin (SSAB), which is not part of the SCAB, and the five plans referenced in the comment letter are not applicable to the Revised Project because they are intended for a different air basin. Nevertheless, the Coachella Valley is covered in the 2022 AQMP and the same control measures that are applicable to the Revised Project for the SCAB are already evaluated for consistency in the RSEIR.

LAHD is not aware of any guidance or previous requests from any air quality management agency indicating that consistency analyses must attain the level of detail and specificity suggested by the list of plans and documents in the comment. Accordingly, the LAHD has determined that no revision of the RSEIR is necessary.

Response to Comment SCAQMD-15:

The comment summarizes the Wilmington, Carson, West Long Beach Community Emissions Reduction Plan (WCWLB CERP).

The comment is general and does not identify any specific deficiencies of the Draft RSEIR, and, therefore, no further response is required (PRC, § 21091(d); CEQA Guidelines § 15204(a)). The comment will be part of the record for Final RSEIR and made available to the decision-makers for their consideration prior to taking any action on the Revised Project.

Response to Comment SCAQMD-16:

The comment states that the Revised Project is not consistent with the goals of the WCWLB CERP.

To the extent the commenter is stating that the CERP requires LAHD to evaluate additional mitigation measures for reducing emissions, LAHD was not required to re-evaluate or consider additional or alternative methods for the impacts addressed by mitigation measures and lease measures from the 2019 SEIR or 2008 EIS/EIR that were upheld by the Courts or were not challenged (please see Consolidated Response 1 and 2).

Please see Response to Comment SCAQMD-14 and Response to Comment CARB-20.

Response to Comment SCAQMD-17:

The comment states that the Revised Project should include binding requirements and clear deadlines for the Revised Project's transition to zero-emissions including ships at-berth, cargo-handling equipment, and trucks to be consistent with the goals of the CERP.

To the extent the commenter is stating that the CERP requires LAHD to evaluate additional mitigation measures for reducing emissions, LAHD was not required to re-evaluate or consider additional or alternative methods for the impacts addressed by mitigation measures and lease measures from the 2019 SEIR or 2008 EIS/EIR that were upheld by the Courts or were not challenged (please see Consolidated Response 1 and 2). This includes the infeasibility findings related to zero-emissions technologies referenced by the commenter.

The commenter's four recommendations for revisions to MM AQ-17, which was upheld by the Court and is not subject to re-evaluation, are further addressed as follows:

- *Require that all yard tractors be electric within five years of a feasibility determination, with periodic reassessments if 100% deployment is initially deemed infeasible.* This recommendation is partially duplicative of 2008 EIS/EIR MM AQ-17, as it applies to a 1-year electric yard tractor pilot project requiring 50% of the yard tractors to be electric within five years of the feasibility determination, and is also covered by LM AQ-1 Cleanest Available Cargo Handling Equipment and LM AQ-3 Demonstration of Zero-Emissions Equipment, which have already been imposed by the Sixth Amendment to Permit No. 999.
- *Require periodic assessments on the feasibility of higher-tonnage electric forklifts (e.g., 18-ton forklifts), and a timeline for full adoption once commercially available.* This recommendation is covered by LM AQ-1 Cleanest Available Cargo Handling Equipment and LM AQ-3 Demonstration of Zero-Emissions Equipment.
- *Require periodic assessments and phased adoption of electric top picks as the technology becomes feasible.* This recommendation is covered by LM AQ-1 Cleanest Available Cargo Handling Equipment and LM AQ-3 Demonstration of Zero-Emissions Equipment.
- *Require the replacement of all rubber-tired gantry cranes (RTGs) at the CS Terminal with electric versions as soon as technically and economically feasible.* This recommendation is covered by LM AQ-1 Cleanest Available Cargo Handling Equipment and LM AQ-3 Demonstration of Zero-Emissions Equipment.

Response to Comment SCAQMD-18:

The comment states that the Revised Project must commit to 100% shore power usage or equivalent emissions capture systems with penalties for non-compliance.

Please see Consolidated Response 3 and Response to Comment CARB-16.

Response to Comment SCAQMD-19:

The comment suggests that the RSEIR's HRA should be revised to "provide a more robust cumulative impact analysis (e.g., MATES data with local air monitoring data)…" and to account for the "application of the recommended revisions to MM AQ-17…"

Commenter appears to suggest that LAHD should conduct additional analyses related to the cumulative impacts and the HRA and evaluate additional mitigation measures for reducing emissions. LAHD was not required to re-evaluate or consider additional or alternative methods for the impacts addressed by mitigation measures and lease measures from the 2019 SEIR or 2008 EIS/EIR (such as MM AQ-17 for CHE) that were upheld by the Courts or were not challenged (please see Consolidated Response 1 and 2 and

Response to Comment SCAQMD-17). This includes commenter's challenges to the scope and methodology of the RSEIR's cumulative impacts analysis, which follows the same approach as in the 2019 SEIR. Moreover, CEQA Guidelines provides that the discussion of cumulative impacts must be guided by standards of practicality and reasonableness, and the lead agency has the discretion to define the geographic scope of the area affected by the cumulative impact based on its expertise. (CEQA Guidelines Section 15130(b); *League to Save Lake Tahoe Mountain etc. v. County of Placer* (2022) 75 Cal. App.5th 63; see also *City of Long Beach v Los Angeles Unified School District* (2009) 176 Cal.App.4th 889.) There is no requirement that cumulative impacts be quantified, or that the data be presented in a particular format. (*Citizens for Open Government v. City of Lodi* (2012) 205 Cal.App.4th 296, 320 n. 10.) Accordingly, LAHD properly exercised its discretion in selecting the methodology for analyzing cumulative impacts in RSEIR, and any revision to the scope and methodology of the HRA and cumulative impacts analysis is beyond the scope of this RSEIR.

Nevertheless, for informational purposes, LAHD notes that the HRA was conducted in accordance with OEHHA guidance (see Draft RSEIR page 3.1-27). While the emissions and dispersion analyses incorporate local air quality monitoring data, the HRA is based on exposure to the project-specific emissions, only using local air data in AERMOD to determine the dispersion of those emissions. Accordingly, the comment's suggestion that the HRA rely on local air quality monitoring is already incorporated into the HRA methodology used in the RSEIR.

For this RSEIR, resource areas were analyzed using a projection or a combined list and projection approach as described below. Cumulative analysis of air quality impacts uses projections from the South Coast Air Basin 2022 Air Quality Management Plan and the SCAQMD Multiple Air Toxics Exposure Study (MATES-V). Accordingly, the RSEIR's cumulative impact analysis does incorporate the MATES studies (see p. 4-14 of the Draft RSEIR). The analysis acknowledged that MATES-V identified elevated cancer risks in the port area; accordingly, the MATES data is not solely a "regional baseline" as characterized by the comment but rather provides a baseline focused on the port area, i.e., the AB617 CERP communities of Wilmington and West Long Beach. The RSEIR concludes, on the basis of the MATES-V data, that there is a significant cumulative health impact in the port area and analyzes the Revised Project's contribution to that impact. Using SCAQMD guidance (see page 4-11 of the Draft RSEIR), the analysis concluded that because the Revised Project's health risks would be below the project-specific thresholds, it would not make a cumulatively considerable contribution to that significant cumulative impact.

Response to Comment SCAQMD-20:

The comment summarizes CEQA provisions and states that the Port must include a binding instrument that makes the mitigation measures enforceable.

This comment is a summary of CEQA provisions and case law. The comment is general and does not identify any specific deficiencies of the Draft RSEIR, and, therefore, no further response is required (PRC, § 21091(d); CEQA Guidelines § 15204(a)). The comment will be part of the record for Final RSEIR and made available to the decision-makers for their consideration prior to taking any action on the Revised Project.

Regarding the enforceability of mitigation and lease measures, please see Consolidated Response 5 and Response to Comment CARB-16.

Response to Comment SCAQMD-21:

The comment states that the Port should adopt all feasible mitigation and reassess any measures that were determined to be technologically infeasible "more than a half a decade ago."

LAHD was not required to re-evaluate or consider additional or alternative methods for the impacts addressed by mitigation measures and lease measures from the 2019 SEIR or 2008 EIS/EIR, or challenges to the data, analyses, and conclusions in the 2019 SEIR that were brought or could have been brought in the prior litigation (please see Consolidated Responses 1, 2, and 3).

Response to Comment SCAQMD-22:

The comment suggests that MM AQ-9 is vague, inaccurate, and needs to be strengthened by adding an enforcement mechanism.

Per the comment's suggestion, MM AQ-9 has been modified to exclude the exception when an AMP-capable berth is not available, to omit those undefined terms, clarifying that the measure applies to "all vessels owned, chartered or operated by China Shipping" and replacing "hoteling" with terms with standard definitions under CARB's At-Berth Regulations, among other suggested changes. Please see Consolidated Response 3.

Regarding enforcement of MM AQ-9, please see Responses to Comments CARB-15 and CARB-16.

Response to Comment SCAQMD-23:

The comment states that the Port should direct preference for direct onsite mitigation for GHGs and require offsets only after a conclusion that additional significant GHG emissions cannot be mitigated through onsite measures.

Please see Consolidated Response 6 and Response to Comment CARB-7.

The comment requests LAHD should evaluate options to obtain onsite GHG mitigation through mitigation of drayage truck emissions, such as incentive measures to advance the Port's own CAAP goals to increase ZE drayage trucks.

LAHD was not required to re-evaluate or consider additional or alternative methods for the impacts addressed by mitigation measures and lease measures from the 2019 SEIR or 2008 EIS/EIR that were upheld by the Courts or were not challenged (please see Consolidated Response 1 and 2). This includes the zero-emission technologies suggested by the commenter. Also, as mentioned in Response to Comment CARB-7, Revised Project lease measures LM AQ-1 and LM AQ-3, which have already been imposed by the Sixth Amendment to Permit No. 999, will ensure that the CS Terminal does incorporate zero-emission cargo-handling equipment.

The Clean Truck Program established in the San Pedro Bay Port's CAAP is a port-wide program that includes a Clean Truck Rate to incentivize the transition to a zero-emissions truck fleet by 2035. This program achieves the same purpose as suggested by the commenter and can only be implemented on a port-wide basis and not by a single terminal.

The comment suggests LM AQ-2 Priority Access for Drayage should be expanded to include priority scheduling and reserved time slots for ZE trucks. LM AQ-2 was not challenged in the prior litigation and has already been imposed by the Sixth Amendment to Permit No. 999, making it contractually enforceable against China Shipping. Thus, re-evaluation is outside of the scope of this RSEIR (please see Consolidated Responses 1 and 2).

The comment suggests that the Port should evaluate options to mitigate GHG emissions through further cargo handling equipment mitigation, such as a phase-in schedule to achieve ZE equipment at the Terminal by 2030 and modifying MM-AQ-15 and MM-AQ-17, claiming only a small portion of this equipment will ever be ZE under the current mitigation.

MM AQ-15 and MM AQ-17 were upheld by the Court and have already been imposed by the Sixth Amendment to Permit No. 999, making them contractually enforceable against China Shipping. Thus, re-evaluation of these measures is outside the scope of this RSEIR (please see Consolidated Responses 1 and 2). Please also see Response to Comment SCAQMD-17 regarding the application of the 2008 EIS/EIR MM AQ-17 (as it applies to a 1-year electric yard tractor pilot project requiring 50% of the yard tractors to be electric within five years of the feasibility determination) and LM AQ-1 and LM AQ-3, which all serve the same purpose of meeting the CAAP goal of ZE equipment by 2030.

The commenter claims the Revised Project is not consistent with the CAAP ZE goal because the analysis projects cargo handling equipment alone to exceed the GHG significance threshold (10,000 mty) in 2036.

Based on the data contained in Table 3.2-2 on page 3.2-26 of the Draft RSEIR, the contribution of GHG emissions from CHE is estimated to be 13,273 metric tons in 2036 prior to subtracting 2008 baseline emissions reported as 42,238 metric tons. As explained on page 3.2-21, some mitigation measures such as 2008 EIS/EIR MM AQ-17 (electric yard tractor pilot project) are not quantified in the analysis, meaning the results are conservative and account for GHG emission reductions from MM AQ-15 and MM AQ-17, both of which were upheld by the Court and have already been imposed by the Sixth Amendment to Permit No. 999, making them contractually enforceable against China Shipping. Nevertheless, the purpose of MM GHG-2 is to offset residual GHG emissions on an annual basis and the measure includes an adjustment or re-evaluation if new technology becomes available, which would certainly apply to ZE equipment.

The comment states that CHE mitigation measures do not continue any further phase-in of cleaner equipment beyond 2025, although the Revised Project continues until 2045. This comment appears to be based on typographical errors in Section 3.1.5 of the Draft RSEIR. The dates for the implementation schedule for MM AQ-15 and MM AQ-17 tiered off the date of the lease amendment and are correct in Permit No. 999.

Please see Responses to Comment NRDC-10 and NRDC-11, which explains that changes have been made to the Final RSEIR to to address typographical errors in the implementation dates for MM AQ-15 and MM AQ-17 in Section 3.1.5 of the Draft RSEIR.

Response to Comment SCAQMD-24:

The comment summarizes the previous comments and states that CEQA requires recirculation of the RSEIR.

This is a general comment that serves to summarize the more specific comments that are responded to in detail above. The comment is general and does not identify any specific deficiencies of the Draft RSEIR, and, therefore, no further response is required (PRC, § 21091(d); CEQA Guidelines § 15204(a)). The comment will be part of the record for Final RSEIR and made available to the decision-makers for their consideration prior to taking any action on the Revised Project.

Regarding the request for recirculation, please see Consolidated Response 7.

2.4 Individuals

Public Hearing (PH)

Comment Letter

See Section 2.6.

Responses

Response to Comment PH-1:

The comment requests details regarding the exceptions to 100% compliance with MM AQ-9 and definitions of ship-side and shore-side equipment failure and expressed doubt that the Writ requires compliance with the California Code of Regulations (CCR).

Thank you for your comment on the Draft RSEIR. MM AQ-9 has been revised to define terms and clarify details regarding compliance, exceptions, and procedures for MM AQ-9. Please see Consolidated Response 3.

The comment regarding compliance with CCR is unclear and does not appear to identify any specific deficiencies of the Draft RSEIR, and, therefore, no further response is required (PRC, § 21091(d); CEQA Guidelines § 15204(a)). The comment will be part of the record for Final RSEIR and made available to the decision-makers for their consideration prior to taking any action on the Revised Project.

Response to Comment PH-2:

The comment requests that the RSEIR explain in detail the criteria by which the feasibility determination in MM AQ-17 will be made.

LAHD was not required to re-evaluate or consider additional or alternative methods for the impacts addressed by mitigation measures and lease measures from the 2019 SEIR or 2008 EIS/EIR, or challenges to the data, analyses, and conclusions in the 2019 SEIR that were brought or could have been brought in the prior litigation. MM AQ-17 consists of two parts, (1) the 2008 pilot program requirement and (2) the 2019 SEIR MM AQ-17, both of which were addressed in the prior litigation and cannot be raised again here. Please see Consolidated Responses 1 and 2.

For information purposes, LAHD notes that the demonstration project is required to test the equipment for a period of at least one year and document any feasibility concerns on operation, cost, and availability for permanent use at the terminal.

Response to Comment PH-3:

The comment states that the commenter had not, at the time of the public hearing, reviewed MM GHG-1 (sic) in detail and would submit comments later.

The comment does not identify any specific deficiencies of the Draft RSEIR, and, therefore, no further response is required (PRC, § 21091(d); CEQA Guidelines § 15204(a)). The comment will be part of the record for Final RSEIR and made available to the decision-makers for their consideration prior to taking any action on the Revised Project.

2.5 References

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2.6 Comment Letters

Letters are presented in the order in which they were responded to in Sections 2.3 and 2.4.

August 11, 2025

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Lisa Ochsner
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Sent via email

Dear Lisa Wunder and Lisa Ochsner:

Thank you for providing the California Air Resources Board (CARB) with the opportunity to comment on the Berth 97-109 (China Shipping) Container Terminal Project (Revised Project) Revised Supplemental Environmental Impact Report (RSEIR), State Clearinghouse No. 2003061153. The China Shipping Project is within the jurisdiction of the City of Los Angeles Harbor Department (LAHD), which is the lead agency for California Environmental Quality Act (CEQA) purposes. The California Attorney General also joins CARB in its comments on the RSEIR for the continued operation of the China Shipping Container Terminal.

CARB submitted a comment letter, which is attached to this letter, on the Notice of Preparation (NOP) for the RSEIR released in September 2024. CARB's letter, dated September 20, 2024, highlighted the need to fully evaluate the Revised Project's air quality impacts in the RSEIR. Furthermore, in the letter CARB recommended including a mitigation measure that would ensure the project uses the cleanest switcher and line-haul locomotives available. It also urged the LAHD and China Shipping to implement all existing and emerging zero-emission technologies to minimize exposure to diesel particulate matter (diesel PM) and nitrogen oxides (NOx) emissions for all neighboring communities, and to minimize the greenhouse gases (GHG) that contribute to climate change. Unfortunately, LAHD has not included CARB's recommendations in the RSEIR. CARB incorporates its comments on the NOP by reference here as well.

The continued operation of the China Shipping Container Terminal has, and will, result in increased heavy-duty truck trips, cargo-handling equipment (CHE) use, ocean-going vessel (OGV) calls, and rail activity at the Port; these sources emit toxic diesel PM, and contribute to

CARB-1

regional air pollution and global climate change.[1] Residences are located west of the Revised Project, with the closest residences situated approximately 630 feet from the Revised Project's western boundary. In addition to residences, Taper Avenue Elementary School, Park Western Place Elementary School and Barton Hill Elementary School are located within a mile of the Revised Project. These residences and schools are located within the Wilmington, Carson, West Long Beach Community (WCLBC) which has been designated as a disadvantaged community under Assembly Bill (AB) 617 (C. Garcia, Chapter 136, Statutes of 2017).[2] Therefore, CARB is particularly concerned about localized air pollutant exposure, as well as the Revised Project's regional air quality impacts. To protect the health of vulnerable groups, such as school children as well as the community at large, LAHD and China Shipping have an obligation to operate the China Shipping Container Terminal using all feasible zero-emission technologies described in this letter.

CARB-1

Background

The Revised Project consists of the continued operation of Berths 97-109 in the Port of Los Angeles (Port). China Shipping operates the China Shipping Container Terminal under a lease agreement (also referred to as Permit No. 999) between China Shipping and LAHD. The Revised Project, which has already been constructed and is operational, includes lengthened wharfs at Berths 100 and 102, placement and use of 10 new shoreside A-frame cranes, continued use of 142 acres of terminal backlands, construction and use of various new onsite facilities, and improvements to roadways.[3] Due to these improvements, the Revised Project has created capacity for a substantial increase in throughput at the China Shipping Terminal resulting in increases in vessel calls, heavy-duty truck trips, and train trips. Due to this increased activity, an increase in air pollution was reasonably foreseeable.

CARB-2

Due to concerns of potential environmental impacts associated with the construction and operation of the Project, the LAHD and the U.S. Army Corps of Engineers released a joint environmental impact report/environmental impact statement for the Project in September 2008 (2008 EIR/EIS).[3] The 2008 EIS/EIR was prepared in response to a court order and the 2004 Amended Stipulated Judgement (ASJ) between China Shipping and the

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[1] With regard to GHG emissions from this project, CARB has been clear that local governments and project proponents have a responsibility to properly mitigate these impacts. CARB's guidance, set out in detail in the Scoping Plan issued in 2022, explains that in CARB's expert view, local mitigation is critical to achieving climate goals and reducing GHG below levels of significance. CARB's 2022 Scoping Plan for Achieving Carbon Neutrality, published November 16, 2022, is available at *https://ww2.arb.ca.gov/sites/default/files/2022-12/2022-sp_1.pdf*

[2] Assembly Bill 617, Garcia, C., Chapter 136, Statutes of 2017, modified the California Health and Safety Code, amending § 40920.6, § 42400, and § 42402, and adding § 39607.1, § 40920.8, § 42411, § 42705.5, and § 44391.2.

[3] LAHD, 2008. Berth 97-109 (China Shipping) Container Terminal Project Recirculated Draft Environmental Impact Report/Environmental Impact Statement. Page 2-1. Accessible at *https://kentico.portoflosangeles.org/getmedia/b2e0115e-492a-4c79-b409-35348abd2608/2_Project_Description*

Port of Los Angeles. The 2008 EIS/EIR was certified in 2008; it proposed the adoption of 52 mitigation measures to reduce the Project's environmental impacts.

In 2017, the LAHD released the China Shipping Draft Supplemental EIR (2017 Draft SEIR),[4] which evaluated the potential environmental impacts of the proposed modification of 10 mitigation measures and one lease measure that had not yet been fully implemented. The comment letters on the Project submitted by the Attorney General of the State of California (AGO), South Coast Air Quality Management District (SCAQMD), and the National Resources Defense Council (NRDC) expressed concerns that the 2017 Draft SEIR removed key feasible mitigation measures previously adopted in the original 2008 EIR/EIS.[5,6]

In response to comments received on the 2017 Draft SEIR, the LAHD made changes to the Project's air quality analysis and minor edits to the proposed mitigation measures. These changes were reflected in the China Shipping Recirculated Draft Supplemental Environmental Impact Report (2018 RSEIR).[7] The AGO, SCAQMD, and NRDC submitted comment letters on the 2018 RSEIR reiterating their concern of potential health impacts of the proposed relaxation of the mitigation measures that were originally proposed in the 2008 EIR/EIS.[8] With no further changes to address the concerns of the AGO, SCAQMD, and NRDC, the LAHD certified the China Shipping Final Supplemental Environmental Impact Report (2019 FSEIR) in October 2019.[9,10,11] In late 2019 and early 2020, the AGO, SCAQMD, CARB and NRDC submitted appeal letters on the LAHD decision to approve the

CARB-2

[4] LAHD, 2017. Berths 97-109 [China Shipping] Container Terminal Project SEIR. Accessible at: *https://www.portoflosangeles.org/environment/environmental-documents*

[5] SCAQMD Comment Letter on the 2017 SEIR. September 29, 2017. Accessible at: *http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/dseir-chinashipping-092917.pdf?sfvrsn=6*

[6] CARB Comments on the 2017 SEIR. September 29, 2017. Accessible at: *https://ww2.arb.ca.gov/sites/default/files/classic//toxics/ttdceqalist/chinashipping.pdf*

[7] LAHD, 2018. Berths 97-109 [China Shipping] Container Terminal Project Revised SEIR. Accessible at: *https://www.portoflosangeles.org/environment/environmental-documents*

[8] SCAQMD Comment Letter on the 2017 SEIR. Accessible at: *http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/LAC190905-02.pdf?sfvrsn=8*

[9] LAHD, 2019. Berths 97-109 [China Shipping] Container Terminal Project Final Revised SEIR. Accessible at: *https://www.portoflosangeles.org/environment/environmental-documents*

[10] City of Los Angeles City Council, 2020. Official Action of the Los Angeles City Council. August 12, 2020. Accessible at: *https://clkrep.lacity.org/onlinedocs/2019/19-1263_CAF_08-12-2020.pdf*

[11] NRDC Comment Letter on the China Shipping FRSEIR. October 3, 2019. Accessible at: *https://kentico.portoflosangeles.org/getmedia/23a1b785-052d-44dc-8dd4-5db355252b80/2019-10-03-China-Shipping-FSEIR-comments*

2019 FSEIR.[12,13,14,15,16,17] On August 12, 2020, the City of Los Angeles City Council denied the appeal and approved the 2019 FEIR.

In the 16 years since the certification of the 2008 EIR/EIS, due to failures by LAHD to enforce the mitigation and refusal by China Shipping to comply with several key mitigation measures in the SEIR, several mitigation measures and one lease measure have not yet been fully implemented. Throughout that time, the expanded terminal has continued operating unchecked and releasing substantial additional air pollutant emissions, significantly impacting the communities surrounding the Port while not implementing the required mitigation. After several petitioners successfully litigated this issue in court (as well as challenges to the 2019 FEIR's air quality analysis), the court ordered the certification of the 2019 SEIR to be set aside. The court also directed LAHD and China Shipping to amend China Shipping's permit, to implement, and make enforceable, the mitigation measures and lease measures upheld by the court. Finally, the court ordered LAHD to prepare a Revised SEIR that would include re-evaluation and revision of certain issues from the 2019 FSEIR.

CARB-2

CARB-3

The following sections set forth CARB's comments on specific aspects of the RSEIR.

Concerns Remain Regarding the Revised Project's Health Risk Analysis

The Health Risk Assessment (HRA) prepared for the Revised Project and presented in Section 3.1 (Air Quality and Meteorology) of the RSEIR concluded that occupational bystanders near the Revised Project would be exposed to diesel PM emissions that would result in an incremental cancer risk of 12.5 chances per million above baseline levels. Since the cancer risk would exceed the South Coast Air Quality Management District's 10 chances per million significance threshold, the LAHD concluded in the RSEIR that the Revised Project would result in a significant health risk impact. However, the LAHD concluded in the RSEIR that the estimated cancer risks for residential and sensitive receptors, as well as chronic and acute non-cancer hazard indices, remained below applicable significance thresholds. The analysis evaluated health risk impacts as incremental increases above two baselines: the

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[12] NRDC Appeal Letter on the FRSEIR. October 18, 2019. Accessible at: *https://clkrep.lacity.org/onlinedocs/2019/19-1263_misc_10-18-2019.pdf*
[13] SCAQMD Appeal Letter on the FRSEIR. December 4, 2019. Accessible at: *https://clkrep.lacity.org/onlinedocs/2019/19-1263_rpt_pub_12-04-2019.pdf*
[14] SCAQMD Appeal Letter on FRSEIR. July 16, 2020. Accessible at: *https://clkrep.lacity.org/onlinedocs/2019/19-1263_PC_AB_07-16-2020.pdf*
[15] CARB Appeal Letter on the FRSEIR. February 3, 2020. Accessible at: *https://clkrep.lacity.org/onlinedocs/2019/19-1263_PC_AB_02-03-2020.pdf*
[16] Appeal Letter from the Office of the California Attorney General on the FRSEIR. April 7, 2020. Accessible at: *https://clkrep.lacity.org/onlinedocs/2019/19-1263_misc_04-07-20.pdf*
[17] Joe Buscaino, Councilmember, 15th District. Letter to Los Angeles City Council. July 17, 2020. Accessible at: *https://clkrep.lacity.org/onlinedocs/2019/19-1263_misc_7-17-20.pdf*

2008 Static Baseline, reflecting terminal operations and emissions under mitigation measures in place during that year; and the Floating Future Baseline, which assumes constant 2008 activity levels but incorporates reductions in emission factors over time due to regulatory and technological advancements.

The RSEIR does not clearly explain why the use of a 2008 baseline to evaluate the Revised Project's health risk impacts specifically is the most appropriate, or how analyzing health impacts using a 2008 baseline would compare to using an "existing conditions" baseline. In this case, the NOP for this RSEIR was released in 2024. By that point, the China Shipping terminal had already been constructed (completed in 2013) and had been operational for over a decade.

CARB-4

CARB staff are also deeply concerned that the HRA prepared for the RSEIR reports significantly lower incremental cancer risk levels than those presented in the 2018 RSEIR released for public review in 2018. The 2018 RSEIR's HRA reported incremental cancer risks of 25.4, 25.9, and 21.4 chances per million for residential, occupational, and sensitive receptors, respectively.[18] In contrast, the current HRA reports substantially lower incremental risks of 0.2, 12.5, and 4.3 chances per million for those same receptor groups.[19]

These discrepancies raise serious concerns regarding the methodology used in the current HRA, particularly whether emission factors were appropriately and consistently applied across the Static Baseline, Floating Baseline, and Revised Project scenarios. Furthermore, the mitigation measures proposed in the RSEIR are largely similar to those included in the 2018 DSEIR, particularly for CHE, heavy-duty trucks and OGVs, and do not appear to reflect changes significant enough to justify the large reduction in reported health risks.

CARB-5

To provide further transparency, the RSEIR should be revised to also quantify health impacts using a baseline consistent with existing conditions in 2024, reflecting actual operational emissions from the China Shipping terminal and broader port activities. The HRA should be recalculated using this updated baseline to provide additional information regarding the project's incremental health risk impacts. Additionally, the RSEIR should include a clear and transparent comparison with the HRA results from the 2018 RSEIR, along with an explanation of any substantial discrepancies in the reported cancer risk levels.

CARB-6

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[18] LAHD. Berths 97-109 (China Shipping) Container Terminal Project Recirculated Draft Supplemental Environmental Impact Report. September 2018. Appendix B. Page b3-24. Table B3-6. Accessible at *https://kentico.portoflosangeles.org/getmedia/c40f0a25-5248-45f0-a0a6-8c2954f88359/Appendix_B3_HRA_CS_DRSEIR*

[19] LAHD. Berths 97-109 (China Shipping) Container Terminal Project Draft Revised Supplemental Impact Report. June 2025. 3.1-69. Table 3.1-19. Accessible at *https://ceqanet.lci.ca.gov/2003061153/11/Attachment/Cz7Jzj*

The Proposed Greenhouse Gas Mitigation Fails to Consider Direct and Local Mitigation

The RSEIR states that continued operation of the Revised Project would generate greenhouse gas (GHG) emissions that would result in a less than significant impact after mitigation. According to Section 3.2 (Greenhouse Gas Emissions and Climate Change), the operation of the Revised Project would emit GHG emissions as high as approximately 215,000 metric tons of carbon dioxide equivalent (CO_{e2}) per year, exceeding the SCAQMD's 10,000 CO_{e2} metric ton significance threshold. To reduce the Revised Project's GHG impact, the LAHD proposes the implementation of mitigation measure MM GHG-1, requiring the use of LED lighting, and MM GHG-2, committing China Shipping to purchase GHG reduction offsets through 2045. After the implementation of these mitigation measures, the LAHD concluded in the RSEIR that the continued operation of the Revised Project would result in a less than significant impact after mitigation.

Mitigation Measure GHG-2 (GHG Reduction Offsets) as proposed in the RSEIR does not explain why it relies entirely on offsite carbon offsets without first considering all feasible onsite reductions. Onsite reductions are feasible in this case, and they present many advantages, including avoiding emissions in the first place, being readily enforceable and verifiable, and delivering substantial air quality co-benefits to nearby communities. Yet MM GHG-2 defaults to offsets as the primary mitigation tool, without considering other GHG reduction measures.

Additionally, MM GHG-2 only applies the offset requirement through the end of the permit term in 2045. This creates a potential mitigation gap if China Shipping continues operating at the terminal beyond 2045 without a new or extended lease that undergoes a new CEQA process that results in equivalent or stronger GHG mitigation – which is a large unknown. To avoid a lapse in climate protections, the RSEIR should simply (and explicitly) require that China Shipping continue to purchase and retire GHG offsets for all GHG emissions from any continued operations, indefinitely into the future, until the time there are no GHG emissions left to mitigate (for example, if the terminal transitions fully to ZE operations).

MM GHG-2 also allows China Shipping to fulfill its GHG obligations through yet-undefined and unspecified "different and additional GHG reduction methods if new technology and/or other feasible measures become available during the term of the Permit", subject only to quantification "by an independent, qualified third-party verifier" and subject to review and approval by LAHD staff. CEQA does not permit mitigation to be deferred to a future program unless specific performance standards are articulated and there is substantial evidence supporting the effectiveness of the program. In this case, there is no assurance that such a program will achieve quantifiable or timely reductions. As discussed throughout this letter, CARB strongly supports GHG reduction measures that involve direct reductions, particularly through increased adoption of ZE equipment at the Project site. However, this measure appears to allow much broader, yet-unspecified alternative GHG reduction approaches that may include claimed GHG reductions that are highly indirect, and that

CARB-7

would be subject only to third party quantification under undefined standards and approval by LAHD based on unspecified criteria.

MM GHG-2 further provides a mechanism by which China Shipping may adjust its offset obligations based on retrospective reporting of actual emissions. This self-reporting process lacks standardized methodologies, transparency, or adequate third-party verification qualifications, and therefore fails to provide substantial evidence to ensure emissions will be reduced in a reliable and enforceable manner. CEQA requires that mitigation be measurable and enforceable, which is not demonstrated here.

To address these deficiencies, we recommend that the RSEIR be revised to require all feasible onsite GHG reductions as a first step, including the electrification or zero-emission conversion of CHE, trucks, locomotives, and harbor craft. Offsets, if used, should be geographically constrained to the South Coast Air Basin or California to ensure local co-benefits. Any emissions accounting methodology should follow standardized, publicly available protocols and must be verified by an independent third party. The mitigation measure should clearly define the qualifications required for this third party, including demonstrated expertise in GHG accounting, familiarity with CARB-approved emission quantification methodologies, and certification or accreditation by a recognized environmental auditing body. Without such standards, the reliability and transparency of the emission reduction claims cannot be assured under CEQA.

CARB-7

Lastly, the LAHD should incorporate applicable strategies from Appendix D of CARB's 2022 Scoping Plan to the Revised Project, which outlines concrete and achievable GHG mitigation measures for Port and freight operations.[20] Potentially feasible measures consistent with this approach include direct GHG-reduction measures such as accelerated deployment of zero-emission equipment across terminal operations, increased use of shore power or zero-emission alternatives at berth, and support for infrastructure that enables electrification. These measures are critical to aligning the Revised Project with statewide climate targets and environmental justice goals.

CARB-8

[20] CARB. 2022 Scoping Plan for Achieving Carbon Neutrality. December 22, 2025. Accessible at *https://ww2.arb.ca.gov/sites/default/files/2023-04/2022-sp.pdf*

Mitigation Measure AQ-9 (Shore Power Requirements) Lacks Key Detail Essential to Enforceability, Including Clear Distinction of Applicable Vessels, Operational Details, Reporting Requirements, Verification, Enforcement Mechanisms, Penalties, and Other Necessary Elements

The LAHD included mitigation measure MM AQ-9 to mitigate the Revised Project's air quality impacts from OGVs while at berth. MM AQ-9, as updated per the May 24, 2024 First Amended Writ of Mandate, the May 2, 2025 Ruling on Petitioners' Motion to Enforce, and May 15, 2025 Order Enforcing the Writ, requires that all "China Shipping ships" and any ships retrofitted for, or capable of, using Alternative Maritime Power (AMP) calling at Berths 97-109 must use AMP during 100% of their hoteling time at the China Shipping terminal.[21] This mitigation measure is assumed to take effect in 2026, following the expected adoption of a lease amendment after certification of the RSEIR by December 1, 2025. Exceptions to this requirement are allowed only under specific conditions, including berth unavailability due to other AMP-capable ships, safety or emergency events, commissioning periods, or equipment failures on either the vessel or terminal side. CARB-9

While MM AQ-9 is a critical mitigation measure intended to reduce emissions from ocean-going vessels while at berth, it requires significant revisions to ensure all at berth-related emissions are mitigated to the full extent feasible, and to ensure the mitigation is comprehensive and enforceable.

MM AQ-9 mandates AMP usage for 100% of AMP-capable "China Shipping ships" calling at Berths 97–109, but it does not clearly define the term "China Shipping ships" or otherwise identify the full range of vessels that would be subject to the requirement. To ensure the measure is effective and inclusive to the full extent feasible, LAHD must clearly define "China Shipping ships". Specifically, LAHD should adopt the definition of "China Shipping ships" set forth in Exhibit B to the Superior Court's May 15, 2025 Order Enforcing the Writ:

> "China Shipping ships" shall be interpreted to include all vessels owned, chartered, or operated by China Shipping.

CARB-10

Similarly, the measure does not define "hoteling". To remedy this, LAHD should adopt the approach for defining "hoteling", which is set forth in Exhibit B to the Superior Court's May 15, 2025 Order Enforcing the Writ, which is attached to this letter.

LAHD should also clearly specify that MM AQ-9 applies to all applicable vessel types such as container ships, roll-on/roll-off vessels, and others consistent with CARB's definition of regulated vessels. Moreover, the mitigation measure should be expanded to apply to all CARB-11

[21] A "writ" is a formal, written order issued by a court or another legal authority. These orders are used to direct a person or entity to perform, or refrain from taking, a specific action or deed.

ships calling at Berths 97–109, not just those operated by China Shipping. Failing to include other vessel operators would leave a significant gap in emissions control and create unequal mitigation obligations at the terminal. CARB-11

In addition, the RSEIR may have inaccurately reported that China Shipping operates two berths. Based on CARB data, there are three berths at the China Shipping terminal. If the third berth is to be considered active and in use by China Shipping, it must be equipped with the infrastructure necessary to support full shore power capability, consistent with CARB regulatory requirements. CARB-12

While MM AQ-9 requires bi-annual "compliance forms" to be submitted to LAHD's Environmental Management Division, the mitigation measure lacks clear direction on what these forms must include, and detail regarding what the standards for evaluating compliance are (for example, what constitutes noncompliance). CARB notes that in past court-filed mitigation compliance reporting, LAHD has indicated the terminal is in compliance with the mitigation measures even when some aspects of the mitigation measures have not been satisfied. The mitigation measure should be updated to require reporting of individual vessel visits and compliance status, AMP usage data, exemption claims, and documentation retention for at least five years, with independent third-party verification. In addition, terminal operators must be assigned clear responsibility for maintaining AMP infrastructure, coordinating berth availability, and ensuring that shore power connections are available to all qualifying ships. Furthermore, the bi-annual compliance reporting documentation should be made available publicly by posting to the Port's public website. CARB-13

CARB's regulation also allows for the use of approved alternative emissions control technologies (e.g., bonnet capture systems) as an alternative to AMP. For visits that are subject to the AMP requirements but do not use AMP due to a valid exception, or for visits from ships that are not owned, operated or chartered by China Shipping and that are not equipped for AMP, MM AQ-9 should be modified to allow use of such technologies that have an executive order as a CARB approved emission control strategy for these ship visits. CARB-14

The list of exemptions included in MM AQ-9 should also be further clarified to ensure enforceability. The first exception (berth unavailability) is not explained; at a terminal with only two operating berths, both of which are equipped for AMP, it is not clear how a circumstance would arise under which an AMP-capable berth is unavailable due to use by another AMP-capable ship. The fourth exception should also be clarified to precisely define what qualifies as an equipment failure. LAHD should fully incorporate the provisions relating to equipment failure set forth in Exhibit D to the Superior Court's May 15, 2025 Order Enforcing the Writ. CARB-15

All exemptions must be fully documented and reported to LAHD and CARB within a specified timeframe to ensure accountability.

Finally, the mitigation measure must include enforcement mechanisms and penalties. These should include monetary fines and corrective actions. These provisions are essential to ensure MM AQ-9 is legally enforceable under CEQA. CARB-16

The Revised Project is not Consistent with the 2022 South Coast Air Quality Management Plan or with the Community Emission Reduction Plan for Wilmington/Carson/West Long Beach

CARB notes that the Revised Project is not consistent with the Final 2022 Air Quality Management Plan (AQMP).[22] Upon review of Section 3.1 (Air Quality and Meteorology) of the RSEIR, it is clear that the Revised Project, as proposed, undermines both the intent and the implementation framework of the AQMP. The LAHD claims compliance with the AQMP through its inclusion of the China Shipping Container Terminal operational activities in Port-wide emissions forecasts. However, this narrow framing fails to account for the Revised Project's air pollutant emissions increases, and disproportionate impacts on already overburdened communities near the Revised Project.

The Revised Project is expected to generate significant emissions of air pollutant emissions associated with freight transport. According to Table 3.1-8 of the RSEIR, the Revised Project's incremental increase of Volatile Organic Compounds (VOC), Carbon Monoxide (CO), and NOx would all exceed the SCAQMD's significance thresholds. Furthermore, the RSEIR shows the operation of the Revised Project's incremental increase in ambient concentrations of NOx, particulate matter with a diameter smaller than 10 µm (PM10), and particulate matter with a diameter smaller than 2.5 µm (PM2.5) would also exceed the SCAQMD's significance thresholds. These air pollutant emissions will impact the communities of the WCLBC that have long suffered from the cumulative health burdens from existing operations at the Port. The AQMP emphasizes the need to reduce emissions in such environmental justice communities, not simply manage their increase within a projected growth model. By expanding throughput and delaying full implementation of zero-emission technologies until 2035, the project directly contributes to worsening near-term air quality conditions in the region. CARB-17

In terms of mitigation, the Revised Project falls short of meaningful alignment with the AQMP's control strategy. Measures such as MM AQ-9 and MM AQ-10, aimed at reducing vessel emissions, rely largely on compliance with existing regulations and voluntary, rather than mandatory, improvements. The AQMP, however, calls for accelerated and ambitious measures in the port sector, including aggressive electrification of cargo-handling equipment and rapid reductions in ocean-going vessel emissions. The Revised Project CARB-18

[22] SCAQMD. 2022 Air Quality Management Plan. Adopted December 2, 2022. Accessible at *https://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2022-air-quality-management-plan/final-2022-aqmp/final-2022-aqmp.pdf?sfvrsn=edcebd61_16*

offers no such leadership, instead opting for incremental improvements that are insufficient given the magnitude of the air quality challenges in the South Coast Air Basin. CARB-18

Furthermore, CARB does not believe the Revised Project is consistent with the goals established in the 2017 San Pedro Bay Ports Clean Air Action Plan (CAAP).[23] Although the RSEIR asserts consistency with the CAAP, it falls short of meeting the plan's fundamental goals. The CAAP clearly establishes targets for achieving 100% zero-emission CHE by 2030 and zero-emission drayage trucks by 2035. While the RSEIR includes mitigation measures such as MM AQ-9 (shore power compliance), MM AQ-10 (vessel speed reduction), and MM AQ-17 (an electric CHE pilot project), it fails to include any binding mitigation or project design measures that require a full transition to zero-emission CHE and trucks for the Revised Project. As a result, the RSEIR is not aligned with the core emissions-reduction objectives of the CAAP. To achieve consistency with CAAP goals, CARB recommends that the LAHD and China Shipping incorporate enforceable measures requiring all CHE to be zero-emission by 2030 and all trucks serving the terminal to be zero-emission by 2035. CARB-19

Lastly, the LAHD's assertion that the Revised Project is consistent with the Community Emissions Reduction Plan (CERP) for Wilmington and nearby neighborhoods is questionable. The CERP prioritizes zero-emissions technology and strong enforcement of CARB rules. The Revised Project continues to rely on diesel equipment and does not establish clear mechanisms for early deployment of zero-emission technologies. Without enforceable actions tied to community-identified priorities, the LAHD's claims of consistency with the CERP appear largely problematic. CARB-20

The LAHD Must Evaluate More Meaningful Feasible Mitigation Measures to Reduce the Revised Project's Impact on Air Quality

Section 3.1 (Air Quality and Meteorology) of the RSEIR concluded that continued operation of the China Shipping Container Terminal would result in a significant and unavoidable impact on air quality after implementation of mitigation. The mitigation measures provided in the RSEIR consist of reinstating earlier measures from the 2008 EIS/EIR, as required by the court-ordered Writ. These mitigation measures consist of MM AQ-9, which requires 100% use of AMP by China Shipping vessels at these berths, and MM AQ-10, which requires all ships to comply with the Vessel Speed Reduction Program (VSRP) of 12 knots within 40 nautical miles. 2019 MM AQ-15 requires phased replacement of older liquid propane gas (LPG) yard tractors with units meeting Tier 4 final standards by 2023. 2008 MM AQ-17 establishes a pilot project for electric yard tractors, and 2019 MM AQ-17 outlines strict replacement schedules for forklifts, top picks, and rubber tired gantry cranes, requiring compliance with Tier 4 final or electric standards between 2019 and 2025. Support CARB-21

[23] San Pedro Bay Ports. Final Clean Air Action Plan Update. November 2017. Accessible at: *https://kentico.portoflosangeles.org/getmedia/9d371f7b-9812-4c75-bcfd-23e83a191435/CAAP_2017_Draft_Document-Final*

equipment must also transition, with sweepers using alternative fuel or the cleanest available technology, and shuttle buses becoming zero-emission by 2025. MM AQ-31 ensures compliance with California's At-Berth Regulations during vessel hoteling. 2019 LM AQ-1 requires tenants to coordinate with LAHD to ensure all new or replacement equipment reflects the cleanest operationally and economically feasible technology, while 2019 LM AQ-3 requires tenants to conduct a one-year demonstration of at least ten zero-emission cargo-handling units, with feasibility assessments in 2020 and 2025, aiming for 100% zero-emission equipment by 2030. CARB-21

To reduce the Revised Project's air quality and GHG impacts and make the China Shipping Container Terminal a model for sustainable freight development, CARB urges the LAHD and China Shipping to plan for the use of zero-emission trucks, and the cleanest available switchers, line-haul locomotives, and ocean-going vessels within the China Shipping terminal. CARB-22

The RSEIR should include a mitigation measure requiring the phased adoption of electric drayage trucks serving the China Shipping container terminal. Drayage trucks are a major source of diesel PM and NOx, contributing significantly to air quality impacts in nearby communities. According to Table 2.2 (Operation of the CS Container Terminal as Analyzed in the 2008 EIS/EIR and in this RSEIR) of the RSEIR, the operation of the Revised Project would result in up to 1,672,732 truck trip pear year.[24] The air quality analysis prepared for the Revised Project shows the operation of heavy-duty trucks constitutes a large percentage of the air pollutant emissions generated during the operation of the Revised Project. To reduce the Project's potential air quality impacts, CARB urges the LAHD and China Shipping to include either project design features or a mitigation measure that facilitate the transition to all zero-emission heavy-duty trucks, including installing on-site infrastructure to support those zero-emission trucks at the China Shipping container terminal. CARB-23

A list of commercially available zero-emission trucks is available through the Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project (HVIP), a program under California Climate Investments designed to promote the adoption of zero-emission vehicles.[25] According to HVIP vehicle specifications, battery-electric trucks offer a typical range of 125 to 330 miles, while hydrogen fuel cell trucks can travel 350 to 500 miles. Data from the 2013 CALSTART I-710 Project Key Performance Parameters for Drayage Trucks survey indicates that approximately 81% of drayage trucks serving California's seaports operate on

[24] LAHD. Berths 97-109 (China Shipping) Container Terminal Project Draft Revised Supplemental Impact Report. June 2025. 2-6. Table 2-2. Accessible at *https://ceqanet.lci.ca.gov/2003061153/11/Attachment/4518BP*

[25] Zero-Emission Truck and Bus Voucher Incentive Project. Accessible at: *https://californiahvip.org/*

routes under 60 miles.[26] Based on this travel distance, currently available zero-emission trucks would be well-suited to meet the operational needs of the Revised Project. CARB-23

The RSEIR should incorporate a mitigation measure requiring the use of the cleanest available switcher and line-haul locomotives, including zero-emission technologies as they become commercially viable. According to Table 2.2 of the RSEIR (Operation of the CS Container Terminal as Analyzed in the 2008 EIS/EIR and in this RSEIR), operation of the Revised Project would involve up to 605 diesel-powered line-haul locomotive trips per year, in addition to requiring on-site diesel-powered switcher locomotives operated by Pacific Harbor Line.[27]

With advancements in battery-electric and hydrogen fuel cell technologies, zero-emission locomotives have the potential to fully support the Revised Project's operational needs. CARB projects that zero-emission passenger, switcher, and industrial locomotives will be commercially available by 2030, and freight line-haul locomotives by 2035.[28] CARB continues to lead and fund demonstration projects aimed at accelerating the deployment of clean freight technologies to reduce pollution associated with goods movement throughout California. Notably, CARB's Zero- and Near Zero-Emission Freight Facilities Program has successfully demonstrated battery-electric locomotives, which could be further developed and applied to the Revised Project.[29] With proactive planning and continued technological progress, the Revised Project could be transitioned to zero-emission rail operations. To support this transition, CARB recommends that the LAHD and China Shipping consider electrifying key segments of rail corridors serving the Revised Project. CARB-24

Mitigation Measure 2019 LM AQ-3 requires China Shipping to conduct a one-year demonstration project using at least ten units of zero-emission cargo handling equipment. After the demonstration, the tenant must submit a feasibility report to LAHD and continue testing and reporting in 2020 and 2025 on the viability of zero-emission technologies with the overall goal of achieving 100% zero-emission cargo handling equipment by 2030. Given that the specified reporting years of 2020 and 2025 in mitigation measure 2019 LM AQ-3 CARB-25

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[26] CALSTART, Performance Parameters for Drayage Trucks Operating at the Ports of Los Angeles and Long Beach, 2013. Accessible at *https://calstart.org/wp-content/uploads/2018/10/I-710-Project_Key-Performance-Parameters-for-Drayage-Trucks.pdf https://calstart.org/wp-content/uploads/2018/10/I-710-Project_Key-Performance-Parameters-for-Drayage-Trucks.pdf*

[27] LAHD. Berths 97-109 (China Shipping) Container Terminal Project Draft Revised Supplemental Impact Report. June 2025. 2-6. Table 2-2. Accessible at *https://ceqanet.lci.ca.gov/2003061153/11/Attachment/4518BP*

[28] CARB. Public Hearing to consider the Proposed In-Use Locomotive Regulation Staff Report: Initial Statement of Reasons. Appendix F. Page 52, 57. Accessible at: *https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2022/locomotive22/appf.pdf*

[29] California Air Resources Board (CARB), 2020. CARB's Zero and Near Zero-emission Freight Facility Program. Accessible at *https://ww2.arb.ca.gov/news/carb-announces-more-200-million-new-funding-clean-freight-transportation#:~:text=The%20goal%20of%20CARB's%20Zero,commercialization%20of%20these%20technologies%20statewide*

have already passed, it is essential that updated feasibility assessments and progress reports be completed moving forward to ensure continued evaluation of zero-emission CHE. To remain aligned with the 2030 goal of achieving 100% zero-emission CHE, the tenant should be required to submit additional reports, at minimum on an annual basis, through the end of the decade. These ongoing updates are critical to track technological advancements, infrastructure readiness, and financial feasibility, and to maintain accountability in meeting the Port's zero-emission targets. The mitigation measure should also be revised to require, rather than merely set a goal for, achieving 100% zero-emission CHE by 2030. This change is necessary to ensure enforceable accountability and to align with the Port's long-term air quality and climate objectives. CARB-25

The LAHD should provide a more robust justification for its claim that it lacks the authority to require OGVs visiting the China Shipping Container Terminal to use the cleanest available technologies. In Section 3.1 (Air Quality and Meteorology) of the RSEIR, LAHD states that "[t]he Port does not have the authority to impose any specific emissions reduction technology on OGVs as they are internationally flagged vessels subject only to IMO regulations."[30] While LAHD may not have direct regulatory authority over OGVs, China Shipping does have the ability to set environmental standards for its own fleet. In light of this, CARB encourages LAHD and China Shipping to adopt a mitigation measure that requires all China Shipping vessels calling at the terminal to utilize the cleanest available technologies, thereby advancing the Port's emission reduction goals. CARB-26

All Mitigation Measures Must Be Made Enforceable Through Legally Binding Means

CEQA mitigation measures are not legally adequate unless they are enforceable through means that are legally binding. (Pub. Resources Code § 21081.6(b).) To ensure the mitigation measures in the RSEIR are fully enforceable, LAHD and China Shipping must incorporate them into the lease for the terminal.

Despite this legal obligation, the RSEIR remains vague about whether the mitigation measures will be incorporated into the lease through a lease amendment. For example, in section 2.2.2, the RSEIR states: "If changes to the mitigation measures or entirely new mitigation measures are recommended as a result of the Draft RSEIR, the Board of Harbor Commissioners will consider amending Permit No. 999 for operations at Berths 97-109 accordingly." To be clear, the mitigation measures *are* being changed through the RSEIR, and the RSEIR *is* proposing entirely new mitigation measures. Therefore, the RSEIR must be revised to affirmatively state that the lease with China Shipping will be amended within 45 days from RSEIR certification to incorporate all mitigation measures set forth in the RSEIR. CARB-27

[30] LAHD. Berths 97-109 (China Shipping) Container Terminal Project Draft Revised Supplemental Impact Report. June 2025. 3.1-50. Accessible at *https://ceqanet.lci.ca.gov/2003061153/11/Attachment/Cz7Jzj*

Conclusion

CARB remains deeply concerned about the air quality impacts of the Revised Project, as presented in the RSEIR – particularly given the long history of failing to fully implement required mitigation at this terminal. The use of an outdated baseline to evaluate the Revised Project's health risks, the questionable health risk analysis results, and the inadequate proposed mitigation measures all fail to meet CEQA requirements and do not protect nearby disadvantaged communities already burdened by port-related pollution.

The RSEIR must be revised to reflect actual 2024 operating conditions, recalculate health risks using consistent methods, prioritize enforceable onsite emissions reductions, and accelerate deployment of zero-emission technologies. In particular, improving the mitigation measures as described above and including further onsite mitigation focusing on zero-emission equipment would help the project better align with the South Coast AQMP, CAAP, and WCLBC CERP. The Revised Project should also strive for consistency with CARB's 2022 Scoping Plan by incorporating as many direct onsite GHG reduction measures as feasible.

The continued operation of the Revised Project presents LAHD and China Shipping with a valuable opportunity to lead by example and demonstrate what is possible for the future of sustainable goods movement. By transforming the China Shipping Container Terminal into a model zero-emission freight facility, LAHD and China Shipping can show that it is possible to support economic growth while protecting public health and reducing environmental impacts on surrounding communities. As one of the largest and most visible freight projects in the region, the Revised Project can help set a new standard for clean port operations. To help realize this potential, CARB strongly encourages the incorporation of all feasible zero-emission technologies outlined in this letter.

CARB-28

CARB appreciates the opportunity to comment on the RSEIR for the Revised Project. Given the breadth and scope of projects subject to CEQA review throughout California that have air quality and GHG impacts, coupled with CARB's limited staff resources to substantively respond to all issues associated with a project, CARB must prioritize its substantive comments here based on staff time, resources, and its assessment of impacts. CARB's deliberate decision to substantively comment on some issues does not constitute an admission or concession that it substantively agrees with the lead agency's findings and conclusions on any issues on which CARB does not submit substantive comments.

CARB staff can provide assistance with zero-emission technologies and emission reduction strategies, as needed. Please include CARB on your list of selected State agencies that will receive the Final Revised Supplemental Environmental Impact Report (FRSEIR). If you have questions, please contact Stanley Armstrong, Air Pollution Specialist via email at *stanley.armstrong@arb.ca.gov*.

Sincerely,



Matthew O'Donnell, Chief, Risk Reduction Branch



Keari A. Platt, Deputy Attorney General, Department of Justice
For Rob Bonta, Attorney General, Department of Justice

cc: State Clearinghouse
state.clearinghouse@opr.ca.gov

Sam Wang, Program Supervisor- CEQA IGR, South Coast Air Quality Management District
swang1@aqmd.gov

Stanley Armstrong, Air Pollution Specialist, Risk Reduction Branch

September 20, 2024

Lisa Ochsner
Environmental Management Division
City of Los Angeles Harbor Department
425 South Palos Verdes Street
San Pedro, California 90731
lochsner@portla.org

Sent via email

Dear Lisa Ochsner:

Thank you for providing the California Air Resources Board (CARB) with the opportunity to comment on the Notice of Preparation (NOP) for the Berth 97-109 (China Shipping) Container Terminal Project (Project) Revised Supplemental Environmental Impact Report (Revised SEIR), State Clearinghouse No. 2003061153. The China Shipping Project is within the jurisdiction of the City of Los Angeles Harbor Department (LAHD), which is the lead agency for California Environmental Quality Act (CEQA) purposes.

Background

The Project consists of the continued operation of Berths 97-109 in the Port of Los Angeles. China Shipping operates the China Shipping Container Terminal under a lease agreement (also referred to as Permit No. 999) between China Shipping and LAHD. The Project, which has already been constructed and is operational, includes lengthened wharfs at Berths 100 and 102, placement and use of 10 new shoreside A-frame cranes, use of 142 acres of terminal backlands, construction and use of various new onsite facilities, and improvements to roadways.[1] Due to these improvements, the Project would result in a substantial increase in TEU throughput at the China Shipping Terminal resulting in increases in vessel calls, heavy-duty truck trips, and train trips. Due to this increased activity, an increase in air pollution was reasonably foreseeable.

Due to concerns of potential environmental impacts associated with the construction and operation of the Project, the LAHD and the U.S. Army Corps of Engineers released a joint environmental impact report/environmental impact statement for the Project in September 2008 (2008 EIR/EIS). The 2008 EIS/EIR was prepared in response to a court order and the 2004 Amended Stipulated Judgement (ASJ) between China Shipping and the

[1] LAHD, 2008. Berth 97-109 (China Shipping) Container Terminal Project Recirculated Draft Environmental Impact Report/Environmental Impact Statement. Page 2-1. Accessible at *https://kentico.portoflosangeles.org/getmedia/b2e0115e-492a-4c79-b409-35348abd2608/2_Project_Description*

Port of Los Angeles. The 2008 EIS/EIR was later certified in 2008 and proposed the adoption of 52 mitigation measures to reduce the Project's environmental impacts.

In 2017, the LAHD released the China Shipping Recirculated Draft Supplemental EIR (2017 RDEIR),[2] which evaluated the potential environmental impacts of the proposed modification of 10 mitigation measures and one lease measure that had not yet been fully implemented. The comment letters on the Project submitted by the AGO, South Coast Air Quality Management District (SCAQMD), and the National Resources Defense Council (NRDC) expressed concerns that the 2017 Draft SEIR removed key feasible mitigation measures previously adopted in the original 2008 EIR/EIS.[3,4]

In response to comments received on the 2017 RDEIR, the LAHD made changes to the Project's air quality analysis and minor edits to the proposed mitigation measures. These changes were reflected in the China Shipping Recirculated Draft Supplemental Environmental Impact Report (2018 RSEIR).[5] The AGO, SCAQMD, and NRDC submitted comment letters on the 2018 RSEIR reiterating their concern of potential health impacts of the proposed relaxation of the mitigation measures that were originally proposed in the 2008 EIR/EIS.[6] The LAHD later certified the China Shipping Final Supplemental Environmental Impact Report (2019 FSEIR) in October 2019.[7,8,9] In late 2019 and early 2020, the Office of the Attorney General of the State of California (AGO), SCAQMD, CARB and NRDC submitted appeal letters on the LAHD decision to approve the 2019

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[2] LAHD, 2017. Berths 97-109 [China Shipping] Container Terminal Project SEIR. Accessible at: *https://www.portoflosangeles.org/environment/environmental-documents*

[3] SCAQMD Comment Letter on the 2017 SEIR. September 29, 2017. Accessible at: *http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/dseir-chinashipping-092917.pdf?sfvrsn=6*

[4] CARB Comments on the 2017 SEIR. September 29, 2017. Accessible at: *https://ww2.arb.ca.gov/sites/default/files/classic//toxics/ttdceqalist/chinashipping.pdf*

[5] LAHD, 2018. Berths 97-109 [China Shipping] Container Terminal Project Revised SEIR. Accessible at: *https://www.portoflosangeles.org/environment/environmental-documents*

[6] SCAQMD Comment Letter on the 2017 SEIR. Accessible at: *http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/LAC190905-02.pdf?sfvrsn=8*

[7] LAHD, 2019. Berths 97-109 [China Shipping] Container Terminal Project Final Revised SEIR. Accessible at: *https://www.portoflosangeles.org/environment/environmental-documents*

[8] City of Los Angeles City Council, 2020. Official Action of the Los Angeles City Council. August 12, 2020. Accessible at: *https://clkrep.lacity.org/onlinedocs/2019/19-1263_CAF_08-12-2020.pdf*

[9] NRDC Comment Letter on the China Shipping FRSEIR. October 3, 2019. Accessible at: *https://kentico.portoflosangeles.org/getmedia/23a1b785-052d-44dc-8dd4-5db355252b80/2019-10-03-China-Shipping-FSEIR-comments*

FSEIR.[10,11,12,13,14,15] On August 12, 2020, the City of Los Angeles City Council denied the appeal and approved the 2019 FEIR.

In the 16 years since the certification of the 2008 EIR/EIS, due to failures by LAHD to enforce the mitigation and refusal by China Shipping to comply with several key mitigation measures in the SEIR, several mitigation measures and one lease measure have not yet been fully implemented. Throughout that time, the expanded terminal has operated and produced additional emissions, significantly impacting the communities surrounding the port while not implementing the required mitigation. After several petitioners successfully litigated this issue in court (as well as challenges to the 2019 FEIR's air quality analysis), the court ordered the certification of the 2019 SEIR to be set aside. The court also directed LAHD and China Shipping to amend China Shipping's permit, to implement and make enforceable the mitigation measures and lease measures upheld by the court. Finally, the court ordered LAHD to prepare a Revised SEIR that would include re-evaluation and revision of the following issues from the 2019 FSEIR, resulting in the immediate NOP.

The Project Increases Exposure to Air Pollution for Residences Located in Disadvantaged Communities

Since the certification of the 2008 EIR/EIS, the Project was constructed and allowed to operate without the full implementation of the mitigation measures provided in the 2008 EIR/EIS aimed at protecting public health. The continued operation of the Project has, and continues, to expose nearby communities to elevated levels of air pollution, including diesel particulate matter (diesel PM) and oxides of nitrogen (NOx) from the operation of marine vessels, heavy-duty trucks, onsite equipment, and locomotives. According to the 2018 RSEIR, the operation of the Project would expose nearby residences to 1,937 pounds per day of NOx and 151 pounds per day of particulate matter less than 10 micrometers

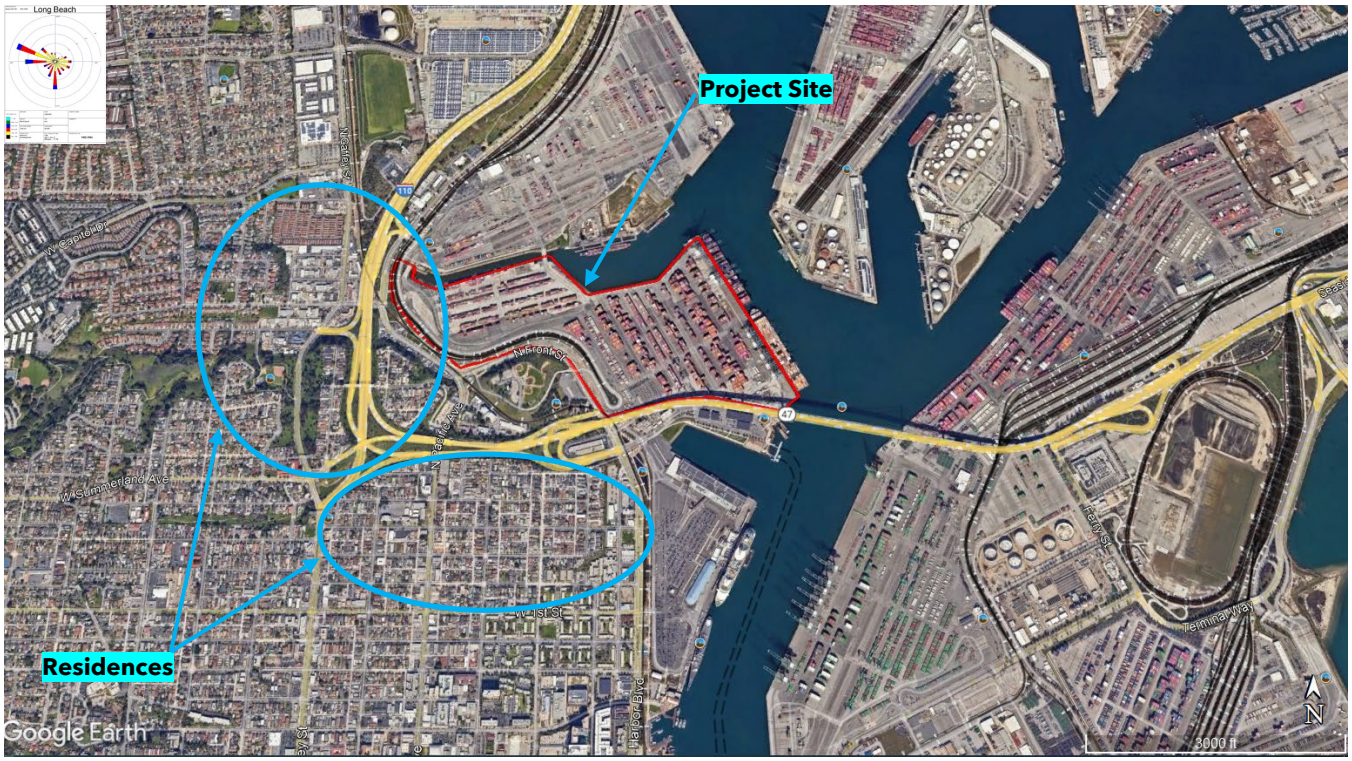
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[10] NRDC Appeal Letter on the FRSEIR. October 18, 2019. Accessible at: *https://clkrep.lacity.org/onlinedocs/2019/19-1263_misc_10-18-2019.pdf*
[11] SCAQMD Appeal Letter on the FRSEIR. December 4, 2019. Accessible at: *https://clkrep.lacity.org/onlinedocs/2019/19-1263_rpt_pub_12-04-2019.pdf*
[12] SCAQMD Appeal Letter on FRSEIR. July 16, 2020. Accessible at: *https://clkrep.lacity.org/onlinedocs/2019/19-1263_PC_AB_07-16-2020.pdf*
[13] CARB Appeal Letter on the FRSEIR. February 3, 2020. Accessible at: *https://clkrep.lacity.org/onlinedocs/2019/19-1263_PC_AB_02-03-2020.pdf*
[14] Appeal Letter from the Office of the California Attorney General on the FRSEIR. April 7, 2020. Accessible at: *https://clkrep.lacity.org/onlinedocs/2019/19-1263_misc_04-07-20.pdf*
[15] Joe Buscaino, Councilmember, 15th District. Letter to Los Angeles City Council. July 17, 2020. Accessible at: *https://clkrep.lacity.org/onlinedocs/2019/19-1263_misc_7-17-20.pdf*

(PM10); these levels of harmful emissions are all well above the SCAQMD's air quality threshold of significance.[16]

As shown in Figure 1 below, many residences are located near of the Project. Residences are located west of the Project, with the closest residences situated approximately 630 feet from the Project's western boundary. In addition to residences, Taper Avenue Elementary School, Park Western Place Elementary School and Barton Hill Elementary School are located within a mile of the Project. These residences and schools are located within the Wilmington, Carson, West Long Beach Community (WCLBC) which has been designated as a disadvantaged community under Assembly Bill (AB) 617 (C. Garcia, Chapter 136, Statutes of 2017).[17] Therefore, CARB is particularly concerned about localized air pollutant exposure at the neighborhood level, as well as the Project's regional air quality impacts.

Figure 1: Project Location Relative to Residences



[16] LAHD, 2018. Berths 97-109 (China Shipping) Container Terminal Recirculated Draft Supplemental Environmental Impact Report. Page 3.1-51. Table 3.1-9. Accessible at *https://kentico.portoflosangeles.org/getmedia/e75c5353-bb13-4f23-8f0c-9b7466a0c361/03-1_CS_Air_Quality_RSEIR*

[17] Assembly Bill 617, Garcia, C., Chapter 136, Statutes of 2017, modified the California Health and Safety Code, amending § 40920.6, § 42400, and § 42402, and adding § 39607.1, § 40920.8, § 42411, § 42705.5, and § 44391.2.

Health-harming emissions, including diesel PM, a toxic air contaminant with no safe level of exposure, generated from the operation of the Project have, and continues to, negatively impact the community, which is already disproportionally impacted by air pollution from existing freight operations as well as stationary sources of air pollution.[18] According to the base year (2017) emissions inventory presented in the WCLB Community Emissions Reduction Plan (CERP), the residences located within the WCLBC are currently exposed to 10,614 tons of NOx, 5,642 tons of volatile organic compounds (VOC), and 1,323 tons of particulate matter less than 2.5 micrometers (PM2.5) annually.[19] A large percentage of these annual air pollutant emissions are generated by off-road and on-road emission sources such as those servicing rail and port facilities. The continued operation of the Project will increase air pollutant emissions in these communities if not mitigated. To protect the residents living in the WCLB community, the LAHD and China Shipping should incorporate all feasible mitigation measures in the Project's final design.

The LAHD and China Shipping Must Fully Evaluate the Project's Air Quality and Health Risk Impacts in the Revised SEIR

The operation of the Project results in increased rail traffic and vessel calls, along with increased truck traffic, all of which negatively impact nearby residents. CEQA requires the lead agency to "determine whether a project may have a significant effect on the environment based on substantial evidence in light of the whole record." (See Title 14, Cal. Code of Regs., § 21082.2, subd. (a)). To fully evaluate the Project's air quality and health risk impacts, the LAHD and China Shipping must analyze all direct and reasonably foreseeable air quality and health risk impacts associated with the operation of the Project.

The health risk assessment (HRA) prepared for the Project should be based on the latest Office of Environmental Health Hazard Assessment's (OEHHA) guidance (2015 Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments).[20] The on-road and off-road Diesel PM emissions used to estimate the proposed Project's cancer risk impacts should be based on CARB's latest 2021 Emission Factors model (EMFAC2021) and OFFROAD2021, respectively.[21,22]

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[18] CARB. CARB Identified Toxic Air Contaminants. Accessible at *https://ww2.arb.ca.gov/resources/documents/carb-identified-toxic-air-contaminants*

[19] South Coast Air Quality Management District. Community Emissions Reduction Plan Wilmington, Carson, West Long Beach. September 2019. Accessible at *https://www.aqmd.gov/docs/default-source/ab-617-ab-134/steering-committees/wilmington/cerp/final-cerp-wcwlb.pdf?sfvrsn=8*

[20] Office of Environmental Health Hazard Assessment (OEHHA). Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments. February 2015. Accessed at: *https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf*.

[21] CARB. Emission Factors model Web Platform. Accessible at: *https://arb.ca.gov/emfac/emissions-inventory/7fbbb7c961d621ffc05eb5e5f8dfd175c8cff0fc*

[22] CARB. OFFROAD2021 Web Platform. Accessible at: *https://arb.ca.gov/emfac/offroad/*

CEQA also requires lead agencies to consider whether the incremental effects of a proposed project are cumulatively considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects. (See Title 14, Cal. Code of Regs., § 15064, subd. (h)(1)). The LAHD and China Shipping must consider the combined air quality and health risk impacts of the Project, and other reasonably foreseeable projects that may arise because of the Project. Should the Revised SEIR find that the Project would result in a cumulatively significant impact, CEQA requires that the LAHD and China Shipping must implement all feasible mitigation measures to reduce those impacts to a less-than-significant level.

As shown in the 2018 DEIR, LAHD and China Shipping find that the operation of the Project would expose residences near the Project site to diesel PM that would result in a significant and unavoidable health impact. Since it is likely that the Revised SEIR will reach a similar impact conclusion, CARB urges the LAHD and China Shipping to include additional meaningful mitigation measures to reduce the Project's potential health risk impacts to the neighboring communities. As further discussed below, additional feasible mitigation options have become available in the five years since the last EIR was finalized.

The Revised SEIR Should Include a Mitigation Measure that Ensures the Project Uses the Cleanest Switcher and Line-Haul Locomotives Available

To reduce the Project's impacts to air quality, greenhouse gas, and health risk, CARB urges the LAHD and China Shipping to plan for the use of zero-emission switcher and line-haul locomotives within the Project to address the Project's impact on air quality and public health. According to the 2018 RSEIR, the operation of the Project would result in 723 daily train trips in the year 2030.[23] To reduce the Project's potential air quality and health risk impacts, CARB urges the LAHD and China Shipping to include either a project design feature or mitigation measure that requires all locomotives serving the Project to be zero-emission and to install on-site infrastructure to support those zero-emission locomotives.

On April 27, 2023, CARB approved the In-Use Locomotive Regulation to reduce air pollutant emissions, toxic air contaminants, and greenhouse gas (GHG) emissions from locomotives operating throughout California. More information about the proposed In-Use Locomotive Regulation can be obtained from CARB's website: *https://ww2.arb.ca.gov/our-work/programs/reducing-rail-emissions-california/locomotive-fact-sheets*.

Based on emerging technologies in batteries and hydrogen fuel cells, zero-emission locomotive operation could be used to meet the needs of the Project. CARB estimates that zero-emission technology will be commercially available by 2030 for passenger, switcher,

[23] LAHD, 2018. Berths 97-109 (China Shipping Container Terminal Recirculated Draft Environmental Impact Report. Page 2-13. Table 2-3. Accessible at *https://kentico.portoflosangeles.org/getmedia/7acf4b8e-3663-45df-a080-b276ee338e86/02_CS_Project_Description_RDSEIR*

and industrial locomotives and by 2035 for freight line haul locomotives.[24] CARB has sponsored, and continues to sponsor, demonstration projects to accelerate the adoption of clean freight technologies and to reduce air pollution caused by the movement of goods throughout the State. CARB's Zero and Near Zero-emission Freight Facilities Program successfully demonstrated batteries in locomotives that could be applied to the Project.[25]

The Revised SEIR Should Facilitate All Heavy-Duty Trucks Serving the Project To Be Zero-Emission

The Project involves the use of heavy-duty trucks to transport freight to its final destinations. According to the 2018 RSEIR, the operation of the Project would result in 1,501,817 daily truck trips in the year 2030.[26] To reduce the Project's potential air quality, health risk and greenhouse gas impacts, CARB urges the LAHD and China Shipping to include either project design features or mitigation measures that facilitate the transition to all zero-emission heavy-duty trucks, including by installing on-site infrastructure to support those zero-emission trucks, and through other creative measures that incentivize use of zero-emission trucks (such as expanded zero-emission priority lanes).

As presented below, CARB has adopted regulations that promote and eventually require the use of zero-emission trucks at freight facilities, such as the Project. Specifically, the Advanced Clean Fleets Regulation sets forth a path for transitioning to a zero-emission fleet statewide and would require all drayage trucks in California to transition to zero-emission over time and be fully zero-emission by 2035. To support trucks serving the Project that are already complying with the Advanced Clean Fleets regulation, CARB urges the LAHD and China Shipping to require, as either a Project design measure or as a mitigation measure, the infrastructure to support on-site zero-emission trucks. A list of commercially-available zero-emission trucks can be obtained from the Hybrid and Zero-emission Truck and Bus Voucher Incentive Project (HVIP).[27] The HVIP is a part of California Climate Investments to incentivize the purchase of zero-emission trucks. Based on CARB's review of the zero-emission trucks listed in the HVIP, today there are commercially available electric trucks that can meet the cargo transportation needs of individual industrial uses proposed in the Project. While CARB has implemented or is developing regulations that will eventually

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[24] CARB. Public Hearing to consider the Proposed In-Use Locomotive Regulation Staff Report: Initial Statement of Reasons. Appendix F. Page 52, 57. Accessible at: *https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2022/locomotive22/appf.pdf*

[25] California Air Resources Board (CARB), 2020. CARB's Zero and Near Zero-emission Freight Facility Program. Accessible at *https://ww2.arb.ca.gov/news/carb-announces-more-200-million-new-funding-clean-freight-transportation#:~:text=The%20goal%20of%20CARB's%20Zero,commercialization%20of%20these%20technologies%20statewide*

[26] LAHD, 2018. Berths 97-109 (China Shipping Container Terminal Recirculated Draft Environmental Impact Report. Page 2-13. Table 2-3. Accessible at *https://kentico.portoflosangeles.org/getmedia/7acf4b8e-3663-45df-a080-b276ee338e86/02_CS_Project_Description_RDSEIR*

[27] Zero-Emission Truck and Bus Voucher Incentive Project. Accessible at: *https://californiahvip.org/*

require the use of zero-emission trucks (as noted above), the Project must plan for this transition, and the Revised SEIR should explain how the Project will achieve this transition. CARB also urges the LAHD and China Shipping to incorporate all feasible measures to facilitate and incentivize zero-emission trucks within the Project site. As an additional example, Project currently has a lane that prioritizes entry to the terminal for zero-emission trucks. The Revised SEIR should consider additional priority entry lanes for zero-emission trucks.

The list below details the CARB regulations that will result in the reduction of Diesel PM and NOx emissions from trucks within California:

- **Drayage Truck Regulation:** The existing Drayage Truck Regulation requires all drayage trucks to operate with an engine that is a 2007 model year or newer.
- **Truck and Bus Regulation:** The Truck and Bus Regulation requires all trucks, including drayage, to have 2010 or newer model year engines by January 1, 2023.
- **Heavy-Duty Low-NOx Omnibus Rule:** The Heavy-Duty Low-NOx Omnibus Rule requires truck emission standards to be reduced from 0.20 to 0.05 grams per brake horsepower-hour (g/bhp-hr) from 2024 to 2026, and to 0.02 g/bhp-hr in 2027.
- **Advanced Clean Trucks Regulation:** The Advanced Clean Trucks Regulation, approved by CARB on June 25, 2020, requires manufacturers to start manufacturing zero-emission trucks and vans beginning in 2024. The rule is expected to result in about 100,000 zero-emission trucks in California by the end of 2030 and about 300,000 by 2035. The Advanced Clean Trucks regulation is part of CARB's overall approach to accelerate use of zero-emission medium-and heavy-duty vehicles. CARB approved amendments to the Advanced Clean Trucks regulation in March 2021; the amendments help ensure that more zero-emission vehicles are brought to market. CARB directed staff to ensure that fleets, businesses, and public entities that own or direct the operation of medium- and heavy-duty vehicles in California purchase and operate ZEVs in anticipation of fully ZEV fleets by 2045 everywhere feasible, and specifically to reach:
    - 100% zero-emission drayage trucks, last mile delivery, and government fleets by 2035
    - 100% zero-emission refuse trucks and local buses by 2040
    - 100% zero-emission capable utility fleets by 2040
- **Advanced Clean Fleets Regulation:** The Advanced Clean Fleets Regulation is part of CARB's overall strategy to accelerate use of zero-emission medium- and heavy-duty vehicles. This regulation works in conjunction with the Advanced Clean Trucks regulation. The regulation applies to trucks performing drayage operations at seaports and railyards, fleets owned by State, local, and federal government agencies, and high priority fleets. High priority fleets are those entities that own, operate, or direct at least one vehicle in California, and that have either $50 million or more in gross annual revenue, or that own, operate, or have common ownership or

control of a total of 50 or more vehicles. The regulation affects medium- and heavy-duty on-road vehicles with a gross vehicle weight rating greater than 8,500 pounds, off-road yard tractors, and light-duty mail and package delivery vehicles. All drayage trucks entering seaports and intermodal railyards would be required to be zero-emission by 2035.

With the implementation of the regulations listed above, specifically the Advanced Clean Trucks Regulation, LAHD and China Shipping would over time be required stop using diesel trucks and vans and begin using zero-emission trucks. To protect the air quality of the communities near the Project site, CARB urges the LAHD and China Shipping to include all feasible project design features and/or mitigation measures in the Revised SEIR that would facilitate the transition to exclusively zero-emission trucks.

The Revised SEIR Should Require All Cargo Handling Equipment to be Zero-Emission

The operation of the Project would require cargo handling equipment (CHE) such as top picks, side picks, yard tractors, and rubber-tired gantry cranes. In developing the Revised SEIR, LAHD must reevaluate the CHE-related mitigation measures in the previous EIR, specifically MMs AQ-15, MM AQ-16, and MM AQ-17, which would require the transition to cleaner diesel-powered CHE operating within the Project site. Although these mitigation measures would somewhat reduce the Project's air quality impact, diesel-powered CHE operating within the Project site would continue to expose nearby communities and onsite works to diesel PM emissions that could significantly impact health. Furthermore, in the intervening years since the last SEIR, there have been notable advances in zero-emission cargo handling equipment.

To reduce the proposed Project's air quality, health risk and greenhouse gas impacts, CARB urges the LAHD and China Shipping to include a project design feature or mitigation measure in the Revised SEIR that would require all CHE operating within the Project site to be zero-emission. Zero-emission CHE are commercially available and can be purchased using incentive funding from CARB's Clean Off-Road Equipment Voucher Incentive Project (CORE) administered by CALSTART or the HVIP. [28,29,30]

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[28] CARB Cargo Handling Equipment Commercial Availability List. Accessible at: *https://ww2.arb.ca.gov/our-work/programs/cargo-handling-equipment/zero-emission-che-availability*

[29] Clean Off-Road Equipment Voucher Incentive Project. Accessible at: *https://californiacore.org/how-toparticipate/*

[30] Zero-Emission Truck and Bus Voucher Incentive Project. Accessible at: *https://californiahvip.org/*

The Revised SEIR Should Require All Transport Refrigeration Units to be Zero-emission Where Feasible and Plug-In Capable Everywhere Else

Based on CARB staff's review of the NOP for the Revised SEIR and 2018 RSEIR, it is unclear whether the trucks and railcars serving the Project would be equipped with transport refrigeration units (TRU). TRUs on trucks and trailers, and on railcars, can emit large quantities of diesel exhaust while operating in and around the Project site. Residences and other sensitive receptors (e.g., daycare facilities, senior care facilities, and schools) located near where these TRUs could be operating, would be exposed to Diesel PM emissions that would result in a significant cancer risk impact to the nearby community.

On February 24, 2022, CARB approved the amendments to the Transportation Refrigeration Unit Airborne Toxic Control Measure (2022 TRU ATCM Amendments).[31] The TRU ATCM is an initiative aimed at reducing air pollutant and greenhouse gas emissions and improving air quality in the transportation sector. The 2022 TRU ATCM Amendments require newly manufactured truck TRUs, trailer TRUs, and domestic shipping container TRUs to use refrigerant with a global warming potential less than or equal to 2,200, or no refrigerant at all, beginning December 31, 2022. Beginning December 31, 2023, TRU owners will be required to turn over at least 15% of their truck TRU fleet operating in California to zero-emission technology each year for seven years, and all truck TRUs operating in California are required to be zero-emission by December 31, 2029. CARB staff are developing concepts for new requirements to use zero-emission non-truck TRUs (trailer TRUs, domestic shipping container TRUs, railcar TRUs, and TRU generator sets).

The Revised SEIR should specify whether transporting or handling cold storage is part of the Project. If the Project is used to transport cold storage, CARB urges the LAHD and China Shipping to require all TRUs on trucks and trailers to be zero-emission to protect the health of communities and to stay in step with current and upcoming CARB regulations. All rail cars with plug-in-capable TRUs entering the Project should be plugged into electric power until they are ready to be transported directly out of the facility. Lastly, the LAHD and China Shipping should require all loading/unloading docks and trailer spaces be equipped with electrical hookups for trucks with plug-in-capable TRU or auxiliary power units. This requirement will substantially decrease the amount of time that a TRU powered by a diesel engine can operate at the project site. Use of zero-emission all-electric plug-in TRUs, hydrogen fuel cell transport refrigeration, and cryogenic transport refrigeration are encouraged and can also be included in lease agreements.

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[31] CARB. Transportation Refrigeration Unit (TRU or Reefer) Regulation. Accessible at: *https://ww2.arb.ca.gov/our-work/programs/truckstop-resources/truckstop/regulations/transport-refrigeration-unit-tru-or#:~:text=Regulation%20Background,risk%20from%20diesel%2Dpowered%20TRUs.*

The Revised SEIR Must Incorporate All Feasible GHG Mitigation

As proposed in the 2019 SEIR, Lease Measure GHG-1 only required the Port to contribute an amount sufficient to offset *one* year of greenhouse gas emissions from the project- an amount wholly inadequate given the Project has already involved, and will continue to involve, operations well beyond a single year.[32] Furthermore, the measure does not specify which type(s) of offset credits can be purchased.

Under CEQA, a lead agency may not approve a project that will have significant environmental impacts unless it finds that alternatives and mitigation measures to reduce environmental impacts are infeasible based on specific economic, legal, social, technological or other considerations. (Pub. Res. Code, §§ 21002; 21061.1.) "'Feasible' means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social and technological factors." (*Id.*, § 21061.1.)

The 2018 RSEIR found that the Project would result in 183,231 tons of carbon dioxide equivalent (CO2e) in the year 2030, far exceeding the SCAQMD's 10,000 tons of CO2e significance threshold; ultimately resulting in a significant and unavoidable impact on climate change.[33] Since there have been little to no changes in the Project's operations, it is very likely that the Revised SEIR will have similar GHG impacts as found in the 2018 RSEIR. Consequently, the Project will have significant greenhouse gas impacts that are not fully mitigated by existing measures. As such, the Port must mitigate GHG to the extent feasible for the reasonably foreseeable operational life of the Project.

The NOP indicates that the Revised SEIR will analyze the Project's GHG impacts, and will identify any mitigation measures that are available and feasible to mitigate those impacts. To that end, CARB suggests above several additional feasible mitigation measures that LAHD can adopt to much more fully mitigate the Project's significant emissions impacts, including its greenhouse gas emissions. LAHD should incorporate these measures in the Revised SEIR. LAHD should also consider additional feasible greenhouse gas mitigation. For further information regarding how to properly analyze and feasibly mitigate the Project's greenhouse gas emissions, the Local Actions Appendix to CARB's 2022 Scoping Plan (Appendix D) includes information on these topics to assist lead agencies with meeting their CEQA obligations.[34] Appendix D helps agencies identify feasible greenhouse gas mitigation, including by describing the "hierarchy" of available mitigation, starting by

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[32] See December 29, 2023 Opinion in *Natural Resources Defense Council, Inc. et al. v. City of Los Angeles*, (Fourth Appellate Dist. Case No. D080902) at p. 28.

[33] LAHD, 2018. Berths 97-109 [China Shipping] Container Terminal Project Revised SEIR. Page 3.2. Table 3.2-4. Accessible at *https://kentico.portoflosangeles.org/getmedia/1621ba42-12a9-45c8-b11a-4389b764d34e/03-2_CS_GHG_RDSEIR*

[34] CARB, 2022. 2022 Scoping Plan. Appendix D. Accessible at *https://ww2.arb.ca.gov/sites/default/files/2022-11/2022-sp-appendix-d-local-actions.pdf*.

looking for opportunities at the project site (consistent with CARB's mitigation recommendations above).

Where additional on-site mitigation is demonstrated to not be feasible, Appendix D also provides information regarding off-site GHG mitigation, and carbon offsets. The LAHD should consider this information in the Scoping Plan and all other sources relevant to CEQA greenhouse gas analysis and must ensure that it is mitigating the Project's greenhouse gas emissions to the full extent required by CEQA.

Conclusion

LAHD and China Shipping have a long history of failing to implement essential – and required - CEQA mitigation that would help protect the communities near the Project. Through the Revised SEIR, LAHD has the opportunity to reevaluate and improve the air quality analysis and mitigation measures to minimize the Project's significant air quality, toxics, and greenhouse gas impacts to the full extent feasible to protect public health. CARB strongly urges the LAHD to consider these comments when preparing the Revised SEIR.

The LAHD and China Shipping now have a unique opportunity to create jobs for Californians and to showcase a state-of-the-art zero-emission terminal that could be used as a model for other projects in the State. By building on the work of other port operators already servicing their operations with zero-emission technologies, the LAHD and China Shipping can develop a freight facility that results in economic growth without diminishing public health in nearby communities or exacerbating climate change. To this end, CARB urges the LAHD and China Shipping to incorporate all feasible measures for zero-emission switcher and line-haul locomotives, trucks, on-site CHE, and TRUs within the Project.

Given the breadth and scope of projects subject to CEQA review throughout California that have air quality and GHG impacts, coupled with CARB's limited staff resources to substantively respond to all issues associated with a project, CARB must prioritize its substantive comments here based on staff time, resources, and its assessment of impacts. Please note that CARB's deliberate decision to substantively comment on some issues does not constitute an admission or concession that it substantively agrees with the lead agency's findings and conclusions on any issues on which CARB does not substantively submit comments.

CARB staff can provide assistance with zero-emission technologies and emission reduction strategies, as needed. Please include CARB on your list of selected State agencies that will receive the Revised SEIR. If you have questions, please contact Stanley Armstrong, Air Pollution Specialist via email at *stanley.armstrong@arb.ca.gov*.

Sincerely,



Matthew O'Donnell, Chief, Risk Reduction Branch

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IN THE SUPERIOR COURT OF THE STATE OF CALIFORNIA

COUNTY OF SAN DIEGO – CENTRAL DIVISION

NATURAL RESOURCES DEFENSE COUNCIL, INC., SAN PEDRO AND PENINSULA HOMEOWNERS COALITION, SAN PEDRO PENINSULA HOMEOWNERS UNITED, INC., EAST YARD COMMUNITIES FOR ENVIRONMENTAL JUSTICE, and COALITION FOR CLEAN AIR, INC., non-profit corporations Petitioners/Plaintiffs, v. CITY OF LOS ANGELES, PORT OF LOS ANGELES, and LOS ANGELES BOARD OF HARBOR COMMISSIONERS, public entities Respondents/Defendants.	Case No. 37-2021-00023385-CU-TT-CTL Assigned For All Purposes To: Hon. Timothy Taylor Department: 2004 **~~[PROPOSED]~~ ORDER ENFORCING WRIT** Actions Filed: September 16, 2020 Trial Date: June 24, 2022

CHINA SHIPPING (NORTH AMERICA) HOLDING CO., LTD, a Delaware corporation; CHINA COSCO SHIPPING CORPORATION LIMITED, a corporation; COSCO SHIPPING (NORTH AMERICA), INC., a California corporation; WEST BASIN CONTAINER TERMINAL LLC, a Delaware corporation; and DOES 1 THROUGH 20, inclusive

Real Parties in Interest.

AND CONSOLIDATED CASE.

[PROPOSED] ORDER ENFORCING WRIT

On July 15, 2022, this Court, the Honorable Timothy Taylor presiding, entered judgment ("Judgment") granting in part and denying in part the Petition for Writ of Mandate, Complaint for Declaratory and Injunctive Relief of Petitioners Natural Resources Defense Council, San Pedro and Peninsula Homeowners Coalition, San Pedro Peninsula Homeowners United, East Yard Communities for Environmental Justice, and Coalition for Clean Air; the Petition for Writ of Mandate and Complaint for Declaratory Relief of Petitioner South Coast Air Quality Management District; and the Petition for Writ of Mandate in Intervention of Intervenors the People of the State of California, acting by and through Attorney General Rob Bonta, and the California Air Resources Board (collectively, "Petitioners and Intervenors"), against Respondents the City of Los Angeles, Los Angeles City Council, Port of Los Angeles, City of Los Angeles Harbor Department, and Los Angeles Board of Harbor Commissioners (collectively, "Respondents") and Real Parties in Interest China Shipping (North America) Holding Co. Ltd., China COSCO Shipping Corporation Limited, COSCO Shipping (North America), Inc. (collectively, "China Shipping") and Real Party in Interest West Basin Container Terminal LLC (collectively, with China Shipping, "Real Parties"). Petitioners and Intervenors, Respondents and Real Parties are referred herein as "Parties."

Having reviewed the administrative record, the briefs and papers submitted by counsel, and the arguments of counsel, on June 27, 2022, the Court issued a ruling on the merits.

Petitioners Natural Resources Defense Council, San Pedro and Peninsula Homeowners Coalition, San Pedro Peninsula Homeowners United, East Yard Communities for Environmental Justice, and Coalition for Clean Air and Petitioner South Coast Air Quality Management District filed Notices of Appeal of this Court's Judgment. On December 29, 2023, the Court of Appeal, Fourth Appellate District, Division One, issued its Opinion ("Opinion"). The Opinion reversed in part the Ruling and directed that it be modified as set forth in the Opinion. The remittitur issued on May 6, 2024.

On May 24, 2024, the Court entered an amended judgment ("First Amended Judgment") and amended writ ("First Amended Writ") in this case, and on May 31, 2024, Respondents were

personally served with the First Amended Writ.

On July 15, 2024, Respondents filed an initial return to the First Amended Writ ("Initial Return").

On July 30, 2024, and January 30, 2025, Respondents filed their first and second status reports, respectively, pursuant to the First Amended Writ.

On April 1, 2025, Petitioners and Intervenors filed a motion to enforce the First Amended Writ. The Court held a hearing on the motion on May 2, 2025, and on that same day, issued the ruling attached as **Exhibit A**.

ACCORDINGLY, IT IS HEREBY ORDERED that the motion to enforce is granted in part. The First Amended Judgment entered in this action on May 24, 2024, is enforced as follows in this order enforcing the writ ("Order"):

A. The First Amended Writ, issued by this Court on May 24, 2024, and ordering Respondents to take the certain actions the Court has determined necessary under Public Resources Code Section 21168.9 to comply with the provisions of the California Environmental Quality Act ("CEQA"), remains in full force and effect. This Order interprets and takes steps, as are necessary and proper, to enforce the First Amended Judgment and the First Amended Writ. The First Amended Writ shall be implemented and interpreted pursuant to the provisions of this Order. This Order shall be enforceable by any Party by application to the Court to enforce compliance herewith, and for violations hereof, if any, including through enforcement of the First Amended Writ.

B. As established by the Initial Return, Respondents have complied with Paragraph 1 of the First Amended Writ, which directed them to file an initial return within 45 days of being served, showing that they had:

1. Entered into and adopted an amendment ("Permit Amendment") to Permit 999 (the "Permit") for the Berths 97-109 China Shipping Terminal ("China Shipping Terminal") in the manner required by the City of Los Angeles Charter. The Permit Amendment shall implement and make fully enforceable against the permittee/tenant the mitigation measures in the

2008 Environmental Impact Report for the Berths 97-109 [China Shipping] Container Terminal Project ("2008 EIR"), as modified by the 2019 Supplemental Environmental Impact Report for the Berths 97-109 [China Shipping] Container Terminal Project ("2019 SEIR"), the Ruling on the Merits issued by the Court on June 27, 2022 ("Ruling"), and the Opinion of the Court of Appeal, Fourth Appellate District, Division One issued on December 29, 2023 ("Opinion") (collectively, "Mitigation Measures and Lease Measures"), specifically identified as:

i. 2008 EIR MM AQ-9, Alternative Marine Power;

ii. 2008 EIR MM AQ-10, Vessel Speed Reduction Program;

iii. 2008 EIR MM AQ-17 as it applies to a 1-year electric yard tractor pilot project; and

iv. All measures identified in the 2008 EIR Mitigation Monitoring and Reporting Program, listed at pages 6528–6597 of the administrative record in this action, as modified by the 2019 SEIR Mitigation Monitoring and Reporting Program, listed at pages 10528–10536 of the administrative record in this action, except the measures described in subsections i–iii above (which have been reinstated by the Ruling and Opinion), or measures that Respondents can prove are fully completed and thus moot (e.g., construction that has been completed).

2. Set aside certification of the 2019 SEIR, as well as the related project approvals referred to on pages 8–25 of the administrative record in this action.

C. The status reports to be filed by Respondents with the Court in compliance with Paragraph 4 of the First Amended Writ shall comply with the following requirements:

1. For each continuing Mitigation Measure and Lease Measure, the status

report shall state whether Respondents and/or Real Parties were "in compliance" or "not in compliance" during the applicable reporting period. The statement "not in compliance," standing alone, shall not be construed as an admission by the City that it has willfully disobeyed the Amended Judgment (though it may be considered as evidence of willful disobedience). The status reports do not have to include any Mitigation Measures or Lease Measures that have been identified as fully completed in a prior status report. If the Port discovers that a Mitigation Measure or Lease Measure that was previously identified as having been fully completed is not, in fact, fully completed, the Port must resume reporting on that measure.

2. For MM AQ-9, Alternative Marine Power, the status report shall include:

   a. A list of all vessel visits to the China Shipping Terminal during the applicable reporting period, including vessel name, type, and operator/owner; berth visited; arrival date and time; departure date and time; shore power connection and disconnection meter readings; shore power connection start and end times; and any exceptions claimed.

   b. As described in **Exhibit B**, all information necessary to substantiate any claimed exception to MM AQ-9, including but not necessarily limited to any information submitted to or received from the California Air Resources Board regarding the claimed exception.

3. For MM AQ-10, Vessel Speed Reduction Program, the status report shall include:

   a. A list of vessels that departed or arrived at the China Shipping Terminal during the applicable reporting period;

   b. Listed speed in knots for each vessel at the following intervals, in nautical miles, from Point Fermin: 10nm, 15nm, 20nm, 25nm,

30nm, 35nm, 40nm;

c. Indication whether each vessel listed complied with MM AQ-10 for each departure and/or arrival within the 40nm limit;

d. Indication of compliance with MM AQ-10 within the 40nm limit, as a percentage of all vessel trips during the applicable reporting period;

e. Detailed description, including supporting documentation, of any actions taken pursuant to the WBCT Terminal Tariff to address non-compliance with MM AQ-10-within the 40nm limit during the applicable reporting period.

4. For MM AQ-15 and AQ-17, Cargo-Handling Equipment, the status report shall include, in substantially similar format:

a. A summary spreadsheet identifying all cargo-handling equipment that is operated at the China Shipping Terminal, regardless of whether that equipment is operated only full-time or part-time at the Terminal. The summary spreadsheet shall include at least the following information for cargo-handling equipment of each equipment/fuel type: the total number of units; the number of units belonging to each model year; the number of units purchased in a year or pending purchase in a future year starting from 2024 through the year in which the Port achieves compliance with MM AQ-15 and MM AQ-17; and the number of units that are "in compliance" during the reporting period at issue, which shall include all units that satisfy the technical specifications set forth in MM AQ-15 or MM AQ-17, as applicable (including all units for which required replacements are still timely pending).

b. A summary spreadsheet for each type of equipment operated at the China Shipping Terminal, including the following information for

each unit of that equipment type operated at the China Shipping Terminal: equipment tag number, model year, chassis VIN, engine make, engine year, engine serial number, engine family name, manufacturer, model, and fuel type.

c. Invoices for all units of cargo-handling equipment purchased to satisfy MM AQ-15 and MM AQ-17, respectively: payment invoices that include all units that have been purchased; and final invoices that list the same units by serial number with a detailed description of the technical specifications.

5. If Respondents supplement their status reports to support their compliance with this Order and First Amended Writ, any supplemental materials must be served on all parties, posted online, and signed under penalty of perjury in the same manner as required for the status reports as detailed in the First Amended Writ.

D. Under Public Resources Code Section 21168.9(c), the Court does not direct Respondents to exercise their lawful discretion in any particular way. Nothing in this Order, the First Amended Judgment, or the First Amended Writ should be construed as requiring Respondents to take any particular action other than as specifically set forth herein.

E. This Court expressly retains jurisdiction over this matter to make such further orders as may be necessary and appropriate to ensure Respondents' and Real Parties' full compliance with CEQA, and with the terms of this Order, the First Amended Judgment, and the First Amended Writ.

IT IS SO ORDERED.

Date: May 15, 2025

The Honorable Timothy Taylor

Exhibit A

SUPERIOR COURT
OF CALIFORNIA
COUNTY OF SAN DIEGO

FILED
San Diego Superior Court
MAY 02 2025
Clerk of the Superior Court
By: T. Crandall, Deputy

Ruling on Petitioners' Motion Under CCP Section 1097 (MM AQ-9)

Natural Resources Defense Council, Inc., et al. v. City of Los Angeles, et al.; SCAQMD v. City of Los Angeles, et al., Case No. 2021-23385

Argued and submitted: May 2, 2025, 9:00 a.m., Dept. 2004

1. Background and Procedural Posture.

This is a CEQA case involving the China Shipping Terminal at the Port of Los Angeles. The court incorporates its own 2022 merits decision (ROA 154), as well as the opinion of the Fourth District Court of Appeal, Div. 1, filed 12/29/23 in Case No. D080902 (and thereafter ordered published, 98 Cal. App. 5th 1176), remanding the case to this court to exercise its discretion to fashion an appropriate remedy in the first instance.

Following the spreading of the appellate mandate, the court has, among other things: a) set an OSC regarding why port activities at the China Shipping Terminal should not be suspended (ROA 185); b) decided (after full briefing) not to suspend those operations (ROA 210); c) signed an amended writ and judgment (ROA 212, 217); d) conducted an extensive site visit (ROA 225); reviewed respondent's initial return to the writ (ROA 227-236) and petitioners' response thereto (ROA 244); e) worked up a fully briefed attorneys' fee motion (ROA 226); and f) continued to monitor respondent's compliance via review of further status reports and objections thereto (ROA 300, 304-305, 312, 320, 351). The court held several status conferences while a glacial meet and confer process went forward among the parties.

The March 7, 2025 status conference was set at the conclusion of the January 17, 2025 status conference, at which the parties reported they were close to agreement on a second amended judgment. The parties appeared remotely at the March 7 status conference having already submitted a proposed second amended judgment. However, during the hearing it became clear that the parties were still far apart as to MM AQ-9 (AMP). The City withdrew its consent to the second amended judgment, and the court did not sign it. ROA 333, 349.

The court informed the parties of its impending retirement, and noted that the disagreements regarding MM AQ-9 (AMP) must be resolved before May 30, 2025. A further status conference was set for April 4, 2025. ROA 333. The court informed the parties if they had not reached

agreement by April 4, the court would expect petitioners to have secured a date to present an affidavit in support of an OSC re contempt. *Ibid.*

No agreement was reached. In lieu of pursuing a finding of contempt, petitioners and intervenors filed, on April 1, a "Motion to Enforce Under CCP Section 1097." ROA 346-347. The City filed opposition, to which Cosco and West Basin filed joinders. ROA 353-357. Petitioners/intervenors filed reply. ROA 360. The court reviewed the moving, opposition and reply papers, and published a tentative ruling on April 28. ROA 361. The court heard spirited argument on May 2, 2025, and took the motion under submission. The court now decides the motion.

2. <u>Applicable Standards</u>.

A. CCP Section 1097 provides:

If a peremptory mandate has been issued and directed to an inferior tribunal, corporation, board, or person, and it appears to the court that a member of the tribunal, corporation, or board, or the person upon whom the writ has been personally served, has, without just excuse, refused or neglected to obey the writ, the court may, upon motion, impose a fine not exceeding one thousand dollars. In case of persistence in a refusal of obedience, the court may order the party to be imprisoned until the writ is obeyed, and **may make any orders necessary and proper for the complete enforcement of the writ.**

This provision was enacted in 1872 as part of the Field Code, and has been amended only once (in 2016, non-substantively). Petitioners/intervenors invoke the last (highlighted) clause of the statute. Justice O'Rourke has observed that the Court of Appeal will "review the trial court's order under section 1097 of the Code of Civil Procedure, which permits the court to 'make any orders necessary and proper for the complete enforcement of the writ,'" by focusing on the respondent's "response to the writ and the trial court's assessment of that response." *San Diego Unified Port Dist. v. California Coastal Com.*, 27 Cal. App. 5th 1111, 1128 (2018), citing *Brown v. California Unemployment Insurance Appeals Board*, 20 Cal.App.5th at p. 1114; *Robles v. Employment Development Department* (2015) 236 Cal.App.4th 530, 546; *Los Angeles Internat. Charter High School v. Los Angeles Unified School District*, 209 Cal.App.4th at p. 1355 ("*Charter High School*"); and *City of Carmel-by-the-Sea v. Board of Supervisors of Monterey County*, 137 Cal.App.3d 964, 971-971.

B. The City contends the court lacks jurisdiction to amend the judgment (as prayed by the moving parties). Petitioners/intervenors respond the court can avoid this issue by just making an "order" instead of a judgment. Initially it did not seem to the court that the City, in raising this side dispute, had considered how it may affect its appellate rights. A common law exception to the one final judgment rule is

"the collateral order doctrine, under which some interim orders are deemed appealable "judgments" because they are essentially the same as a final judgment. (See *Curtis v. Superior Court* (2021) 62 Cal.App.5th 453, 464, 276 Cal.Rptr.3d 676.) To be appealable, a collateral order must satisfy three elements: the order must (1) finally determine (2) a matter collateral to the litigation and (3) require the payment of money or performance of an act. (*Marsh v. Mountain Zephyr, Inc.* (1996) 43 Cal.App.4th 289, 297-298, 50 Cal.Rptr.2d 493; Eisenberg et al., Cal. Practice Guide: Civil Appeals and Writs (The Rutter Group 2020) ¶ 2:77.)"

Reddish v. Westamerica Bank, 68 Cal. App. 5th 275, 278, 283 Cal. Rptr. 3d 398, 400 (2021). Under this rule, if an order is not a "collateral order" (and thus not appealable), the Court of Appeal would have to dismiss any appeal the City might take:

"Civil cases in California are governed by the " 'one final judgment' " rule, which "prohibits review of intermediate rulings by appeal until final resolution of the case." (*Griset v. Fair Political Practices Com.* (2001) 25 Cal.4th 688, 697, 107 Cal.Rptr.2d 149, 23 P.3d 43.) The rule is a bedrock principle of appellate practice, codified in Code of Civil Procedure, section 904.1. (*In re Baycol Cases I & II* (2011) 51 Cal.4th 751, 756, 122 Cal.Rptr.3d 153, 248 P.3d 681.) The rationale for the rule " ' "is that piecemeal disposition and multiple appeals in a single action would be oppressive and costly, and that a review of intermediate rulings should await the final disposition of the case." ' " (*Id.* at p. 756, 122 Cal.Rptr.3d 153, 248 P.3d 681.) Courts should not recognize exceptions to the one final judgment rule unless " 'clearly mandated.' " (*Id.* at p. 757, 122 Cal.Rptr.3d 153, 248 P.3d 681.)

Reddish, supra at 277(footnote omitted). Neither side's briefing cited the court to a case resolving the tension between CCP section 1097, which contains no 75 day time limitation, and sections 629, 663, 663a, and 659, which do. The court raised this during the May 2 argument, and the City cited *Charter High School, supra,* 209 Cal.App.4th at p. 1354: "The order following the hearing into the adequacy of the [respondent's] return on the writ is appealable as an order enforcing the judgment."

C. As already noted, the Court of Appeal ordered the undersigned to exercise its discretion to fashion an appropriate remedy in the first instance. That discretion "must be exercised within the confines of the applicable legal principles." (*Sargon Enterprises, Inc. v. University of Southern California* (2012) 55 Cal.4th 747, 773.) Judicial discretion "is not a whimsical, uncontrolled power, but a legal discretion, which is subject to the limitations of legal principles governing the subject of its action, and to reversal on appeal where no reasonable basis for the action is shown." (9 Witkin, Cal. Procedure (5th ed. 2008) Appeal, § 364, p. 420.) "The legal principles that govern the subject of discretionary action vary greatly with context. [Citation.] They are derived from the common law or statutes under which discretion is conferred." (*City of Sacramento v. Drew* (1989) 207 Cal.App.3d 1287, 1297-1298.) The reviewing court must consider the legal principles and policies that should have guided the trial court's actions to determine if it abused its discretion. (See *People v. Carmony* (2004) 33 Cal.4th 367, 377.)

3. <u>Discussion and Rulings</u>.

A. The amended writ of mandate provides, in relevant part:

4. Within 60 days of service of the Writ and continuing every six months until the final return, Respondents shall file reports with the Court detailing the status of the implementation of all mitigation Measures and Lease Measures in the Permit.

...b. The status reports shall be signed under penalty of perjury by the appropriate officials/representatives on behalf of Respondents and Real Parties. The reports shall include 1) a list of all Mitigation Measures and Lease Measures in the Permit and the Permit Amendment, 2) a detailed explanation of the status of implementation of those measures, and 3) supporting evidence proving progress towards implementation (e.g., logs, purchase orders, invoices, photographs, etc.). **If any Mitigation Measure or Lease Measure is not being fully implemented as required by the Permit or Permit Amendment, Respondents must explain why and describe the actions being taken to reach compliance with the Permit or Permit Amendment.**

(ROA 212, ¶ 4, bold type added.)

B. The Mitigation Measure at issue in this motion is MM AQ-9, relating to shore power:

MM AQ-9: Alternative Maritime Power (AMP).

China Shipping ships calling at Berths 97-109 must use AMP at the following percentages while hoteling in the Port: ***

• January 1, 2011, and thereafter: 100 percent 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.

AR 6561.

C. In her January 30, 2025 sworn declaration (ROA 320), Lisa Ochsner, the City's Marine Environmental Manager,* testified as follows:

"Mitigation Measure AQ-9 Alternative Maritime Power (AMP). The status of this measure is **in compliance** for this reporting period. This information is derived from WBCT's reporting to the California Air Resources Board (CARB) and the Department's review of documentation regarding the exceptions claimed by the vessels calling at the terminal. (See Exhibit B, 2008 MM AQ-9.) According to WBCT, **100% shore power or an equivalent CARB approved emission control strategy (CAECS) was utilized for all vessels during the reporting period from July 2, 2024 through December 31, 2024. Of the fifteen (15) "exceptions" in the CARB report: four (4) were for safety and emergency events including power outages weather, and a vault explosion; three (3) were for vessel incident events including problems with a grounding switch, soaked electrical cables, and disconnecting early for the sock barge to be used on a tanker; three (3) were for research events; and five (5) were for vessel commissioning, which were all ultimately successful and used shore power after the commissioning. All 15 of these "exceptions" are counted in the 100% compliance rate because these vessels either initially or eventually used shore power or CAECS during the vessel visit as evidenced by the documentation provided with this report."**

The table of Monitoring Measures and Lease Measures appended to the Ochsner declaration repeats at page 9 the assertion that the City was "IN COMPLIANCE" with MM AQ-9. This is the "nub" of the present dispute. In summary, the City contends it is in compliance as Ms. Ochsner reported, while petitioners/intervenors contend 1) the language quoted immediately above in bold type presumes exceptions never contemplated by MM AQ-9; and 2) Ms. Ochsner should have reported that MM AQ-9 is not "being fully implemented" and then "explain[ed] why and describe[d] the actions being taken to reach compliance with" MM AQ-9.

D. After careful consideration, the court concludes the petitioners/intervenors have the better side of the debate, and exercises its discretion to grant the motion in part. While isolated emergencies and equipment failure deviations were "baked into" the 2008 EIR (AR 5834),** MM AQ-9 does not provide an exception for "an equivalent*** CARB approved emission control strategy (CAECS)." And MM AQ-9 does not provide an exception for "research events." As to MM AQ-9, the City's "response to the writ," at least as of January 30, has been to conflate compliance with the writ (which requires compliance with a 2008 Monitoring Measure) and compliance with a 2020 CARB at-berth regulation. While some deference to the lead agency's interpretation of the mitigation measure may be appropriate, not so here where the City's track record led this court to observe that the City had "committed a profound violation of CEQA." 98 Cal. App. 5th at 1231. Not so here where the Court of Appeal determined that the City led this court into error by resisting a more robust remedial regime. *Ibid.* Not so here where there is nothing in MM AQ-9 suggesting it left room for a swing from 2-3% non-compliance to 22% non-compliance (as petitioners contend, with ample support, the January 30 reporting reflects). And not so here where the City's interpretation "allows the Port to continue

its illegal operation of the [T]erminal without enforceable mitigation measures" in place." 98 Cal. App. 5th at 1231.

The City cries "foul" by pointing out that CARB is both the enforcer of the 2020 at-berth regulation and an intervenor seeking relief in this motion. The court can understand that Ms. Ochsner might feel "whipsawed" by this dual role of CARB. But there is a proper cure for this: the City may, in the new SEIR it is preparing, propose to weave the at-berth regulations into the monitoring measure, and then put that new environmental document out for comment and otherwise invite public participation. Only then will the City's hoped-for monitoring measure be part of a "document of accountability," and only then will the public "know the basis on which its responsible officials either approve or reject environmentally significant action." 98 Cal. App. 5th at 1200. What the City may not do is what it proposes to do here: unilaterally engraft the 2020 CARB at-berth regulation into MM AQ-9 as written, and then blithely claim compliance with the latter. And this effort is particularly disconcerting given the City's position less than one year ago:

> Mr. Kulkarni: "What the Court did here was basically the Port had attempted to modify MM AQ-9 in the SEIR. The Court found there was not substantial evidence to support that modification. What the Port has decided to do here, and as effectuated in the Fifth [Lease] Amendment, is **MM AQ-9 would default back to the original measure from the 2008 SEIR**. ...And because the **Port has decided not to modify the 2008 MM AQ-9,** therefore those arguments challenging are also moot now. So it makes no sense, you Honor, if you're reverting back to ... the 2008 measure, which is for at-berth emissions, there's absolutely no need to reanalyze anything because **we're doing exactly what the original document said**."

5/24/24 RT, 34:19-25, 35:11-18 (**bold** type added).

Contrary to these representations, the January 30 reporting reflects that the City is not doing exactly what the 2008 monitoring measure said, and that the City is attempting to modify MM AQ-9 by watering it down with exceptions never contemplated in 2008. And contrary to Ms. Ochsner's January 30 declaration, the court's assessment is that the City was not in compliance with MM AQ-9 and the Amended Judgment on January 30, 2025 because the reporting on that date was not accurate.

E. Remedy: The court will sign an order enforcing the writ along the lines of the amended judgment heretofore rejected (ROA 349), with one interlineation on page 6, lines 6-7. After the phrase "...during the applicable reporting period" the following must be added: "The statement 'not in compliance,' standing alone, shall not be construed as an admission by the City that it has willfully disobeyed the Amended Judgment (though it may be considered as evidence of willful disobedience)." The court orders this change because the court has formed the impression that doing so will enhance the candor with which the City reports the at-berth shore power connections of vessels hoteling at the China Shipping Terminal.

Petitioners/intervenors are ordered forthwith to submit an order enforcing the writ consistent with the foregoing for signature by the court. Further, Ms. Ochsner must forthwith**** submit to the court (and otherwise publish as required by the writ) a revised version of her January 30, 2025 declaration, consistent with the foregoing rulings. The court declines the invitation of the petitioners/intervenors to require Ms. Ochsner to revise the July 30, 2024 status report. Given the passage of time since the latter report, and the extensive back-and-forth between the parties since then, and the December update to the June 30 report, the court perceives little to be gained by imposing such a make-work exercise. Further, to the extent the original moving papers asked

the court to enter the previously rejected "Proposed Stipulated Second Amended Judgment," the motion is denied.

The court concludes that the foregoing orders are necessary and proper for the complete enforcement of the writ.

Petitioners'/intervenors' request for attorneys' fees may be the subject of a future motion if not resolved by negotiation as the previous fee motions were.

The court thanks counsel for their work on this matter over the last four years.

IT IS SO ORDERED.

May 2, 2025

Timothy B. Taylor

Judge of the Superior Court

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*The same declaration recites that Ms. Ochsner is responsible for overseeing "environmental compliance of Port tenant leases and permits, including but not limited to, mitigation measures and lease measures implemented through Mitigation Monitoring and Reporting Programs, environmental conditions imposed through project approvals, and other environmental requirements contained in tenant Environmental Compliance Plans."

**Petitioners/intervenors also take issue with the City's "vessel commissioning" exceptions. Any fair-minded person who has visited the China Shipping Terminal (as the court has), will understand that connecting a massive, complex ocean-going vessel to shore power is not at all like plugging in a toaster or a blender in a suburban home.

***Petitioners/intervenors vigorously dispute that it is "equivalent." ROA 346 at 14-16. The City does not convincingly meet this argument.

****The revised declaration and revised Order Enforcing Writ are due in Dept. 2004 by noon on May 14, 2025. The editing of the latter must also remove any suggestion that it is an amended judgment.

Exhibit B

Exhibit B - Interpreting and Reporting Compliance with MM AQ-9 (Alternative Maritime Power)

I. Text and Background of MM AQ-9

The text of MM AQ-9 states:

> "China Shipping ships calling at Berths 97-109 must use AMP at the following percentages while hoteling in the Port:
>
> - January 1 to June 30, 2005: 60 percent of total ship calls (ASJ Requirement)
> - July 1, 2005: 70 percent of total ship calls (ASJ Requirement)
> - January 1, 2010: 90 percent of ship calls
> - January 1, 2011, and thereafter: 100 percent 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."

The 2008 Mitigation Monitoring and Reporting Program ("MMRP") provides that the Real Parties (China Shipping) shall submit bi-annual compliance reports to Respondents documenting compliance with MM AQ-9.

In *NRDC et al. v City of Los Angeles et al.*, San Diego County Superior Court Case No. 37-2021-00023385-CU-TT-CTL, the Court recognized that MM AQ-9, as discussed in the 2008 EIR, also accounts for "emergency" situations and "certain events such as equipment failure [that] may mean less than 100% of ships would comply with this measure in certain years." (June 22, 2022, Minute Order at p. 10).

Sections III and IV, below, identify the only applicable exceptions to MM AQ-9 for the purpose of determining and reporting compliance with MM AQ-9 in Respondents' status reports required by the First Amended Writ. As set forth in detail below, where MM AQ-9 lacks specificity, this document incorporates some provisions from the California Air Resources Board's (CARB's) 2020 At-Berth Regulation, California Code of Regulations, Title 17, section 93130, et seq. (At-Berth Regulations). The references below to the At-Berth Regulations are specific to the current version, adopted in 2020.

Pursuant to Paragraph C.1 of the Order Enforcing the Writ, if Respondents report an exception not identified in Sections III and IV, below, in a status report for an applicable reporting period, the status report will state "not in compliance" for MM AQ-9 for that reporting period. Notwithstanding the foregoing, reporting "not in compliance," in a status report shall not be construed as a concession of contempt by Respondents of the First Amended Judgment or First

Amended Writ.

II. Definitions

1. "China Shipping ships" shall be interpreted to include all vessels owned, chartered, or operated by China Shipping.

2. "Hoteling": The term "hoteling" is undefined in MM AQ-9. To define this term, the At-Berth Regulation provisions regarding connection and disconnection times shall apply; that is, vessels must begin controlling emissions with AMP within two hours after "Ready to Work" (as defined in California Code of Regulations, Title 17, section 93130.2, subdivision (b)(63)), and must not cease controlling emissions with AMP sooner than one hour before "Pilot on Board" (as defined in California Code of Regulations, Title 17, section 93130.2, subdivision (b)(58)). "Ready to Work" means that the vessel is tied to the berth, the gangway has been lowered with netting down, and all government authorities with jurisdiction over the vessel visit have cleared the vessel. "Pilot on Board" means that the vessel's pilot has boarded the vessel to assume navigational control to prepare for vessel departure.

3. "Vessel arrival" means the date and time that a vessel is initially tied to a berth with first line. (Cal. Code Regs., tit. 17, § 93130.2, subd. (b)(83).)

4. Other terms are defined as appropriate in the relevant provisions throughout this document.

III. Express Exceptions in the Text of MM AQ-9

Applicability: MM AQ-9 contains two express exceptions:

1. Non- "China Shipping ships" that are not "retrofitted for AMP."

2. Non- "China Shipping ships" that experience "circumstances when an AMP-capable berth is unavailable due to utilization by another AMP-capable ship."

Reporting: As part of the status report for each applicable period, Respondents shall:

- Identify, and provide documentation to support, which visits are by vessels that are owned, chartered, or operated by China Shipping.

- Provide documentation substantiating that the vessel was a non-China Shipping ship and was "not retrofitted for AMP" for any vessel visit under the first express exception above.

- Provide documentation substantiating that the vessel was a non-China Shipping ship and the existence of "circumstances when an AMP-capable berth is unavailable due to utilization by another AMP-capable ship" for any vessel visit under the second express

exception above.

IV. Other Applicable Exceptions

In addition to the express exceptions set forth above, consistent with the Court's June 22, 2022, Minute Order and the 2008 EIR, MM AQ-9 shall be interpreted to incorporate the three exceptions described below, which are based on the At-Berth Regulations. MM AQ-9 incorporates the At-Berth Regulations only to the extent the regulation is expressly referenced, identified, or quoted below.

1. **Safety & Emergency Events**:

   - Applicability: The AMP requirement in MM AQ-9 does not apply during any portion of a vessel visit that qualifies as a "safety and emergency event" under California Code of Regulations, Title 17, section 93130.8, subdivision (a). "Safety and emergency event" is defined as "an event where a responsible official reasonably determines that compliance with this [mitigation measure] would endanger the safety of the vessel, crew, cargo, passengers, terminal, or terminal staff because of severe weather conditions, a utility event, or other extraordinary reasons beyond the control of the terminal operator or vessel operator." (Cal. Code Regs., tit. 17, § 93130.2, subd. (b)(70).) All safety and emergency events are subject to review and audit by CARB, per the At-Berth Regulation. This exception applies only as long as the event occurs and only to the extent necessary to secure the safety of the vessel, its crew, its cargo, or its passengers and provided that the vessel master: (1) Takes all reasonable precautions after the conditions necessitating the exception have ended to avoid or minimize repeated claims of exception under this subsection; and (2) Includes with the reporting requirement of California Code of Regulations, Title 17 , section 93130.7, subdivision (e)(4) all documentation necessary to establish the conditions necessitating the safety and emergency event exception and the date(s), local time, and location. All required documentation must be in the English language.

   - Reporting: Respondent must submit as part of the status report for the applicable period all documentation received from the Real Parties and/or submitted to CARB in support of the safety and emergency event claim. This includes "all documentation necessary to establish the conditions necessitating the safety and emergency event exception and the date(s), local time, and location. All required documentation must be in the English language." (Cal. Code Regs., tit. 17, § 93130.8, subd. (a)(2).)

     - If CARB denies a claimed safety and emergency event exception for purposes of compliance with the At-Berth Regulation for any given visit, that exception also cannot be claimed for that visit for purposes of compliance with MM AQ-9. In that event, another applicable exception must be identified, or the visit must be

identified as noncompliant.

- The status report shall include any communication on any past claimed safety and emergency event exception that Respondents received from the Real Parties and/or CARB since the last report.

2. **Vessel Commissioning:**

   - Applicability: The AMP requirement in MM AQ-9 does not apply during any portion of a vessel visit that qualifies as "commissioning" under California Code of Regulations, Title 17, section 93130.8, subdivision (c). "Commissioning" is defined as "the process undertaken by the vessel operator and terminal operator to ensure that the shorepower equipment on the vessel is compatible with the shore power equipment on the terminal and that there are no safety issues for both the equipment and the personnel handling the connection." (Cal. Code Regs., tit. 17, §93130.2, subd. (b)(84).) Any exceptions claimed for vessel commissioning shall follow the At-Berth Regulation's exception for vessel commissioning. That exception is set forth in California Code of Regulations, Title 17, section 93130.8, subdivision (c), as follows:

     - "The first vessel commissioning visit made by a vessel to a terminal may be an exception as long as the vessel was able to successfully connect to shore power during that visit."

     - In addition, there can be a vessel commissioning exception after the first visit provided that the vessel operator demonstrates that either: "(1) The commissioning process could not be accomplished in a single visit; or (2) The terminal requires that the vessel be recommissioned."

     - For any vessel visit for which a commissioning exception is claimed, the vessel operator and terminal must commence and complete commissioning as soon as reasonably practicable upon vessel arrival.

   - Reporting: Respondents must submit as part of the status report for the applicable period all documentation received from the Real Parties and/or submitted to CARB in support of the commissioning visit claim, as specified in California Code of Regulations, Title 17, sections 93130.7, subdivision (e)(4) and 93130.8, subdivision (c) of the At-Berth Regulation. The status report must include documentation showing whether vessel commissioning was commenced and completed as soon as reasonably practicable.

     - If CARB denies a claimed commissioning exception for purposes of compliance with the At-Berth Regulation for any given visit,

that exception cannot be claimed for that visit for purposes of compliance with MM AQ-9. In that event, another applicable exception must be identified, or the visit must be identified as noncompliant.

- The report will include any communication on any past claimed commissioning exception that Respondent received from the Real Parties and/or CARB since the last report.

3. **Equipment Failure**:

- Applicability: The AMP requirement in MM AQ-9 does not apply during any portion of a vessel visit that occurs during either a vessel-side equipment failure or a terminal-side equipment failure.

  - A "terminal-side equipment failure" shall be deemed to occur when the terminal or Respondents have installed shoreside control equipment and maintains that equipment according to manufacturer recommendations, but that equipment experiences an unexpected failure at the time of hoteling during the vessel visit for which the equipment failure is claimed. In addition, a "terminal-side equipment failure" cannot be claimed unless arrangements are promptly made to ensure that repair, replacement, or servicing of the failed equipment will be completed as soon as possible.

  - A "vessel-side equipment failure" shall be deemed to occur when a vessel owner or operator has installed on-board equipment to connect with shoreside control equipment and maintains that on-board equipment according to manufacturer recommendations, but that on-board equipment experiences an unexpected failure at the time of hoteling during the vessel visit for which the equipment failure is claimed. In addition, a "vessel-side equipment failure" cannot be claimed unless arrangements are promptly made to ensure that repair, replacement, or servicing of the failed on-board equipment will be completed as soon as possible.

- Reporting: Respondents must submit as part of the status report for the applicable period any documentation received from the Real Parties and/or CARB related to the equipment failure. In addition, Respondents shall submit any further documentation necessary to substantiate a claimed equipment failure exception as defined above. Necessary documentation includes, at minimum, the dates and times of the failure(s); any relevant correspondence documenting the equipment failure consistent with the definitions above; evidence that the equipment at issue has been maintained according to manufacturer recommendations; evidence that the equipment failure was unexpected at the time of hoteling during the vessel visit for which the equipment failure is claimed; and evidence that

arrangements have been made to ensure that repair, replacement, or servicing will be completed as soon as possible.

PROOF OF SERVICE

Natural Resources Defense Council, Inc., et al. v. City of Los Angeles, et al.
San Diego County Superior Court Case No. 37-2021-00023385-CU-TT-CTL

I am employed in the County of Los Angeles, State of California. I am over the age of 18 and not a party to the within action. My business address is 21865 Copley Drive, Diamond Bar, CA 91765.

On **May 9, 2025**, I served the within document(s) described as **[PROPOSED] ORDER ENFORCING WRIT (WITH EXHIBITS); AND [PROPOSED] ORDER ENFORCING WRIT (WITH EXHIBITS) (REDLINE VERSION)** on the interested parties in this action as stated below: [on the *attached service list*].

☐ (BY MAIL) By placing a true copy of the foregoing document(s) in a sealed envelope addressed as set forth above. I placed each such envelope for collection and mailing following ordinary business practices. I am readily familiar with this District's practice for collection and processing of correspondence for mailing. Under that practice, the correspondence would be deposited with the United States Postal Service, with postage thereon fully prepaid at Diamond Bar, California, in the ordinary course of business. I am aware that on motion of the party served, service is presumed invalid if postal cancellation date or postage meter date is more than one day after date of deposit for mailing in affidavit.

☐ (BY OVERNIGHT DELIVERY) I deposited in a box or other facility regularly maintained by Overnight Express, an express service carrier, or delivered to a courier or driver authorized by said express service carrier to receive documents, a true copy of the foregoing document(s) in a sealed envelope or package designated by the express service carrier, addressed as set forth above, with fees for overnight delivery paid or provided for.

☐ (BY FAX) By transmitting a true copy of the foregoing document(s) via facsimile transmission from this District's sending facsimile machine, whose telephone number is (909) 396-2961, to each interested party at the facsimile machine telephone number(s) set forth on the attached mailing list. Said transmission(s) were completed on the aforesaid date at the time stated on the transmission record issued by the District's sending facsimile machine. Each such transmission was reported as complete and without error and a transmission report was properly issued by the District's sending facsimile machine for each interested party served. A true copy of each transmission report is attached to the office copy of this proof of service and will be provided upon request.

☐ (BY PERSONAL SERVICE) I caused to be delivered a true copy of the foregoing document(s) in a sealed envelope by hand to the offices of the above addressee(s).

☒ (BY E-MAIL) By transmitting a true .pdf copy of the foregoing document(s) by e-mail transmission from rmendoza@aqmd.gov to each interested party at the e-mail address(es) set forth above [on the attached service list]. Said transmission(s) were completed on the aforesaid date at the time stated on declarant's e-mail transmission record.

Executed on May 9, 2025, at Chino Hills, California.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Rachel Mendoza
(Type or print name)

(Signature)

SERVICE LIST

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WEST BASIN CONTAINER TERMINAL
111 W. Ocean Blvd., Suite 1610
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August 11, 2025

Ms. Lisa Wunder
Director of Environmental Management
Port of Los Angeles
425 S. Palos Verdes Street
San Pedro, CA 90731

Re: Draft Revised Supplemental Environmental Impact Report, 26 June 2025
Terminal (Berths 97–109) – Mitigation Measures GHG-2 and MM AQ-9

Dear Ms. Wunder,

This letter addresses the Draft Revised Supplemental Environmental Impact Report (DRSEIR) published and proposed by the Port of Los Angeles (POLA) on June 26, 2025. It is submitted by West Basin Container Terminal (WBCT) on behalf of China Shipping (North America) Holding Co. Ltd (China Shipping, also Tenant). As you may well know, WBCT serves as China Shipping's terminal operator for the facilities and berths 97-109 under Permit 999 ("Terminal").[1]

CSNAH-1

China Shipping is more than just a tenant of POLA; it is also a foundational partner in the economic engine of Southern California. With over two decades of operational history and nearly 200 million dollars in capital already invested, the Terminal's continued success is inextricably linked to the competitive viability and global standing of this Port. Thus, China Shipping submits its comments as a committed stakeholder compelled to warn against the adoption of the proposed mitigation requirements MM GHG-2 and MM AQ-9; both of which are flawed, misguided and represent a critical strategic error with potentially grave consequences.

Comment 1:

Under CEQA, mitigation measures outlined in the DRSEIR must be:

- **Feasible** (Cal. Pub. Res. Code § 21061.1; Cal. Code Regs. tit. 14, § 15126.4(a)(2));

CSNAH-2

[1] The subject Terminal was the first container terminal ***in the world*** to use Alternative Maritime Power ("AMP")—June 21, 2004—nearly 20 years before doing so became the industry norm. *See Alternative Maritime Power*, The Port of Los Angeles, https://www.portoflosangeles.org/environment/air-quality/alternative-maritime-power-(amp) (last visited Aug. 11, 2025).

- **Proportionate** to actual significant impacts (Cal. Pub. Res. Code § 21002.1); and,
- **Non-duplicative**-- particularly where existing programs already mitigate expected impacts (Cal. Code Regs. tit. 14, § 15126.4(a)(5)).

CSNAH-2

CEQA also requires agencies to consider **impacts on the human environment**, including employment and economic well-being (*Bakersfield Citizens for Loc. Control v. City of Bakersfield* 124 Cal. App. 4th 1184 (2004); Cal Code Regs. tit. 14 § 15131)). Where a project's foreseeable consequences include substantial job losses or economic harm to a community, those effects must be analyzed and mitigated (*Kings Cnty. Farm Bureau v. City of Hanford*, 221 Cal. App. 3d 692 (Ct. App. 1990), *reh'g denied and opinion modified* (July 20, 1990)).

The DRSEIR is void of any reference or consideration of the impacts on the human environment. China Shipping respectfully requests that POLA consider these impacts as recorded in recent studies, including, *inter alia*, *Economic Importance of Trade & the Ports to Southern California: Phase I Report: Baseline Economic & Fiscal Impacts*[2] and *Goods On The Move: Trade And Logistics In Southern California*[3] to address the human environment impacts.

CSNAH-3

Human environmental impacts are also addressed in Comments 4 and 5, below.

Comment 2: The proposed mitigation measure MM GHG-2 is **not feasible**. (Cal. Pub. Res. Code § 21061.1; Cal. Code Regs. tit. 14, § 15126.4(a)(2)).

The June 2025 DRSEIR proposes MM GHG-2, requiring the Tenant to purchase and retire carbon offsets for all GHG emissions projected to be above 10,000 metric tons annually (DRSEIR, p. 3.2-27). The measure is flawed for two reasons.

First, the projections are over inflated. *See*, footnote 10, and Comment 7. Second, the DRSEIR fails to consider or account for substantially increasing costs of carbon offsets.

MM GHG-2 requires the purchase of carbon offsets from a CARB recognized offset registry. (DRSEIR, p. 3.2-42). Recent quarterly auctions have settled between approximately $25.87 and $31.91 per ton, reflecting variability across 2024–2025 auctions. Admittedly, the most recent joint cap-and-trade allowance auction, No. 43, on May 25, 2025 settled at $25.87 per ton — the floor price for the year and the lowest ever since 2021.[4] However, prices for carbon offsets

CSNAH-4

[2] Center for Jobs, *Economic Importance of Trade & the Ports to Southern California: Phase I Report: Baseline Economic & Fiscal Impacts* (May 2024), https://centerforjobs.org/wp-content/uploads/Economic-Impact-Ports-Report-FINAL.pdf.

[3] Los Angeles County Economic Development Corporation, *Goods on the Move: Trade and Logistics in Southern California*, 2025 Trade and Logistics Industry Cluster Report (Mar. 2025), https://laedc.org/2025-trade-and-logistics-industry-cluster-report/.

[4] *See* California Air Resources Board, *California and Quebec Release Summary Results from 43rd Joint Cap-and-Trade Allowance Auction* (May 29, 2025) https://ww2.arb.ca.gov/news/california-and-quebec-release-summary-results-43rd-joint-cap-and-trade-allowance-auction; *see also* Daniel Weeks & Madeline Ryan, *California-Quebec Clears at Floor Price for First Time Since 2020*, S&P Global Commodity Insights (May 29, 2025), https://www.spglobal.com/commodity-

are likely "to rise to intrinsic value closer to the current Tier 1 level of $60, with a path toward **$90 by 2030** and possibly as high as $180 by the middle of the next decade."[5] Some analysts are forecasting a potential 20% hike after 2026.[6] The MM GHG-2 simply fails to account for widely accepted projections that the surplus of allowances—previously growing—will soon begin to decline sharply by 2026, creating what is being described as a "cliff event."[7] Even the California Legislature's economists have modeled future California Carbon Allowance (CCA) values that reflect expectations that **allowance prices will rise steadily starting from 2026 onward**, especially under tighter supply scenarios.[8]

Permit 999 also obligates the Tenant to meet a Minimum Annual Guarantee (MAG) per TEU. The proposed (yet to be approved) MAG for 2026 is $28.24 million. Based on an annual 3% GRI, that MAG will likely scale upwards perhaps as high as $43.37 million in 2036.

Analyzing the DRSEIR's projection for residual emissions in its Table 3.2-2 with the MAG schedule using the current CCA price of $25.87 and a 2026 projected price of only $40 per ton for the sake of argument, illustrates that MM GHG-2 is not financially feasible.

Year	Obligation (tCO_2e)	MAG ($M)	Cost @ $25.87/t ($M)	Cost @ $40/t ($M)	% of MAG (Low–High)	Cost/TEU (Low–High)[9]
2026	79.071	28.24	2.04	3.16	7.22% – 11.19%	$2.24 - $3.46
2036	126,141	43.37	3.26	5.04	7.52% – 11.62%	$3.57 - $5.53
2045	118,832	56.59	3.07	4.75	5.42% – 8.39%	$3.37 - $5.21

Even at the lowest floor price (which is set by CARB to automatically increase 5% per year), the projected costs for MM GHG-2 equates to 5–12% of the Tenant's MAG obligations, substantially exceeding the 3–5% operating margin typical for West Coast container terminals — effectively forcing the Terminal to operate into negative margins. Causing the Terminal to incur

CSNAH-4

insights/en/news-research/latest-news/electric-power/052925-california-quebec-carbon-auction-clears-at-floor-price-for-first-time-since-2020.

[5] Luke Oliver, *California Carbon: Policy, Positioning, Performance*, KraneShares (Mar. 14, 2025), https://kraneshares.com/california-carbon-policy-positioning-performance/ (emphasis added).

[6] *Ibid.*

[7] *Ibid.*

[8] California State Assembly, Committee on Budget, Subcommittee No. 4 on Climate Crisis, Resources, Energy, and Transportation, Assembly Member Steve Bennett (Chair) (April 30, 2025), https://abgt.assembly.ca.gov/system/files/2025-04/april-30-sub-4-agenda-on-ggrf-expenditures.pdf.

[9] Based on DRSEIR's flawed 1.215M TEU assumed throughput projection for 2026. Permit 999's 2024 actual throughput was only 911,929.75 TEUs; thus the per-TEU cost is much higher. In any event, POLA's 1.215M TEU assumption is overly optimistic and impermissibly inflated. It is simply not feasible that Permit 999's throughput will increase by 33.33% over two years (2024 to 2026). Data from the Pacific Merchant Shipping Association (PMSA) and POLA strongly suggest that the 2026 projection of 1.215M TEUs is not credible given current market and diversion trends.

losses will inevitably lead to its closure, the impacts for which were previously accepted and submitted by POLA to the Court during the cited litigation.[10]

CSNAH-4

Comment 3: MM GHG-2 is **not proportionate** and will put the Terminal at a severe competitive disadvantage; resulting in the diversion of cargo.

It is well documented that over the last two decades, multiple trends and events have eroded the West Coast's market share of the country's goods movement through its ports. These include, but are not limited to:

- 2006–2023: West Coast market share dropped 9.6 percentage points (which equates to the loss of ~77,000 regional jobs).
- The Panama Canal expansion (2016) enabled larger vessels to reach US Gulf/East Coast ports directly.
- Massive infrastructure investments at Ports in Western Canada, Savannah, Houston, Virginia and others have improved and increased capacity and speed to inland markets.
- Supply chains have shifted away from China to Southeast Asia which favors Suez Canal routes to the East Coast.
- Perceived West Coast labor instability has driven shippers to diversify routings.
- Regulatory uncertainty, and regulatory friction/burdens undermine and threaten long-term investments required to keep POLA (and Port of Long Beach) competitive with the growing ports on the US East and Gulf Coasts.

As one of POLA's largest container terminals, responsible for nearly one-fifth of POLA's annual container throughput,[11] the Terminal faces these very same pressures.

CSNAH-5

Financially stressed terminal operators will invariably pass on additional costs to their customers through higher Terminal Handling Charges (THC). A comparison of THC at major U.S. container ports reveals that the Ports of Los Angeles and Long Beach are already among the most expensive gateways in the nation. On the world stage, the San Pedro Bay ports fare no better.[12]

[10] Respondents' Response to Order Following Remand/Order to Show Cause, Dkt. No. 199 at pp. 8-9, *Nat. Res. Def. Council, Inc. v. City of Los Angeles*, Case No. 37-2021-00023385-CU-TT-CTL (Cal. Super. Ct. San Diego Cnty. May 10, 2024) (citing "serious harm" and "massive disruption").

[11] *See* Declaration of Quentin Yang in Support of Cosco Shipping (North America), Inc., China Cosco Shipping Corporation Limited, and China Shipping (North America) Holding Co. Ltd.'s Response to Order to Show Cause, Dkt. No. 200 at ¶ 8, *Nat. Res. Def. Council, Inc. v. City of Los Angeles*, Case No. 37-2021-00023385-CU-TT-CTL (Cal. Super. Ct. San Diego Cnty. May 10, 2024).

[12] YQN, *Compare Terminal Handling Charges Across Major Ports* (Jun. 2, 2025), https://resources.yqn.com/compare-terminal-handling-charges-ports/.

Port Complex	THC 20' (USD)	THC 40' (USD)
Los Angeles/Long Beach	$300–$400	$400–$500
Rotterdam, Netherlands	$220–$275	$330–$385
Dubai (Jebel Ali), UAE	$150–$200	$250–$300
Busan, South Korea	$160–$210	$260–$310

Adding even $1–$3/TEU for offsets would simply widen this gap and accelerate diversion of cargo to Canada, or US Gulf or East Coast ports. The consequences of diversion were also accepted and submitted by POLA to Court during the cited litigation.[13]

Even if the Terminal were able to continue to operate with a positive margin (which it cannot, see Comment 2, above), it is reasonable to expect that a significant increase in any cost component must be incorporated into determining the total landed cost calculus; that is, the THC that the ocean carrier will have pay to load and unload containers to and from the vessel. This cost ultimately gets passed on to the Beneficial Cargo Owner (BCO) as a part of their total freight rate. As shown above, the THC fees on the West Coast are already the highest in the world.

Terminal fees in general are highly competitive as other local terminal operators (and other non-US West Coast ports) solicit ocean carriers and BCOs to attract more vessel calls and related cargo volumes. This marketing effort becomes increasingly complex due to established (and changing) vessel alliances with multiple carriers sharing space on vessels, some of whom may also have an investment in the marine terminal itself. Carriers within an alliance who have a financial interest in a marine terminal will advocate for vessel calls at their affiliated terminal. This can become cumbersome when multiple ocean carriers have conflicting objectives regarding which marine terminal a service string should call. Since the Terminal will necessarily have higher terminal fees as a result of MM GHG-2 carbon credit purchases, it will be at a severe disadvantage over other POLA terminals, those in Long Beach, and those on the US East and Gulf Coasts.

CSNAH-5

Comment 4: Cargo diversion would result in significant negative impacts on the human environment, including employment and economic well-being.(*Bakersfield Citizens for Loc. Control v. City of Bakersfield* 124 Cal. App. 4th 1184 (2004); Cal Code Regs. tit. 14 § 15131)). Where a project's foreseeable consequences include substantial job losses or economic harm to a community, those effects must be analyzed and mitigated (*Kings Cnty. Farm Bureau v. City of Hanford*, 221 Cal. App. 3d 692 (Ct. App. 1990), *reh'g denied and opinion modified* (July 20, 1990)). It stands, *a fortiori*, that proposed mitigation measures must then also account for impacts that such measures will have on the human environment.

CSNAH-6

[13] Respondents' Response to Order Following Remand/Order to Show Cause, Dkt. No. 199 at p. 9, *Nat. Res. Def. Council, Inc. v. City of Los Angeles*, Case No. 37-2021-00023385-CU-TT-CTL (Cal. Super. Ct. San Diego Cnty. May 10, 2024) (citing "significant risk of reducing market share" and referring to POLA's 20% loss of market share since 2002).

The Terminal directly employs approximately 876 full-time, mostly blue-collar workers, who provided over 1.8 million man-hours in 2023 and contracts with 170+ vendors, including ~1,500 independent truck drivers and other service workers (e.g., janitors, waste management, fencers, handymen, locksmiths, secretarial workers, etc.).[14]

Analysts have calculated that each 1% of market share loss equals ~8,000 regional jobs lost.[15]

Cargo diversion to other local terminals or other ports will not reduce global GHG emissions — it merely shifts them geographically, while inflicting economic damage on the local economies. Ships will still sail, containers will still move and the only change will be loss of local jobs, vendor revenue, and tax base.

CSNAH-6

Comment 5: There is a causal chain—from project increased costs to operator margin pressure, to higher THCs, to reduced port and Terminal competitiveness, to market share loss, and finally to regional job loss— which is a direct, foreseeable, and significant adverse impact of the mitigation measure, MM GHG-2. The DRSEIR's failure to analyze this critical economic dynamic represents a failure to assess the mitigation measures indirect and cumulative impacts on the human environment, a core requirement of CEQA.

CSNAH-7

Comment 6: The order of priority for the purchase of carbon offsets (DRSIER, p. 3.2-42) is vague and lacks specificity with respect to contemplated mechanisms and conditions for which the purchaser of the carbon offsets may seek to purchase from outside the local area, South Coast Air Basin, or State of California. POLA should consider appropriate and fair triggers including price which will allow for the purchase of second to fourth level priorities.

CSNAH-8

Comment 7: Regulatory Redundancy Under CEQA (MM GHG-2 and MM AQ-9).

CEQA expressly prohibits requiring mitigation measures for effects already addressed by other enforceable regulatory programs (Cal. Code Regs. tit. 14, § 15126.4(a)(5); *City of Marina v. Bd. of Trs. of California State Univ.*, 39 Cal. 4th 341, 366 (2006)).

MM GHG-2 is redundant because:

- AB 32 Cap-and-Trade already regulates and mitigates the Terminal's land-based emissions, which have been included and were "covered" in the program baseline since its inception. The project-specific, land-based emissions are covered by the cap-and-trade program. Operations at the Terminal began in 2008. When the California Air Resources

CSNAH-9

[14] Q. Yang Declaration, ¶¶ 22-23.

[15] *See* Declaration of Michael Kahoe in Support of Cosco Shipping (North America), Inc., China Cosco Shipping Corporation Limited, and China Shipping (North America) Holding Co. Ltd.'s Response to Order to Show Cause, Dkt. No. 201 at ¶ 25, *Nat. Res. Def. Council, Inc. v. City of Los Angeles*, Case No. 37-2021-00023385-CU-TT-CTL., (Cal. Super. Ct. San Diego Cnty. May 10, 2024), *citing* Center for Jobs, *Economic Importance of Trade & the Ports to Southern California: Phase I Report: Baseline Economic & Fiscal Impacts* (May 2024), https://centerforjobs.org/wp-content/uploads/Economic-Impact-Ports-Report-FINAL.pdf.

Board ("CARB") adopted the GHG cap-and-trade program in 2011, emissions from operations at the port were specifically included in the design of that program and, therefore, calculation of the baseline for the cap.

- Moreover, the CARB At-Berth Regulation (17 CCR § 93130 et seq.) is a specialized, expert-driven framework for vessel GHG emissions at berth, including compliance exceptions (VIEs/TIEs) and a Remediation Fund. Rather than creating a conflicting and less-informed parallel system as stated in proposed MM AQ-9, the DRSEIR should defer to the expertise of CARB and adopt its existing framework, including its approved exceptions. This approach appears to be taken with respect to MM AQ-31, which should serve as the single standard at the Terminal.

- Finally, the International Maritime Organization (IMO)'s MARPOL Annex VI framework imposes technical (EEXI) and operational (CII) measures that directly limit GHG emissions from vessels calling at the Terminal. Ignoring these binding measures artificially inflates the DRSEIR's emissions estimates and unfairly burdens the Terminal.

CSNAH-9

By layering MM GHG-2 and MM AQ-9 on top of these programs, the DRSEIR double counts emissions and imposes costs with no additional environmental benefit. The proposed measures are not proportionate and are duplicative in counting emissions and their impacts.

Recommended Alternatives

1. Recognize AB 32, CARB At-Berth, and IMO compliance as full mitigation.
2. Adopt MM AQ-31 and withdraw MM AQ-9.
3. Focus on on-site emission reductions that deliver local air quality benefits.
4. Adopt volume-based compliance flexibility for low-throughput.
5. Provide flexible price-based guidance allowing for the purchase of second to fourth level priorities.

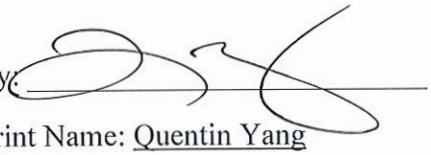
CSNAH-10

Conclusion

MM GHG-2 is duplicative, infeasible, and counterproductive. Using the Port's own data, it would impose costs beyond industry margins, accelerate cargo diversion, and cause substantial job loss — all without reducing total GHG emissions. We respectfully request that POLA remove or substantially revise MM GHG-2 and withdraw/streamline MM AQ-9 with MM AQ-31 in compliance with CEQA's requirements and existing regulatory frameworks. CSNAH-11

Sincerely,

West Basin Containers Terminal LLC

By: 

Print Name: Quentin Yang

Title: Senior Vice President

Date: 8/11/2025

August 8, 2025

Lisa Wunder
Acting Director of Environmental Management
City of Los Angeles Harbor Department
425 S. Palos Verdes Street
ceqacomments@portla.org
Via Email

Re: Draft Revised Supplemental Environmental Impact Report – Berths 97-109 [China Shipping] Container Terminal Project

Dear Ms. Wunder,

On behalf of the Natural Resources Defense Council, San Pedro Peninsula Homeowners' Coalition, San Pedro Peninsula Homeowners United, Inc., Coalition for Clean Air, and East Yard Communities for Environmental Justice (collectively, "Community Petitioners"), we provide comments on the Draft Revised Supplemental Environmental Impact Report for the Berths 97-109 [China Shipping] Container Terminal Project ("Draft RSEIR").

After years of litigation, the Port has finally—under force of court order—started the process to revise the inadequate Supplemental Environmental Impact Report it certified in 2019 ("2019 SEIR"). However, as explained in detail below, the Draft RSEIR continues to violate the California Environmental Quality Act ("CEQA") by artificially limiting the scope of the review for this document, thus entirely excluding discussion other feasible mitigation measures. Even within the categories of mitigation analyzed in the Draft RSEIR, the Port fails to evaluate feasible mitigation for at-berth emissions and proposes an inadequate greenhouse gas fund measure. Therefore, the Port should revise those measures as stated in this letter and adopt them immediately; the Port should not continue to use the CEQA process to delay implementation of feasible mitigation when the project is already polluting neighboring communities and contributing to climate change. In addition, the Port should revise and recirculate the Draft RSEIR to include additional mitigation beyond the scope of the current document.

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NATURAL RESOURCES DEFENSE COUNCIL
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I. The Port incorrectly limits its analysis of mitigation measures to alternative maritime power and a greenhouse gas offset fund

Under CEQA, a lead agency may not approve a project that will have significant environmental impacts unless it finds that alternatives and mitigation measures to reduce those impacts are infeasible based on specific economic, legal, social, technological, or other considerations. (Pub. Res. Code, §§ 21002, 21061.1; see also *Covington v. Great Basin Unified Air Pollution Control Dist.* (2019) 43 Cal.App.5th 867, 880 [noting the "relevant finding" for certifying a CEQA document despite significant environmental effects "is that no additional feasible mitigation measures were available"].) "'Feasible' means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social and technological factors." (Pub. Res. Code, § 21061.1.)

Here, the Port evaluates only two measures—alternative maritime power ("AMP") and a greenhouse gas offset fund—to reduce the project's significant impacts. While the Port prepared the Draft RSEIR pursuant to a court order to address specific issues (Draft RSEIR at pp. 1-3 to 1-4), nothing in that court order requires the Port to *limit* its discussion of mitigation to only those issues. To the contrary, the writ says the Port must evaluate those measures "at a minimum." (May 24, 2024, Writ ¶ 2.a.) Here, where there is no dispute that the project will continue to have significant air quality and greenhouse gas impacts, the Port must evaluate additional feasible mitigation measures to reduce those impacts. This is especially true given that technology has advanced considerably since the Port last considered mitigation in 2019. NRDC-2

Therefore, the Port must consider a much broader set of mitigation measures beyond AMP and a greenhouse gas offset fund. Indeed, the Port's own Clean Air Action Plan has goals of zero emissions for cargo handling equipment by 2030, and zero emissions for on-road drayage trucks serving the Port by 2035. (Ex. A, San Pedro Bay Ports Clean Air Action Plan 2017, at p. 4.) The Port should evaluate whether any additional mitigation measures are feasible to achieve those goals.

Furthermore, the Port must evaluate measures that would require it to continue to update and improve pollution control technologies over time. There are 20 years left on this lease (as well as the possibility that the project will continue to operate even after that). Surely, technology will continue to advance over these two decades. The Port must analyze and adopt measures to ensure that this terminal is operating with the cleanest technology available, even if that technology is developed after the close of this comment period.

II. The Port must analyze and adopt all feasible mitigation measures for at-berth emissions

The Draft RSEIR fails to analyze all feasible mitigation for at-berth emissions because the Port does not consider any means for reducing at-berth emissions other than the 2008 AMP measure, MM AQ-9. This failure is unacceptable because, as explained below, the trial court specifically ordered the Port to reevaluate mitigation for at-berth emissions *in addition to* implementing MM AQ-9.

Community Petitioners have repeatedly called for additional mitigation of at-berth emissions throughout this years-long CEQA process: in their comments on the 2019 SEIR, in the briefing in the litigation, and in their comments on the Notice of Preparation for this document. Specifically, Community Petitioners have consistently asked for the basic and feasible mitigation of 100% AMP compliance with minimal exceptions for emergencies and similar events, but the Port continues to ignore that request. This violates CEQA and the court's writ and judgment in this case.

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In the litigation over the 2019 SEIR, Community Petitioners argued both that the Port had no basis for abandoning the 2008 version of MM AQ-9 *and* that the Port had failed to adopt all feasible mitigation that would reduce emissions beyond the original 2008 measure and the proposed 2019 SEIR measure. Community Petitioners, in the CARB brief they joined, proposed that the Port adopt a 100% AMP requirement for all ships, with exceptions only for emergencies. (See Jan. 5, 2022, Second Corrected People and CARB Opening Brief, at pp. 19-23].)

In its ruling, the trial court held that the Port's abandonment of the 2008 AMP measure was not supported by substantial evidence. (June 27, 2022, Trial Court Ruling on Merits, at p. 10.) As the Port is aware, after the appeal, the trial court required that measure to be reinstated immediately, and it is now included in the Sixth Amended Lease. But as relevant here, the trial court *also* granted Community Petitioners' petitions "challenging the Port's failure to adopt all feasible measures to mitigate the Revised Project's at-berth emissions[.]" (June 27, 2022, Trial Court Ruling on Merits, at p. 13.) The writ and judgment effectuate that latter part of the ruling by ordering reevaluation of the at-berth emissions mitigation in a revised environmental review document. (May 24, 2024, Writ ¶ 1.a.i.; *id.* at ¶ 2.a.ii.)

Accordingly, the Port began the current process of revising the measure to ostensively adopt all feasible mitigation to address at-berth emissions and issued this Draft RSEIR in response to that ruling. For at-berth mitigation, the Draft RSEIR proposes:

MM AQ-9: Alternative Maritime Power (AMP). China Shipping ships calling at Berths 97-109 shall use AMP while hoteling in the Port for 100-percent of ship calls.

Additionally, all ships retrofitted for or capable of using AMP calling at Berths 97-109 shall use AMP while hoteling in the Port for 100-percent compliance of ship calls.

The following exceptions apply to this measure:

1) When an AMP-capable berth is unavailable due to utilization by another AMP-capable ship.
2) During any portion of a vessel visit that qualifies as a "safety and emergency event" under California Code of Regulations, Title 17, 29 section 93130.8, subdivision (a).
3) During any portion of a vessel visit that qualifies as "commissioning" under California Code of Regulations, Title 17, section 93130.8, subdivision (c).
4) During any portion of a vessel visit that occurs during either a vessel-side equipment failure or a terminal-side equipment failure.

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(Draft RSEIR at p. 3.1-42.)

Not only is this mitigation measure not better than the 2008 measure currently in place (as clarified by the court's May 15, 2025, order), as discussed below, it is *worse* because it leaves key terms undefined. Therefore, the Draft RSEIR violates the court's writ and judgment, which ordered the Port to re-evaluate the 2008 measure to determine whether *additional* mitigation is feasible, not to weaken the requirements currently in place.

The Port has been on notice regarding the deficiencies of this measure. Most recently, in their NOP comments, Community Petitioners stated that the Port should evaluate the following issues:

- An AMP measure that requires 100% compliance for *all* vessels at the terminal except for enumerated emergencies
- What the definition of "emergency" is and why that definition is being used

- A plan to address any noncompliance and/or emergency-related incidents, to prevent those incidents from reoccurring
- How to eliminate instances in which vessels are unable to AMP because other ships are AMPing, either through scheduling or other means
- How to eliminate calls by non-AMP capable ships, either through contracting requirements or other means
- Any obstacles to compliance caused by the electricity grid, such as insufficient electricity and/or power outages, and how those obstacles can be addressed
- The definition of "hoteling" and the time period the ships need to be connected while at berth
- Ensuring that vessels are drawing electrical power for the entire time they are supposedly AMPing
- Whether alternatives to AMPing, such as bonnet systems, are necessary and explaining why they are necessary

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The Port failed to take these comments to heart, ignoring most of these requests. Therefore, the proposed measure fails to adopt all feasible mitigation for the following reasons.

A. It is feasible to have a baseline requirement of 100% AMP for *all* ships, not just China Shipping ships

The proposed mitigation measure requires 100% AMP as a starting point for all China Shipping ships, but sets forth a different, more lenient requirement for non-China Shipping ships. For non-China Shipping ships, the measure requires AMP only for ships that are "retrofitted for or capable of using AMP." (Draft RSEIR at p. 3.1-42.) That means if a non-AMP capable non-China Shipping ship calls at the Port, it need not comply with the AMP requirement. This is an important distinction because based on the most recent reporting, a significant number—7 to 10 percent of ship visits—fall in this category. (See July 30, 2025, Ochsner Decl. at p. 9 and exhibits [claiming that six of 83 visits for the January to June 2025 period were non-China Shipping ships that were not AMP capable]; April 21, 2025, Respondents'/Defendants' Opposition to Motion to Enforce at pp. 15-16 [claiming that 10 (of 100) visits for the July to December 2024 period were non-China Shipping ships that were not AMP capable]; see also Jan. 30, 2025, Ochsner Decl. and exhibits; May 14, 2025 Ochsner Decl. and exhibits; and July 30, 2024, Ochsner Decl. and exhibits.)

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The Draft RSEIR provides no reasoned analysis for this distinction between China Shipping ships and non-China Shipping ships, and it appears to simply be a relic of settlement negotiations from over two decades ago. And while the distinction

appears in the 2008 version of the measure currently in place now, there is no reason to continue the distinction in the future. Indeed, determining which ships are "China Shipping ships" and which ships are "non-China Shipping ships" has been a persistent source of conflict between the parties and a burden on the Port by its own admission. (Ex. B at p. 7 [Port complaining that "[b]ecause the vessels are not China Shipping vessels, neither WBCT or China Shipping have access to the ownership information; by the same measure, WBCT does not include the ownership information for those vessels (because it does not have such information) in its reports."]; April 21, 2025, Respondents/Defendants' Opposition to Motion to Enforce at pp. 15-16 [same].) At the very least, if the Port retains this distinction, it must provide a meaningful definition of the term "China Shipping ships," namely, the one used by the parties and adopted by the court:

> "China Shipping ships" shall be interpreted to include all vessels owned, chartered, or operated by China Shipping.

However, the Port should *not* retain this distinction because allowing non-China Shipping ships to circumvent the AMP requirement simply because they are not retrofitted for AMP is not consistent with CEQA. CEQA requires all feasible mitigation, and it is feasible to include a measure that requires all ships—regardless of who owns, operates, or charters them—to comply with the baseline 100% AMP requirement.

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The Port's first defense of this distinction is that it does not "have authority to impose any specific emissions reduction technology on [ocean going vessels] as they are internationally flagged vessels subject only to IMO regulations." (Draft RSEIR at p. 3.1-50.) But that defense simply tears down a straw man argument that Community Petitioners have never made. Community Petitioners do not ask that the Port somehow require that all ships in the world be AMP capable. Rather, Community Petitioners ask only that the Port not allow non-AMP capable ships to call at the terminal. As to that argument, the Port admits it could conceivably "exclude non-AMP-capable vessels from the terminal," but then baldly claims that "the Port and the terminal do not have the authority to implement such a strategy." (Draft RSEIR at p. 3.1-50.)

The Port has failed to substantiate its rejection of this measure with any—let alone substantial—evidence. Contrary to the Port's claim, the Port *does* have authority to exclude non-AMP-capable vessels from the terminal. The Port can do so via the very document that it has used to impose all other environmental mitigation requirements, including requirements on ships: the lease. For example, the Port has included in the lease the requirement that all ships—even non-China Shipping ships—abide by the speed limits in the waters near the Port. And in the 2019 SEIR, the Port *itself* proposed a 95% AMP requirement to apply to *all* ships. (Draft RSEIR at p. 2-7.) And of course, to comply with that 95% AMP requirement, the Port would

need to ensure that non-China Shipping ships that were not retrofitted for AMP could be excluded from the terminal. Whether the requirement is 95% or 100%, the conclusion is the same—the Port has authority to control which ships call at the terminal. An EIR that incorrectly disclaims the power and duty to mitigate environmental effects based on erroneous legal assumptions is not sufficient as an informative document and an agency's "use of an erroneous legal standard constitutes a failure to proceed in a manner required by law." (*City of San Diego v. Bd. of Trustees of Cal. State Univ.* (2015) 61 Cal.4th 945, 956.)

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The real reason the Port likely wants to exempt non-China Shipping ships from the 100% AMP requirement is because it will cost the Port and/or the lessee money to impose more stringent requirements. Turning away dirty ships could lead to a loss in revenue. But the Port has not stated that ground as a basis for a 100% AMP requirement being infeasible, nor would such a statement survive any level of scrutiny. While a 100% AMP requirement could lead to some ships being ineligible to call at the terminal, it would not be so unprofitable as to be infeasible under CEQA, especially when the terminal could accept any of the many AMP-capable ships instead. If a project "can be economically successful with mitigation, then CEQA requires that mitigation . . . ." (*Uphold Our Heritage v. Town of Woodside* (2007) 147 Cal.App.4th 587, 600, quoting *Maintain Our Desert Environment v. Town of Apple Valley* (2004) 124 Cal.App.4th 430, 449.) There has been no argument made that the terminal could not be economically successful with this requirement, nor would any such argument be supportable.

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B. The first exception to the AMP requirement is nonsensical

The first exception to the AMP requirement states that ships are excused from plugging in if an "AMP-capable berth is unavailable due to utilization by another AMP-capable ship." (Draft RSEIR at p. 3.1-50.) Given that the terminal has two berths that are both AMP capable, this exception makes no sense and should be removed. The Port developed the measure while the terminal was being built out in the early 2000s, and the exception appears to be a holdover from that time. Including a baseless, putative exception to AMP contravenes CEQA's requirement to adopt all feasible mitigation.

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C. The measure fails to define key terms, thus allowing ships to avoid using AMP

The measure requires AMP "while hoteling," but it does not define the term "hoteling." The Port should adopt the definition currently used pursuant to court order, as that definition is feasible:

> "Hoteling": The At-Berth Regulation provisions regarding connection and disconnection times shall apply; that is, vessels must begin controlling emissions with AMP within two hours after "Ready to

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> Work" (as defined in California Code of Regulations, Title 17, section 93130.2, subdivision (b)(63)), and must not cease controlling emissions with AMP sooner than one hour before "Pilot on Board" (as defined in California Code of Regulations, Title 17, section 93130.2, subdivision (b)(58)). "Ready to Work" means that the vessel is tied to the berth, the gangway has been lowered with netting down, and all government authorities with jurisdiction over the vessel visit have cleared the vessel. "Pilot on Board" means that the vessel's pilot has boarded the vessel to assume navigational control to prepare for vessel departure. "Vessel arrival" means the date and time that a vessel is initially tied to a berth with first line. (Cal. Code Regs., tit. 17, § 93130.2, subd. (b)(83).)

The measure also includes an exception for any "portion of a vessel visit that occurs during either a vessel-side equipment failure or a terminal-side equipment failure." (Draft RSEIR at p. 3.1-50.) While Petitioners acknowledge that unanticipated equipment failures could make it infeasible to use AMP for certain ship calls, as currently structured, the exception is far too broad because it contains no limits. The Port should make clear what it means by "equipment failure," and also require that such failures be unanticipated and unavoidable. This is exactly what the current measure requires, so it is clearly feasible to define these terms. Therefore, the Port should adopt and include the definition for equipment failures required by the court right now:

> A "terminal-side equipment failure" shall be deemed to occur when the terminal or Respondents have installed shoreside control equipment and maintains that equipment according to manufacturer recommendations, but that equipment experiences an unexpected failure at the time of hoteling during the vessel visit for which the equipment failure is claimed. In addition, a "terminal-side equipment failure" cannot be claimed unless arrangements are promptly made to ensure that repair, replacement, or servicing of the failed equipment will be completed as soon as possible.
>
> A "vessel-side equipment failure" shall be deemed to occur when a vessel owner or operator has installed on-board equipment to connect with shoreside control equipment and maintains that on-board equipment according to manufacturer recommendations, but that on-board equipment experiences an unexpected failure at the time of hoteling during the vessel visit for which the equipment failure is claimed. In addition, a "vessel-side equipment failure" cannot be claimed unless arrangements are promptly made to ensure that repair, replacement, or servicing of the failed on-board equipment will be completed as soon as possible.

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Necessary documentation to substantiate these exceptions includes, at minimum, the dates and times of the failure(s); any relevant correspondence documenting the equipment failure consistent with the definitions above; evidence that the equipment at issue has been maintained according to manufacturer recommendations; evidence that the equipment failure was unexpected at the time of hoteling during the vessel visit for which the equipment failure is claimed; and evidence that arrangements have been made to ensure that repair, replacement, or servicing will be completed as soon as possible.

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D. The measure fails to include a requirement to use barge-based capture and control systems during exceptions, if feasible

The measure also does not require all feasible mitigation because it does not require ships to use barge-based capture and control systems, or "bonnets," when ships use exceptions to AMP. While not all exceptions will be amenable to bonnet use (i.e., commissioning), there is no reason a ship that encounters an emergency or an AMP-related equipment failure should not use a bonnet to control emissions, if doing so is feasible. Indeed, the monitoring data submitted by the Port in this case shows that bonnets can be and have been used when AMP exceptions are cited. (See July 30, 2025 Ochsner Decl. at p. 9 and exhibits [showing bonnet use during AMP exceptions].)

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The Port must also require the cleanest available bonnets. Current CARB regulations require bonnets to be powered by renewable diesel. However, Petitioners are aware of bonnets in development that will be run by zero-emission hydrogen fuel cells and by renewable gas. (See Exs. C and D [showing development of these technologies].) Therefore, the Port should revaluate the state of bonnet technology within two years of adoption of this measure, and require implementation of the cleanest available bonnet technologies within three years of adoption of this measure.

E. Community Petitioners' proposed measure should be adopted and immediately implemented

In short, the measure should be revised as stated below. Given the number of ships that visit the terminal, the length of time these ships will be docked for offloading, and the amount of emissions released while ship are at berth, requiring 100% of ships to mitigate at-berth emissions—and ensuring that any exceptions are minimized—would meaningfully reduce emissions at the terminal. The Port has failed to explain why this version of the measure would be infeasible.

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MM AQ-9: Alternative Maritime Power (AMP). All ships calling at Berths 97-109 shall use AMP while hoteling in the Port for 100-percent of ship calls.

The following exceptions, and only these exceptions, apply to this measure:

1) **During any portion of a vessel visit that qualifies as "commissioning" under California Code of Regulations, Title 17, section 93130.8, subdivision (c).**
2) **During any portion of a vessel visit that qualifies as a "safety and emergency event" under California Code of Regulations, Title 17, 29 section 93130.8, subdivision (a).**
3) **During any portion of a vessel visit that occurs during either a vessel-side equipment failure or a terminal-side equipment failure, as defined in this measure. Necessary documentation to substantiate these exceptions includes, at minimum, the dates and times of the failure(s); any relevant correspondence documenting the equipment failure consistent with the definitions above; evidence that the equipment at issue has been maintained according to manufacturer recommendations; evidence that the equipment failure was unexpected at the time of hoteling during the vessel visit for which the equipment failure is claimed; and evidence that arrangements have been made to ensure that repair, replacement, or servicing will be completed as soon as possible.**

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If a vessel visit qualifies for an exception under 2) or 3) above, but can still feasibly control emissions using an alternative control technology (i.e., a barge-based capture and control system), the vessel shall use that strategy. The Port shall revaluate the state of barge-based capture and control system technology within two years of adoption of this

measure, and require implementation of the cleanest available technologies within three years of adoption of this measure.

<u>Definitions</u>:

"Hoteling": The At-Berth Regulation provisions regarding connection and disconnection times shall apply; that is, vessels must begin controlling emissions with AMP within two hours after "Ready to Work" (as defined in California Code of Regulations, Title 17, section 93130.2, subdivision (b)(63)), and must not cease controlling emissions with AMP sooner than one hour before "Pilot on Board" (as defined in California Code of Regulations, Title 17, section 93130.2, subdivision (b)(58)). "Ready to Work" means that the vessel is tied to the berth, the gangway has been lowered with netting down, and all government authorities with jurisdiction over the vessel visit have cleared the vessel. "Pilot on Board" means that the vessel's pilot has boarded the vessel to assume navigational control to prepare for vessel departure. "Vessel arrival" means the date and time that a vessel is initially tied to a berth with first line. (Cal. Code Regs., tit. 17, § 93130.2, subd. (b)(83).) NRDC-9

"Terminal-side equipment failure": A "terminal-side equipment failure" shall be deemed to occur when the terminal or Respondents have installed shoreside control equipment and maintains that equipment according to manufacturer recommendations, but that equipment experiences an unexpected failure at the time of hoteling during the vessel visit for which the equipment failure is claimed. In addition, a "terminal-side equipment failure" cannot be claimed unless arrangements are promptly made to ensure that repair, replacement, or servicing of the failed equipment will be completed as soon as possible.

"Vessel-side equipment failure": A "vessel-side equipment failure" shall be deemed to occur when a vessel owner or operator has installed on-board equipment to connect with shoreside control equipment and maintains that on-board equipment according to manufacturer recommendations, but that on-board equipment experiences an unexpected failure at the time of hoteling during the vessel visit for which the equipment failure is claimed. In addition, a "vessel-side equipment failure" cannot be claimed unless arrangements are

promptly made to ensure that repair, replacement, or servicing of the failed on-board equipment will be completed as soon as possible.

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III. The Port must analyze and adopt all feasible mitigation measures for cargo-handling emissions

A. The replacement schedules for cargo-handling equipment (CHE) have already passed

MM AQ-15 and MM AQ-17 require the replacement of cargo-handling equipment (CHE) with less-polluting models. However, the Draft RSEIR sets forth replacement schedules for those measures that are out of date; each of the deadlines has already passed.

Specifically, 2019 MM AQ-15 states:

By January 1, 2019 all LPG yard tractors of model years 2007 or older shall be alternative fuel yard tractors that meet or exceed Tier 4 final off-road engine standards for PM and NOx, and by January 1, 2023 all LPG yard tractors of model years 2011 or older shall be alternative fuel yard tractors that meet or exceed Tier 4 final off-road engine standards for PM and NOx.

(Draft RSEIR at p. 3.1-83.)

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In addition, 2019 MM AQ-17 states:

All yard equipment at the terminal, except for yard tractors, shall implement the following requirements:

Forklifts

- By January 1, 2019 all 18-ton diesel forklifts of model years 2004 and older shall be replaced with units that meet or exceed Tier 4 final off-road engine standards for PM and NOx.
- By January 1, 2020 all 18-ton diesel forklifts of model years 2005 and older shall be replaced with units that meet or exceed Tier 4 final off-road engine standards for PM and NOx.
- By January 1, 2020, all 5-ton forklifts of model years 2011 or older shall be replaced with electric units.
- By January 1, 2021 all 18-ton diesel forklifts of model years 2007 and older shall be replaced with units that meet or exceed Tier 4 final off-road engine standards for PM and NOx.

Toppicks

- By January 1, 2019 all diesel top-picks of model years 2006 and older shall be replaced with units that meet or exceed Tier 4 final off-road engine standards for PM and NOx.
- By January 1, 2021 all diesel top-picks of model years 2007 and older shall be replaced with units that meet or exceed Tier 4 final off-road engine standards for PM and NOx.
- By January 1, 2023 all diesel top-picks of model years 2014 and older shall be replaced with units that meet or exceed Tier 4 final off-road engine standards for PM and NOx.

Rubber-Tired Gantry (RTG) Cranes

- By January 1, 2021 all diesel RTG cranes of model years 2003 and older shall be replaced with diesel-electric hybrid with diesel engines that meet or exceed Tier 4 final off-road engine standards for PM and NOx.
- By January 1, 2023 all diesel RTG cranes of model years 2004 and older shall be replaced with diesel-electric hybrid with diesel engines that meet or exceed Tier 4 final off-road engine standards for PM and NOx.
- By January 1, 2025 four RTG cranes of model years 2005 and older shall be replaced by all-electric units, and one diesel RTG crane of model year 2005 shall be diesel-electric hybrid with a diesel engine meeting Tier 4 final off-road engine standards for PM and NOx.

Sweepers

- Sweeper(s) shall be alternative fuel or the cleanest available by 2025.

Shuttle Buses

- Gasoline shuttle buses shall be zero emissions by 2025.

(*Id.* at p. 3.1-84.)

To the extent that some of the CHE-replacements required by MM AQ-15 and MM AQ-17 have already been completed—and the Port's status reports to the court indicate that is the case—the Port should specify which requirements have been met and which remain outstanding. (See May 14, 2025, Revised Decl. of Lisa

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Ochsner, at pp. 9-12, [reporting partial progress toward compliance with MM AQ-15 and MM AQ-17].)

For any requirements that remain outstanding, the Port should provide accurate, up-to-date information regarding when those requirements will be met, recognizing that those measures should have already been fully implemented. The Port must update the deadlines in MM AQ-15 and MM AQ-17 so that the Draft RSEIR includes the current deadlines for those measures as required by the court's Writ. (See May 24, 2024, Writ, at pp. 4-5.) Specifically, the deadlines in MM AQ-15 and MM AQ-17 should be tiered off the effective date of the "new lease amendment" between the Port and China Shipping (see 2019 SEIR, at pp. 1-14 to 1-18), and that "new lease amendment" is the 2024 Sixth Amendment to Permit 999. NRDC-10

B. The Port's estimate of emissions reductions from MM AQ-15 and MM AQ-17 is not supported by substantial evidence

The Draft RSEIR states that "[t]he modified mitigation measures from the Writ (see Table 1-1) were implemented for future years for the Revised Project scenario." (Draft RSEIR at p. 3.1-29.) There is not, however, substantial evidence to support the assumption that MM AQ-15 and MM AQ-17 have been implemented in accordance with the timelines set forth in the Draft RSEIR.

As discussed above, the Draft RSEIR sets forth outdated deadlines for replacement of CHE pursuant to MM AQ-15 and MM AQ-17. (See *supra* section III.A.) Those outdated deadlines erroneously suggest that the Port has already completed the CHE replacements required by those measures. However, the Port's own status reports to the court indicate that the Port will not fully implement MM AQ-15 and MM AQ-17 until seven years after the effective date of the Sixth Amendment to Permit 999. (See Jan. 30, 2025, Decl. of Lisa Ochsner, at pp. 7-10.) The Port's assumption that MM AQ-15 and MM AQ-17 have already been fully implemented therefore results in an overestimate of the emission reductions from those measures. NRDC-11

IV. The Port must clarify that Lease Measures from the 2019 SEIR are enforceable mitigation measures under CEQA or provide a reasoned explanation as to why they are not

The Draft RSEIR contains three "Lease Measures" that address the Revised Project's air-quality impacts: LM AQ-1 (cleanest available CHE), LM AQ-2 (priority access for drayage), and LM AQ-3 (zero-emission equipment demonstration and feasibility assessment). (Draft RSEIR at p. 3.1-85.) Because the Port identified these measures as feasible ways to mitigate the Revised Project's significant air emissions (see Draft RSEIR at p. 3.1-42 ["These mitigation measures would reduce criteria pollutant emissions associated with project operation]), these measures must comply with CEQA and the Port must adopt them as enforceable measures in NRDC-12

its lease with China Shipping. (See Pub. Resources Code, §§ 21002.1, subd. (b), 21081.6. subd. (b); Guidelines, §§ 15021, subd. (a), 15126.4, subd. (a)(2)).

The Draft RSEIR correctly characterizes these "Lease Measures" as mitigation measures. (See, e.g., Draft RSEIR at pp. ES-19 [including the three measures under the category "New or Updated Mitigation Measures"], 3.1-42 [describing the three measures as "operational mitigation measures"].) In addition, the Port already adopted these measures in its Sixth Amended Lease with China Shipping. (See July 15, 2024, Initial Return to Writ, Ex., A, Sixth Amendment of Permit 999, at PDF pp. 160-61.) The Port should therefore disclose the current implementation status of these measures in the Draft RSEIR.

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In contrast to the Draft RSEIR, the Sixth Amended Lease states that these "lease measures do not meet all of the criteria for CEQA mitigation measures" and that the "lease obligation is distinct from the requirement of further CEQA mitigation measures to address impacts of potential subsequent discretionary Project approvals." (*Ibid*.) The Port must either revise its lease with China Shipping to recognize that LM-AQ-1, LM AQ-2, and LM AQ-3 *are* CEQA mitigation measures; or it must revise the RSEIR to disclose that it is not adopting these Lease Measures as CEQA mitigation measures and provide a reasoned explanation as to why. (See Dec. 29, 2023, Opinion, *NRDC v. City of L.A.*, Case No. D080902, at pp. 30-32.)

V. The Port must analyze and adopt all feasible mitigation measures for greenhouse gas emissions

As proposed in the 2019 SEIR, Lease Measure GHG-1 required China Shipping to make yearly contributions of $250,000 for eight years (for a total of $2 million) to a "Greenhouse Gas Fund." Petitioners challenged this measure because the Port had failed to show in the 2019 SEIR that more mitigation was not feasible. Most significantly, the total amount the Port proposed to collect from China Shipping—$2 million—was woefully insufficient, offsetting only *one* year of greenhouse gas emissions from the project. (Dec. 29, 2023, Opinion at p. 28.) Furthermore, the measure failed to contain restrictions on where the offsets may be purchased, and thus fails to ensure that the offsets are real, "enforceable," and "not otherwise required." (See Guidelines, § 15126.4, subds. (a)(2), (c)(3).)

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The Port's primary defense was that because it called the measure a "lease measure" in the 2019 SEIR, the measure did not need to meet CEQA's legal requirements for mitigation measures. (Dec. 29, 2023, Opinion at pp. 28–29.) But the Court of Appeal squarely rejected the Port's "lease measure" argument, finding that because the Port relied on the measure to mitigate impacts, its decision to make the "measure a lease measure rather than a mitigation measure is not supported by substantial evidence." (*Id.* at p. 26; see also *id.* at pp. 29–30.) The Court of Appeal also agreed with Community Petitioners that "the 2019 SEIR

effectively concedes that it is economically feasible for China Shipping to pay *at least* $2 million to address GHG emissions." (*Id.* at p. 35.) In short, the measure was not only procedurally deficient in that it was not made enforceable—it was substantively deficient as well.

In the Draft RSEIR, the Port concedes it must identify any feasible measures to mitigate the project's significant greenhouse gas impacts. (Draft RSEIR at p. 3.2-4.) As discussed above in section I of this letter, the Port must consider not only more funding for the greenhouse gas fund and better safeguards for that fund, but also all other feasible greenhouse gas mitigation measures as well.

As to the offset fund itself, the proposed measure here—MM GHG-2—*still* violates CEQA. Greenhouse gas "offsets 'must be real, additional, quantifiable, permanent, verifiable, and enforceable." (Cal. Code Regs., tit. 17, § 95802, subd. (a); see also *Golden Door Props., LLC v. Cnty. of San Diego* (2020) 50 Cal.App.5th 467, 486.)

As an initial matter, the Draft RSEIR uses the incorrect baseline for its analysis. The document uses a 2008 baseline. (Draft RSEIR at p. 3.2-17.) That baseline makes no sense here, when the only purpose of the analysis is to mitigate the emissions from the project itself. (See Guidelines, § 15125, subd. (a).) The 42,238 million tons year (mty) of carbon dioxide equivalent that the Draft RSEIR claims are part of the baseline are in fact caused by the project. (See Draft RSEIR at p. 3.2-17). The baseline amount of greenhouse gases before this project was proposed and built was zero, and the quantity of project emissions that must be mitigated should be calculated using that baseline.

Even with the faulty baseline, the Draft RSEIR admits that the project would exceed the greenhouse gas threshold of 10,000 mty in all study years. (Draft RSEIR at p. 3.2-27.) The new MM GHG-2 correctly concludes that the Port must offset all greenhouse gases generated by the Project in excess of the 10,000 mty significance threshold. But from there, the mitigation measure veers off course.

NRDC-13

First, the measure, as presented in the Draft RSEIR, would allow offsets from a yet-to-be developed Port greenhouse gas program rather than requiring carbon offsets from a CARB-recognized registry. (Draft RSEIR at p. 3.2-27.) The Draft RSEIR contains no information or assurances about whether this in-house program would fulfill CEQA's requirements for mitigation measures, and thus impermissibly defers mitigation. "Formulation of mitigation measures shall not be deferred until some future time." (Guidelines, § 15126.4, subd. (a)(1)(B); see also *POET, LLC v. State Air Resources Bd.* (2013) 218 Cal.App.4th 681, 735.) At the very least, the agency must commit to specific performance standard criteria for any future mitigation measures. (*King & Gardiner Farms, LLC v. Cnty. of Kern* (2020) 45 Cal.App.5th 814, 856, *as modified on denial of reh'g* (Mar. 20, 2020).)

NRDC-14

Second, the measure requires offsetting of greenhouse gases only through 2045, not through the entire lifetime of the project. To the extent that the terminal will operate beyond 2045, the Port must also require mitigation beyond that date because there will still be environmental impacts beyond that date. The Draft RSEIR has provided no explanation of why continuing to mitigate the project's greenhouse gas emissions for the entire time the terminal is operating is infeasible. In short, if the emissions can be mitigated this way until 2045, they can be mitigated after that year as well. NRDC-15

Finally, the proposed mitigation measure does not adequately ensure that offsets would benefit the most affected communities surrounding the Port. The measure states that the first priority for offsets would be "the local area," but it is unclear what that means. (See Draft RSEIR at p.3.2-42.) If the Port resorts to offsets—which, as stated above, it should not because it has failed to analyze and adopt all other feasible mitigation—it must prioritize reducing emissions *at the Port*, not just in the "local area." This would ensure that the communities surrounding the Port would reap any co-benefits (e.g., air quality or aesthetic co-benefits) from those greenhouse gas emissions reductions. NRDC-16

VI. Conclusion

This project has been operating in violation of CEQA since 2001. For far too long, the Port has failed to mitigate its significant greenhouse gas emissions and has exposed the surrounding community to high levels of illegal air pollution. The Port must rectify those violations and bring the terminal into compliance with CEQA as soon as possible. In particular, the Port should revise the measures as requested in sections II-V of this letter and adopt them immediately; the Port should not continue to use the CEQA process to delay implementation of feasible mitigation when the project is already operating and polluting neighboring communities. In addition, the Port should revise and recirculate the Draft RSEIR to include additional mitigation beyond the scope of the current document, as stated in section I of this letter. NRDC-17

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Sincerely,



Jaclyn H. Prange
Margaret Hsieh
Natural Resources Defense Council

Counsel for Natural Resources Defense Council, San Pedro Peninsula Homeowners' Coalition, San Pedro Peninsula Homeowners United, Inc., Coalition for Clean Air, and East Yard Communities for Environmental Justice

Exhibit A



SAN PEDRO BAY PORTS

CLEAN AIR ACTION PLAN 2017

Final
Clean Air Action Plan Update

NOVEMBER 2017

San Pedro Bay Ports
Clean Air Action Plan 2017
FINAL

November 2017





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Preface

The Port of Long Beach and Port of Los Angeles (together, the "Ports") hereby introduce the 2017 Clean Air Action Plan (CAAP) Update, which will serve as high-level guidance for continued emission reduction activities in collaboration with industry stakeholders, regulatory agencies, local communities, and environmental groups for the next 20 years.

This CAAP Update is the result of extensive public outreach that has taken place over the past two years combined with recent regulatory and statutory changes. The 2017 CAAP Update strategies have evolved over this period, from the concepts proposed in the 2017 CAAP Update Discussion Document (Discussion Document) released on November 17, 2016, to the Draft CAAP 2017 Update released July 19, 2017, to the final version presented here. All strategies continue to support our aggressive march toward clean air for the community.

Throughout development of this CAAP Update, the Ports have engaged in stakeholder outreach that has included multiple small focused meetings as well as three large public meetings that took place in October 2015, January 2017, and August 2017. The Ports have held more than 70 stakeholder meetings, conducted workshops drawing nearly 300 people, and received more than 400 comment letters from industry, environmental, neighborhood, and regulatory organizations. Comment letters are posted on the CAAP website at www.cleanairactionplan.org.

Additionally, these strategies have been guided by recent and ongoing regulatory agency planning efforts, chief among them the California Sustainable Freight Action Plan, which also provides the framework for State and regional control strategies under the Clean Air Act; as well as the South Coast Air Quality Management District (SCAQMD) 2016 Air Quality Management Plan (AQMP), approved by the SCAQMD Governing Board on March 3, 2017 and the California Air Resources Board (CARB) Governing Board on March 23, 2017. In addition, a series of regulatory and statutory changes have also occurred over the past year. These changes, which will be described later in more detail, have had an important impact on some of the new proposed CAAP strategies, in some cases offering opportunities for more aggressive and focused actions, and in other cases, imposing greater constraints.

On June 12, 2017, Mayor Eric Garcetti of the City of Los Angeles and Mayor Robert Garcia of the City of Long Beach announced a joint declaration for creating a zero-emissions goods movement future – with ultimate goals of zero emissions for cargo handling equipment by 2030, and zero emissions for on-road drayage trucks serving the ports by 2035. In the declaration, the mayors made a commitment to continue focusing on advancing clean technologies to reduce emissions and combat climate change. They identified that the CAAP Update should include expansion of

at-berth emission reductions; a pilot project to test zero-emission drayage trucks; establishment of a CAAP Implementation Stakeholder Advisory Group that would discuss and report on CAAP implementation progress and progress on related energy projects; development of a Green Ports Collaborative to advance similar goals with other climate mayors along the West Coast and throughout the nation; and, finally, a joint effort to secure funding to support necessary equipment purchases and infrastructure development. These goals have been captured in this 2017 CAAP Update.

Adoption of the 2017 CAAP Update by the two Boards of Harbor Commissioners is just the first step in a collaborative process in which details will be developed and refined in an ongoing dialogue with CAAP stakeholders prior to presentation of specific programs to the ports' Boards for approval. It is vital that all stakeholders continue to work together if we are going to be successful in achieving our shared vision of an economically competitive, efficient, and environmentally sustainable port complex.

Guiding Principles

Achieving the ambitious 2017 CAAP Update goals will require extensive collaboration among the Ports, regulatory agencies, industry, and the community, which has been the hallmark of the CAAP for more than ten years, and resulted in the CAAP's successful results. The Ports recognize that finding the balance between our environmental and economic goals will be critical to our ongoing success and long-term sustainability. To that point, the Ports commit to implementing these strategies in line with the guiding principles below:

- The Ports must work with our tenants and customers to expeditiously reduce our fair share of air emissions and associated health risk from port-related operations to support a healthy, thriving community and clean environment.
- The Ports are vital economic engines, supporting hundreds of thousands of local and regional jobs, and we must remain economically competitive and maintain our market position.
- The Ports must continue to support our vibrant workforce by avoiding job losses, by fostering new workforce opportunities associated with green goods movement, and by ensuring equity for the men and women who move cargo at the ports.
- The Ports must continue to develop and foster strong partnerships with all stakeholders, including regulatory agencies, our port-related operators, the broader goods movement industry, and local communities in order to achieve and sustain successful outcomes for all.

- The Ports must assure that the CAAP implementation process is transparent and responsive to stakeholder input.

Recent Regulatory and Statutory Actions: Challenges and Opportunities

Since the release of the CAAP Discussion Document in late 2016, several state and regional actions have prompted the Ports to re-evaluate the original concepts for several proposed strategies.

In some cases, these recent actions have aligned with the proposed CAAP strategies by identifying a process for developing statewide emission-reduction mandates for mobile sources. Those actions allow the Ports to focus efforts on implementation and acceleration of these statewide mandates in order to support successful implementation and generate near-term reductions. In other cases, however, the actions imposed new constraints on the Ports' strategies to address certain port-related sources. In those cases, the Ports modified the proposed CAAP strategy to reflect new realities while still pursuing emission reductions to the maximum extent possible within their jurisdiction.

The following actions have influenced the strategies in this CAAP Update document.

California Air Resources Board, 2016 State Strategy for the State Implementation Plan, Resolution No. 17-7. During the adoption of the State Implementation Plan in March 2017, the CARB Board directed its staff to take the following actions for Los Angeles Ports and Ports that are in or adjacent to disadvantaged communities in the top 10% of those defined as most impacted by CalEnviroScreen:[1]

- Within 18 months, develop At-Berth Regulation amendments that achieve up to 100% compliance by 2030
- Within 24 months, develop cargo-handling equipment regulations to achieve up to 100% compliance with zero-emissions vehicles by 2030

With the State moving ahead on more stringent regulations for at-berth emissions and zero-emissions cargo-handling equipment, it is appropriate for the Ports to defer to, and participate in, the rulemaking process in order to provide comments consistent with our Guiding Principles and to ensure consistency with the regulatory approach. For that reason, the Ports will be

[1] CalEnviroScreen is a science-based screening tool developed by the California Office of Environmental Health Hazard Assessment. It helps to identify California communities that are disproportionately burdened by many sources of pollution.

engaged in the rulemaking process while we simultaneously focus our efforts on implementation and, where feasible, accelerate these regulations to facilitate compliance and generate emission reductions in the early years. This is entirely consistent with the approach used for the original 2006 and 2010 CAAP strategies, which relied on impending newly developed State regulations (Drayage Truck Rule, Shore Power Rule) and accelerated the compliance dates at the Ports, in an "early action" demonstration that promoted such regulatory implementation to great success.

State of California Senate Bill 1 (SB 1), signed into law April 28, 2017. SB1 develops a funding mechanism for transportation infrastructure in California. Within the statute, however, is a prohibition on new requirements to replace, retire, repower, or retrofit heavy-duty trucks before the truck has reached the earlier of either 800,000 vehicle miles traveled or 18 years from the engine model year. The language does not prohibit voluntary incentive and grant programs, including, but not limited to, those that give expedited access to a facility to a particular vehicle or class of vehicles. SB1 also requires CARB by January 1, 2025, to evaluate the impact of the provisions of SB1 on efforts to meet state and local clean air goals.

During the 2017 CAAP Update public outreach process, many stakeholders urged the Ports to mirror the proposed 2017 CAAP Update Clean Trucks Program (CTP) with the strategy of bans contained in the original CAAP CTP initiated in 2008. Importantly, however, the California truck regulatory status is different today than in 2008 and SB1 has helped to reinforce these differences. The original CTP relied upon the power of the State of California CARB Drayage Truck Rule to establish in-use requirements on all truck fleets at all ports and railyards throughout the state, and required them to turn over to 2007 US EPA compliant engines effective January 1, 2014.[2] The original CTP moved up implementation of CARB's 2014 Drayage Truck Rule to a phase-in between 2008 and 2012. CARB's inevitable Drayage Truck Rule requirement in 2014, combined with grants and incentives offered by the Ports starting in 2008, led to a voluntary early fleet replacement by industry years in advance of the State's 2014 requirement.

Today, as a result of SB1, CARB is prohibited from adopting regulations to require state truck fleet replacement sooner than the Truck and Bus Rule (which replaced the Drayage Truck Rule) that requires 2010 US EPA Truck standard by January 1, 2023, or to implement new requirements for replacement of trucks with engines that are 2010 model year or newer prior to the earlier of 2028 or 800,000 miles.[3] Therefore, unless and until CARB is able to adopt a new state truck

[2] CARB is the state air agency with regulatory authority, as delegated by the EPA and under state law, to set standards that require port trucks statewide to be replaced with cleaner trucks, as it did with the State Truck and Bus Rule.

[3] SB1 contains language that supports the industry's desire to maximize the useful life of their investment. U.S. Environmental Protection Agency (EPA) has authority to set nationwide standards for

standard requirement for port drayage trucks, the Ports are unable to follow the previous strategy of advancing a ban already established by an existing State truck regulation. Instead, in compliance with our jurisdiction and within the limitations of our own authority[4], the Ports are proposing a suite of actions to encourage acceleration of new trucks entering the fleet to meet the cleanest standards, including near-zero emissions and zero-emissions. The Ports also have bolstered the incentive-based strategies to promote voluntary turnover to cleaner technologies.

Indirect Source Rule or Alternatives, 2016 State Strategy for the State Implementation Plan, Resolution No. 17-7 and South Coast Air Quality Management District 2016 Air Quality Management Plan. As defined under the Clean Air Act, an indirect source is "…a facility, building, structure, installation, real property, road, or highway which attracts, or may attract, mobile sources of pollution…"[5]

During the adoption of the State Implementation Plan in March 2017, the CARB Board directed its staff to take the following action:

- Return to the Board with concepts for an Indirect Source Rule to control pollution from large freight facilities, including ports, railyards, warehouses, and distribution centers, as well as any identified alternatives capable of achieving similar levels of emission reductions.

The CARB Board direction appears to be similar to the Indirect Source Rule concept in SCAQMD's 2016 AQMP Measure MOB-01 Emission Reductions at Commercial Marine Ports which calls for a process to evaluate facility-based emission-reduction options for various freight-related operations, including indirect source rules. In the AQMP, the SCAQMD describes a collaborative working group process through March of 2018 that would determine what feasible actions could be taken to reduce pollution from freight facilities, including ports. This process could include an exploration of mechanisms other than rules to ensure emission reductions. If, however, the

mobile sources (42 U.S.C. §7521, 7547). EPA has given authority to CARB to regulate heavy duty trucks and other mobile sources for the State of California, under so-called "Clean Air Act waivers" under Clean Air Act 42 U.S.C. §7543, which is how CARB issues its manufacturing standards for new engine technology, including future "near zero" or "zero emissions" manufacturing standards, as well as heavy duty truck regulations for trucks operating in California ports.

[4] POLA jurisdiction and authority under the Los Angeles City Charter is solely to manage the Tidelands granted by the State and related assets and revenues to "promote maritime commerce, navigation and fisheries." POLB's jurisdiction and authority under the Long Beach City Charter is similar – to manage the Tidelands granted by the State and related assets and revenues to "provide for the needs of commerce, navigation, recreation and fishery in the Harbor District".

[5] 42 U.S.C. § 7410(a)(5)(C)

SCAQMD Board does not believe that adequate progress has been made under the voluntary program, it may pivot to rulemaking.

The agencies may attempt to apply an Indirect Source Rule to cap maximum emissions or activity at a freight facility, according to the "Facility Based Approach" described in CARB's April 2015 Sustainable Freight Pathways to Zero and Near-Zero Emissions Discussion Document.[6]

The Ports will be collaborating with CARB staff to provide input for its report to the CARB Board on this subject, just as the Ports have been collaborating with SCAQMD staff on its approach to the concept in working group meetings since the adoption of the 2016 AQMP.

In addition, the state legislature recently adopted AB 617 (Garcia), which calls for the development of community emission reduction programs to reduce exposure in neighborhoods most impacted by air pollution. Implementation strategies include community-level air monitoring, development of community-specific emission reduction plans, and accelerated control of emissions from equipment operating at facilities located near impacted communities. Under AB 617, CARB will develop a statewide strategy by October 2018, and within one year, districts encompassing impacted communities will be required to develop emission reduction programs. It is uncertain at this point how or if this program will relate to the Ports.

Mindful of these efforts, the 2017 CAAP Update includes strategies that are feasible and within the purview of our legal and jurisdictional authority while advancing the objectives of the ports' Boards of Harbor Commissioners, each city's mayor, the regulatory agencies, and other stakeholders, to reduce emissions.

[6] https://www.arb.ca.gov/gmp/sfti/sustainable-freight-pathways-to-zero-and-near-zero-emissions-discussion-document.pdf, at pp 44-46.

Introduction

With the 2006 adoption of the CAAP, the Ports became worldwide leaders in efforts to reduce emissions associated with maritime goods movement. At the time, no other seaport complex in the world had attempted such a progressive and comprehensive program to reduce emissions from maritime goods-movement-related mobile sources. Even today, the CAAP remains the most successful seaport emission-reduction effort ever implemented.

Since 2005, San Pedro Bay port-related emissions of diesel particulate matter (DPM) have dropped 87%, nitrogen oxides (NO_x) are down 56%, and sulfur oxides (SO_x) have nearly been eliminated. Greenhouse gas (CO_2e) emissions have also dropped 18% during this period. The 2014 emission reduction goals for DPM, NOx and SOx, that were voluntarily set in 2010, were met and exceeded. These reductions are a testament to the CAAP's cutting-edge strategies and the collaborative approach taken with our industry partners and the regulatory agencies to meet shared goals.

The unprecedented success of the CAAP would not have been achieved without the support of the maritime industry and the other stakeholders. Investments in new equipment by the maritime industry since the CAAP was adopted have been significant, with nearly $2 billion estimated to have been spent on cleaner trucks and cargo-handling equipment and strategies such as shore power for ships. The Ports do not own, operate, or contract for dispatch any of the vehicles or equipment used in maritime goods movement-related activities and thus must work cooperatively with private operators to bring about environmental change. The emission reductions achieved over the past decade would not have occurred if not for their efforts.

Much has changed since the Ports adopted the original CAAP more than 10 years ago and updated it in 2010. The strategies outlined in the first two CAAPs have been fully implemented or are well underway. Zero-emission technologies that once existed only in concept are becoming a reality, with significant development of zero emission prototypes underway by many larger Original Equipment Manufacturers. The Ports have engaged in Supply Chain Optimization efforts with a goal to improve efficiency in the freight system. Cleaner and more reliable sources of energy through energy planning activities by the Ports are also being pursued.

At the same time, these successes bring about new challenges. Substantial recent investments have been made by the industry in new cleaner technologies that still have useful life. Accelerated replacement of that equipment could result in stranded assets.

Further, as directed by Governor Brown's Executive Order B-32-15, the State of California (State) for the first time has defined a comprehensive multi-agency vision for cleaner goods movement through its Sustainable Freight Action Plan, which was finalized in July 2016. The Sustainable Freight Action Plan provides a long-term vision for the freight system and new targets to help the State meet its environmental, efficiency, and economic competitiveness goals over the next decade.

Although much progress has been made, the Ports recognize that additional work needs to be done to reduce the freight industry's impacts on local communities and to help the State and region meet their goals for air quality improvements and sustainable freight movement. As stated in the Sustainable Freight Action Plan, "success will require government, industry, labor, and environmental and community leaders to stand together on this vision."

The CAAP supports this vision by introducing specific emission reduction and efficiency improvement strategies that can be implemented locally to support the overarching goals and objectives outlined in the Sustainable Freight Action Plan. The CAAP also identifies the areas where significant investments will be needed, and the timelines for those investments, to inform upcoming funding allocation plans to be developed at the state and federal level.

Public Outreach

The strategies contained in this CAAP have been shaped by more than two years of outreach and engagement with our customers and operators, industry trade associations, the broader business community, environmental groups, technology developers, equipment and fuel vendors, regulatory agencies, elected officials, and the local communities. The outreach process for the development of this update to the CAAP has been more robust than previous efforts, with more direct engagement and input from a broader set of stakeholders, including regulators, port operators and business users, community and non-governmental organizations (NGOs), energy suppliers, and technology developers.

Additionally, the Ports used a wide array of outreach strategies to encourage input. These strategies included small focus groups, presentations to business organizations and neighborhood groups, calls for formal comment letters, and several presentations to each port's Board of Harbor Commissioners during which members of the public could make comments. Updates on CAAP progress and opportunities for community interaction were advertised through press releases, each port's website, the CAAP website, Facebook, and Twitter. Also, the Ports held three public workshops – one on October 14, 2015, to help formulate the concepts in the Discussion Document, another on January 24, 2017, following release of the Discussion

Document, and a final workshop on August 30, 2017, following release of the Draft CAAP. Together, these workshops drew more than 375 people. During two of these workshops, which included Spanish translation, the Ports used small breakout sessions to drive more focused and detailed discussions on the proposed CAAP concepts, thus providing valuable focused input and dialogue.

To date, the Ports have held more than 70 meetings with more than 30 groups representing thousands of stakeholders, and the Ports have received more than 400 letters totaling nearly 1,000 pages from our customers, business groups, regulatory agencies, neighborhood and community organizations, environmental groups, and technology providers.

Based on the input received throughout this process, the Ports have refined, clarified – and in some cases, modified – the CAAP strategies. This CAAP reflects years of public engagement, study, and discussion, and the Ports have taken very seriously the comments received from hundreds of stakeholders.

Comments Received on the Draft CAAP

The Ports have received numerous comments over the past two years; these comments, including the actual letters received, are posted on the CAAP website.

The majority of the comments received relate to the debate between transitioning to cleaner near-zero-emission trucks and equipment in a step-wise approach versus transforming to zero emissions in one big jump.

Many of the other comment themes related to cost, competitiveness and loss of market share, implementation timeline, and interim goals and commitments for how we will get there are related to the larger discussion and debate about transitioning versus transforming.

A listing of the overarching themes included in the comments is provided below, in no particular order.

- Support and praise for the inclusion of zero-emissions goals for trucks and cargo-handling equipment.
- The strategies could adversely impact the San Pedro Bay port complex's economic competitiveness and jobs.
- Near-zero-emission technologies will provide dramatic emission reductions and will cost significantly less than zero-emission technologies. On the basis of dollars spent per ton

of emissions reduced, these technologies will be much more cost effective. The Ports should consider near-zero-emission technologies as an end goal.

- Near-zero emission trucks can provide emission reductions in the near-term because the technologies are closer to commercialization. Many comments recommended turnover within the next 5 years.
- The infrastructure needed to support near-zero-emission trucks, specifically natural gas fueling infrastructure, has been expanding throughout the region and is largely in place. Further, as near-zero technologies are developed that use diesel fuel, this infrastructure is well established. Hydrogen fueling and electrical charging for heavy-duty trucks and equipment is not currently available.
- Zero-emission technologies are necessary to meet the emission reduction and community health needs; focusing attention on development of near-zero-emission technologies will divert from that path and slow or potentially stop our progress to getting to zero emissions.
- The Ports need to move away from continued dependence on fossil fuels like diesel and natural gas. Near-zero-emission technologies, which have combustion-based engines, continue to rely on fossil fuels. Other commenters have stated, however, that renewable fuels, from sources like landfill gas and dairies, are not fossil fuel based.
- If investments are made in near-zero technology and infrastructure, it will result in additional, unnecessary expenses, and the full value of those investments will not be available because of the timeline to convert to zero emissions.
- Significant progress has been made in advancing toward zero emissions, including the demonstration projects that both ports have underway. Those technologies will be available in the near-term and should be implemented prior to the 2030/2035 timelines.
- Zero-emission technologies do not exist today and are not expected to become feasible within timeframes identified.
- The cost to get to zero emissions is very high. The cost estimates are inaccurate and the level of expense is unsustainable. The industry is in no financial position to be able to take on those costs. As a result, shippers will find other, less expensive gateways to move their cargo which will result in loss of local jobs, regional economic impacts, and increased greenhouse gas emissions when the cargo is delivered through less efficient routes. Diversion is already happening - these ports are losing our market share - and the economic impacts of these environmental requirements will exacerbate that situation.
- Many truck owners are still paying off their trucks to comply with the first phase of Clean Trucks Program and the CARB regulation. Nearly half the trucks already have MY2010 engines in compliance with the state's requirement, which becomes effective in 2023 and they do not have the ability to pay for new, more expensive trucks. These expenses could push those truck owners out of the drayage business.

- Terminal operators have made investments in clean equipment in compliance with the state regulation and port lease requirements, and the timeline to replace with zero emissions by 2030 will make that equipment obsolete before its full useful life, resulting in stranded assets.
- The Ports must address the financial impacts and workplace inequities for truck drivers.
- The cost of doing nothing will result in continued health impacts that will have greater regional economic impacts that must be paid by the local communities, including from health care costs, hospitalizations, missed days of work and missed school days, and that those expenses will be greater than the cost to purchase cleaner equipment.
- The Ports need to identify their community impacts and prioritize public health.
- Action must be taken immediately. The community cannot wait until 2035 for cleaner trucks.
- Interim goals and milestones should be identified and tracked to provide certainty that the ports will take the necessary actions to ensure the cleaner equipment is introduced into port–related operations on the expected timeline.
- Development and implementation of the CAAP must be transparent and inclusive of stakeholders.

The Ports have received a lot of input from several perspectives. There are many strong opinions and concerns about the implications of decisions the Ports will be making in this update to the CAAP strategies, and there is not one consensus opinion about how to proceed.

The Ports have taken these comments seriously, and the strategies contained in this CAAP Update reflect this input. More details about how the Ports responded to comments for specific strategies can be found within the description of the respective strategy and in the accompanying document, “Summary of Major Comments and Responses.”

Supporting Documents

Additionally, in response to requests for further detail, the Ports have provided additional technical information and analysis to support the development of the strategies. These documents are also available on the CAAP website.

- “Framework for Feasibility Assessments”: A description of the process to be used, components to be analyzed, and proposed methodologies to be employed in developing the feasibility assessments for trucks and cargo-handling equipment.

- "Preliminary Cost Estimates for Select 2017 Clean Air Action Plan (CAAP) Strategies": An analysis of the potential costs associated with the CAAP as a plan, with more detailed cost analyses to come during implementation of specific strategies.
- "CAAP Strategies: Economic and Jobs Effects Discussion Paper": A discussion of the potential economic and jobs impacts associated with the CAAP strategies.
- "Draft Bay-Wide Ocean-Going Vessel International Maritime Organization Tier Forecast 2015-2050": A forecast of the penetration of Tier 3 ships for various vessel types. This document will continue to be updated as new information becomes available.
- "Potential Emission Reduction Projections for Select CAAP Strategies": A range of forecasted emission reductions for CAAP strategies related to trucks and cargo-handling equipment, where sufficient information exists to support such forecasts.

About the CAAP

The CAAP is a plan that provides guidance to help the region achieve its clean air goals and to support the statewide vision for more sustainable freight movement. The proposed strategies in this iteration of the CAAP are some of our boldest yet, and they will require continued cooperation from the goods movement industry and our regulatory agency partners.

As articulated in the Sustainable Freight Action Plan, to become greener – and to support the ultimate goal of zero-emissions goods movement – the Ports must develop strategies that include the introduction of clean vehicles and equipment, infrastructure, freight efficiency and energy planning. This approach is broader in scope than our previous efforts.

The CAAP supports this shift in the way we think about sustainable port planning while preserving our longstanding commitment to improve air quality for our communities.

As a result, parallel strategies are proposed in this CAAP. First, the Ports have identified near-term actions to produce air quality improvements within the next 5 years. These actions rely on accelerating the adoption of commercially available cleaner engine technologies and operational changes through incentives and new requirements. Next, and in parallel, the Ports are evaluating long-term strategies to be implemented over the next two decades and have defined a series of interim steps to lay the foundation for our ultimate goal – zero emissions and the reduction of our carbon footprint. Strategies with specific actions and timelines for technology development, infrastructure planning, and fleet turnover will be developed as part of the CAAP implementation process, and will help to lay the groundwork for our long-term vision of a clean maritime goods movement freight transport system.

The strategies contained in this Final CAAP have been shaped by extensive outreach and engagement with the goods movement industry, regulatory agencies, environmental groups, and the local communities. Additionally, these strategies have been guided by recent planning efforts, chief among them the California Sustainable Freight Action Plan, which also provides the framework for State and regional control strategies under the Clean Air Act, the South Coast Air Quality Management District (SCAQMD) 2016 Air Quality Management Plan (AQMP), approved by the SCAQMD Governing Board on February 3, 2017, and the CARB Governing Board on March 23, 2017, as well as new regulations and statutes coming into play over the last year. Lastly, these strategies are informed by numerous technical documents, including the Ports' Zero Emissions Roadmap,[7] separate efforts by each of the Ports, including the Port of Los Angeles Zero Emission

[7] http://www.cleanairactionplan.org/documents/zero-emissions-roadmap-technical-report.pdf

White Paper[8], and a series of technology assessments developed by the California Air Resources Board.[9]

Based on the input received throughout this process, the Ports have modified, refined, and clarified the CAAP air emissions reduction strategies as planning guidelines that are feasible and consistent with the Ports' jurisdiction to provide for the needs of commerce, navigation, recreation and fisheries in their respective Harbor Districts.

It is also important to note that the Ports' approach to achieving emissions reductions has always been, and will remain, to establish goals in the CAAP and provide flexibility to the operators on how they can best achieve those goals. The Ports are not mandating a particular technology pathway or a certain type of operation – we are technology-neutral, fuel-neutral, and operations-neutral. Through the Ports' Technology Advancement Program, we will continue to support and demonstrate a variety of technology options so there can be more tools in the toolbox. We understand that there are no "one-size-fits-all" solutions. The industry is the expert on its business operations and is in the best position to identify the solutions that meet the goals, and at the same time, work best for its needs.

[8] https://www.portoflosangeles.org/pdf/Zero_Emission_White_Paper_DRAFT.pdf
[9] https://www.arb.ca.gov/msprog/tech/report.htm

Background

On November 20, 2006, the Ports took an unprecedented joint action to improve air quality in the South Coast Air Basin by adopting the CAAP, a sweeping plan aimed at significantly reducing the health risks posed by air pollution from port-related mobile sources, specifically ships, trains, trucks, terminal equipment and harbor craft, such as tugboats.

The CAAP was a landmark air quality plan that established the most comprehensive, far-reaching approach to improve air quality in the Ports region and to reduce health risks from maritime goods-movement-related activities. The CAAP's success allowed the Ports to continue development, job creation, and economic activity while ushering in a suite of air emission-reduction strategies including the ports' Clean Trucks Program and a series of vessel programs. The Ports believe it is important to continuously update the CAAP. Staff from both Ports meet regularly to evaluate progress towards meeting the CAAP goals, review status of existing control measures, evaluate new measures, and jointly develop updates to the CAAP as needed. This 2017 CAAP Update will be the third version of the CAAP.

Additionally, the CAAP is a plan that provides high-level guidance, and acceptance of the plan does not constitute approval to implement the individual strategies. Each port's Board of Harbor Commissioners retains its respective jurisdiction and authority to approve these strategies to be implemented at each port in future separate actions[10], which would provide additional time for study, public participation and outreach, and refinement and consideration of the then-applicable facts and circumstances at the time of adoption.

Public Health – A Call to Action

Freight operations at the Ports generate toxic air emissions from ships, trucks, trains, tugboats, and terminal equipment, thus contributing to regional air quality issues and local health risk. According to the Environmental Protection Agency, air pollution can negatively impact public health by:[11]

- Aggravating respiratory and cardiovascular disease
- Reducing lung function
- Increasing the severity and frequency of respiratory symptoms such as coughing and difficult breathing

[10] Future separate actions by the Boards include but are not limited to adoption of programs, budgets, incentives, grants, tariffs, contracts, leases, and CEQA mitigation in port project environmental impact reports (EIRs).
[11] "Draft A Ports Primer for Communities." 2016. United States Environmental Protection Agency. https://www.epa.gov/sites/production/files/2016-07/documents/420p16001.pdf

- Increasing susceptibility to respiratory infections
- Impacting the nervous system, including the brain
- Increasing the risk of cancer
- Contributing to premature death

Certain sensitive populations are especially susceptible to the effects of air pollution, such as children, senior citizens, people with chronic illnesses, and pregnant women. Children are particularly vulnerable to air pollution due to the fact that children's bodies, including their lungs, are still developing and their exposure is greater due to quicker breathing speeds and more active hours spent outdoors.[12]

Such health impacts drove the development of the original CAAP more than 10 years ago. Today, as a result of the CAAP and various state regulations that have since come into effect, the communities around the Ports have seen dramatic reductions in health risk and air pollution. Since 2005, port-related NO_x and SO_x have dropped by 56% and 97% respectively, according to the Ports emissions inventories. Even more, port-related DPM – which is linked to cancer risk and other adverse health effects – has plunged 87% during that time, significantly reducing the public health risk associated with port-related emissions faced by neighboring communities. Figure 1 approximates the reduction in port-related health risk since 2005.[13]

In fact, the area around the Ports has seen a greater decline in air-related cancer risk than Southern California as a whole. According to the South Coast Air Quality Management District's Multiple Air Toxics Exposure Study IV (MATES-IV), between 2005 and 2012, cancer risk near the Ports dropped 66% compared to a 56% reduction for the rest of the region, demonstrating the accelerated rate of progress and the success of our CAAP and other goods movement-related initiatives[14].

[12] "The Children's Health Study," 2015. California Air Resources Board. https://www.arb.ca.gov/research/chs/chs.htm

[13] In 2009, the Ports conducted a Bay-wide health risk assessment tool (BWHRA Tool) to project health risk reductions as a result of CAAP strategies. The BWHRA Tool used DPM emissions for the baseline year of 2005, forecasted DPM emissions for 2020, and determined health risk reductions that would result from an 85% reduction in Ports-related DPM by 2020. The Ports have achieved an 87% reduction in DPM as confirmed by the 2016 Annual Emissions Inventories for each Port. Thus, it is appropriate to use the 2020 forecasted health risk results to characterize the current impact of Port-related activity on the neighboring community.

[14] "Multiple Air Toxics Exposure Study in the South Coast Air Basin, MATES IV." 2012. South Coast Air Quality Management District, p. 4-11. http://www.aqmd.gov/docs/default-source/air-quality/air-toxic-studies/mates-iv/mates-iv-final-draft-report-4-1-15.pdf?sfvrsn=7

Figure 1: Percent Reduction in Diesel Particulate Matter-Related Health Risk Since 2005 for Ports Region Based on 85% Reduction in Emissions[15]

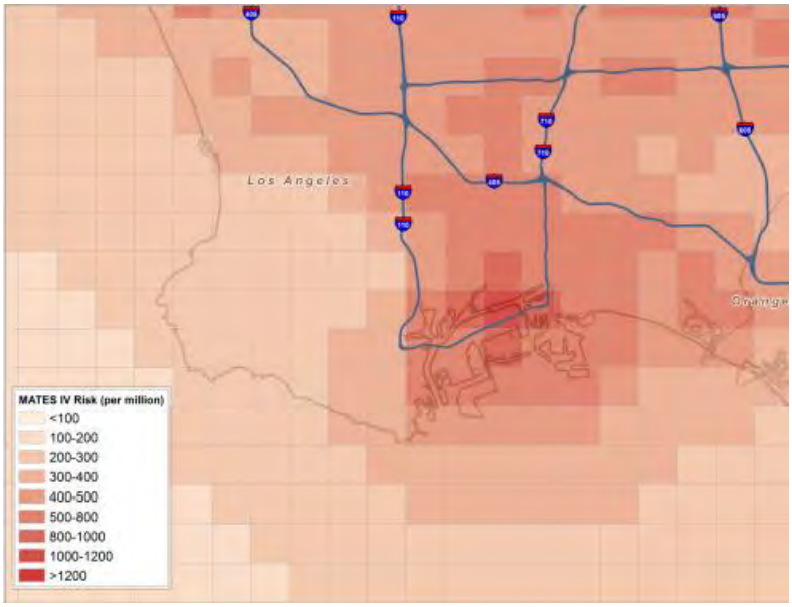


Yet despite the improvements in air quality and health, more work needs to be done. Although health risk reductions have been significant, residents nearest the Ports still face higher pollution-related health risks than the rest of the Southern California population,[16] and most of the neighboring areas are classified as "disadvantaged" communities pursuant to SB 535 (De León, Statutes 2012) using the California Communities Environmental Health Screening Tool (CalEnviroScreen).

Health risk increases with proximity to the source of pollution, and as a result, communities closest to the Ports face greater public health impacts than those farther away. Figure 2 displays the high cancer risk near the Ports, according to MATES-IV.[17]

[15] San Pedro Bay Ports Final 2010 Clean Air Action Plan Update, http://www.cleanairactionplan.org/documents/2010-final-clean-air-action-plan-update.pdf
[16] "Multiple Air Toxics Exposure Study in the South Coast Air Basin, MATES IV." 2012. South Coast Air Quality Management District. http://www.aqmd.gov/docs/default-source/air-quality/air-toxic-studies/mates-iv/mates-iv-final-draft-report-4-1-15.pdf?sfvrsn=7
[17] MATES-IV

Figure 2: Ports Area Simulated Air Toxic Cancer Risk, MATES IV, 2012



In addition to cancer risk, port-related air pollution contributes to other acute and chronic health effects. About 15% of children in Long Beach suffer from asthma compared to 9% of children in the United States.[18] The City of Long Beach Community Health Assessment (July 2013) further reflects the health burden on communities surrounding the Ports. According to the assessment, in 2011, about 55,000 Long Beach residents suffered from asthma. In 2007, about 1,200 hospitalizations in Long Beach were due to asthma and Chronic Obstructive Pulmonary Disease (COPD), which is also linked to poor air quality. Asthma hospitalization rates are greater in West Long Beach near the Ports and the 710 freeway than in East Long Beach.

In communities near the Port of Los Angeles, including San Pedro, Wilmington, and the Harbor Gateway, asthma-related emergency department visit rates exceed the city average in half of the zip codes. The Los Angeles rate of asthma-related hospital visits is 39 per 10,000 residents; in at least one zip code in the Harbor Gateway, that rate rose to 72 visits per 10,000 residents.[19] Hospitalizations result in significant direct costs such as medications and services, and indirect costs including missed school and work. The average cost of an asthma-related hospitalization in 2010 according to the California Public Health Department was $33,749.[20]

[18] "Health Statistics 2010." 2013. City of Long Beach Department of Health and Human Services. http://www.longbeach.gov/health/media-library/documents/planning-and-research/reports/2010-health-statistics/2010-health-statistics/

[19] "Health Profiles – Harbor Gateway." Plan for a Healthy Los Angeles. http://healthyplan.la/interactive/neighborhoods/#id=11

[20] "Strategic Plan for Asthma in California 2015-2018." 2015. The California Department of Public Health. https://www.californiabreathing.org/images/SPAC2014_7-28-15APR.PDF

The South Coast Air Basin continues to be out of compliance with federal ambient air quality standards for ozone and particulate matter, pollutants correlated with breathing problems, exacerbation of asthma and other respiratory symptoms, and in the case of particulate matter, increased mortality due to cardiovascular or respiratory diseases.[21] Goods movement-related sources generate roughly 40% of the NO_x emissions in the South Coast Air Basin, and although not all of these sources are tied directly to the San Pedro Bay port complex, the Ports recognize we have a responsibility to minimize our environmental and public health impacts.

With our community's health and quality of life at the forefront, the Ports offer our most aggressive CAAP yet.

[21] "Final 2016 Air Quality Management Plan," South Coast Air Quality Management District. http://www.aqmd.gov/home/library/clean-air-plans/air-quality-mgt-plan/final-2016-aqmp

CAAP Goals

This 2017 CAAP Update continues to move forward with the aggressive goals that were established in the 2010 CAAP Update, and identifies new long-term goals to continue to guide our progress. Establishment of these goals has been informed by efforts at the state level and by the mayors of the cities of Los Angeles and Long Beach, as described below, and by the two ports' continued commitment to reducing the impacts of port-related operations on the environment and our neighboring communities. The goals identified in this section provide overall direction for the ports' approach on individual strategies. The specific goals for each strategy are outlined in the Strategy section of this document.

Pursuant to Governor Brown's Executive Order B-32-15, California has established aggressive goals for more sustainable movement of goods to meet air quality and greenhouse gas reduction goals.

The Sustainable Freight Action Plan set the following targets for the goods movement sector:

- *For system efficiency*: Improve freight system efficiency 25 percent by increasing the value of goods and services produced (as measured by GDP) from the freight sector, relative to the amount of carbon that it produces by 2030.
- *To transition to zero-emissions technologies*: Deploy over 100,000 freight vehicles and equipment capable of zero-emission operation and maximize near-zero-emission freight vehicles and equipment powered by renewable energy by 2030.
- *To address economic competitiveness*: Establish a target or targets for increased State competitiveness and future economic growth within the freight and goods movement industry.

Additionally, the State has set targets for reducing greenhouse gas emissions (GHGs) through Assembly Bill 32, subsequent executive orders and Senate Bill 32 as follows:

- By 2020, reduce GHGs to 1990 levels;
- By 2030, reduce GHGs to 40% below 1990 levels (Governor's Executive Order B-30-15 and Senate Bill 32);
- By 2050, reduce GHGs to 80% below 1990 levels (Governor's Executive Order S-3-05)

The cities of Los Angeles and Long Beach also have greenhouse gas reduction and sustainability goals. In 2015, the City of Los Angeles adopted the Sustainable City pLAn, which called for reducing GHGs to 45% below 1990 levels by 2025 and to 60% below 1990 levels by 2035 in

addition to the Governor's 2050 target. Additionally, the plan seeks to increase the percentage of Port-related goods movement trips that use zero-emissions technology to at least 15% by 2025 and 25% by 2035. Both mayors have also signed on to the "Compact of Mayors," which requires cities to set greenhouse gas reduction targets and to address the impacts of climate change.

On June 12, 2017, the Mayors of the cities of Los Angeles and Long Beach publicly signed a joint declaration affirming the commitment to move toward zero emissions at the Ports, including setting goals of zero-emission cargo-handling equipment by 2030 and zero-emission drayage trucks by 2035. The Mayors committed to a CAAP that includes new investments in clean technology, expanded use of at-berth emission reduction technologies, and a zero-emissions drayage truck pilot program.

The declaration also puts in place a CAAP Implementation Stakeholder Advisory Group to bring together key public and private industry stakeholders to advise the Ports on details of CAAP implementation and further ongoing operational efficiency programs to move towards zero-emissions goods movement. The group will also report on progress with CAAP implementation and related issues such as energy efficiency improvements, onsite renewable energy generation and energy storage.

The declaration also called for the establishment of a Green Ports Collaborative to advance progress toward meeting shared goals for reducing emissions and protecting public health with other Climate Mayors along the West Coast and the nation. A core initiative of the collaborative will be to aggregate, demonstrate and create markets that grow the demand for zero-emissions goods movement vehicles and equipment to encourage investments in vehicle development by manufacturers. Finally, the declaration emphasizes the need to work together to secure public and private funding to support the purchase of cleaner equipment and development of the infrastructure needed to meet the goals of the CAAP.

Although the specific actions and numeric targets vary, all of these goals strive to advance zero-emissions and low-carbon goods movement. The strategies in the CAAP support these larger goals by accelerating the development and deployment of zero-emissions technologies and cleaner equipment, improving freight efficiency, and undertaking long-term planning efforts to help our cities and State meet their sustainability goals.

For freight efficiency, the Ports have proposed to study concepts to speed the flow of cargo through the terminals, such as off-dock staging yards and chassis facilities; to explore systemwide efficiencies, such as intelligent transportation systems; and to reduce truck visit times with a universal portwide reservation system that can integrate with existing terminal specific systems.

Such strategies are expected to have positive benefits for air quality. The State has set a metric to measure freight efficiency that considers GHG emissions in relation to the economic value of the goods movement industry. To support that effort, the Ports will continue to report emissions per container moved in our annual emissions inventories and to measure the progress over time in reducing the amount of freight industry emissions generated while moving cargo.

The bulk of the 2017 CAAP Update strategies, however, are designed to significantly advance the push toward zero emissions in support of the GHG reduction goals from the State and the mayors of Long Beach and Los Angeles.

To that end, the 2017 CAAP Update incorporates two new emission reduction targets:

- Reduce GHGs from port-related sources to 40% below 1990 levels by 2030
- Reduce GHGs from port-related sources to 80% below 1990 levels by 2050

In addition, the 2010 CAAP set emission reduction targets for 2014 and 2023 for diesel particulate matter, nitrogen oxides, and sulfur oxides, as compared to 2005 conditions:

- By 2014, reduce port-related emissions by 22 percent for NO_x, 93 percent for SO_x and 72 percent for DPM.
- By 2023, reduce port-related emissions by 59 percent for NO_x, 93 percent for SO_x and 77 percent for DPM.[22]

The 2017 CAAP Update does not alter these goals, and the Ports pledge to continue to incorporate programs to meet or exceed the 2023 goals, which are now part of the 2017 CAAP Update goals. The CAAP includes strategies designed to achieve the necessary emission reductions and maintain the progress we have achieved over the past 10 years. Continued progress in reducing DPM, NO_x and SO_x remains an ongoing priority for the Ports.

The 2010 CAAP further established the following San Pedro Bay-wide health risk reduction goal, consistent with CARB's Goods Movement Reduction Plan goal, as compared to 2005 conditions:

- By 2020, reduce residential cancer risk from port-related DPM emissions by 85%

[22] The Ports have achieved the 2014 targets. The Ports' 2016 Emission Inventories report DPM reduced by 87%, NO_x by 56%, and SO_x by 97%. We are well on our way to achieving the 2023 targets.

The initial CAAP also made reducing health risk from individual port development projects an important objective by setting an increment threshold of 10 in a million excess residential cancer risk for new projects.

For the 2017 CAAP Update, the Ports remain committed to this 10 in a million threshold to manage health risk from individual port development projects, as well as to achieving the 2020 Bay-wide health risk reduction goal. At the same time, the Ports will continue to work with State, regional and local regulators and stakeholders to determine how continued reductions in emissions and an ever-improving baseline, and recent changes made by the State Office of Environmental Health Hazard Assessment (OEHHA) to procedures for calculation of health risk, could affect the way these goals are evaluated by the Ports in the future. The Ports will continue to evaluate whether this health risk threshold should be modified on a case-by-case basis for future redevelopment projects, particularly if new information or guidance arises.

The Ports also remain committed to the 2023 emission reduction targets set by the initial CAAP. The CAAP includes strategies designed to achieve the necessary emission reductions and maintain the progress we have achieved over the past 10 years. Continued progress in reducing DPM, NO_x and SO_x remains an ongoing priority for the Ports.

Finally, it should be noted that strategies to reduce GHGs often help to reduce criteria pollutants, an approach that has been embraced by state and regional air agencies; thus, the strategies put in place to achieve the 2030 and 2050 GHG reduction goals will also help us achieve our 2023 NO_x, DPM, and SO_x emission reduction targets and continue to make further progress. More importantly, the GHG reduction goals align with local, regional, and State mandates and commit the Ports to a long-term path toward sustainability and improved air quality.

Looking toward 2050, there are several unknowns that will affect future GHG emission levels. These unknowns include grid power portfolios; maritime industry preferences of power sources for ships, harbor craft, terminal equipment, locomotives, and trucks; advances in cargo movement efficiencies; the locations of manufacturing centers for products and commodities moved; and consumer concern about the carbon footprint of goods to be purchased. The key factors that have led to operational efficiency improvements to date are the cost of energy, current and upcoming regulatory programs, and the competitive nature of the goods movement industry. We anticipate these factors will continue to have an effect on GHG emissions in the foreseeable future.

In order to reach the targets of 40% reduction in GHG emissions in 2030 and 80% reduction in GHG emissions in 2050, compared to 1990 levels, the Ports will need to overcome tremendous

challenges and will need to be prepared to address those challenges in new ways. The Ports will need a long-term vision and a coordinated, collaborative effort with both the industry and the regulatory agencies to realize the needed emission reductions from maritime goods movement-related sources.

Strategies

The CAAP strategies are aligned to broad State Agency Actions identified in Appendix C of the Sustainable Freight Action Plan:

1. Clean Vehicles and Equipment Technology and Fuels
2. Freight Infrastructure Investment and Planning
3. Freight Efficiency

Energy resource planning, which is a critical part of the path to zero-emissions, falls under "freight infrastructure investment and planning" in the Sustainable Freight Action Plan. Due to the importance of energy infrastructure and supply for implementing the CAAP actions, the Ports are identifying energy planning as its own action:

4. Energy Resource Planning

With a health risk reduction goal for 2020 and emission reduction goals for 2023, 2030, and 2050, the Ports will require near- and long-term approaches to achieve our goals.

In the next few years, there is still a need to develop and demonstrate the zero- and near-zero-emissions technologies that will be critical to helping us reduce emissions in the long term. Where cleaner engine technologies are already certified and feasible, the Ports will use a combination of incentives and requirements to support more widespread deployment.

In the long-term, as cleaner technologies are developed and become feasible and commercialized, the Ports will look to drive the pace of deployment of such equipment to produce the cleanest fleet possible. By necessity, some strategies, particularly those for ships, will have long timeframes to accommodate the limited availability of cleaner equipment and to ensure adequate notice and planning timelines for fleet turnover.

In addition to the specific strategies listed throughout this section, the Ports are committed to several overarching goals that cut across the categories of clean vehicles and equipment technology, freight infrastructure, freight efficiency, and energy resource planning:

- Technology Advancement
- Regulatory Advocacy
- Funding Advocacy

Technology Advancement

One important initiative that was established in 2007, soon after the adoption of the original CAAP, is the Technology Advancement Program (TAP) [23]. This program is a collaborative partnership among the Ports, regulatory agencies, and industry partners, including shipping lines, terminal operators and the trucking industry. Through the TAP, the Ports have led the way in advancing emission reduction technologies for the port sector.

Under the guidance of the TAP, the Ports fund the development and demonstration of promising emission-reduction technologies. Since its inception more than 10 years ago, the TAP has become a catalyst for identifying, evaluating, and demonstrating new emissions reduction technologies for potential commercialization and deployment throughout the port complex to help achieve the CAAP goals. The TAP has advanced cutting-edge technology in use today, such as pollution capture systems for ships at berth and hybrid-electric rubber-tired gantry cranes. The Ports have committed almost $15 million for nearly 35 projects, many of which have resulted in commercialized technologies now deployed throughout the port complex.

This program will remain a critical component of our efforts going forward as we rely on the development and deployment of technologies to meet our CAAP goals. The 2017 CAAP Update reaffirms our commitment to technology development and demonstration. The TAP, which has focused mainly on technologies with criteria pollutant reductions, will evolve to include technologies and approaches with the potential to reduce GHGs in order to help us meet our new GHG reduction targets. TAP Guidelines will be modified to reflect a prioritization on focused solicitations for targeted source categories and emission goals, including GHG reduction. This will allow the Ports to direct our resources to supporting development of technologies where there is the greatest need.

Over the next few years, the Ports envision specifically targeting TAP investments toward technologies for harbor craft, ships, and zero-emissions cargo-handling equipment and trucks, as well as for technologies or operational approaches that improve freight efficiency in order to reduce fuel consumption, and thus, GHGs.

Regulatory Advocacy

The Sustainable Freight Action Plan highlighted the State's intention to advocate for new engine tier levels for locomotives and ships, and SCAQMD has petitioned the federal government for a national near-zero-emission engine standard for trucks. The Ports have supported these efforts

[23] More information about the TAP is available at www.cleanairactionplan.org/tap

and will continue to do so. Additionally, the Ports will continue to advocate for making source specific strategies developed at the local port level into state or federal mandates, in order to minimize diversion of cargo to other gateways with less restrictive environmental controls, potentially resulting in an increase in global emissions.

In support of the CAAP, the Ports propose to participate in, advocate for, and support regional, State, and federal efforts to move forward on the following regulations:

- Near-zero-emission engine standard for on-road trucks
- Tier 5 engine standard for locomotives
- Tier 4/particulate matter engine standard for vessels
- Statewide vessel speed reduction
- At-berth emission controls from non-regulated vessels
- New fleet turnover requirements for harbor craft
- Idling restrictions and fleet turnover requirements for cargo handling equipment

It is important to preserve access to state and federal funding to accelerate implementation of these strategies, in advance of any regulatory requirements.

Funding Advocacy

In the short term, early adoption of cleaner technologies will require financial support to offset higher incremental costs. Capital costs are likely to remain very high for both manufacturers and operators of the advanced technologies envisioned in the CAAP. Expanding on-dock rail infrastructure and installing emission-control technologies to reduce ship emissions at berth will require significant investments. Furthermore, it is anticipated that a substantial amount of electrical infrastructure must be installed at terminals, including major utility upgrades to bring additional power to the ports, in support of electrified zero-emissions cargo-handling equipment.

The Ports have estimated incremental costs between $7 billion and $14 billion for new technologies, infrastructure investments, and incentive programs to support the CAAP strategies.[24] This is in addition to Port investments in on-dock rail infrastructure. Outside of any state and federal funding that can be secured to support these efforts, these costs will be borne by the Ports themselves and private industry. Moreover, a large portion of these costs must occur within the next 5 to 7 years to ensure the necessary infrastructure is in place to support the

[24] For information on these cost estimates, please see the "Preliminary Cost Estimates for Select 2017 Clean Air Action Plan Strategies" at www.cleanairactionplan.org.

equipment transition; fleets cannot begin to convert to near-zero or zero emissions without adequate charging and fueling capabilities.

Keeping the Ports economically competitive amidst this transition to cleaner goods movement will be challenging, however it is necessary that we find this balance for these actions to be sustainable. By far, this 2017 CAAP Update represents the largest environmental investment ever undertaken by a port complex, and these strategies will place an enormous financial burden on the Ports and goods movement industry. The CAAP cannot be successful, and the industry cannot remain economically competitive, without the significant financial support of the state and federal government.

Federal, state and regional government incentives can help offset costs where production of this equipment is low due to the presence of less expensive alternatives and the resulting lack of widespread demand. Government subsidies are also needed in the near-term to install the critical infrastructure and to support additional research, development, and demonstration projects. The Ports have already begun to advocate for incentive funding from federal, state, and regional sources to assist with these efforts, and will remain actively involved in these discussions throughout the implementation of this CAAP.

The Ports will also serve in an advocacy role, between port operators and funding agencies, to help reduce barriers for applicants and to ensure funding awards will be targeted for priority projects in support of the CAAP goals. This includes advocating for streamlined application processes and flexibility on eligible costs, maximum funding levels, and timelines for implementation.

In addition, many small operators and tenants require assistance to apply for grant opportunities. The Ports will expand current efforts to make our tenants aware of upcoming grants and support them with the application process and reporting requirements. In some cases, as has already occurred, the Ports will take on the role of project partner and grant administrator.

1. Clean Vehicles and Equipment Technology and Fuels

Cleaner engine technologies are the cornerstone of more sustainable goods movement. The Ports are committed to advancing technologies that move our industry toward zero emissions and to ensuring that our fleets are among the cleanest in the world. The strategies below support the State's goal of deploying 100,000 zero-emission vehicles by 2030, the goals of the mayors of the cities of Los Angeles and Long Beach, and reinforce our continued push to reduce port-related air quality impacts. With a combination of requirements and incentives, the Ports aim to advance feasible, cutting-edge technologies and support deployment as expeditiously as possible. In addition, the Ports encourage operational changes that generate significant emission reductions for our communities.

Where cleaner technologies and certified engines already exist, the Ports are proposing near-term strategies to accelerate deployment. Where technologies do not exist, or where there is expected to be longer lead times required for adoption, particularly for ships, the Ports are proposing strategies with longer timeframes and incremental near-term milestones to get us to our ultimate outcome.

1.1. Clean Trucks Program

The Clean Trucks Program (CTP), adopted in 2007 and launched in October 2008, was a groundbreaking initiative to phase out the oldest, dirtiest trucks serving Port terminals by banning trucks older than 2007 engine model year (MY) between 2 and 6 years in advance of the State Drayage Truck Rule. The benefits of this program cannot be overstated. By 2010, just over two years from initiation of the program, more than 90% of the fleet was transformed to 2007 EPA compliant trucks, which have significantly lower emissions than their predecessors. By January 1, 2012, 100% of the fleet consisted of 2007 EPA-compliant trucks or newer, two full years before the State Drayage Truck Rule requirements went into effect in 2014.

Numerous challenges arose with implementing the original CTP. The Ports had never undertaken a program that was so transformational to a sector of the port industry. There were many concerns with the ability of the trucking sector to take on the costs of upgrading its equipment and uncertainty as to the availability of enough clean trucks to meet the operational needs of the Ports. Many of the trucks used in drayage were older, in some cases many decades old. Drayage is a low-margin industry and many of the truck owners were not well positioned to invest in newer, more expensive trucks. At the same time, however, new state and federal regulations provided opportunities for aggressive action. CARB was in the regulatory development process to establish requirements for trucks servicing ports and rail yards in California. This regulation

served as a basis for the Ports requirements that accelerated the state's requirements and timeline locally by between two and six years with financial support of grants, incentives, and bulk purchase pricing to help the industry to comply. Finally, the EPA had already promulgated emissions standards for new heavy-duty on-road truck engines manufactured in 2007 and 2010, providing assurances that truck engines meeting the emissions requirements would be available.

Through the combined efforts of the Ports, availability of grant funding to purchase new trucks, and the impending 2014 turnover requirements of the State Drayage Truck Rule, the transition of the older trucks serving the Ports was dramatic and very effective. Our latest emissions inventories show that truck-related DPM emissions have decreased 97% since 2005.[25]

While this progress is remarkable and should be celebrated, there is still a need for further emission reductions, and more needs to be done. According to the 2016 port emissions inventories, trucks remain a significant source of emissions. Port trucks contribute 23% of the total NO_x emissions, making them the second largest source of NO_x emissions at the Ports. Further, port trucks are the largest contributor of port-related GHG emissions, representing 40% of total port-wide GHG emissions.

The issue of the best path to zero emissions was one of the most hotly debated issues during the Draft CAAP Update comment period. The Ports are fully committed to our goal of transitioning to zero emissions by 2035. The Ports will also work with the industry to deploy the cleanest available feasible technology in order to benefit the region's and state's emission reduction needs and to reduce health risks to the community in the near term. The many issues contributing to this choice are discussed further below. We believe that near-term deployment of cleaner transitional technologies will not detract from our ultimate zero-emissions goal.

In order to continue reducing NO_x and GHGs, through the strategies described below, the Ports' goal is to transition the current drayage truck fleet to near-zero technologies in the near-term and ultimately zero-emissions technologies by 2035. As of the end of September 2017, 53% of the engines in the Ports' drayage fleet met the 2007 EPA standard and 47% met the 2010 standard.

Importantly, zero- and near-zero-emissions trucks are not yet commercially available; however, several recent demonstration projects utilizing a variety of technology and fuel types, described in more detail below, have shown great promise.

[25] 2016 Emissions inventories

Near-Zero Emissions

A truck with an ultra low-NO_x engine, also known as a near-zero-emissions truck, is up to 90% cleaner than the cleanest trucks today. When paired with renewable fuels, the near-zero-emissions engine truck will also provide significant GHG reductions.

SCAQMD and other partners are working with Cummins Westport Inc. (CWI) to develop and demonstrate a natural gas-fueled 11.9L near-zero-emissions engine as a follow-on effort to CWI's recent certification and commercialization of its smaller 8.9L ISL G NZ near-zero-emissions engine. The most recently announced schedule anticipates the larger near-zero-emissions engine to be available in early-2018. The only near-zero-emissions engines to be available in the next few years are fueled by natural gas; however, CARB has projected[26] that diesel-fueled near-zero engines are likely to become available sometime after 2020.

Moreover, CARB's 2016 State Strategy for the State Implementation Plan[27] proposes to promulgate a new engine standard in 2019 that will require all new heavy-duty engines manufactured in 2023 to meet the near-zero-emissions level. The new standard will produce 90% less NOx emissions than today's engines, however, agency staff have indicated that further evaluation is necessary to define the specific NO_x emissions rate. At this point, it is unknown what the final engine standard will be, although it is anticipated to be between 0.02 g NO_x/bhp-hr and 0.05 g NO_x/bhp-hr.

Zero Emissions

There are ongoing demonstrations of zero-emission truck technologies as part of the Zero Emission Cargo Transport programs (I and II) being led by the SCAQMD and financially supported by the Ports' TAP. These projects include battery-electric, fuel cell, and plug-in hybrid (both natural gas and diesel) trucks capable of operating in "zero emissions mode" for short distances from more than half a dozen manufacturers with several trucks already in service. Additionally, SCAQMD has received Greenhouse Gas Reduction Funds to develop and demonstrate 44 zero-emissions trucks, which are expected to enter service in late 2018.

Also, the SCAQMD is piloting an overhead catenary system to provide wayside power to electric trucks when connected to the system. The Ports are providing financial support for the project. The 1-mile demonstration test track is located near the Ports. The project includes retrofitting zero-emission trucks with devices to allow them to attach to the overhead electric lines to draw

[26] https://www.arb.ca.gov/msprog/tech/techreport/ta_overview_v_4_3_2015_final_pdf.pdf
[27] https://www.arb.ca.gov/planning/sip/2016sip/2016sip.htm

power from the grid while in motion. This demonstration has begun and results are expected in 2018.

By the end of 2019, there should be nearly 70 zero-emissions trucks in demonstration at the Ports and throughout the region.

Many stakeholders have urged that waiting for many years while zero-emission technologies can become commercially and operationally viable is not acceptable due to the urgent health impacts on local communities in Southern California. The Ports agree. As a result, the Ports propose a Clean Trucks Program that attempts to strike a balance between maximizing near-term benefits with available near-zero engine technologies while defining a clear path with concrete steps and a schedule toward achieving the ultimate goal of zero emissions.

There is still significant effort needed for these zero- and near-zero-emission technologies to become feasible and commercialized. One near-zero-emission truck is expected to be commercially available as soon as next year. Other near-zero and zero-emission technologies may take several years to become commercialized and feasible for drayage. The aim of this strategy is to identify a long-term schedule so that the trucking industry can know the expectations and can plan ahead for new equipment purchases. This strategy is also a signal for the truck manufacturers and technology developers to gauge the anticipated demand and timeline needed for these cleaner technologies and to develop more affordable options, especially for zero-emission units that are now two to three times the cost of conventional trucks, in order to fit within the existing business model. As a result, funding advocacy efforts to our state and federal legislators and agencies will be necessary to secure incentive dollars in order to urge early adopters to begin to use this equipment.

Stakeholder Input

Throughout the 2017 CAAP Update process, the Ports have met with numerous community, environmental and industry groups, and the regulatory agencies, and received many comments related to the strategy for trucks. In fact, more public comments have been received on the proposed strategy for trucks than for any other strategy included in this Plan. These comments, in addition to the legislative changes previously discussed and various modeling and forecasting analyses, have led to changes in the proposed truck strategy throughout the update process.

Many stakeholders lauded the inclusion of a deadline for zero-emissions trucks; however, stakeholders also expressed the need for interim milestones for near-zero-emissions and zero-emissions trucks in order to ensure introduction of cleaner trucks to the fleet earlier than 2035.

A significant number of comments were received from stakeholders supporting the ACT Now Plan[28], which called for immediate requirements to use trucks with engines that meet 0.02 g NOx/bhp-hr in order to replace all diesel-fueled trucks with natural gas-fueled trucks within 5 years, starting as soon as 2018.

The trucking industry has had significant concerns about near-term requirements that would come into effect prior to the current regulatory deadlines. Trucking companies develop their fleet replacement plans years in advance and have purchased trucks to be compliant with the State Truck and Bus Rule, which bans pre-2010 MY trucks in 2023; any acceleration of this timeline, according to some commenters, would not give these companies enough time to recoup their nearly $1 billion investment to comply with the current requirements, or to plan and budget for replacements. Additionally, the industry expressed concerns about fees. An early proposal to implement a continuous fee on 10-year-old and older trucks starting in 2018 elicited objections based on assertions that properly serviced trucks can maintain low emission levels for many years and that a fee would arbitrarily diminish the value of these trucks without justification. The industry has also questioned the legality of a mechanism to impose a rate on all trucks with exemptions for trucks that meet certain emissions standards, claiming that such a strategy is likely preempted under federal law. Lastly, industry stakeholders expressed concern over the availability, viability and cost of near-zero and zero-emissions technologies, especially within the aggressive timeline proposed.

The regulatory agencies, specifically CARB and AQMD, identified a need to meet near-term emission reductions in order for the region to achieve the National Ambient Air Quality Standard (NAAQS) for 8-hour ozone in 2023. In order to meet this emission reduction requirement, they believe that near-zero-emission trucks will play a vital role and that significant numbers of these trucks will need to be in operation at the ports by 2023. To ensure this, both agencies commented that the truck rate should be initiated prior to 2023, or by at least 2020, if not sooner.

In addition, as mentioned previously, the recently approved Senate Bill 1 (SB 1) prohibits new regulatory requirements by the State to replace, retire, repower, or retrofit heavy-duty trucks before the truck has reached the earlier of either 800,000 vehicle miles traveled or 18 years from the engine model year. As a result, it is not anticipated that CARB will develop any new regulations that establish near-term requirements for trucks. Therefore, the Ports are unable to follow our previous CAAP strategy of advancing ban deadlines contained within a state truck in-use regulation.

[28] http://cngvc.org/wp/wp-content/uploads/2017/04/ACT-Now-Plan-Final.pdf

Lastly, many port drayage truck drivers have raised serious and legitimate concerns about the impact of expensive new technologies on the working conditions of the thousands of drivers who haul cargo to and from the ports. The problem arises due to the high cost of new technology being beyond what most drivers can afford. During the previous Clean Trucks Program, a widespread drayage industry practice was for licensed motor carriers to purchase the trucks and lease them to drivers with lease deductions taken directly from the payments to the drivers. Some have argued that this practice was highly successful for achieving the rapid replacement of trucks. Numerous drivers have complained, however, that these expenses and deductions left little remaining to cover living expenses. These issues were documented in a series of stories in the media, including a recent article in USA Today,[29] and elsewhere. The question of how to fund the billions of dollars required for the replacement of trucks to zero and near-zero emissions vehicles poses a significant challenge for the financial viability and long-term economic sustainability of a clean truck fleet. It should not fall solely on the drivers to fund the transition to a new truck fleet to serve the Ports. It is critical that the drivers, motor carrier companies, Ports, goods movement industry, cargo owners, agencies, and legislators all work together on solutions to address this problem in order to transition to a sustainable cleaner truck fleet and a drayage system that does not place an undue burden on any particular party.

The Ports have thoughtfully considered all of these factors, taking into account the need to reduce emissions for community health and to meet our criteria pollutant and greenhouse gas reduction goals, while minimizing economic impacts on the industry, and utilizing the Ports' authority within our jurisdiction. As described above, it is our intent to identify a long-term process and schedule so that the trucking industry can know the expectations and can plan ahead for new equipment purchases coupled with near-term actions for immediate public health benefits. To that end, key highlights related to the proposed new truck strategy are outlined below:

- immediately requires any new trucks entering the port drayage registries to meet the cleanest engine manufacturing standard,
- establishes an approach to accelerate the transition to near-zero-emission trucks in the early years, and zero-emission trucks in the later years,
- provides a long-term schedule for the drayage industry to budget and plan for the eventual transition to zero emissions,
- commits to an early action pilot of a state heavy-duty truck emission inspection program (e.g. Heavy-Duty Smog Check) to improve drayage truck repair rates and emissions performance and retire non-complaint trucks with excessive emissions,

[29] USA TODAY, "Rigged." June 16, 2017. https://www.usatoday.com/pages/interactives/news/rigged-forced-into-debt-worked-past-exhaustion-left-with-nothing/

- defines a stepwise transition to zero emissions, including incentives and pilot programs to introduce these trucks to the fleet prior to 2035, and
- includes frequent feasibility assessments to identify the state of near-zero and zero-emissions technologies, potential challenges for meeting the goals, opportunities for earlier penetration of the cleanest trucks, and to inform our progress throughout the implementation period.

The proposed Clean Trucks Program update is as follows:

- Beginning in mid-2018, new trucks entering the Ports' Drayage Truck Registry (PDTR) must have a 2014 engine model year (MY) or newer. Existing trucks already registered in the PDTR can continue to operate.
- Beginning in early 2020, following promulgation of the state's near-zero-emission heavy-duty engine standard , all heavy-duty trucks will be charged a rate to enter the ports' terminals, with exemptions for trucks that are certified to meet this near-zero standard or better.
- Starting in 2023, or when the state's near-zero-emission heavy-duty engine standard is required for new truck engine manufacturers, new trucks entering the PDTR must have engines that meet this near-zero emissions standard or better. Existing trucks already registered in the PDTR can continue to operate.
- Modify the truck rate so that by 2035 only trucks that are certified to meet zero-emissions will be exempt from the rate.

Immediate Requirements for 2014 Engine Model Year Trucks

Starting in mid-2018, the Ports will require that any new trucks entering port drayage service meet the State's 2010 emissions standard. Under the current requirements for the Ports' Clean Trucks Programs and the State Truck and Bus Rule, all trucks must have engines that, at a minimum, meet the federal 2007 engine emission standard of 1.2 g NOx/bhp-hr. Based upon the most recent report from the PDTR, all trucks in operation at the Ports are compliant with that standard. Further, as of September 2017, 47% of the registered trucks in operation at the ports are already MY2010 or newer, well in advance of the State's regulatory requirement which requires trucks to have MY2010 engines by 2023. Ensuring that any new trucks entering the PDTR at least meet the 2010 engine emission standard will accelerate near-term reductions from port truck trips.

All trucks with pre-2010 engines entered into the PDTR before the 2018 implementation date will be allowed to continue providing drayage services until the state requires replacement in 2023.

The specific new registration requirement will be for trucks to have model year 2014 or newer engines. This was chosen for two reasons. First, a portion of the 2010 to 2014 model year truck engines are not compliant with the federal 2010 emissions rate of 0.2 g NOx/bhp-hr due to credits that engine manufacturers received to build the engines. Second, the 2014 MY engines are equipped with On-Board Diagnostics that will assist with engine testing and maintenance compliance going forward. Therefore, trucks with 2014 MY engines provide the current cleanest engine emissions level coupled with on-board diagnostics to assist in maintaining that level.

Transition to Near-Zero-Emission Truck Engines

CARB's State Strategy for the State Implementation Plan[30] proposes to require a manufacturing standard for all new heavy-duty engines to meet a near-zero-emission standard starting in 2023. It is anticipated that this standard will be promulgated in 2019, and the NOx emissions level will be established somewhere between 0.02 g/bhp-hr and 0.05 g/bhp-hr. The Ports intend to hasten the penetration of these CARB-certified near-zero-emission trucks into the drayage fleet with financial inducements for those trucks starting immediately.

Further, starting in early 2020, or following promulgation of the State's near-zero-emission heavy-duty engine standard, a rate will be charged to the beneficial cargo owners for all heavy-duty trucks to enter the ports' terminals, with exemptions for trucks with CARB-certified near-zero engines or better. Initiation of this rate will be contingent on several critical elements.

- Promulgation of a near-zero-emission standard: This is a very important step for the Ports to initiate a new truck rate. The state is expected to establish the allowable emission level for near-zero-emission truck engines in 2019. The state will also be responsible for certifying whether or not particular truck engines developed by various manufacturers meet this emission level. The Ports will rely on these certifications as the determination of whether or not particular engines are considered to be near-zero emissions.
- Economic study to establish the Clean Truck Fund rate: The Clean Truck Fund rate amount will be established based upon an economic study that will evaluate the capacity of the industry to absorb this expense in light of existing costs and other fees, including an assessment of how the rate will affect the Ports' economic competitiveness and the potential for cargo diversion. All funds collected through the assessment of the rate will be used for trucking initiatives, for example, for incentives to the trucking industry for purchase of near-zero and zero-emission trucks.

[30] https://www.arb.ca.gov/planning/sip/2016sip/2016sip.htm

- Technology Feasibility and Commercial Availability: The feasibility assessment for trucks, which will initially be developed in 2018 and updated periodically, will provide information about the feasibility of the technology, including confirmation of the availability of trucks suitable for drayage operations that meet this certification level.
- Clean Truck Fund rate collection mechanism: The Ports will need to establish a mechanism to collect the rate on individual truck calls and to assess the appropriate amount to the owner of the cargo being hauled by the truck.

In addition, the Ports have already begun early funding advocacy efforts with the goal of securing grants from state and federal programs to support early deployment of near-zero emission trucks. The Ports will work with the trucking industry to identify opportunities for early deployment of near-zero technologies, in partnership with technology manufacturers and fuel providers.

After January 1, 2023, when California's new engine manufacturing requirement is expected to come into effect, the Ports will only allow trucks with certified near-zero-emission engines or cleaner to be entered for new service into the PDTR. All trucks that are compliant with the requirements of the State Truck and Bus Rule that are entered into the PDTR before 2023, will be allowed to continue providing drayage services.

Under the previous Clean Trucks Program, which imposed a fee on older trucks, roughly 90% of the trucks were replaced within three years with cleaner models while 10% chose to pay the fee in the short term. Thus, the assessment of the truck rate could result in a significant turnover to near-zero-emissions trucks in the near-term while giving fleet owners flexibility and ample time to plan for new purchases. The Ports project that by 2024, as a result of the truck rate starting in 2020 and the 2023 requirement for any new trucks entering the service, near-zero-emission trucks could comprise roughly 70% to 90% of the drayage truck fleet.

Financial incentives will be critical to meet this rate of turnover. The Ports intend to work closely with the federal, state, and local governments to secure incentive funding for near-zero-emission trucks in the near-term.

Transition to Zero-Emissions Trucks

To support the goal of ultimately transitioning to a zero-emission truck fleet in 2035, the truck rate implemented initially in 2020 will gradually be modified so that by 2035 it will only provide exemptions for trucks that are certified by the state to meet zero-emissions specifications.

The initial effort to introduce near-zero emission trucks into the Ports' drayage trucking fleet is not intended to slow down the parallel ongoing effort to transition the entire truck fleet to zero emissions by 2035. This approach aims to balance the near-term emission reduction needs by using cleaner technologies that will be feasible in the next few years, and allowing time for the cleanest, zero-emission technologies to develop and become feasible in the future. Near-zero-emission technologies are expected to be commercially available and mass-produced in the next few years, while the zero-emission trucks may not be available for some time. Significant effort and advancement will be needed to manufacture a sizeable fleet of commercialized zero-emission trucks that are capable of meeting the challenging cargo drayage duty-cycle operational requirements, and that are reliable, durable and affordable. Providing fueling or charging infrastructure to support the use of zero-emission trucks throughout the region will take major planning and funding as well. Similar to the challenges of transitioning to near-zero-emission trucks, financial incentives will be critical to make the switch to zero-emission trucks. The cost to transition to zero-emission technologies is anticipated to be substantial. The Ports plan to work with federal, state, and local agencies to secure funding for the effort to help turn over the fleet to zero-emission. Finally, the Ports will continue to work with state and federal agencies to obtain regulatory support for the transition to zero emissions in order to strengthen the program and expand the requirements beyond just the San Pedro Bay area.

Based on the strategy outlined above, the Ports projected the truck fleet composition in key years: 2021, 2024, 2031, and 2036. To determine the composition, the Ports had to make assumptions about the number of near-zero and zero-emissions trucks that could enter the fleet at certain times in response to the truck rate or new registration requirements. Because of the uncertainty, the Ports tested a range of assumptions, resulting in seven possible scenarios. These scenarios and the complete methodology are described in detail in the document "Potential Emission Reductions from Select CAAP 2017 Strategies."[31]

Table 1 shows the projected distribution of the fleet in the key years. The "No Action" column presents the projected fleet distribution absent a new Clean Trucks Program, in other words,

[31] Available at www.cleanairactionplan.org

"business as usual." The "Clean Trucks Program" column presents the projected distribution under the new strategy, incorporating the following assumptions:

- In 2021, the Ports estimated that between 5% and 10% of the fleet could turn over to newer trucks in response to the rate beginning in 2020. Some of these trucks would have 2014+ engine model years; the remainder would be near-zero emissions.
- In 2024, 2031, and 2036, the Ports have provided a range of near-zero and zero-emission truck penetration based on a variety of assumptions regarding the effectiveness of the rate's impact. On the low end, the Ports estimated that 25% of trucks would turn over to near-zero and then zero-emissions, and on the high end, the Ports estimated that 100% of trucks would turn over in response to the rate.
- In 2024, 2031, and 2036, the Ports varied the assumed penetration rate of zero-emissions vehicles based upon the projected availability of vehicles and financial incentives.
- The projections also take into account natural fleet turnover, that is, trucks that would normally be expected to leave the fleet and get replaced with newer trucks because they have reached the end of their useful lives.

Based on the assumptions above, the Ports generated the projected fleet distribution, which is captured in the "Clean Trucks Program" column. These scenarios present a bounding analysis to understand what levels of fleet turnover will be needed, on what timeframe, in order to achieve various levels of near-zero and zero emissions trucks. These scenarios (including Tables 1 and 2 below) should only be considered initial planning estimates to guide Clean Truck Program development, including the economic study to establish the clean truck rate. These scenarios should not be considered commitments, as any such commitments would need to be evaluated by the Boards of Harbor Commissioners of the two Ports as part of initial program development and ongoing program performance.

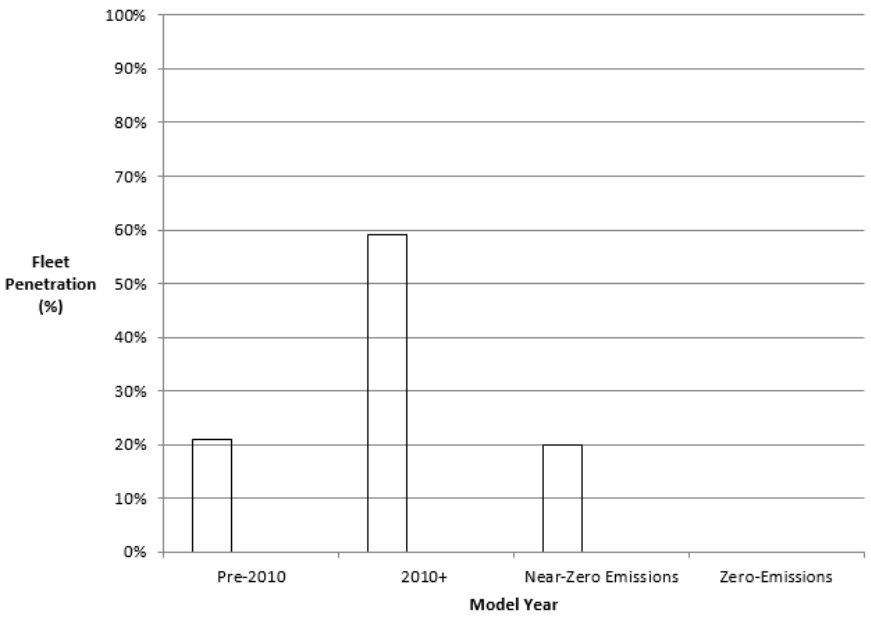
Table 1: Projected Fleet Distributions in Selected Years (% of Trucks)

	No Action				**Clean Trucks Program**			
	2021	**2024**	**2031**	**2036**	**2021**	**2024**	**2031**	**2036**
Pre-2010	46%	0%	0%	0%	20-23%	0%	0%	0%
2010+	54%	100%	100%	100%	59-64%	9-30%	1-3%	0-1%
Near-Zero Emissions	0%	0%	0%	0%	13-20%	69-90%	55-90%	0-44%
Zero-Emissions	0%	0%	0%	0%	0%	1-14%	7-44%	55-100%

Figure 3 graphically represents the projected fleet distributions.

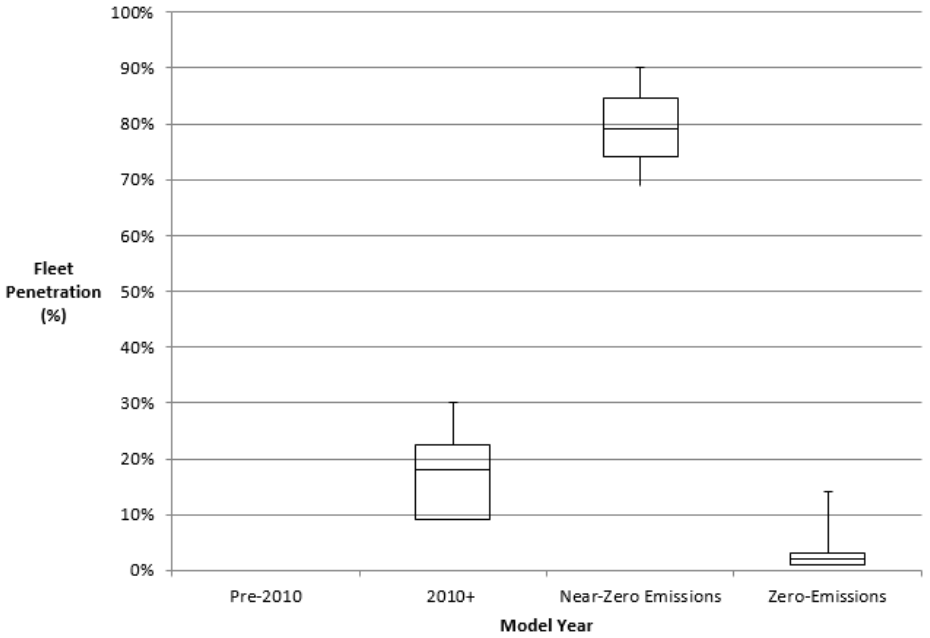
Figure 3: Projected Fleet Distributions, with Proposed Clean Trucks Program

Year: 2021



Note: In 2021, without the Ports' proposed Clean Trucks Program, the truck mix is expected to be 46% pre-MY2010 trucks and 54% MY2010+

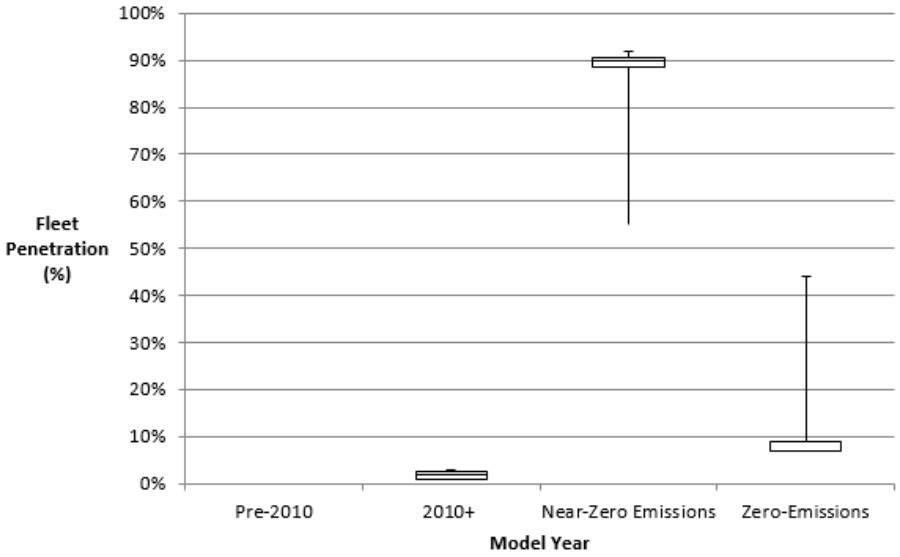
Year: 2024



Note: In 2024, without the Ports' proposed Clean Trucks Program, the truck mix is expected to be 100% MY2010+

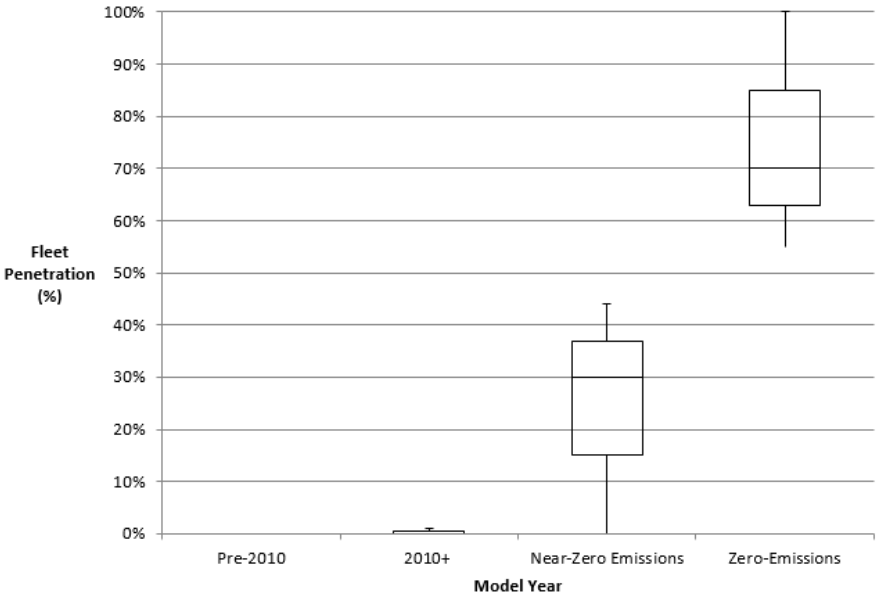
Figure 3 (continued): Projected Fleet Distributions, with Proposed Clean Trucks Program

Year: 2031



Note: In 2031, without the Ports' proposed Clean Trucks Program, the truck mix is expected to be 100% MY2010+

Year: 2036



Note: In 2036, without the Ports' proposed Clean Trucks Program, the truck mix is expected to be 100% MY2010+

These fleet penetration scenarios are based upon a set of assumptions related to the potential effectiveness of the specific details of the proposed Clean Trucks Program, including the most aggressive assumptions to get up to a 100% zero-emissions drayage fleet by 2035. Other efforts, chiefly the aggressive funding advocacy campaign that will be conducted by both Ports, are expected to result in accelerated turnover of trucks to near-zero through 2023, and zero-emissions through 2035. Substantial funding support by state and federal agencies will be critical to build upon the efforts of the Ports' CTP strategies to meet the ultimate goal of 100% zero-emissions trucks by 2035.

In support of the transition to cleaner trucks, the Ports would take additional actions, including:

- conducting feasibility assessments to evaluate the state of the technology development, infrastructure availability, and economic factors for deployment of zero-emissions trucks by 2035 and to provide interim progress reports on deployment of near-zero and zero-emission trucks;
- facilitating, supporting, and expanding upon the state's comprehensive heavy-duty vehicle maintenance, repair and inspection program currently under development by serving as the pilot location for implementation;
- waiving the Clean Truck Program annual registration fee for near-zero and zero-emission vehicles, effective upon adoption of each port's Clean Truck Program tariff; and
- conducting a larger-scale pilot deployment of zero-emission trucks to demonstrate the technology in targeted duty cycles.

These supporting efforts are described in more detail below.

Feasibility Assessments

In support of this strategy, the Ports will conduct a feasibility assessment by the end of 2018 with updates every 3 years or as new information becomes available. These studies will evaluate the technological, operational, and economic considerations as well as the cost-effectiveness of new truck technologies. These feasibility studies will inform the 2035 timeline for implementation and will identify potential challenges that need to be addressed in the intervening years to ensure the timeline is achieved. In addition, the feasibility studies may identify if there is a long-term need for near-zero-emission trucks in certain duty cycles. The scope and process for developing

these assessments is described in the accompanying document, "A Framework for Developing Feasibility Assessments."[32]

Heavy-Duty Vehicle Inspection Pilot Program

CARB's Periodic Smoke Inspection Program (PSIP) and Heavy-Duty Vehicle Inspection Program (HDVIP) are designed to ensure that heavy duty trucks are well maintained and are working properly in order to achieve expected emission reductions. These programs are more than 20 years old and are being updated to address the newer modern engine technologies and after-treatment systems. For the PSIP, ARB is proposing to revise the current opacity threshold to assist in identifying heavy-duty trucks in need of repair due to malfunctioning diesel particulate filters.

For the HDVIP, CARB is developing a more comprehensive program that would be similar to the smog check program for passenger automobiles. Ongoing efforts to develop a comprehensive heavy-duty vehicle inspection and maintenance program are expected to be finalized by 2020.

The Ports intend to facilitate and support CARB with these efforts to amend and implement these updated programs. With over 17,000 heavy-duty trucks signed up in the PDTR, the Ports are in a unique position to carry out effective pilot programs. In initial discussions with CARB staff, the Ports have offered to facilitate pilot programs at agreed upon locations throughout the Port complex.

It is currently estimated that a small portion (< 5%) of the drayage fleet that services the ports has issues with its after-treatment devices resulting in additional emissions. The Ports account for those increased emissions through the application of the state's emission modeling tools used in our annual emissions inventories. The Ports' efforts to facilitate and support CARB will assist in identifying higher polluting trucks and ensuring they are repaired for improved performance or eliminating them from the fleet and thus lowering those emissions. Additionally, the program will be able to provide better data on the actual emission levels of the trucks in operating in port drayage. Finally, support for CARB's maintenance and repair programs will ensure that the drayage trucking fleet at our Ports remains clean over time.

[32] Available at www.cleanairactionplan.org

Annual Registration Fee Waiver

As an early incentive to purchase near-zero and zero-emission trucks, the Ports anticipate waiving the annual truck registration fee. These fees are used to cover the administrative costs associated with managing each port's Clean Trucks Program. Current practice by both ports has been to exempt the cleanest trucks from the fee on a case-by-case basis to support prototype demonstration projects.

Each port charges an annual fee of $100 per truck registered in the PDTR. Assuming a truck stays 10 years in the PDTR, the owner would spend $2,000 on fees per truck to operate at both ports. There are more than 40 trucking companies serving the Ports that have at least 100 trucks in their fleets, and the largest fleet has 1,250 trucks. Waiving the fees would equate to $20,000 in savings for fleets of 100 near-zero or zero-emissions trucks over a 10-year span; the largest operator would save $2.5 million in that time. Although seemingly insignificant on a per-truck basis, the aggregate savings could be substantial, particularly for larger fleets. By waiving these fees, the Ports could help incentivize and accelerate the transition to cleaner trucks. In future years, the Ports will evaluate the administrative expenses associated with the Clean Trucks Programs and the penetration of cleaner trucks to assess the long-term need for these fee waivers.

Pilot Deployment

Zero-emissions on-road drayage trucks, whether battery- or fuel-cell powered, face range limitations in the near term when compared to their diesel counterparts. They are also very dependent upon access to electric-charging infrastructure or hydrogen fueling. The infrastructure requirements are a key challenge in Southern California due to the long distances trucks must often travel to conduct business. Therefore, zero-emission on-road vehicles are likely to be focused on short-haul duty for the near term, often limited to trips to and from the near dock railyards, or other nearby warehouses or yards.

These short-distance runs are a prime candidate for early introduction of zero-emissions trucks. To that end, the Ports will seek to demonstrate 50 to 100 zero-emissions trucks in targeted duty cycles, using the results to assess whether additional incentives or programs may accelerate the penetration of zero-emissions trucks before 2035 in short-haul applications. Beginning in 2018, the Ports will work to identify potential partners for the pilot project, including licensed motor carriers, truck manufacturers, technology developers, utilities and/or fuel providers, and funding agencies, in order to develop a defined scope of work and project budget. Once project partners and funding sources have been confirmed, the Ports will proceed to implementation.

Potential Emission Reductions

The Clean Trucks Program strategy is expected to greatly increase the penetration of cleaner trucks into the fleet, particularly near-zero-emission trucks in the near term and zero-emission trucks in the long term, and lead to significant emission reductions. Table 2 shows the forecasted reductions of truck-related pollutants as a result of this strategy based on the projected fleet distributions presented in Table 1. These reductions are based on anticipated emissions in the selected years compared to the emissions that would have occurred in those years absent this strategy. A complete description of the projected reductions can be found in "Potential Emission Reductions from Select CAAP 2017 Strategies."

Table 2: Forecasted Reductions of Truck-Related Pollutants from the Proposed Strategy

	2021	**2024**	**2031**	**2036**
NO_x	48-53%	77% -93%	84% - 96%	86% - 100%
CO_2e	8-9%	9% - 21%	10% - 46%	56% - 100%
DPM	48-53%	72% - 85%	70% - 82%	81% - 100%

* Range depends on the impact of the 2023 rate, zero-emissions trucks penetration, and the emissions standard (i.e., the Ports forecasted 0.02 gm/NOx and 0.05 gm/NOx)

To support the transition to the near-zero and zero-emission trucks, significant allocations of federal, state and local grant funding will be necessary, and workforce development programs will be needed to assist truck drivers and mechanics with the transition to new technologies. The Ports will help support these efforts as further described in the Implementation section.

Driver Conditions and Sustainability of the Clean Trucks Program

The Ports must ensure the long-term sustainability of the Clean Trucks Program. A program that relies solely on drivers to finance billions of dollars of new trucks is not a sustainable or fair model. As noted above, recent reports have highlighted the poor working conditions and financial hardships faced by many independent owner-operators who invested in new trucks under the original Clean Trucks Program. The Ports, SCAQMD and CARB (including Proposition 1B funds) have jointly funded clean truck program grants and incentives to help the industry purchase clean trucks, but they have no direct control over the drayage truck industry business practice of truck owners leasing trucks to drivers who want work but do not own their own trucks. Due to the high cost of new technology, well-capitalized motor carriers purchase new trucks and lease them to drivers, deducting the lease payments from their payments to the drivers. Concerns have been raised that many drivers do not make enough money to cover the high costs of these leases over the long term.

The trucks proposed under this new iteration of the Clean Trucks Program will be significantly more expensive than the previous models. Moreover, the transition to near-zero emissions and zero-emission will take place over nearly two decades, and thus, it is imperative the drayage industry develop practices that can sustain the cost transition to a clean trucking fleet and secure its workers over the long term.

The Ports, SCAQMD and CARB have committed to working together on securing grant and incentive funding, and to ensure that such funding is effectively used to benefit motor carriers and drivers alike to sustainably turn over truck fleets to achieve CAAP goals. However, the practices by which drivers are paid and the industry-developed driver leasing system are third-party contractual relationships between motor carriers and drivers that fall outside of the Ports' registration agreements with motor carriers. Nevertheless, the driver pay and truck lease issues must be addressed.

The Ports remain committed to a sustainable Clean Trucks Program that achieves our ambitious clean-air goals while supporting the workforce. To that end, in implementing the Clean Trucks Program, the Ports will be guided by the principles listed in the preface to this plan, including the need to support a vibrant workforce, with equity for the men and women who haul cargo to and from the ports each day.

The Ports will work with the industry, community, elected, funding, and regulatory partners to ensure that the Clean Trucks Program implementation aligns with these principles.

1.2. Terminal Equipment

Within the marine terminals, equipment is used to move the cargo in the yard, to and from ships, rail cars, and trucks. The majority of the cargo handling equipment in operation at the ports is used in the container terminals. Containerized cargo is handled by yard tractors, top handlers, side handlers, gantry cranes, reach stackers, and forklifts. Dozers, cranes, and front–end and other loaders are typically used to handle bulk material. In 2016, more than 3,760 pieces of terminal cargo-handling equipment (CHE) operated at the Ports, comprising 4% of the Ports' overall DPM emissions, 6% of NO_x emissions, and 17% of GHG emissions.

As a result of the original CAAP and the 2009 CARB cargo-handling equipment regulation, which requires phased-in replacement of older equipment, emissions from terminal equipment have dropped significantly since 2005 with DPM and NO_x emissions down 90% and 69% respectively. The state regulation and CAAP strategies have primarily focused on reducing criteria pollutants,

which is evident in the drastic reductions in DPM and NO_x emissions. Further reductions of criteria pollutant and greenhouse gas emissions into the future will require transition to even cleaner technologies.

Some near-zero and zero-emission technologies that can be used in marine terminals are either commercially available or currently being demonstrated in port operations as described in more detail below.

Near-Zero-Emission

Near-zero-emission terminal equipment is up to 90% cleaner than today's cleanest equipment, but to date, development of these technologies for cargo-handling equipment applications has been limited. The Port of Los Angeles will demonstrate 20 near-zero-emission yard hostlers powered by natural gas engines beginning in the second quarter of 2018. These yard hostlers are expected to meet the 0.02 g NO_x/bhp-hr emissions level. There is no active technology development for near-zero-emissions top handlers or rubber-tired gantry cranes. Hybrid technologies – which are cleaner than conventional equipment but may not meet the near-zero-emissions threshold – have been tested, and in some cases commercialized for some pieces of terminal equipment. For instance, hybrid-electric rubber-tired gantry cranes have been successfully deployed at the Port of Los Angeles' West Basin Container Terminal. Also, hybrid yard hostlers have been tested over the past 10 years at the Ports, but they have had inconsistent performance and the emissions reduction results are mixed. It is not clear whether hybrid technologies would be able to generate the NO_x reductions equivalent to near-zero emissions.

Zero-Emissions

In some cases, zero-emission terminal equipment is further along in development than near-zero technologies, and for some applications, commercialized. For example, ship-to-shore gantry cranes have been electrically powered in the Ports for decades. Electric-powered rail-mounted gantry cranes have also operated in various locations for several years, and electric rubber-tired gantry cranes powered by cable reel – allowing the operator to disconnect from the grid to move to other parts of the yard – are also commercialized. These electric rubber-tired gantry cranes often have a small diesel generator on board to power the crane as it moves to another container stack or to the maintenance yard. Over the next two years, the Port of Long Beach will demonstrate fully-electric rubber-tired gantry cranes that rely on batteries for short moves, eliminating use of the diesel generators. The TRAPAC terminal at the Port of Los Angeles uses electric stacking cranes. Electric forklifts are commercialized for smaller capacities, and development is underway for heavier forklifts. The use of electric cargo-handling equipment on

a mass scale was introduced with the opening of the Port of Long Beach Middle Harbor Terminal operated by Long Beach Container Terminal, using commercialized zero-emissions equipment such as automated guided vehicles and intermodal yard cranes. Zero-emissions technology also seems promising for traditionally operated yard tractors and top handlers. Both Ports have begun demonstrating electric yard tractors at multiple terminals with nearly 30 such tractors expected to be in testing or full use by the end of 2019. Additionally, the Port of Los Angeles will demonstrate two battery-electric top handlers beginning in 2019.

Transition to Cleaner Equipment

Terminal operators have made considerable capital investments in clean equipment over the past decade to comply with Port lease requirements and state regulation, which has resulted in significant emission reductions from Port terminal cargo handling operations. To get to zero emissions, it will be necessary to identify, demonstrate, and deploy technologies in port operations that will provide cost-effective options with durability and operational performance equivalent to traditional, diesel-powered equipment.

The Ports received numerous comments from stakeholders related to the strategy for cargo-handling equipment. Many stakeholders supported the aggressive timeline to get to zero-emissions operations to meet the needs for emissions reductions close to the local communities, in protection of public health. Other stakeholders had concerns about the feasibility of the timeline given the shortage of proven zero-emission equipment designed for use in terminal operations and the lack of available infrastructure to support those technologies. In addition, commenters identified that the aggressive timeline will not allow terminal operators to capture the full useful life for the equipment in which they have recently invested, resulting in stranded asset costs. Lastly, commenters suggested that the cost to achieve zero emissions is not cost effective compared to near-zero-emission equipment, which could result in significant emissions reductions at a fraction of the cost. All of these concerns must be taken into consideration.

In March 2017, the CARB Board directed its staff to develop amendments to the cargo-handling equipment regulation to achieve up to 100% compliance with zero emissions by 2030 in San Pedro Bay and other ports near environmental justice communities[33]. Additionally, the Mayors have adopted a goal of zero emissions for all terminal equipment by 2030.

CARB anticipates amending the Cargo Handling Equipment Regulation by March 2019. With the State moving forward on new zero-emission CHE requirements, the Ports must align the CAAP strategy with this effort, and – consistent with our longstanding approach of supporting and

[33] California Air Resources Board, 2016 State Strategy for the State Implementation Plan, Resolution No. 17-7, p.6.

accelerating state regulations here in San Pedro Bay – advance the deployment of cleanest available terminal equipment.

Transitioning the terminal equipment fleet to zero emissions is an ambitious goal, one that is complicated by the current lack of commercially available cleaner technology and inadequate infrastructure to support widespread charging or use of alternative fuels. It is not simply a matter of swapping equipment; there must be years of design, engineering, and construction to install the necessary electric and alternative fuel terminal infrastructure. This infrastructure will be costly – as much as $2 billion according to our estimates – and must be in place before the fleets can transition. Moreover, the longer it takes to install the infrastructure, the less time the operators have to purchase new equipment, which concentrates their costs into a few years and increases their financial burden.

In light of these challenges but cognizant of the need to reduce emissions now, the Ports commit to work closely with the marine terminal operators to implement the following strategy for terminal equipment:

- Starting January 1, 2019, terminals must submit to the Ports an equipment inventory and 10-year procurement schedule for new cargo handling equipment. Procurement plans will be updated annually.
- Beginning in 2020, marine terminal operators would be required to ensure that new equipment purchases are zero emissions, if feasible, or near-zero emissions if feasible, or cleanest available if zero/near-zero emissions are not yet feasible. Feasibility determinations would be made through a public and collaborative process through the Ports' Feasibility Assessment, with exemptions for equipment with low operating annual hours.
- The Ports and marine terminal operators will work together to accelerate replacement of existing equipment with near-zero and zero-emissions equipment, through terminal leases and grant funding.

This approach is consistent with the vision of the State's Sustainable Freight Action Plan, which calls for "zero emission equipment everywhere feasible, and near-zero emission equipment powered by clean, low-carbon renewable fuels everywhere else."[34]

[34] California Sustainable Freight Action Plan, July 2016, p.8.

Procurement Planning

Beginning in 2019, terminal operators will submit to the Ports an equipment inventory and 10-year procurement schedule. These procurement plans will help the ports identify opportunities for operators to invest in cleaner equipment for new purchases, particularly if there are state or federal incentive funds available to support the transition. These discussions will also allow the Ports and the operators to identify the appropriate turnover schedule in an effort to avoid equipment becoming obsolete before the end of its useful life. In addition, these discussions will allow the Ports and the operators to discuss long-term plans and any necessary terminal upgrades to support continued operations. Periodic updates to these procurement plans will be necessary to continue to forecast for a 10-year period and to understand any changes in the timeline or available technology. The Ports anticipate discussing upcoming equipment purchases with terminal operators on an annual basis.

These procurement plans will also allow for a better understanding of the demand for new equipment each year throughout the port complex, providing a signal for equipment manufacturers to develop new cleaner equipment to meet the demand, and will also allow the Ports, the terminal operators, and the equipment vendors to discuss opportunities for negotiating group rates or making bulk purchases that can reduce the costs for individual pieces of equipment.

The three pieces of port equipment with the greatest contribution to emissions are rubber-tired gantry cranes, yard hostlers, and top handlers. These pieces of equipment represent 62% of the population of equipment in operation, have some of the highest annual hours of operation, and contribute 86% of the DPM, 88% of the NOx, and 91% of the GHGs. This equipment is typically diesel-fueled, however there are several yard tractors in operation that use gasoline or propane. The following table illustrates the typical life spans of these key pieces of terminal equipment and the average model year of equipment in San Pedro Bay:

Table 3: Life Span and Average Model Year for Equipment in Operation at Marine Terminals in San Pedro Bay

	Rubber-Tired Gantry Cranes	Yard Hostlers	Top Handlers
Typical Life Span[35]	15	8	15
Average Model Year (San Pedro Bay)[36]	2007-2008	2011	2008-2010

The Ports will work with the terminal operators, through the procurement planning process, to ensure that replacement schedules are in alignment with the anticipated equipment life spans.

Feasibility Assessments

Starting at the end of 2018, the Ports will conduct feasibility assessments and provide interim progress reports to evaluate the status of terminal equipment technologies and infrastructure as well as the operational and financial challenges associated with this transition. Updates to the feasibility assessments will be performed at least every 3 years but more frequently if new information becomes available.

These assessments will help the Ports determine whether zero emissions is feasible for a specific piece of equipment (e.g., RTGs, top/side handlers, yard trucks, etc.) and may evaluate distinctions by the type of terminal, operational mode, or duty cycle among other considerations, in order to ensure that a technology is feasible for widespread Bay-wide deployment. If zero emissions is not considered feasible at that time, the assessments will identify the cleanest feasible alternative currently available for purchase.

The scope and process for developing these feasibility assessments is described in the accompanying document, "A Framework for Developing Feasibility Assessments"[37], and takes into account technical viability, operational feasibility, commercial availability, infrastructure availability, and key economic considerations. For a piece of equipment to be deemed feasible, it must be proven to be comparable in velocity, useful life, cost, throughput, maintenance and labor costs compared to its diesel counterparts. As stated in the Port of Los Angeles Draft Zero Emission White Paper[38], "these vehicles must do more than just function; they must perform at the level of their conventional technology counterparts, which have well over a century of

[35] Typical life taken from Pacific Merchant Shipping Association's report on the Sustainable Freight Strategy.
[36] From the Ports' 2016 Annual Emissions Inventories
[37] www.cleanairactionplan.org
[38] Port of Los Angeles, DRAFT Zero Emission White Paper, July 2015, p. 14.

experience behind them. Zero emission vehicles at the port need to be able to execute the same tasks as their conventional combustion-based counterparts with a similar level of reliability, in the rigorous marine environment."

Additionally, to be feasible for widespread deployment, a technology must have the infrastructure in place to support long-term fueling and/or charging. No part of this strategy would require terminal operators to purchase zero- or near-zero emissions equipment if there are any delays by Ports or utilities in installing the needed infrastructure to support such equipment, either inside or outside the marine terminal.

Requirements for New Equipment Purchases

Once a Feasibility Assessment has determined that cleaner equipment is feasible, the Ports would work with terminal operators to put that equipment in place in accordance with their procurement plans; any new equipment purchases would need to be the cleanest feasible, consistent with the schedule outlined in the terminal operator procurement plans and contingent upon having the infrastructure in place to support the equipment. The Ports will evaluate the most appropriate mechanism to implement this requirement, which may include but is not limited to leases or other agreements.

Further, this strategy allows for the following:

- Terminal operators will be allowed to use near-zero emissions or cleanest available for a period of time not to exceed the equipment's useful life if that equipment is in place prior to zero-emission equipment being determined feasible.
- Terminal operators will not be penalized for purchasing near-zero emissions or cleanest available equipment if the infrastructure to support zero-emissions equipment is not in place at that terminal, recognizing that terminal design, permitting, financing, and construction may take years.
- Feasibility assessments will continue to be conducted at least every 3 years until a technology is deemed feasible. Once a technology is deemed feasible, a terminal operator would need to purchase that technology from that point forward assuming the supportive infrastructure is in place.

This approach secures emission reductions in the near term, allows time for the zero-emissions technologies to develop, for the supporting infrastructure to be installed, and for the terminal operators to avoid stranded assets and to recoup the value of their existing equipment, which is relatively new. As a result of rapid advancements in zero-emission technologies and the lifespan

of the equipment, it is anticipated that in most cases, if a zero-emission technology is not feasible at the time of purchase, it likely will be available by the next time that piece of equipment needs to be replaced. It also ensures a transition to cleanest available technology even for equipment that is unlikely to become zero emissions any time soon. For example, some of the more specialized equipment used in bulk terminals may not be developed commercially as a zero-emission product because the manufacturers may not see enough of a potential market; these operators would still be required to purchase the cleanest available equipment under this strategy.

The Ports also recognize that some pieces of terminal equipment may have very few operating hours in a given year. In those instances, a requirement for new zero- or near-zero-emission equipment may have high costs without a commensurate emission benefit. Thus, the Ports plan to evaluate potential exemptions for equipment with low operating hours, which is consistent with the state's current cargo-handling equipment regulation.

Incentives for Accelerated Deployment of Zero- and Near-Zero-Emission Equipment

In addition to working with the terminals on purchasing the cleanest feasible equipment, the Ports will also work with terminal operators to accelerate the replacement of existing equipment with the cleanest available equipment through terminal leases and by securing incentive funding for zero- and near-zero-emission technologies. These mechanisms provide more opportunities for near-term penetration because a technology that is not considered feasible for Bay-wide deployment could be feasible in narrow, terminal-specific applications.

To accelerate deployment, the Ports plan to engage in the following actions described in more detail below:

- Infrastructure planning and construction
- Technology demonstrations
- Pursuit of incentive dollars

Infrastructure Planning and Construction. To support the required transition to cleaner equipment, the Ports must ensure that terminals have the charging or fueling infrastructure in place. Availability of the supporting infrastructure will be a key factor in the determination of feasibility for the cleaner technology. To that end, the Ports will work with the utilities and technology manufacturers to develop port-wide infrastructure plans and budgets that will allow for timely construction of needed infrastructure to support zero-emission terminal equipment. The timing for the construction will need to be balanced with the ports' other significant near-

term capital improvements commitments. The Ports will also seek state and federal incentive funds to reduce costs and accelerate the timeline for implementation.

Technology Demonstrations. Through the Ports TAP and various grant-funded programs, the Ports have several technology demonstrations underway. The Ports have begun aggressively pursuing and have successfully received multi-million dollar grant awards being offered by federal, state and local government agencies to build, test, and deploy near-zero and zero-emissions cargo handling equipment.

To date, the Port of Los Angeles has received about $25 million to test and demonstrate near-zero and zero-emissions equipment at two of its cargo terminals. The first cargo terminal, Pasha, received about $15 million from CARB to fund nine pre-commercial zero-emissions electric vehicles (four yard tractors, two Class 8 on-road trucks, two high-tonnage forklift retrofits, and one top handler retrofit) in addition to other emission-reduction and energy-related technologies. The second cargo terminal, Everport, has received about $10 million from the California Energy Commission (CEC) to fund 20 near-zero-emissions yard tractors, eight zero-emission yard tractors, and two zero-emission top handlers. These projects are underway and deployment of the various equipment is scheduled to begin over the next couple of years.

The Port of Long Beach has received more than $9.7 million from CEC to repower nine rubber-tired gantry cranes (RTGs) to full electric power, making it the largest deployment of fully electric RTGs in the nation, and to demonstrate 12 battery-electric yard tractors at two container terminals. These projects are expected to be complete by the latter part of 2020.

Incentive Funding. There are several sources of funding available to accelerate early deployment of zero- and near-zero technologies and the infrastructure needed to support them, including Proposition 1B, Carl Moyer, SB-1 Transportation Funds, Diesel Emission Reduction Act (DERA) funds, and various incentive programs funded by the Greenhouse Gas Reduction Fund. Lastly, there are Volkswagen Settlement funds in the amount of $800 million that will be made available for zero-emission projects in California. The Ports will continue to work together to advocate and apply for a sizable portion of any and all relevant funding opportunities that arise in the future.

A key approach to accelerating deployment will be the pursuit of grant funds. The Ports estimate it may cost upwards of $1.8 billion to replace the existing fleet with zero-emissions equipment, plus up to an additional $2 billion for supporting infrastructure. The Ports will work with the terminals and technology manufacturers to seek grant funds and incentives for additional deployment of near-zero and zero-emission cargo-handling equipment. The Ports will assist

terminals in applying for these funds and will advocate at the local, state, and federal level for more funding for this equipment.

Additionally, the Ports recognize that some terminal operators have already made significant investments in zero-emissions equipment well in advance of the 2030 goal and that other terminal operators may seek to do the same. The Ports want to encourage these early transformations. To that end, the Ports will work to recognize such near-term achievements through incentives, which may be financial or otherwise, and strong recognition programs. Further, the Ports believe these early adopters deserve statewide credit for helping to accelerate the introduction of zero-emissions technologies; as such, the Ports will work with our agency partners to recognize these achievements and the significant cost associated with the existing zero-emissions deployments as these agencies develop future regulations.

As noted above, zero-emissions equipment already operates at the ports, and more pieces are expected to be deployed in the next few years through our existing commitments. Table 4 shows the current penetration of zero- and near-zero-emission terminal equipment at the Ports as well as projections for 2020 and 2025, based upon commitments that have been made by terminal operators and funding that has already been secured from state and federal sources.

Table 4: Baseline Projections for Cleaner Terminal Equipment Based on Commitments Already Made

	2017 (actual)	**2020**	**2025**
Near-Zero-Emission Equipment	0	20	20
Zero-Emission Equipment	333	519	573
Total Equipment	3,766	3,972	4,026
% Near-Zero-Emission	0%	<1%	<1%
% Zero-Emissions	9%	13%	14%

With the strategy outlined above, the Ports expect to surpass these baseline percentages. The Ports will also work closely with CARB on developing and implementing the amendments to the cargo-handling equipment regulation for up to 100% compliance with zero-emission equipment by 2030 to meet the Mayors' goals.

1.3. Terminal Equipment Idling Reduction Program

Idling is defined as an engine running for non-operational purposes. The emission rate during idling is higher than when the engine is running while in motion or moving cargo. Extended idling

can also cause a build-up of soot in engines, resulting in black smoke. Diesel exhaust from idling engines can accumulate in and around the emission source and pose a human health exposure risk.

The purpose of a port-wide Terminal Equipment Idling Reduction Program is to ensure that unnecessary idling of vehicles and equipment does not occur on port terminals. Less idling contributes to a healthier work environment, reduces air and noise pollution, fuel consumption, and engine deterioration and wear. Currently, there is no regulation to limit idling for cargo-handling equipment.

Additional information will be necessary to understand when idling is occurring and where opportunities exist for reducing that idling without compromising safety or reducing operational efficiency. A study developing an inventory of equipment with idling limit devices and analyzing equipment data loggers will be necessary to develop recommendations.

The Ports envision that through this program, terminal operators would be required to develop plans to reduce or eliminate unnecessary idling of cargo-handling equipment. These plans would need to identify specific strategies and implementation actions to that end. Terminals would:

- Ensure that idle limiting technologies are installed on equipment internal combustion engines. An idling limiting device or software enables the engine to shut down automatically if it idles longer than the programmed time.
- Develop training and education programs for equipment operators to identify opportunities for idle reduction
- Make operational changes to reduce idling

The Ports would review these plans and provide suggestions to ensure the maximum use of idle reduction strategies.

1.4. Vessel Speed Reduction Program

When ships slow down, the load on the main engines decreases considerably as compared to operation at higher speeds. Operation at a slower speed typically decreases the total energy required to move the ship through water. This energy reduction translates to less fuel burned and fewer emissions.

The voluntary Vessel Speed Reduction (VSR) Program initially started under a multi-party Memorandum of Understanding in 2001. Starting in 2005, the Ports have provided financial

incentives to shipping lines that reduce their speeds to 12 knots within 20 nautical miles (nm) of Point Fermin. In 2009, the Ports expanded this program to provide additional incentives for ships slowing down within 40 nm of the Ports. This voluntary program has been extremely successful. Participation within the 20 nm zone is approximately 95%, and just under 90% within the 40 nm zone.

Owing to the significant emission reductions associated with vessel speed reduction, especially reductions in NO_x and GHG emissions, the Ports are seeking to build upon the already very high participation rate and maximize compliance at the 40 nm boundary.

A revised VSR incentive program to drive improved compliance and emission benefits is as follows:

- Maximize participation in VSR for all vessels transiting within 40 nm of Point Fermin

This revised VSR program would emphasize compliance out to 40 nm from the Ports. Program changes to be considered include reducing the 20 nm incentive to encourage all vessels to participate within 40 nm. The Ports will also consider increasing the incentive amount at the 40 nm distance.

In addition, some operators only participate within 20 nm because of operational issues, such as scheduling of the vessels for other destinations on the service string. In order to preserve the high participation levels, the Ports will continue to evaluate specific operational hurdles on a shipping line by shipping line basis.

The Ports will also evaluate changes to the program's payment structure. Currently, in order to qualify for the dockage rebate incentive, 90% of a fleet's calls for the year must slow down at the prescribed boundary; once a fleet has met this 90% mark, all of the fleet's calls receive a dockage rebate in the ensuing calendar year. The Ports may modify this structure to a per-call incentive, so each qualifying call may earn the incentive on its own. Such an approach could encourage participation on an individual call basis for shipping lines that would not otherwise participate in the 40 nm program today, because they are unable to meet the annual minimum to qualify.

The Ports also continue to require vessel speed reduction within 40 nm, where possible, through new or renewed leases, which provide another mechanism for ensuring compliance.

Additionally, for some vessel classes, a 12-knot vessel speed may not be the optimal speed from an emissions perspective. Some vessels are equipped with an emissions reduction technology

that requires higher speeds for optimum performance. For example, some vessels have large 'house' electrical loads like cruise ships, which have higher optimum emission reduction speeds. Thus, the Ports would continue to pursue the following strategy:

- Implement alternative compliance plans allowing vessel operators to maximize emission reductions for their fleet.

Under this strategy, the Ports will accept requests from shipping lines that propose alternative compliance plans where a different speed would result in the same or fewer emissions compared to the current speed limit. These alternative compliance options may enable a ship to travel faster than 12 knots without an associated emissions penalty, thus increasing the likelihood of compliance and operational efficiency.

1.5. Vessel At-Berth Emission Reductions

Emissions from ship auxiliary engines while loading and unloading cargo at berth are a significant contributor to total ship pollution. In 2016, 32% of DPM, 29% of NO_x and 53% of greenhouse gas emissions from ships in San Pedro Bay were emitted while the ships were at berth.

CARB's current regulation requires at-berth emission reductions from container, cruise and refrigerated cargo vessels ("reefers"), generally by plugging the ship into the electrical grid and turning off the auxiliary engines, which is known as "shore power." The Ports and our tenants have implemented hundreds of millions of dollars in capital improvements to our electrical infrastructure to ensure shore power capabilities at all necessary berths. The CARB regulation, which has been in place since 2014, ramps up the required shore power usage until 2020, when fleets must demonstrate an 80% reduction in at-berth emissions.

In March 2017 the CARB Board directed its staff to amend the At-Berth Regulation in order to achieve up to 100% compliance by all vessels by 2030 in San Pedro Bay and other ports near environmental justice communities. This action would require at-berth emission reductions from vessels not currently subject to the regulation, such as bulk, break bulk, tankers and auto carriers. These vessels contributed one-third of our total at-berth emissions in 2016.

With the state moving forward on additional at-berth controls by 2030, the strategy for at-berth emission reductions is as follows:

- Participate in the State's efforts to achieve up to 100% compliance with the At-Berth Regulation by 2030 and assist with implementation by demonstrating new at-berth emission reduction technologies, accelerating availability and utilization of technologies

through a concerted strategy to advocate for and secure state and federal funds, and accelerating use requirements through leases where possible.

CARB anticipates amending the At-Berth Regulation by September 2018.

Implementing At-Berth Emission Control Systems and Shore Power

Expanding the use of at-berth emission reduction technologies for non-regulated vessels is challenging as there are no CARB-approved technologies currently available for these vessel types. Technologies will need to be designed, developed, tested, certified, and implemented in a very short time frame to meet the schedule directed by the CARB Board. The Ports will take the immediate actions described in more detail below to support and to accelerate this timeline where possible.

Technology Demonstrations

CARB has approved two alternative technologies (AMECS and METS-I) for container vessels that can be used to comply with the at-berth regulation. Both of these technologies are barge-based systems that affix to the vessel's exhaust stack(s) to filter pollutants from auxiliary engines while the vessel is at berth. Currently, these technologies are approved only for container vessels meeting certain configurations; however, operators of both of these systems are working with CARB to expand approval to include other sizes and types of vessels. At least one additional technology manufacturer is developing a barge-based control system and likely will seek CARB approval as an alternative to shore power.

Additionally, the Ports see a need for land-based capture-and-control systems. Some vessel types – tankers, for example – may not be good candidates for barge-based technologies due to at-berth operational constraints and safety considerations. Furthermore, the Ports have limited wharf space and may be unable to provide berths for a substantial fleet of barges. Lastly, barges may impede waterway access and impose constraints on the safe passage of other vessel types depending on the quantity of barges. For these reasons, the Ports see a need for a mix of water- and land-based strategies. The Port of Los Angeles is currently funding the development and demonstration of a land-based system at a non-container terminal for bulk ships.

To augment the existing technologies and to stimulate the development of new technologies, the Ports plan to seek funding for the development and demonstration of at-berth emission control systems for non-container ships. The Ports, through the TAP, will issue a competitive

solicitation for capture-and-control technologies within the next 12 months in order to start development and/or demonstration by January 1, 2019.

Additionally, the Ports already provide financial incentives for shipping lines that participate in technology demonstrations; the Ports will explore whether or not to expand these incentives to increase participation in such demonstrations.

Accelerated Deployment of At-Berth Emission Control Devices

At present, there are two commercialized capture-and-control systems servicing the entire San Pedro Bay Ports complex. Other systems are under development; however, with the impending increase in demand for such systems, the Ports anticipate needing more at-berth control units. Thus, in addition to supporting technology development for new at-berth control systems, the Ports will support deployment of additional commercialized units by (1) conducting operational assessments, including consideration of the potential for other approaches for control of at-berth emissions, and (2) pursuing grant funds.

Operational and Infrastructure Assessments: Deploying enough emission-control systems to handle the entire fleet will not be easy. Limitations on berth space could limit the number of barge-based systems as there is little available space for these units to tie up when not in use. Conversely, limits on wharf area could impede land-based systems. Each terminal may require its own unique solution. Thus, the Ports will work with terminal operators and shipping lines, and conduct studies to determine how such emission-control devices could be deployed and to evaluate possible barriers to implementation, such as berth space, waterway access, piloting hazards, conflicts with bunkering, and backlands constraints. The Ports will further work with agencies and other CAAP stakeholders to consider whether other options exist for control of at-berth emissions. The assessment also will propose recommendations for addressing these impacts in order to maximize deployment. Lastly, the Ports will work with terminal operators and shipping lines to evaluate costs for proposed solutions in order to identify the most cost-effective approaches for each terminal's operating situation.

Pursuit of Grant Funds: A key factor to accelerating deployment will be the procurement of grant funds to assist with the development and deployment of at-berth emission control equipment. The Ports estimate it may cost upwards of $144 million to provide enough emission-control systems for all of the non-container terminals.[39] The Ports will work with the terminals, shipping

[39] "Preliminary Cost Estimates For Select 2017 Clean Air Action Plan Strategies" available at www.cleanairactionplan.org

lines, and technology manufacturers to seek grant funds and incentives for additional deployment of these control systems. There are incentive programs available, including the Proposition 1B Goods Movement Emission Reduction Program. The Ports will assist terminals and shipping lines in applying for these funds and will advocate at the local, state, and federal level for more funding for capture-and-control systems. Ongoing expenses associated with the use of the equipment have not been estimated.

The Ports will also consider development of an incentive program to accelerate early use and adoption of the at-berth emission control technologies at non-container terminals, in advance of CARB's requirements. In addition, the Ports will continue to put requirements into leases, as feasible, for implementation and use of at-berth control technologies at container and non-container terminals.

The Ports anticipate an increase over the next 10 years in the number of vessel calls using alternative emission-control systems. As stated earlier, there are two systems in operation today. An additional land-based unit at Port of Los Angeles is expected to become operational at a non-container terminal in 2018, and Wan Hai Lines, a container line that calls at Port of Long Beach and is not currently subject to the State At-Berth Regulation due to below-minimum annual ship calls, has commissioned the development of a third barge-based system to service its vessels. This system is expected to debut in 2018. With this additional capacity, the Ports expect to see increased use of alternative emission-control systems by 2025.

At the same time, more ships will use grid-based shore power as the State Regulation ramps up to 80% fleet usage requirements in 2020. The shore power regulation applies only to container ships, cruise ships, and refrigerated cargo ships. Table 5 shows the percentage of the fleet currently controlling at-berth emissions and the percentage anticipated to control at-berth emissions in future years.

Table 5: Baseline Use of Alternative Emission Control Systems in Select Years

	2017	**2020**	**2025**
Vessel Calls Using an Alternative Emissions Control Device[1]	4%	5%	5%
Vessel Calls Using Grid-Based Shorepower	43%	49%	49%
All Vessel Calls Using At-Berth Emissions Controls	47%	55%	55%
Vessel Calls Using No At-Berth Emissions Controls	53%	45%	45%
Total Vessel Calls (include all vessel types)	**3,970**	**4,241**	**4,526**

[1] Mostly container calls because currently the two State-approved alternative emission control devices are certified only for container vessels.

The Ports anticipate that in 2020 and 2025, roughly 2,000 calls will not use at-berth emission controls. These calls are largely from non-container ships not subject to the State At-Berth regulation, and as such, they are the primary target for this strategy. The Ports intend to work with the industry and technology partners to develop and deploy alternative systems for these 45% of projected ship calls. The Ports will also work closely with CARB on developing and implementing the amendments to the at-berth regulation for up to 100% compliance by 2030.

1.6. Green Ship Incentives

Ships are the largest source of maritime goods-movement-related NO_x emissions, comprising 51% of the NO_x emissions, according to the 2016 emissions inventories. Of those ship emissions, more than half are associated with ships transiting or maneuvering within approximately 100 nm of the Ports. The International Maritime Organization (IMO)[40] has established engine standards for ships that ratchet down the allowable NO_x emissions over time, which has a tremendous environmental benefit for ship emissions, including those incurred while in transit. Tier 2 engines, which were required to be installed on new ships beginning in 2011, are 15% cleaner than the previous generation of engines, and Tier 3 engines, which became available beginning in 2016, are 75% cleaner than Tier 2 engines.

Although the IMO requires manufacturing standards for newly built ships (post-2015) to have Tier 3 engines for ships serving the North American and Caribbean Emission Control Area (ECA), there are no requirements for shipping lines to purchase new ships with Tier 3 engines nor are there requirements on when to deploy these ships on services calling San Pedro Bay terminals.

The Ports have adopted incentive programs, namely the Environmental Ship Index in Los Angeles and the Green Ship Incentive Program in Long Beach, to encourage the deployment of cleaner ships to San Pedro Bay. In 2016, nearly 1 out of 5 vessel calls to San Pedro Bay qualified for the Tier 2 incentives. These incentive programs, however, do not fully recognize all the methods available for a vessel operator to reduce its vessel's emissions rate. Two key approaches to reducing ship-related emissions are through improvements in operational efficiencies and the introduction of emission reduction technologies.

[40] The governance of international ship pollution is preempted by the international shipping law, MARPOL, the International Convention for the Prevention of the Pollution from Ships, developed through the International Maritime Organization (IMO), a United Nations agency that deals with maritime safety, security, and pollution from ships. Annex VI of MARPOL addresses air pollution from ocean going vessels. The international air pollution requirements of Annex VI establish limits on nitrogen oxides (NOx) emissions and require the use of fuel with lower sulfur content. The requirements apply to vessels operating in U.S. waters as well as ships operating within 200 nautical miles of the coast of North America, also known as the North American Emissions Control Area (ECA). MARPOL violations are addressed by the U.S. EPA and U.S. Coast Guard.

Operational efficiencies are either energy efficiency improvements or operational improvements on board a ship that otherwise reduce energy consumption and potentially reduce a wide range of pollutant and GHG emissions. Several lines have initiated efficiency improvement programs to reduce fuel costs, and these efforts also ultimately reduce emissions such as GHGs. Examples of energy efficiency improvements might be focused on propulsion system modifications of the bulbous bows, installation of improved propellers, de-rating of the main engines, and/or focused on reducing electrical loads such as higher efficiency reefer containers and upgrading the ship's lighting system to light-emitting diodes (LEDs), which reduces the related emissions from the generation of electricity. The Ports TAP is funding the testing of energy efficiency upgrades to several Maersk ships in order to quantify the emission reductions associated with these improvements.

Additionally, some shipping lines are beginning to install emission reduction technologies on their older ships, specifically cruise ships equipped with onboard scrubbers that reduce DPM and SO_x emissions. These emission reduction technologies are typically used as an alternative compliance approach for the low sulfur fuel requirements under the ECA, which permits use of higher sulfur fuel in conjunction with a scrubber because the overall emissions are the same or lower. Although California law continues to require low-sulfur marine distillate fuel usage regardless of the use of a scrubber, the ECA has motivated more shipping lines to consider scrubbers for their global fleets, and the Ports could take advantage of this natural opportunity for additional reductions.

Liquefied natural gas (LNG) also shows promise for reducing ship emissions. LNG-only engines eliminate DPM and have been found to reduce NO_x up to 88% over diesel engines. Dual-fueled engines – which can switch between distillate fuels or a fuel mix with LNG – can reduce DPM by up to 78% although the emission reduction benefits for NO_x are less clear.[41] Several shipping lines have placed orders for LNG-fueled ships, including Matson Lines and Carnival Cruise Lines, in order to comply with the ECA. While some of these ships will be LNG-capable, they initially will not have all of the necessary tankage and fueling systems installed to be able to utilize the LNG fuel. It is also uncertain whether these ships will be placed into service here in San Pedro Bay. A key consideration is the availability of LNG fuel for bunkering, which is not currently offered in San Pedro Bay. The ports will continue to discuss interest in LNG fuel with the shipping lines to gauge potential demand for future bunkering capabilities. In addition, the Ports will continue discussions with fuel suppliers and bunkering companies to provide the fuel infrastructure to support that demand. There may also be benefits in enticing these ships to install all of the necessary fueling infrastructure and to call here.

[41] Starcrest Consulting Group, LLC. "Liquefied Natural Gas (LNG) in the Maritime Sector: Environmental, Economic, and Infrastructure Considerations." August 2015.

In order to encourage these energy efficiency upgrades and emission reduction technologies to reduce ship emissions in the near term, the Ports would work to further incentivize these approaches, especially those that reduce NO_x and GHG emissions, by adding new incentive levels for ships with emission-reduction technologies, alternative fuels, and engines that perform better than Tier 2 levels. Thus, the Ports plan to:

- Modify our incentive programs to include a Tier 2+ level for ships that perform better than the Tier 2 emission levels through on-board technologies, alternative fuels, or as demonstrated by engine certificates.

The Ports also plan to launch an outreach campaign to raise the shipping industry's awareness of these incentive programs and potentially to coordinate with regulatory agencies and/or other ports on the same vessel service strings. If a shipping line can earn incentives from multiple ports along its route, it could provide a greater return on investment for these technology upgrades and make participation more attractive. The Ports have already started a dialogue with West Coast ports, including Port of Vancouver, Port of Oakland, and Port of Prince Rupert, to cooperate on ship incentive programs.

Additionally, the Ports will look to minimize the burden associated with applying and submitting requisite data for participating in the programs. Options might include a joint online registration web portal such that lines would only need to register and update data once, which could be developed within San Pedro Bay or even with other ports in order to streamline the process and thus enhance participation globally.

1.7. Clean Ship Program

Ship diesel engines are classified by the IMO from Tier 0, the oldest pre-regulated engines, to Tier 3, the newest – and cleanest – engines. Currently, Tier 3 engines are only required for ships that have a keel laid date post-2015 and for those that travel in the ECA. Operators are not required to upgrade their existing pre-2016 'grandfathered' fleets to the newest cleanest vessels nor are they required to deploy them to San Pedro Bay.

In 2016, roughly 79% of vessel calls to San Pedro Bay were made by Tier 0 or Tier 1 ships and 19% were made by Tier 2 ships, mostly larger container vessels. To date, no Tier 3 ships have called at San Pedro Bay terminals.

Several factors are affecting the order and deployment of Tier 3 vessels to San Pedro Bay. First, Tier 3 engines are significantly more expensive than their predecessors in both price and

operation, in part due to more complex emission control equipment, which could be contributing to fewer orders. Although Tier 3 engines are required for ships calling the ECA with keels laid starting on January 1, 2016, there were a significant number of ship keels laid prior to 2016 and yet to be constructed, essentially creating a large pool of grandfathered or Tier 3-exempt new ships. Looking at the number of keels laid but not constructed (as of August 2016) between 2005 and 2015, there are more than 1,400 grandfathered keels that are available for new ships with more than 1,200 of those laid in 2015.[42]

For these reasons, the Ports do not expect to see significant numbers of Tier 3 ships in San Pedro Bay Ports any time in the next 10 years. The Ports conservatively project the first Tier 3 ship could arrive no earlier than 2026, with significant numbers not arriving until the mid-2030s to late-2040s depending on the vessel type.

Absent natural turnover to bring the ships with the cleanest engines into the San Pedro Bay service, to meet our emission reduction goals, the Ports will attempt to encourage earlier deployment of Tier 2 and Tier 3 vessels and discourage calls by Tier 0 and Tier 1 ships. Importantly, the Ports do not own or operate the vessels and thus have few tools to compel the introduction of newer vessels. Additionally, terminal operators do not control the deployment of specific vessels to their terminals. The Ports, however, do have control over rates charged to operators through the tariff.

In order to help accelerate the transition to a cleaner fleet, the Ports propose the following strategy:

- Implement a variable rate on ships according to engine tier level to encourage calls by cleaner ships and to discourage older ships. A higher rate would be applied initially to Tier 0 ships, later adding Tier 1 ships, and would begin no earlier than 2025. Any collected funds would be used to provide incentives directed at reducing emissions from ships.

There are examples of charging different rates for ships based on environmental characteristics. The Swedish Maritime Administration assesses lower fees on ships that generate fewer NO_x emissions, setting limits below which a ship's engine must emit to earn the discount. The government of Norway imposes a tax on NO_x emissions from ships (and other sources of NO_x) that do not qualify for an exemption and then uses the revenue to fund technologies that reduce NO_x emissions. One mechanism for shipping lines to qualify for an exemption is to commit to

[42] Starcrest Consulting Group. "San Pedro Bay Ocean-Going Vessel International Maritime Organization Engine Tier Forecasts, 2015-2050." Draft. June 2017.

reducing their NO_x emissions. This tax has spurred heavy investment in liquefied natural gas (LNG) ships in Norway. Seven years ago, there were only 3 LNG-fueled ships serving the country; there are expected to be nearly 100 such vessels within the next few years. An important distinction, however, is that these programs were enacted by countries as a tax on all international ships, not by individual seaports through a tariff.

In 2016, about 14% of the roughly 3,900 calls to San Pedro Bay were made by ships with Tier 0 engines, primarily cruise vessels, which comprised nearly 6% of those calls. About 64% of the calls were made by Tier 1 vessels. Roughly 19% of the calls were made by Tier 2 vessels, and there were no Tier 3 visits. Table 6 provides a snapshot of the 2016 engine tier levels by vessel type:

Table 6: 2016 Vessel Arrivals to San Pedro Bay by Engine Tier and Vessel Type

	Count of Arrivals					Percent of Total Arrivals				
Vessel Type	Tier 0	Tier I	Tier II	Tier III	Steam	Tier 0	Tier I	Tier II	Tier III	Steam
Auto Carrier	59	190	17	0	0	1.5%	4.7%	0.4%	0.0%	0.0%
Bulk	12	177	108	0	0	0.3%	4.4%	2.7%	0.0%	0.0%
Container	178	1,550	430	0	94	4.4%	38.4%	10.7%	0.0%	2.3%
Cruise	226	150	0	0	0	5.6%	3.7%	0.0%	0.0%	0.0%
General Cargo	23	46	20	0	0	0.6%	1.1%	0.5%	0.0%	0.0%
Integrated Tug Barge	7	10	1	0	0	0.2%	0.2%	0.0%	0.0%	0.0%
Miscellaneous	11	0	0	0	0	0.3%	0.0%	0.0%	0.0%	0.0%
Reefer	16	4	0	0	0	0.4%	0.1%	0.0%	0.0%	0.0%
RoRo	2	0	24	0	0	0.0%	0.0%	0.6%	0.0%	0.0%
Tanker	39	465	174	0	0	1.0%	11.5%	4.3%	0.0%	0.0%
TOTAL	**573**	**2,592**	**774**	**0**	**94**	**14.2%**	**64.3%**	**19.2%**	**0.0%**	**2.3%**

In 2025, due to forecasted fleet turnover, calls from Tier 0 ships are expected to comprise less than 1% of the total, and calls from Tier 1 ships are expected to comprise roughly 35% of the total. Meanwhile, the percentage of calls by Tier 2 vessels is expected to more than triple to nearly 65% by 2025, as shown in Table 7.

Table 7: Forecasted Vessel Arrivals to San Pedro Bay in 2025 by Engine Tier and Vessel Type

	Count of Arrivals					Percent of Total Arrivals				
Vessel Type	Tier 0	Tier I	Tier II	Tier III	Steam	Tier 0	Tier I	Tier II	Tier III	Steam
Auto Carrier	0	157	226	0	0	0.0%	4.3%	6.2%	0.0%	0.0%
Bulk	0	73	196	0	0	0.0%	2.0%	5.4%	0.0%	0.0%
Container	0	445	1,069	0	0	0.0%	12.3%	29.5%	0.0%	0.0%
Cruise	12	136	379	0	0	0.3%	3.8%	10.5%	0.0%	0.0%
General Cargo	0	40	98	0	0	0.0%	1.1%	2.7%	0.0%	0.0%
Integrated Tug Barge	0	9	0	0	0	0.0%	0.2%	0.0%	0.0%	0.0%
Miscellaneous	0	11	0	0	0	0.0%	0.3%	0.0%	0.0%	0.0%
Reefer	0	5	15	0	0	0.0%	0.1%	0.4%	0.0%	0.0%
RoRo	0	16	23	0	0	0.0%	0.4%	0.6%	0.0%	0.0%
Tanker	17	363	328	0	0	0.5%	10.0%	9.1%	0.0%	0.0%
TOTAL	**29**	**1,255**	**2,334**	**0**	**0**	**0.8%**	**34.7%**	**64.5%**	**0.0%**	**0.0%**

By imposing a higher rate on Tier 0 vessels in 2025, the Ports would affect less than 1 percent of the calls. The rate, however, would most likely solely impact tankers and cruise ships as they are expected to be the primary Tier 0 vessels calling the Ports at that time. A differentiated rate on Tier 1 vessels, which could follow shortly after 2025, is expected to affect more than one-third of vessel calls, particularly auto carriers, smaller container ships, cruise vessels, and tankers. The larger container ships (i.e., greater than 10,000 TEU capacity) are expected to be largely Tier 2 by that time.

This variable rate strategy requires a long timeline in order to accommodate the projected dearth of Tier 3 ships and to give shipping lines ample time to modify deployment schedules and potentially to upgrade their fleets. Ships have long life spans, and operators will need time to project future availability. Further complicating fleet turnover are the investments already made on existing ships to meet CARB's at-berth regulations, which is taken into account by the shipping lines when analyzing the business cases for global fleet deployments.

The Ports are keenly aware that today's shipping industry is facing unprecedented financial hardship and consolidation. In 2016, one of the world's largest shipping lines, Hanjin Shipping, filed for bankruptcy. According to some experts, the shipping industry has overinvested in large ships, resulting in a glut of capacity that has driven shipping freight rates down to unsustainable levels and further hampering the pace of Tier 3 deployment.

Any money collected through the variable rate would be used by each Port to establish a Clean Ship Fund, which would provide incentives to reduce emissions from ships.

The Ports must balance these economic realities with the need to reduce air pollution impacts on our communities. Because it is impossible to predict what the shipping industry will look like in 2025 and how this strategy would affect it, the Ports propose to conduct a vessel forecast in 2020 that would update the projections for Tier 3 deployment. In addition, the Ports will conduct an economic assessment to evaluate the appropriate rate structure and implementation timeline to be adopted by both Ports through a tariff, also taking into account current costs of shipping through the San Pedro Bay complex, potential cargo diversion to other ports, and market competitiveness. One year before the proposed implementation start date, the Ports will update the assessment to identify any new considerations that may warrant changes to the implementation plan.

1.8. Harbor Craft

Harbor craft that operate at the Ports – tugboats, crewboats, and workboats – are among the cleanest in the world, thanks largely to the federal phase-in of more stringent marine engine emissions standards between 2014 and 2018 and state regulations that require accelerated turnover of all Tier 1 and older engines by 2023. Over the past few years, incentive funding from the Ports and state and federal programs have assisted to offset the incremental cost to accelerate the deployment of cleaner harbor craft by repowering or retrofitting marine engines operating in the San Pedro Bay. In addition, on port-owned properties, the Ports have funded the construction of electrical infrastructure improvements for tugboats to use shore power when they are tied up at berth. The main assist tug operators at the Ports, Crowley and Foss, have shore power capability at berth. It is also common practice to turn off engines when tugs are not working and at berth.

Today, harbor craft are our third largest source of particulate matter, comprising 21% of the port-related DPM emissions. Harbor craft also contribute 10% of our NO_x emissions and 6% of our GHG emissions. While emissions from port-related harbor craft have decreased over the last several years as a result of the implementation of the state's commercial harbor craft regulation, the relative contribution of emissions from harbor craft compared to emissions from other port-related sources has increased, and is projected to remain at this higher level in the future as a result of the long useful lives of marine engines. As the engines age and accumulate operating hours, they will continue to deteriorate absent new mandates for turnover.

Given the variety and individual characteristics of harbor craft, differences in work activities, engine horsepower, and usage, there is no 'one size fits all' emissions reduction technology applicable to harbor craft. A challenge associated with developing and deploying emissions reduction technologies for harbor craft, include the numerous possible engine combinations and configurations, as well as weight and space limitations on vessels. Given these challenges, it is not uncommon for design, modification, and installation costs to exceed the costs for new engines or emission reduction technologies. As a result, funding opportunities for harbor craft have been limited.

The Ports will continue to encourage and invest in technology development projects for harbor craft through the joint Technology Advancement Program. Such technologies may include scrubbers, selective catalytic reduction, or alternative fuels such as LNG. To stimulate the identification, demonstration, and validation of technologies that can achieve emissions reductions from harbor craft beyond current state and federal regulation, the Ports will seek proposals for harbor craft technologies that have the potential to achieve NO_x and DPM emission

levels cleaner than Tier 4 standards, or technologies that can be retrofitted to existing harbor craft to achieve Tier 3 or Tier 4 emission levels through the following action:

- Issue a Request for Proposals for harbor craft emission-reduction technologies by December 2017 with demonstrations to begin no later than mid-2018.

The Ports will also conduct periodic assessments of the status of harbor craft technology in order to identify ways of accelerating adoption.

Additionally, the Ports propose the following strategies to reduce harbor craft emissions and fuel consumption:

- Provide incentives for harbor craft operators to upgrade to the cleanest available (i.e. Tier 4) engines or low-emission hybrid systems in the short term, and to upgrade with advanced technologies (e.g. fuel cells and alternative fuels) in the long term. Incentives could be given through securing grants from federal, state or local agencies, a formal incentive program with financial rewards, or through more favorable lease terms, where applicable, for harbor craft operators that have cleaner fleets.
- Identify operational changes that could reduce emissions, for example, by reducing the wait time or slow speed movements of assist tugboats while they are waiting to assist a vessel or by optimizing tugboat berth locations to minimize unnecessary travel.
- Continue to provide and expand as necessary infrastructure that allows harbor craft operators to plug into shore power while at berth.
- As leases with harbor craft operators are opened or renegotiated, the Ports will assess whether it is possible to include requirements for harbor craft modernization, subject to the requisite negotiation process. Most harbor craft companies operate on private land and do not have leases with the Ports; however, the Ports will seek opportunities as they arise.

2. Freight Infrastructure Planning and Investments

Deploying the latest, cleanest technology will require significant investments in electrification and fueling infrastructure. Additionally, reductions in emissions can be achieved by shifting the way cargo is handled, for example, by maximizing on-dock rail where possible. The strategies defined below describe the planning and investment actions needed to transform the Ports' infrastructure over the next 10 years to support zero emissions and supply chain efficiencies.

2.1. Expand use of Rail Arriving to and Departing from the Port Complex.

In some cases, moving cargo by rail can be economically and environmentally superior to moving cargo by truck. The Ports estimate that one double-stacked train can eliminate roughly 750 truck trips, which makes rail transport an efficient and sustainable approach to goods movement, particularly if that cargo can be loaded onto rail within the marine terminal. Maximizing the use of rail infrastructure at the terminal – on-dock rail – eliminates intermodal cargo moving by truck along roadways to inland rail yards.

Any cargo that is moved by train from the port complex benefits the overall transportation system by reducing truck mileage and the associated congestion and emissions. In addition, loading cargo onto rail in a terminal can avoid the time and cost associated with an additional lift and drayage to an off-site facility. The CAAP reaffirms the Ports' commitment to investment in on-dock rail infrastructure and in programs that shift cargo to rail.

The Ports have made significant investments over the years, and will continue to make investments, to build rail infrastructure in the terminals and throughout the port complex, with the goal of accommodating 35% of all cargo leaving the port complex by rail. In 2016, 23.5% of all containerized cargo moving through the Ports went by rail. The Ports will also aim to push further. Over the long term, the Ports will seek to handle up to 50% of all cargo leaving the port complex by rail. To achieve this objective, operational changes are needed. For example, the Ports may explore the potential of short-haul rail to inland sorting facilities about 60 to 80 miles away from the Port area, which is described in more detail under Strategy 3.3.

Currently, on-dock rail infrastructure is available at nearly all container terminals at the Ports. Many non-container terminals are also served by rail in both Ports. Some existing on-dock rail facilities have physical limitations due to, for instance, the capacity of storage tracks. Additional tracks may be needed to optimize building blocks of rail cars to make destination trains.

In order to maximize the amount of cargo loaded onto rail in the terminals, the Ports also recognize the need to reduce constraints within the port-wide network that can affect utilization. To do this, the Ports need to invest in port-wide infrastructure improvements and on-dock rail support facilities, which can serve multiple terminals, such as the Port of Long Beach's proposed Pier B On-Dock Rail Support Facility.

Finally, in order to maximize emission reduction benefits, the Ports will continue to work with the rail operators and the state and federal regulatory agencies to seek utilization of the cleanest locomotives. Pacific Harbor Line, the rail company that provides switching services within the Ports (i.e., building trains and providing short moves) is the cleanest rail company in the country and has started to introduce locomotives with the lowest-emitting Tier 4 engines. Additionally, both Ports are funding the development and demonstration of a near-zero-emission locomotive manufactured by VeRail for use in switching operations within the Port complex. The Ports are also seeking funds to upgrade this locomotive with batteries in order to enable some zero-emission track miles. In the future, the Ports will continue to seek opportunities to work with rail operators and technology developers to demonstrate and deploy locomotive technologies that can achieve near-zero emissions and zero-emission track miles.

2.2. Charging Standards for Electric Terminal Equipment.

Successful deployment of commercially available electric terminal equipment will depend on compatible and accessible electrical charging infrastructure. Currently, manufacturers of electric terminal equipment are using different methods and equipment design specifications to charge the vehicles, resulting in different infrastructure requirements depending upon the equipment selected. This incompatibility will lead to potentially significant challenges in the long run. In order to deploy electric equipment on a large scale, the Ports must adopt charging standards so uniform infrastructure can be built throughout the port complex and so that a variety of equipment built by multiple manufacturers can be successfully deployed.

The design, siting, and construction of support infrastructure are very complex. Since 2015, the Ports have been working with regulatory agencies, technology developers and equipment operators to establish charging standards for yard tractors and other pieces of terminal equipment. These standards include technical specifications that consider design, cost and the complexity of charging a large fleet of equipment simultaneously. These standards are under development. The Ports have recently received grant funding to demonstrate several types of electric terminal equipment including yard tractors, top handlers, high tonnage forklifts, and rubber-tired gantry cranes. These demonstrations include various types of manual, automated, and inductive charging options. Final reports indicating the pros and cons of the various charging

options will assist the Ports, in cooperation with technology developers and regulatory agencies, in continuing to develop and refine the charging standards for the different types of terminal equipment. We anticipate similar standards will need to be developed for on-road applications; the Ports will also work with regional partners and standardization organizations to develop on-road charging standards. The Ports will continue these efforts to facilitate deployment of commercially available zero-emission or near-zero-emission equipment and trucks.

3. Freight Efficiency

The Ports recognize the value of moving goods efficiently in order to accommodate cargo growth without increasing emissions, and even better, by potentially reducing emissions. Operational efficiencies may also result in significant cost savings for the operators and cargo owners from reduced fuel costs and reduced time to move the cargo. In 2014, the Ports established the Supply Chain Optimization (SCO) strategy, bringing together representatives from across the goods movement industry to explore ways of enhancing freight efficiency. This ongoing effort will continue to support the State's goal of increasing freight efficiency by 25% as measured by trade value compared to greenhouse gas emissions.

While SCO discussions are still underway, there are several strategies that have risen to the top or that the Ports can explore expeditiously to accelerate potential benefits.

3.1. Green Terminal Program

The Ports will develop a voluntary recognition program to highlight the achievements of terminals working to enhance productivity while minimizing air quality impacts. There are several programs that could serve as models for how such a program could be structured, described below:

Leadership in Energy and Environmental Design (LEED) certification program. Under this program, buildings are rated Silver, Gold, or Platinum depending on the level of environmental sustainability. Terminals could voluntarily apply to be "certified" as a Green Terminal, with more efficient and sustainable terminals receiving higher levels of certification.

EPA SmartWay Program. The EPA's SmartWay Program is a voluntary program that provides supply-chain partners with tools, methodologies, and resources to operate more efficiently and to reduce emissions. SmartWay partners report information on their cargo movements and activities, which are then calculated into emissions. The program helps supply-chain partners identify more environmentally friendly approaches to moving goods. Such a program, perhaps with modifications, could provide tools or metrics for evaluating a terminal's efficiency.

Container Terminal Quality Index. This system encourages container terminals to benchmark their performance against 80 key performance indicators that take into account a terminal's unique configuration and operational profile. Such metrics include ship time at berth and crane productivity. The system provides tools by which terminals can audit their performance, report

these metrics, and obtain third-party certification for their efforts. The program is administered by the Global Institute of Logistics.

Green Marine. Under this program, terminals conduct a detailed self-assessment on a variety of environmental markers. The results determine the terminal's ranking, from mere compliance to leadership and excellence. This program also monitors a terminal's year-over-year improvements in the various performance indicators. Although Green Marine is focused exclusively on environmental achievements, this program could be a model for evaluating efficiency.

To develop a voluntary terminal recognition program for San Pedro Bay, the Ports would evaluate the programs described above as well as others and work with terminals to identify appropriate metrics. The discussions under the SCO effort have identified some of these metrics, which may include berth productivity, terminal dwell time, truck turn times, use of on-dock rail, and ship at-berth times.

The Ports may also structure the program to recognize improvements over time – that is, relative progress toward greater efficiency – rather than absolute standards. An example of such a metric could be emissions produced per TEU moved, which the ports currently track and report on a port-wide basis as a part of the annual emissions inventory. Terminals wishing to participate in this program would be required to report on their efficiency achievements to maintain or improve their certification level. The Ports also could adopt incentives to encourage terminal participation and to recognize their achievements.

3.2. Port Truck Reservation System

Of the 12 container terminals in San Pedro Bay, nine terminals use reservation systems for import containers and four of those terminals also use such systems for export containers. The remaining three terminals use an alternative pre-gate methodology to expedite the gate transaction process rather than reservation systems. For terminals with reservation or appointment systems, truckers who arrive at the gate with an appointment are expected to receive prompt service during that time window. For terminals that have implemented a pre-gate methodology, truckers who have complied with those requirement prior to arriving at the terminal are expected to receive prompt service and complete their terminal visit within one hour.

Currently, individual terminals and trucking companies use their own software systems to manage their gate operations. There is no consistent platform nor are there consequences for a trucker missing an appointment or reservation or a terminal failing to serve a truck on time. In

addition, while a few terminals schedule reservations for gate arrivals to pick up or drop off loaded containers, the majority of the terminals with such systems only schedule appointments for gate arrivals to pick up loaded containers for imports, and don't schedule chassis, the return of empty containers, or drop off of exports. If there were a uniform portal for securing all aspects of a truck transaction, it could improve the functionality of the system, help to alleviate congestion issues, and promote dual transactions (e.g. empty return coupled with a loaded pick-up). Further, efficiency improvements at the gate and throughout the terminal can reduce truck idling time.

Together, these improvements could improve traffic flow, and reduce truck turn times, vehicle miles traveled, and associated truck emissions. In order to improve overall efficiencies and achieve these goals, the Ports propose universal systematic integration of the reservation systems for all marine terminals in San Pedro Bay to be implemented by January 1, 2020. This integration would serve as an overlay to the existing terminal specific systems, providing one front end for the users to access all systems.

One of the Ports' goals for integrating reservation systems would be to achieve a visit time for trucks within the terminal (i.e. from in-gate to out-gate) of 1 hour for a dual transaction.

The Ports will also work with stakeholders to explore mechanisms to ensure compliance with the reservation system and maximum effectiveness in achieving our efficiency goals. Other ports around the world have adopted truck appointment systems coupled with financial penalties for terminals and trucking companies that fail to uphold their end of the appointment. For example, Port Botany, Australia's second largest container port, has instituted financial penalties for terminals that do not honor a trucker's appointment and for truckers who do not arrive during their scheduled appointment time. Port Metro Vancouver has implemented a system that imposes fees on terminals that exceed a specified truck turn-time threshold. Further evaluation would be needed to determine whether or not these approaches could work in the San Pedro Bay Ports, where chassis are managed differently and the truck fleet is four to 10 times larger than these other ports.

In addition, reservation systems should provide process and data flows that allow customers to effectively make drayage arrangements in anticipation of when a container will be ready for pick up. Currently, import containers cannot be scheduled for drayage until the container has been physically discharged from the vessel, updated with a finite location in the container yard, and cleared for pick-up, which can be days after the container arrived in the terminal. With advance notice of when a container will be ready, there will be more opportunity for advanced planning and more efficient scheduling for dual transactions.

In May of 2017, PierPass – a nonprofit company created by terminal operators to address issues of congestion, air quality, and security – announced plans to contract with a consulting firm to analyze two potential options for programmatic changes to the PierPass program designed to increase the efficiency of terminal gate transactions while preserving the core mission of mitigating traffic during peak hours. Those two potential options include a port-wide peel off program and a flat-fee structure. Based on the outcome of that analysis, the members of the West Coast Marine Terminal Operators Agreement (WCMTOA) will make the final determination regarding what changes, if any, will be made to the PierPass program. The Port will continue to coordinate with PierPass to understand if the proposed program can be structured in a way to achieve our goals.

Thus, the strategy for the Port Truck Reservation System is as follows:

- Implement reservation systems for the marine terminals in San Pedro Bay by end of 2020 that will integrate existing terminal operating systems and help to increase overall efficiency for cargo movement in the port complex.

The Ports would propose to conduct a pilot program prior to broader implementation in order to gauge the potential effectiveness and to ensure implementation can be optimized to meet the Ports' goals.

3.3. Systemwide Efficiencies

In order to improve the overall efficiency of freight movement, the Ports are looking beyond the terminals and the port complex. Transitioning to cleaner equipment is critical; however, further emission reductions can be achieved by changing the very way we do business. For example, moving cargo by rail as opposed to truck or handling containers at off-terminal yards, which was identified in the Sustainable Freight Action Plan, show promise in improving air quality.

Such efforts require study, and as such, the Ports propose to examine the feasibility of systemwide efficiency programs in order to identify potential emission reductions and to accelerate deployment. Several of these efforts, including emerging technology demonstrations for intelligent transportation systems and other pilot projects to enhance efficiency, have already begun and can be expanded upon:

Port of Los Angeles Information Portal: The Port of Los Angeles and GE Transportation are partnering to develop a first-of-its-kind port information portal, a unique approach to

demonstrate the benefits of digitizing maritime shipping data and making it available to cargo owners and supply chain operators through secure, channeled access. The digital platform will provide stakeholders with greater line-of-sight and planning capabilities to more effectively service ultra-large container vessels. From May to August 2017, the concept was piloted at the Port of LA's largest terminal, in partnership with two major liner shipping companies, shippers, and various service providers. Cargo data used in the two-month pilot project will include shipping line manifest data and filtered information from the U.S. Customs and Border Protection's Automated Commercial Environment (ACE) system. The pilot project confirmed the benefit of enabling next-level collaboration and coordination among the many stakeholders involved in the conveyance of waterborne cargo containers. The Port of Los Angeles is expanding the portal to other terminals, which will enhance supply chain performance by delivering fast, data-driven insights through a single portal to partners across the supply chain. Ultimately, the goal of the port information portal is to improve data flow between cargo owners, shipping lines and other stakeholders so that port and terminal operators have an extended window of time to track inbound cargo to more effectively service vessels, optimize cargo movement and improve the predictability and reliability of the supply chain.

Freight Advanced Traveler Information System (FRATIS) Demonstration: The Port of Los Angeles is using a nearly $1 million grant from the California Energy Commission to support the ongoing large-scale testing of this technology. FRATIS is an intelligent transportation system that analyzes data from multiple sources to come up with the most efficient schedule, route and container information for drivers, dispatchers and cargo owners. Specific technologies that are being tested include: real-time traffic information obtained from the California Department of Transportation and the Los Angeles County Metropolitan Transportation Authority (Metro); automated estimated-time-of-arrival messaging to the terminals one day in advance of truck arrival; and deployment of an algorithm that will optimize drayage throughout the day and region. The system is designed to reduce travel times inside and outside the terminals, which in turn reduces congestion, emissions and fuel consumption. The demonstration phase of the existing project involves 200 trucks and several trucking companies. The project is also testing Geostamp, a Harbor Trucking Association/InfoMagnus application, which tracks real-time truck travel and terminal turn times via an automated mobile smart device app, and ECO-Drive, University of California, Riverside's Center for Environmental Research and Technology app, which uses traffic signal timing information to optimize acceleration/deceleration of trucks. The Eco-FRATIS demonstration will commence in late 2017.

Concept for the Harbor Performance Efficiency Center (HPEC): The conceptual HPEC is a proposed off-dock container staging and storage facility located in the Port of Los Angeles that could provide an outlet to relieve congestion in San Pedro Bay. The concept is expected to

increase efficiency, reduce costs, and lower emissions. Efforts will be made to ensure that zero- and near-zero-emission technologies are demonstrated and used to the greatest extent feasible at this facility, which will also be used to facilitate learning, collaboration, and new innovative ideas for the supply chain. This concept is currently in the environmental review process.

Short-Haul Rail Study: The Ports have begun researching the potential of inland ports, which involve shuttling cargo by rail between the port complex and warehousing and distribution centers within 100 miles of the Ports. Initial discussions with beneficial cargo owners along with distribution center and warehouse operators indicate significant interest in an inland port served by short-haul rail to serve the Inland Empire region, providing costs are comparable to a truck move. The Ports will be pursuing a more detailed review of the concept. Potential benefits could include reduced congestion at marine terminal gates, reduced congestion on local freeways, and reduced net emissions. Further study is necessary, however, to ensure that potential impacts are not just being shifted to a new location.

Advanced Transportation Management and Information System (ATMIS): The Ports began using this intelligent transportation system (ITS) technology for managing traffic conditions in the San Pedro Port Complex in 2012 and recently began exploring an upgrade of the system. ATMIS is composed of computer software communicating with various field devices including closed-circuit cameras, vehicle detectors, and changeable message signs connected to a central computer software to improve traffic flow and to enable management of roadway conditions. The initial phase of the upgrade includes integrating current traffic management functions with Virtual Port, a geographic information system (GIS)-based operations monitoring tool developed by the Port of Long Beach Security Services Division. Subsequent phases include potential enhancements to Virtual Port and Web Portal (the viewer-only version of the tool) to specifically aid traffic management functions, improved coverage of ATMIS field devices, coordination with the FRATIS, and continued data sharing with regional ITS managed by Metro and the California Department of Transportation (Caltrans).

There is a need for these efforts to be expanded. The Ports will coordinate with their industry and regulatory partners to identify and expand upon the areas of study, which may include:

- Short-haul rail (i.e., shuttle trains)
- Centralized off-dock chassis facilities
- Staging yards (i.e., peel-off yards)
- Truck appointment times and off-terminal queuing
- Intelligent transportation systems

4. Energy Resource Planning

Transitioning to zero emissions at the scale needed to support the two largest container seaports in the country will place a significant burden on the Ports' energy systems as well as the utility grid. Adding electric and alternative-fueled equipment will require additional infrastructure, and the Ports will be challenged to ensure reliable, predictable, and cost-effective power to maintain our operations. For these reasons, the Ports must think strategically about energy generation, storage, controls, and systems integration to ensure resiliency for our operations, capacity for these operations and those of the public, and to meet the 2050 GHG goal.

Since each Port receives its power from different utility providers (Southern California Edison for the Port of Long Beach and Los Angeles Department of Water and Power for Port of Los Angeles), each Port has embarked on its own detailed energy resources planning efforts. The goals of both Ports remain aligned and focused on the following key concepts:

- *Resiliency*: Ability of the Ports to maintain business continuity during power outages and resume operations after a catastrophic event.
- *Availability*: Access to sources of electricity necessary for present and future power demands of Port operations through generation, transmission, and distribution and access to alternative fuels such as hydrogen to support fuel cell powered equipment.
- *Safety:* Uphold high standards for equipment and infrastructure safety and work closely with utilities and contractors to design, verify, and maintain energy systems that keep workers and users safe.
- *Reliability*: Availability of high-quality, consistent electricity that minimizes voltage anomalies and harmonic distortion, and meets predicted peaks in demand.
- *Cost Stability:* Ensure that costs for energy are predictable into the future and cost effective.
- *Efficiency*: Adoption of, and incentives for, management practices and technologies that reduce energy demand, such as LED lighting at terminals and smart controls.
- *Sustainability*: Integration of energy management practices and renewable power generation to minimize the depletion of natural resources and provide economic, social, and environmental benefits.

In addition, the Ports plan to evaluate Energy Management Plans for Harbors and Port Districts (Pub. Res. Code §25990), which encourages ports and utility providers to develop joint energy management plans, to identify opportunities for collaboration and complementary initiatives. Through the respective energy planning efforts, the Ports are poised to become industry leaders

in the management of integrated energy systems that will provide safe, reliable, sustainable power and fuels for seaport operations.

4.1. Energy Infrastructure

The Ports understand that technology-driven design improvements and significant infrastructure planning are required to support the deployment of zero and near-zero-emission equipment. Collaboration between the Ports, manufacturers and regulators is required to evaluate and standardize infrastructure needed for emerging technologies. For example, as mentioned previously, the Ports have convened a working group to establish a charging standard for heavy-duty equipment and are evaluating various charging systems. Initial estimates indicate that supporting infrastructure could cost upwards of $2 billion, so a thorough evaluation of alternatives is required. This research will be used to develop infrastructure plans, design criteria and specifications, and more refined cost estimates to support equipment electrification.

In addition, the ports will evaluate the need for electrical charging infrastructure for on-road trucks and additional alternative fuel infrastructure to support near-zero and zero-emission on-road trucks and equipment, including LNG for marine vessels, and will work with port operators, fuel providers, and regional stakeholders to support necessary deployments.

Both Ports are developing energy programs and are working to refine, demonstrate and implement various energy management strategies. These efforts will be undertaken in collaboration with other stakeholders, such as utilities and energy regulators, to ensure that all energy customers' power needs are met. More information about Port energy programs can be found at the following websites:

- Port of Long Beach: http://www.polb.com/environment/energyisland.asp
- Port of Los Angeles: https://www.portoflosangeles.org/DOC/DRAFT%20POLA%20E-MAP_July%202014.pdf

Supportive Efforts

For the CAAP to be successful, the Ports must engage in efforts that support the CAAP strategies even if those efforts are not tied directly to the strategies themselves. Specifically, the Ports commit to supporting efforts to evaluate and bolster economic competiveness, augmenting workforce development initiatives that bolster the transition to zero emissions, and to cultivating innovation and supporting businesses, including entrepreneurs, that can assist in the development of new emission-reduction technologies.

Economic Competitiveness

The Ports have received many comments from the port-related industry and regional business community about the importance of these two Ports remaining economically competitive and maintaining our market share. The Ports share these concerns, as identified in one of the Guiding Principles for this 2017 CAAP Update that states "the Ports are vital economic engines, supporting hundreds of thousands of local and regional jobs, and we must remain economically competitive and maintain our market position."

Both Ports have undertaken planning efforts to continue to develop our business and to position ourselves competitively to remain the premiere gateway for goods movement in and out of the United States. Our competitive position is influenced by a wide range of factors that go beyond the costs associated with environmental programs such as those included in the 2017 CAAP Update strategies; however, we recognize the need to study the potential impacts of these new environmental efforts on our ability to compete with other national gateways. An initial analysis on the potential economic effects of the 2017 CAAP was provided in the Economic and Workforce Considerations[43] document. Development of specific 2017 CAAP Update strategies will also be guided by economic analyses, including an economic study for the establishment of the truck rate, and the key economic considerations incorporated into the feasibility assessments for new technologies. In addition, the Ports need to continue to evaluate and plan for other potential upcoming challenges, including the financial state of the industry, infrastructure needs, labor negotiations, costs, chassis and equipment availability, etc. Therefore, the Ports will work with industry stakeholders to evaluate our competitive position and ways to sustain and increase that position as we continue to face a variety of challenges.

In addition, the Ports have been actively involved and will continue to work with the State agencies in their efforts to measure, evaluate, and support economic competitiveness of the freight industry throughout California. Evaluating economic competitiveness beyond the local

[43] http://www.cleanairactionplan.org/documents/clean-air-action-plan-2017-economic-considerations-final.pdf

level, and taking into account a broader perspective on the variety of state, national and international economic factors will provide a more robust analysis and understanding of the factors that affect the industry. A Guiding Principle of the California Sustainable Freight Action Plan, is to "grow the economic competiveness of California's freight sector."[44] The State agencies committed to measure economic growth and competitiveness and to develop future targets for increased State competitiveness and economic growth within the freight and goods movement industry. These targets "will be developed in conjunction with an economic competitiveness working group comprised of State agency representatives, economists, industry representatives, and subject matter experts. As there is no single definition, application, or metric which applies to the concept of economic competitiveness across the many different modes, markets, and impacts associated with the freight sector, the targets will need to be based on a multi-pronged suite of metrics and models, which will indicate overall statewide progress in improving California's economic competitiveness. Given the dynamic nature of the freight industry economy, the working group will need to continuously monitor and update these metrics."[45] The Ports have provided input on the scope of work for the state's consultant to prepare these metrics and targets. The Ports will continue to support this effort by the State and will participate as these discussions advance.

Workforce Development

The 2017 CAAP Update hinges on new emission-reduction technologies, particularly near-zero emissions and zero emissions for on-road and off-road vehicles. To support this transition, the Ports need a workforce that can operate and maintain natural gas, battery-electric, and fuel cell equipment; build the necessary infrastructure; and develop innovative approaches to improving efficiency. All this can be done while maintaining the vital jobs here in the port complex, but preparing for these changes must start now.

The Ports already actively engage in workforce development efforts, and in support of the CAAP, we commit to building upon them:

- **Zero-Emissions Workforce Development Working Group**: The Port of Long Beach has partnered with Long Beach City College to evaluate the workforce needs for a zero-emissions future and to develop recommendations for new training programs and curricula that address any gaps. The effort launched this year and the first phase – assessments and recommendations – is expected to wrap up in early 2019. Future phases will involve curriculum development and implementation of new programs. This work

[44] California Sustainable Fright Action Plan, July 2016, p.9.
[45] California Sustainable Freight Action Plan, Appendix B: Freight Targets, July 2016, p. B-4.

group builds upon the Port's longstanding partnership with Long Beach City College, which includes an award-winning training program for technicians servicing natural gas trucks.

- **Port Workforce Training Center**: Working under a High Road Training Partnership Grant from the state, the Port of Los Angeles is working in partnership with labor, industry, and other institutional partners to establish a Port Workforce Training Center. The partnership includes the International Longshore and Warehouse Union (ILWU), the Pacific Maritime Association (PMA), and the City of Los Angeles Economic Workforce Development Department (EWDD), along with oversight by the Office of the Los Angeles Mayor. Objectives of the Port Workforce Training Center include the "up-skilling" or "re-skilling" of incumbent longshore workers to facilitate transition to zero-emission and near-zero-emission operation.

- **Harbor Driver Training Program:** Since 2013, both Ports have partnered with the Harbor Trucking Association and Long Beach City College to train drayage truck drivers through the Harbor Driver Training Program. To date, this program has graduated more than 140 drivers with 70% of them placed into port truck driving jobs. As truck technologies evolve to near-zero emissions and zero-emissions, the Ports will continue to support driver training programs.

- **International Trade Education Programs™ (ITEP)**: ITEP is a Southern California 501(c)(3) non-profit organization that prepares high school students for diverse career opportunities in ports, transportation, logistics, and related industries. ITEP develops programs that integrate internships and career mentoring with the curriculum of area high schools. ITEP serves more than 5,100 students in 21 academies across 15 high schools, many of them near the Ports.

- **Academy of Global Logistics (AGL) at Cabrillo High School:** The Port of Long Beach sponsors the AGL at Cabrillo High School in Long Beach, which combines academic curriculum with industry relevant training and information to support academic and career development. The Academy introduces high school students to career opportunities in global trade and logistics and shows them how to prepare for those careers through a wide range of training and education programs including certificates, certifications, and degrees offered by Long Beach City College and California State University, Long Beach.

Business Support

- **Technology Events and Entrepreneur Development**: As described earlier, the Ports support emerging technology manufacturers and developers through the TAP. The primary purpose of the TAP is to demonstrate promising emission-reduction technologies; however, in support of this ultimate goal, the Ports work closely with organizations that support entrepreneurs whose technologies may be applicable to port operations. In the past, the Ports have attended conferences and events that give entrepreneurs opportunities to pitch new ideas for emission-reduction technologies, and we have participated in "hack-a-thons" to stimulate innovations for supply chain efficiencies. The Ports plan to augment these efforts going forward.

Implementation

The 2017 CAAP Update is a high-level planning document. Following its adoption by the Boards of Harbor Commissioners, the Ports will begin implementing the individual strategies through separate actions considered by each Port's Board of Harbor Commissioners. All of the strategies will require further Board approval, such as grant and incentive programs, contracts, tariff amendments and budget authorizations, before they can be implemented. As these strategies come to each port's respective board for adoption through a public process, the staffs will share more implementation details, including feasibility assessments, specific timelines, cost estimates, and programmatic procedures, and stakeholders will have the opportunity to provide comments along the way.

CAAP Implementation Advisory Workgroup

Upon adoption of the CAAP, the Ports will establish a CAAP Implementation Advisory Group to advise the executive directors and staff regarding the specific details of CAAP implementation. This group will consist of a core list of regular invitees but will be open to all who want to attend and provide input. The workgroup will be formed in January of 2018 and the Ports plan to hold the first meeting soon after in February. This workgroup will meet initially on a quarterly basis to provide input and hear updates on CAAP progress.

Green Ports Collaborative

The two ports will work with their mayors, through their coordination with other Climate Mayors, initially along the West Coast and then expanded nationally, to launch the Green Ports Collaborative. Through the Collaborative, we will seek to advance similar goals to demonstrate zero-emission goods movement vehicles and equipment, and create larger markets that grow demand to encourage manufacturers to invest and produce equipment in large enough numbers to reduce the costs per vehicle. This Collaborative could coordinate on demonstration projects, peer-to-peer information sharing, regular communication, field and technology visits, and collaboration with key industry, government, and nonprofit partners.

Transparency and Reporting

The Ports commit to regularly communicating the results of our CAAP efforts to our Boards and all of our stakeholders through regular briefings at public Board meetings. To that end, the Ports plan to prepare Quarterly Status Reports which will include updates regarding the status of all

ongoing CAAP projects. The Ports will continue to prepare Annual Emissions Inventories to keep the stakeholders informed on our progress in reducing air pollution.

The Ports will post all related CAAP documents, including assessments and technology reports, on the CAAP Web site and on social media, and in working with the CAAP Implementation Advisory Workgroup, identify ways to make the CAAP Web site more user-friendly.

Lastly, regular reports providing feedback on the path forward will be prepared for the Mayors of Long Beach and Los Angeles.

Implementation Timeline

Upon adoption of the CAAP, there will be an immediate need to begin designing and implementing programs to meet the aggressive timelines. In the first year, the bulk of the effort will focus on conducting feasibility assessments and other studies to support the strategies; implementing tariff changes for the Clean Trucks Program, terminal equipment, and vessel programs; and pursuing grant dollars for accelerated deployment of near-zero and zero-emissions equipment.

Fully implementing the CAAP strategies will take years; however, the Ports commit to key actions in the near term specifically for trucks, terminal equipment, and vessel programs, as described below.

Additionally, for all the strategies, the Ports immediately will begin to develop and launch a funding advocacy campaign to secure incentives for demonstrations and accelerated deployments.

More details on implementation for specific strategies are provided in the appendix.

Appendix: Estimated Implementation Timelines

Clean Trucks Program: Implementation Actions 2018-2023, Estimated Timeframe

	2018				2019				2020				2021				2022	2023
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
Program																		
MY 2014 New Registration Requirement				✓														
Registration Fee Waiver for ZE Trucks				✓														
Truck Rate-Setting Study																		
State Adoption of NZE Standard																		✓
Truck Rate and NZE/ZE Exemptions											✓							
NZE New Registration Requirement																		✓
Pilot Smog Check Program with State												✓						
Truck Appointment System													✓					
State and Federal Funding Advocacy Campaign	✓																	
Incentive Funding for Early Deployment	✓																	
Technology																		
Feasibility Assessment																✓		
Ports ZE Pilot Deployment																✓		
SCAQMD Overhead Catenary Demonstration					✓													
SCAQMD GGRF ZE Truck Demo (43 trucks)						✓												
Reporting and Transparency																		
CAAP Advisory Group	✓																	
Quarterly Status Reports		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Annual Emissions Inventory				✓				✓				✓				✓	✓	✓

Development, design, public comment
Board approval
✓ Implementation begins

Terminal Equipment: Implementation Actions 2018-2021, Estimated Timeframe

	2018				2019				2020				2021			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Program																
Participation in State Regulatory Activities for ZE Equipment	✓															
State Amendment of Terminal Equipment Regulation					✓											
Terminal Procurement Planning Requirement					✓											
Terminal Procurement Plan Updates								✓				✓				✓
New Equipment Purchases Requirement									✓							
Terminal Infrastructure Planning														✓		
Terminal Equipment Idling Program												✓				
State and Federal Funding Advocacy Campaign	✓															
Incentive Funding Applications for Early Deployment	✓															
Technology																
Feasibility Assessments																
Port of Los Angeles Near-Zero Emissions Yard Trucks Demo						✓										
Ports Zero-Emissions Top Handlers Demo										✓						
Ports Zero-Emissions Yard Trucks Demos										✓						
Port of Long Beach Electric Rubber-Tired Gantry Cranes Demo										✓						
Reporting and Transparency																
CAAP Advisory Group	✓															
Quarterly Status Reports		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Annual Emissions Inventory				✓				✓				✓				✓

Development, design, public comment
Board approval
✓ Implementation begins

Vessel Programs: Implementation Actions 2018-2025, Estimated Timeframe

	2018				2019				2020				2021				2022	2023	2024	2025
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4				
Program																				
Vessel Speed Reduction Program Modification							✓													
Ship Incentive Programs Modifications					✓															
Participation in State At-Berth Regulation Process	✓																			
State At-Berth Regulation Amendments Adopted		✓																		
At-Berth Infrastructure Planning																	✓			
Clean Ship Differential Rate-Setting Study																				
Clean Ship Differential Rate Program																				✓
State and Federal Funding Advocacy Campaign	✓																			
Incentive Funding Applications for Early Deployment	✓																			
West Coast Ship Incentive Collaboration	✓																			
Technology																				
Maersk Ship Energy Efficiency Demonstration							✓													
Port of Los Angeles At-Berth Demo (Shorekat)					✓															
Ports At-Berth Emission Reduction Demonstration											✓									
Reporting and Transparency																				
CAAP Advisory Group	✓																			
Quarterly Status Reports		✓	✓		✓	✓	✓		✓	✓	✓		✓	✓	✓					
Annual Emissions Inventory				✓				✓				✓								

Development, design, public comment
Board approval
✓ Implementation begins

Exhibit B

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Re: Response to Follow Up re January 30, 2025 Mitigation Status Report

Counsel:

The Port has reviewed Petitioners' meet and confer letters dated March 5, 2025, and March 14, 2025, regarding the Second Mitigation Status Report (Status Report). In conjunction with the telephonic meet and confer between the parties on March 13, 2025, the following will address the issues raised.

I. MM AQ-9 AMP

A. "Ready to Work" and "Pilot on Board"

Petitioners have requested the "Ready to Work"[1] times to determine whether emission control was established within a two-hour window as required by CARB 2020 At-Berth

[1] This is defined as when "the vessel is tied to the berth, the gangway has been lowered with netting down, and all government authorities with jurisdiction over the vessel visit have cleared the vessel." (Cal. Code Regs. tit. 17, § 93130.2(b)(63).)

Regulations, California Code of Regulations, Title 17, section 93130, et seq. (At-Berth Regulations). As you are aware, CARB does not require vessels or terminals to record or report the "Ready to Work" time for each vessel visit; as a result, a "Ready to Work" time for each vessel visit is not included the reports received by the Port. Rather, WBCT reports to CARB and the Port the arrival time and the start time for emission control for each vessel visit. The Port provided this information, in the form of the WBCT Spreadsheet, as part of the Status Report.

The WBCT Spreadsheet demonstrates that, of the vessels that did not claim an exception, only eight did not start AMP within two hours of the arrival time listed in the WBCT Spreadsheet. For those eight vessels, the Port has enclosed documents evidencing the time that the Port Person in Charge (PIC) arrived at the vessel to coordinate with the Ship Person in Charge, inspect the vessel, complete the pre-power transfer conference, and clear the vessel for work. This information demonstrates that each of these vessels transferred to shore power within two hours of being "Ready to Work," as explained below:

- Four of the eight (YM Tutorial on 8/2/3024, YM Wish on 9/3/2024, Maersk Yosemite on 10/16/2024, and YM Uniformity on 12/20/2024) transferred to shore power within two hours of the Port Person in Charge arriving and being cleared for work (Ex. A, pp. 1-11).

  YM Tutorial:

Vessel arrival:	6:20 a.m.
POLA PIC arrival:	6:50 a.m.
Pre-Power transfer conference:	6:55 a.m.
Successful Transfer to Shore Power:	8:47 a.m.

  YM Wish:

Vessel arrival:	6:43 a.m.
POLA PIC arrival:	7:25 a.m.
Pre-Power transfer conference:	7:30 a.m.
Successful Transfer to Shore Power:	9:08 a.m.

  Maersk Yosemite:

Vessel arrival:	6:03 a.m.
POLA PIC arrival:	8:00 a.m.
Pre-Power transfer conference:	8:05 a.m.
Successful Transfer to Shore Power:	9:38 a.m.

  YM Uniformity:

Vessel arrival:	9:59 p.m.
POLA PIC arrival:	11:50 p.m.

Pre-Power transfer conference: 12:40 a.m.
Successful Transfer to Shore Power: 12:49 a.m.
Notes: Vessel arrived at 9:59 p.m. "late connect – email received – calendar not updated."

- Three other vessels (Tender Soul on 11/8/2024, YM Travel on 11/5/2024, and Maxine on 12/9/2024) transferred to shore power within two hours of clearance of minor safety issues. The documentation shows that issues were discovered during the pre-power transfer conference that were quickly remediated prior to the transfer of power.

Tender Soul:
Vessel arrival: 6:17 a.m.
POLA PIC arrival: 6:25 a.m.
Pre-Power transfer conference: 7:10 a.m.
Successful Transfer of Power: 8:49 a.m.
Notes: Ship power infrastructure modified since last successful high voltage ship to shore power transition. Commissioning check list completed to ensure safety prior to start of AMP.

YM Travel:
Vessel arrival: 6:21 a.m.
POLA PIC arrival: 6:20 a.m.
Pre-Power transfer conference: 6:40 a.m.
Successful Transfer of Power: 9:08 a.m.
Notes: breaker tripped three times during connection. Fuses replaced.

MSC Maxine:
Vessel arrival: 4:10 p.m.
POLA PIC arrival: 3:50 p.m.
Pre-Power transfer conference: 4:05 p.m.
Successful transfer of Power: 6:10 p.m.[2]
Notes: waiting on crane crew to bring keys.

- One vessel (Hyundai Jupiter on 9/17/2024) had its connection delayed because the mechanics were not permitted on the vessel until US Customs cleared the vessel.

Hyundai Jupiter:
POLA PIC arrival: 4:20 a.m.
Pre-Power transfer conference: 4:30 a.m.

[2] WBCT Spreadsheet says 6:11, which is one minute later than the Port's records.

U.S Customs/Delay: 6:00 a.m.
Successful Transfer to Shore Power: 6:35 a.m.

See documentation attached as Exhibit A.

Petitioners also requested the "Pilot on Board"[3] times to determine whether emission control stopped more than one hour after the arrival of the Port Pilot as required by the At-Berth Regulations. Again, as you know, CARB does not require vessels or terminals to record or report the "Pilot on Board" time for each vessel visit; as a result, a "Pilot on Board" time for each vessel visit is not included the reports received by the Port. Rather, WBCT reports to CARB and the Port the stop time for emission control and the departure time for each vessel visit. The Port provided this information, in the form of the WBCT Spreadsheet, as part of the Status Report.

The WBCT Spreadsheet demonstrates that, of the vessels that did not claim an exception, 28 stopped emissions control more than one hour before the departure time listed in the WBCT Spreadsheet. For these 28 vessels, the Port has enclosed documents showing the time of the Port Pilot's arrival for each vessel. This information demonstrates that vessels stopped shore power no more than one hour of the Port Pilot arrival time.

See list of vessels and Port Pilot arrival times attached as Exhibit B.

As noted above, responding to these questions from Petitioners required the Port to research and provide documentation beyond what is included in the CARB reporting. Nonetheless, the Port, in good faith, will provide additional information in future mitigation status reports for any vessel visit listed in the WBCT Spreadsheet that either: (a) exceeds two hours between the listed arrival time and start time for emission control; or (b) exceeds one hour between the listed stop time for emissions control and departure time.

B. Confusing Data

As discussed in our telephonic meet and confer, the Port confirmed that the February and March emission control dates for vessel visits MSC Sara Elena, MSC Meline, and MSC Jeongmin were typographical error (i.e., left over data in the field from an earlier report).

Similarly, the vessel arrival date of November 12, 2024 for YM Uniformity should have been November 2, 2024. See documentation attached as Exhibit C.

[3] This is defined as when "the vessel's pilot has boarded the vessel to assume navigational .control to prepare for vessel departure." (Cal. Code Regs. tit. 17, § 93130.2(b)(58).)

C. Safety and Emergency Exception

The Status Report lists four safety and emergency exceptions for vessel visits. As discussed in the telephonic meet and confer, the Port is not aware of whether CARB has audited these exceptions. Counsel representing CARB on the telephonic meet and confer was also not aware. For future mitigation status reports, the Port will affirmatively state whether or not the Port has received any audit information from CARB on any exceptions listed.

Regarding Petitioners' request for supporting data on the use of the exception, this information was included with the Status Report as follows:

- Two of the four safety and emergency exceptions were due to power outages. For Vessel 109 (YM Uniformity), the vessel was connected to shore power on 7/12/2024. It had to repower on 7/15/2024 and AMP restarted. (1/30/2025 Ocshner Decl., Ex. B, pp. 75-77.) Vessel 161 (Acastos) connected to shore power on 9/22/24 and had to repower twice during its stay. (1/30/2025 Ocshner Decl., Ex. B, pp. 82-85.)

- For Vessel 188 (MSC Lily), the vessel claimed an exception and stated "weather" as the reason. However, this claimed exception related to conditions during its departure, not its time at-berth. This vessel was connected to AMP for the entire time it was at-berth and did not disconnect until the pilot was on-board to prepare for departure. After it was disconnected, a dense fog prevented the vessel from departing at the scheduled time. The vessel did not reconnect to shore power because the pilot was on board and the vessel was waiting for the conditions to improve such that it could leave safely. This is consistent with Section 93130.7(e)((3)(b) of the At Berth Regulation, which provides a vessel can cease controlling emissions one hour before "Pilot on Board."

- For Vessel 228 (YM Upward), the exemption was claimed due to damaged ship cables. (1/30/2025 Ocshner Dec., Ex. B, p. 118.) The exemption category is selected by the vessel operator. However, the paperwork supports the fact that damaged cables could pose a safety issue for the persons or property.

D. Commissioning

Petitioners take issue with three of the five ships that commissioned during the reporting time period, claiming that commissioning did not appear necessary for these vessels. "Commissioning" is defined by the At-Berth Regulations as "the process undertaken by the vessel operator and terminal operator to ensure that the shorepower equipment on the vessel is compatible with the shore power equipment on the terminal and that there are no safety issues for both the equipment and the personnel handling the connection." (Cal. Code Regs., tit. 17, § 93130.2(b)(84).) The entire purpose of the commissioning or recommissioning process is connect to AMP and to avoid safety issues once the vessel is connected to shore

power. Commissioning is required for a vessel's first visit; in addition, the terminal may require a vessel be commissioned or recommissioned. (*Id.*, § 93130.8(c).) In all cases, commissioning is done for safety reasons and to facilitate the connection to AMP—commissioning is never used to merely avoid or delay connecting to shore power.

The Mitigation Status Report included information addressing Petitioners' contentions as follows:

- For Vessel 164 (Seaspan Thames), there were equipment issues including missing bollard and extension cords and problems with one of the AMP containers that required the vessel to be commissioned before it was transferred to shore power. (1/30/2025 Ocshner Dec., Ex. B, pp. 86-87.)

- For Vessel 198 (ONE Blue Jay), Petitioners argue that because this was not a first visit for the vessel, commissioning was not necessary. Again, per the At-Berth Regulations, the terminal can require commissioning or recommissioning of a vessel before the vessel is transferred to shore power. (1/30/2025 Ocshner Dec., Ex. B, pp. 105-107.)

- For Vessel 220 (MSC Argrigento) the Port has provided documentation that outlines the problems that required recommissioning. (1/30/2025 Ocshner Dec., Ex. B, p. 110.)

E. Equipment Failure

Petitioners take issue with three of the vessels that claimed an exemption for equipment failure.

As discussed in the telephonic meet and confer, Vessel 227 (Andraklis) was erroneously included in the Status Report. WBCT confirmed that Vessel 227 did not call at the China Shipping terminal. It went to the Yang Ming terminal and should be removed from this report.

The other two vessels had equipment issues as follows:

- For Vessel 125 (Sofia Paz), the mechanics connected AMP cables and encountered issues with the grounding switch. A third party was called out to fix the switch. The vessel was reconnected to AMP within three hours. See supporting documents attached as Exhibit C.

- Vessel 240 (MSC Caterina) had wet cables that made it unsafe to connect to shore power. The cables were allowed to dry out before shore power was connected. (1/30/2025 Ocshner Dec., Ex. B, pp. 121-123.)

F. Research

As discussed in the telephonic meet and confer, the three vessels that were designated as "research" (i.e., connecting to the emissions-control barge that was undergoing CARB certification) were not China Shipping vessels and were not AMP capable. This was confirmed by WBCT. Non-China Shipping, non-AMP capable ships are not subject to MM AQ-9. Thus, no exception was necessary to be listed for those vessel visits.

Petitioners, in a follow-up letter dated March 14, 2025, asked for evidence that the ships were not China Shipping vessels. Ownership of such vessels would be included in the vessels' reports to CARB, which are more accessible to Petitioners (including CARB) than the Port, China Shipping or WBCT. Because the vessels are not China Shipping vessels, neither WBCT or China Shipping have access to the ownership information; by the same measure, WBCT does not include the ownership information for those vessels (because it does not have such information) in its reports to CARB and the Port.

Nonetheless, the Port, in good faith, will provide confirmation from WBCT in future Mitigation Status Reports whether ships that have not connected to AMP are China Shipping vessels.

G. No Listed Exception

As discussed in the telephonic meet and confer, the seven vessels that did not use shore power and no exception was provided were not China Shipping vessels and were not AMP capable. Non-China Shipping, non-AMP capable ships are not subject to MM AQ-9. Thus, no exception was necessary to be listed for those vessel visits.

Petitioners also asked for evidence that the ships were not China Shipping vessels. As noted above, Petitioners have access to the vessels' ownership information via reports to Petitioner CARB that are not available to the Port, WBCT or China Shipping other than through a Public Records Act request. Nonetheless, the Port, in good faith, will provide confirmation from WBCT in future Mitigation Status Reports whether ships that have not connected to AMP are China Shipping vessels.

II. MM AQ-15: YARD TRACTORS

In the telephonic meet and confer, clarification was provided on all of the issues raised by petitioners.

III. MM AQ-17: ELECTRIC YARD TRACTOR PILOT; OTHER CHE AND VEHICLES AT TERMINAL.

In the telephonic meet and confer, clarification was provided on all of the issues raised by Petitioners.

* * * * *

The Port appreciates this opportunity to work with Petitioners to resolve any issues in advance of the April 4, 2025, status conference.

Sincerely yours,



Shaye Diveley

cc: Dennis M.P. Ehling (Ehling@BlankRome.com)
Erica Graves (erica.graves@blankrome.com)
Joseph A. Walsh II (joe.walsh@cwn-law.com)

6031102.2

Exhibit C

Nov 11, 2024

e1 Marine and STAX Engineering Partner on Innovative Barge-Based Emission Capture and Control Project

California Air Resources Board & South Coast Air Quality Management District - funded project to showcase the feasibility of capture and control technology powered by clean-burning methanol-to-hydrogen systems to reduce emissions in ports.



e1Marine's advanced methanol-to-hydrogen power system (M2PWR)

BEND, Oregon, Monday 11th November 2024 — Today, e1 Marine, pioneers of methanol to hydrogen power for the maritime industry and mobile emissions capture and control leaders, STAX Engineering have announced a collaborative partnership to advance emissions capture and control technology for ocean-going vessels.

This collaboration aims to accelerate the maritime industry's decarbonization by combining e1 Marine's advanced methanol-to-hydrogen power systems (M2PWR) with STAX's cutting-edge emissions capture and control (C&C) technology. STAX technology reduces the pollution from the ocean-going vessels, and e1Marine's M2PWR will further enhance the cleanliness of STAX's power sources.

The project was funded by the South Coast AQMD and California Air Resources Board (CARB) as part of California Climate Investments, a statewide program that puts billions of Cap-and-Trade dollars to work reducing greenhouse gas emissions, strengthening the economy and improving public health and the environment — particularly in disadvantaged communities. South Coast AQMD is the grant administrator and partners with STAX and e1 Marine on this technology demonstration project, which is expected to deploy in early 2025.

As part of this initiative, e1 Marine will install its M2PWR onto STAX's barges. The system will supplement their onboard power needs to demonstrate that emissions capture and control for maritime vessels can be safe, effective, and sustainable. STAX already offers CARB-compliant C&C technology for some vessel classes.

"Partnering with STAX Engineering allows e1 Marine to showcase how our M2PWR system can provide cleaner power for barge operations while in port," said David Lee, Executive Director of e1Marine. "By combining our technical expertise, we will ensure the system meets all regulatory requirements and complies with evolving emissions mandates. We hope this initiative demonstrates to the market that proven solutions are available to reduce port emissions and improve air quality in coastal communities."

e1 Marine provides an immediately viable, low- to zero-pollution alternative to fossil fuels, supporting the maritime industry's decarbonization efforts. The patented STAX's C&C technology easily attaches to auxiliary and boiler exhausts across all vessel

cleaner, more sustainable future," said Mike Walker, CEO of STAX. "We're excited to integrate e1 Marine's power generator running on hydrogen fuel cells into our operations, ensuring STAX operates in the most environmentally friendly way possible."

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Do Not Sell My Personal Information

Exhibit D



Our Projects

We reduce emissions harmful to the environment and communities in areas of critical infrastructure like container ports and freight rail, while requiring no retrofit.

As global awareness of environmental impact grows, the maritime industry faces increasi to reduce harmful emissions. 4G Management, Inc. (4G) specializes in advanced emissio technologies designed to mitigate pollutants emitted by ships while in port.

Our solutions not only meet but exceed international standards, ensuring cleaner air and environment for our communities surrounding Ports of Long Beach, Los Angeles and Bay

Objectives

Our primary goal is to safely implement our emission control technology at these Californ safely mitigate harmful emissions.

1. Reduce harmful emissions such as sulfur oxides (SOx) nitrogen oxides (NOx) particul (PM) and reactive organic gases (ROG's) and other GHG forming pollutants.
2. Comply with local, state and federal regulations, exceeding local emission standards.
3. Improve air quality and public health in the vicinity of San Pedro Bay Complex, Bay Ar other California ports.



Oakland Project

Renewable Natural Gas Powered MECCS Barge

4G Management partnered with the Port of Oakland to produce the first emissions capture and control barge that is exclusively powered by renewable natural gas with a negative CARB certified CI score. Our RNG-powered MECCS systems, like previous generations, require no retrofits and changes from the ship or shore-side infrastructure. This design also allows us to easily and linearly scale to the higher SCFM requirements for tankers, Ro-Ros, and cruise ships.

4G Management is working quickly to make additional barges available in all California ports.





MECCS

Maritime Emissions Capture & Control System

- CARB Approved
- Cost Effective
- Proven technology
- No shore side infrastructure
- No shipboard modifications
- Offers flexibility to shipping industry
- Services Auxiliary Engines and Boilers
- Services ships at anchor
- Operates with a negative CARB Carbon Index score

Auxiliary engines and boilers of ocean-going vessels (OGVs) are used at ports for power, lighting, cargo refrigeration, ventilation, communication, and other on-board equipment while berthed. They are a significant source of Particulate Matter (PM), NOx and ROG emissions at ports. The Maritime Emissions Capture & Control System (MECCS) treats the auxiliary exhaust gases to remove NOX, ROG, and PM. MECCS consists of an Exhaust Capture System (ECS) and an Emission Treatment System (ETS). The current MECCS systems are designed to operate on renewable natural gas, though a pilot project for a green hydrogen powered system is already in the early design phase in the San Pedro Bay Complex.

The Emissions Treatment System (ETS) consists of a particulate filter system using active Diesel Particulate Filters (DPF's) to reduce PM, a Selective Catalytic Reduction (SCR) system to reduce NOX, and Diesel Oxidation Catalysts (DOC) for ROG gases. Testing conducted on large ocean-going vessels resulted in a reduction of over 95% of the PM, NOX, ROGs in the exhaust gasses of the vessels.

Our Emissions Capture System (ECS) is an unique capture system proven to attach safely to an exhaust stack of a vessel. A soft connector is utilized for liquid bulk or tanker vessels as most are fitted with a screen or spark arrestor. This is proven effective in capturing emissions at the source.

MECCS is a barge-based system. The newest design incorporates a spud barge for additional operational flexibility and safety especially on liquid bulk vessels. The exhaust is captured using stainless steel ducting actuated by a Putzmeister placement boom mounted on top of a Putzmeister tower. The end of the connection uses high temperature flexible ducting to connect to the generator and/or auxiliary boiler. The exhaust on the vessel moves through the treatment system and re-enters the atmosphere cleaner than the ambient air.

Adaptability: Suitable for a wide range of ship sizes and engine types.

Reliability: Robust and safe design for continuous operation without any significant downtime.

Safety: 4G Management, Inc. team has and will continue to conduct a comprehensive safety assessment for each vessel category and system design.

To ensure we have considered and addressed all safety concerns, we have instilled a mitigation plan to address even the smallest details and have engaged with several of the classification society member groups to implement a detailed risk assessment with respect to tanker and liquid bulk operations. We have done similar assessments with Container and Ro-Ro vessels. Each item discovered and assessed in risk assessment must be fully described and a mitigation plan in effect for the smallest details.

Customization: 4G understands that the liquid bulk or tanker application is the most comprehensive and challenging of all vessel classes. This application presents a unique set of challenges with respect to safety, emission capture efficiency (Boilers) application while providing uninterrupted services.

Installation: Implement our technology at strategic locations within the clients' marine facilities to maximize coverage, ensure safety and compliance without interruption of client's operation.

Testing and Calibration: 4G Management team, in conjunction with clients' operations and safety team, will meet extensively to conduct testing in coordination with customers vessels or charter vessels. 4G's testing partner is UC Riverside, a CE-CERT program known for their expert analysis of emission programs. Rigorous testing is conducted per our CARB approved test plan to ensure optimal performance and compliance.



RECCS

Rails Emissions Capture & Control System

The RECCS, Rail Emissions Capture & Control System, is a semi-mobile emissions control system that has been designed to sit above a railyard. It reduces 95+% of NOx, PM, ROGS, and optionally SOx. The system can treat multiple parallel locomotives and reduces 70-80% of engine noise when attached. Estimates put a single RECCS system as capable of an average yearly reduction of 135 tons of NOx, 8.9 tons of SOx, 3.2 tons of PM per system. This system is designed for both freight and passenger trains at rest, with attachment automated to attach and begin control within minutes of train coming to rest. There are no required modifications of locomotives required.

Carbon Hawk

UAV Ambient Monitoring Program

4G has partnered with UC Riverside CE-CERT to implement the first of its kind 24-month aerial sampling and surveillance program using UAV's and sophisticated air monitoring technology.

4G Management Inc is using aerial UAVs to monitor emissions, odor control, emergency response, for municipalities, landfills, ports, truck, rail operations, pipeline and critical infrastructure inspection. Our vision is to introduce a cost-effective measuring tool in order for our customers to meet and surpass the stringent emission regulations.

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August 11, 2025

Sent Via E-Mail:

Lisa Wunder,
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Re: Draft Revised Supplemental Environmental Impact Report (RSEIR) for the Berth 97-109 China Shipping Container Terminal Revised Project (Revised Project) (SCH No.: 2003061153)

Dear Ms. Wunder,

The South Coast Air Quality Management District ("South Coast AQMD") appreciates the opportunity to comment on the Draft RSEIR for the China Shipping Terminal. As the Port is aware, the RSEIR is necessary to comply with the Peremptory Writ of Mandate issued by the San Diego Superior Court to redress "profound violation[s] of CEQA" and ensure the China Shipping Terminal project complies with CEQA.[1] The Peremptory Writ commanded the Port to, at a minimum, revise the emissions impact analysis and re-evaluate certain air quality mitigation measures. The stated purpose of the Draft RSEIR is to comply with the Peremptory Writ and redress the CEQA violations. SCAQMD-1

Unfortunately, the Draft RSEIR contains significant flaws and technical deficiencies in the Air Quality and Health Risk Analyses; is inconsistent with existing planning documents including the South Coast AQMD's Air Quality Management Plan, the Community Emissions Reduction Plan for the Wilmington, Carson, and West Long Beach AB 617 Community, and the Port's own Clean Air Action Plan; fails to evaluate and implement all feasible mitigation for the significant impacts of the project; and proposes to have certification of the RSEIR without including any binding instrument to implement and enforce even the minimal new mitigation evaluated and considered feasible. SCAQMD-2

[1] The California Environmental Quality Act (CEQA) is comprised of Public Resources Code Section 21000 et seq. and CEQA Guidelines which are codified at Title 14 California Code of Regulations, Section 15000 et seq.

The South Coast AQMD includes detailed comments on each of these issues, and encourages the Port to revise and recirculate the Draft RSEIR to ensure that the Revised Project fully complies with CEQA. Recirculation is necessary here to ensure that all legal deficiencies are corrected and will conserve time and resources to prevent the need for further motion practice. South Coast AQMD staff stand ready to work with the Port to discuss any air quality questions that arise.

SCAQMD-2

Please feel free to contact me to discuss these comments at kroberts@aqmd.gov or you may contact South Coast AQMD's CEQA staff, Program Supervisor Sam Wang, at swang1@aqmd.gov should you wish to discuss.

Sincerely,



Kathryn Roberts
Principal Deputy District Counsel
Office of the General Counsel

CC:
Michael Krause, South Coast AQMD
Barbara Radlein, South Coast AQMD
Sam Wang, South Coast AQMD
Danica Nguyen, South Coast AQMD

South Coast AQMD Staff Comments

Summary of Revised Project Information in the Draft RSEIR

Based on the Draft RSEIR, the Lead Agency (the "Port"): 1) evaluates potential impacts of the continued operation of the Revised Project under new and/or modified mitigation measures; 2) discloses the operational impacts of the Berth 97-109 China Shipping Container Terminal (Terminal) during past years between 2008 to 2023; 3) discloses the operational impacts during future years under the mitigation and lease measures imposed in the 2008 Draft Environmental Impact Report/Environemtnal Impact Statement (EIR/EIS); and 4) examines any additional available, feasible, and enforceable mitigation measures.[2,3] The Draft RSEIR includes an air quality analysis which assumes full implementation of mitigation measures beginning in 2026 and continuing through the end of the lease term in 2045.[4] The Revised Project is comprised of a net increase in the Revised Projected cargo throughput of 119,000 twenty-foot equivalent units (TEUs) from the 1,551,000 TEUs in the 2008 Draft EIR/EIS to 1,670,000 TEUs estimated for years 2036-2045 in the Draft RSEIR.[5] The Revised Project is bounded by the Berth 121-131 container terminal to the north, West Basin, Main Channel, and Pier A to the east, the World Cruise Center and State Route 47 to the south, and Pacific Avenue, Front Street, and the community of San Pedro to the west.[6] The Revised Project is spans approximately 142 acres for oceangoing vessels and a container yard, operated by West Basin Container Terminal LLC (WBCT) under a lease agreement (Permit No. 999).[7] Based on the review of aerial photographs, the nearest sensitive receptors (e.g., residential uses) are located within 1,000 feet of the Revised Project site.

SCAQMD-3

Part I - Technical Deficiencies in Air Quality and Health Risk Analyses:

Inconsistent Methodology in Air Quality Impact Analysis and Health Risk Assessment

Section 3.1.4.1 of the Draft RSEIR describes the methodology for evaluating operational air quality impacts from criteria air pollutants. The approach involves subtracting estimated operational emissions from the 2008 Actual Baseline emissions inventory and then comparing the change to the South Coast AQMD air quality significance thresholds for operational emissions. To assess the significance of the potential air quality impacts, the 2008 (the baseline year) is compared to the period of non-compliance from 2008-2023 and the future years from 2026, 2036, and 2045.[8]

SCAQMD-4

In the same section, the Draft RSEIR outlines the health risk assessment (HRA) methodology relied upon for assessing the health risk impacts. The HRA evaluates cancer risk by comparing modeled risk levels against two baseline scenarios and determining significance relative to the South Coast AQMD's cancer risk threshold of 10 in one million. The two baseline scenarios[9] are defined as follows:

[2] Draft RSEIR. p. 2-1.
[3] *Ibid*. p. 2-2.
[4] *Ibid*.
[5] *Ibid*. Table 2-2. p. 2-6.
[6] *Ibid*. p. 2-3.
[7] *Ibid*.
[8] *Ibid*. p. 3.1-27.
[9] *Ibid*. p. 3.1-28.

- Static Baseline (2008 Actual Baseline): Assumes constant activity levels and emission factors reflective of 2008 operations by incorporating mitigation measures identified in the 2008 Draft EIR/EIS, and holding the activity levels constant with 25-, 30-, and 70-year exposures.

- Floating Future Baseline: Applies 2008 activity levels but updates the emission factors to reflect future projected conditions by incorporating the effects of existing air quality regulations across the same exposure periods starting from 2008.

In its comment letter relative to the Draft SEIR dated September 29, 2017,[10] South Coast AQMD raised prior concerns that the methodologies for evaluating criteria pollutant emissions and health risk impacts were not consistently applied in the air quality analysis. These concerns appear to have not been addressed because the criteria pollutant analysis in the Draft RSEIR once again applies an inconsistent methodology by relying on a fixed historical baseline while the HRA relies on both a static and a future-adjusted baseline.

SCAQMD-4

This inconsistency allows the Port to selectively apply baselines in a way that could obscure the true magnitude of operational impacts. CEQA requires that environmental analyses be based on a stable, accurate, and consistent description of the existing environmental setting (CEQA Guidelines, §15125(a)) and prohibits selective baseline choices that bias the results (*Communities for a Better Environment v. South Coast AQMD* (2010) 48 Cal.4th 310, 322–323). Applying inconsistent baseline methodologies for different components of the analysis undermines the validity of the environmental review and impedes a meaningful comparison of impacts.

To ensure analytical consistency, transparency, and regulatory defensibility in CEQA, the Port should adopt a consistent methodological framework that incorporates a future-adjusted baseline to account for the effect of future effective regulations on both criteria pollutant emissions and health risk and apply it uniformly to both the air quality analysis and the HRA in the Final RSEIR.

Additional Clarification Regarding the Projected Vessel Calls

Table 2-2 of Chapter 2 in the Draft RSEIR presents projected container throughput, measured in TEUs, for the years 2026 through 2045. According to the current Draft RSEIR projections, the throughput reflects an increase from 1,551,000 TEUs as estimated in the 2008 Draft EIR/EIS to 1,670,000 TEUs in 2045. However, the Draft RSEIR projects a decrease in the number of annual vessel calls from 234 in the 2008 Draft EIR/EIS to 153 in 2045.[11]

SCAQMD-5

By projecting an increase in cargo throughput alongside a decrease in vessel calls the Draft RSEIR suggests, but does not explicitly state, that a potential shift toward the use of larger vessels with higher cargo capacity may occur. However, the Draft RSEIR does not provide an explanation as to whether vessel size is the primary driver of the reduced call frequency. Moreover, the Draft RSEIR does not quantify the increase in vessel capacity in terms of emissions relative to historical or previously projected values.

[10] South Coast AQMD September 29, 2017 comment letter available at https://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/dseir-chinashipping-092917.pdf
[11] *Ibid*. p. 2-6.

To enhance transparency and ensure an accurate estimation of operational emissions, particularly from ocean-going vessels (OGVs), the Port should include the following additional information in the Final RSEIR: 1) a quantitative comparison of vessel sizes (e.g., average TEUs per vessel); 2) a clarification of vessel assumptions regarding fleet mix, fuel type(s) to be used, International Maritime Organization (IMO) nitrogen oxides (NOx) tier levels, and class; and 3) a discussion of how these changes influence overall emissions and air quality impacts. SCAQMD-5

Truck Idling Duration and Emissions Modeling

According to the air quality emissions file provided by the Port for on-site truck operations, CS_Onsite_Truck_emissions_idling_Diesel_NL,[12] the average truck idling durations per trip were calculated for three specific locations: in-gate, out-gate, and within the terminal (excluding gate areas) for the years 2008, 2012, 2014, 2018–2023, 2026, 2036, and 2045. Staff notes that the shortest idling durations were assumed to occur at the out-gate location with six minutes in 2008, two minutes during the non-compliance period from 2012 to 2023, and six minutes for the Revised Project years 2026, 2036, and 2045. These assumptions appear to be unrealistic and may not accurately represent real-world operational conditions at a facility of the Revised Project's scale and complexity, especially in consideration of the strict vehicle speed restrictions (e.g., 10 miles per hour) when transiting within the property.

As shown in Table 2-2 of the Draft RSEIR, the Revised Project's annual truck activity is anticipated to increase from 1,508,000 truck trips per year (truck trips/year) in the 2008 Draft EIR/EIS to 1,784,214 truck trips/year for the 2026–2045 analysis period.[13] With an increased throughput, longer idling durations are reasonably expected due to traffic congestion associated with on-site queuing, security screening, staging, loading, and unloading processes, particularly during peak operating hours or in areas with limited circulation capacity. Underestimating idling activities may lead to underestimated diesel particulate matter (DPM) emissions, and consequently, underrepresented localized health risk impacts in the air quality assessment (HRA). SCAQMD-6

Although the California Air Resources Board (CARB) limits diesel truck idling to five minutes as set forth in the Airborne Toxic Control Measure (ATCM), this regulation provides exemptions for trucks equipped with engines that meet the optional low- NOx idle emission standard, typically applicable to model year 2008 and newer trucks. These vehicles, often referred to as "clean idle" certified, are permitted to idle longer than five minutes when situated more than 100 feet from sensitive land uses such as homes and schools.[14] Furthermore, CARB's EMFAC2021 Volume III Technical Document (Table 4.4.2-5) indicates that heavy-duty trucks may idle for up to five hours at a single location under certain conditions.[15]

Accurate characterization of idling activity is essential to fully assess a Revised Project's potential health risk impacts, particularly for nearby sensitive receptors. Therefore, to ensure the HRA provides a conservative and health-protective estimate of potential exposure, the Port should

[12] Provided spreadsheet labeled as CS_Onsite_Truck_emissions_idling_Diesel_NL.
[13] *Ibid*. Table 2-2. p. 2-6.
[14] CARB. Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling available at https://ww2.arb.ca.gov/our-work/programs/atcm-to-limit-vehicle-idling
[15] CARB. EMFAC2021 Volume III Technical Document. Page 161. Table 4.4.2-5 available at EMFAC2021 Volume III Technical Document

either: 1) revise the operational emissions modeling in the Final RSEIR to assume a minimum of 30 minutes of idling per truck per day at each location, unless site-specific data or operational constraints justify a shorter duration; or 2) provide empirical evidence, such as facility-specific queuing and processing time studies, vehicle circulation modeling, or comparable industry data, to substantiate the idling duration assumption as representative of expected operations of the Revised Project. SCAQMD-6

Issues in Air Dispersion Modeling Parameters

1. Locomotive Release Height

In Table B2-1: AERMOD Source Parameters[16] of Appendix B2, the dispersion modeling distinguishes between locomotive emissions occurring during daytime and nighttime operations. However, the release heights assigned to nighttime locomotive sources are notably higher than those assigned to daytime operations. For example, 5.6 meters (m) for Offsite-Day versus 14.6 m for Offsite-Night, and 6.64 m for Onsite-Day versus 13.56 m for Onsite-Night. The Draft RSEIR references the CARB's 2004 Roseville Rail Yard Study[17] to support this approach, noting its use of different release heights to reflect diurnal variability in locomotive operations. However, that study utilized the Industrial Source Complex Short Term Version 3 (ISCST3) dispersion model, which lacked the capability to account for time-of-day variations in meteorological conditions. As of December 9, 2006, U.S. EPA promulgated AERMOD as a replacement for ISCST3 as the recommended dispersion model. Unlike ISCST3, AERMOD inherently incorporates time-of-day meteorology when processing hourly data. Artificially inflating nighttime release heights in AERMOD could overestimate plume rise and dispersion, and in turn, underestimate the near-field concentrations and health risks. SCAQMD-7

To ensure that the HRA is accurate, the Port should revise the source parameter inputs to apply consistent and representative release heights, rerun the dispersion modeling as needed, and evaluate whether additional mitigation measures are warranted to address any previously underestimated health risks.

2. Release Height

According to footnote "a" in Table B2-1, the analysis in Draft RSEIR reflects adjusted release heights for volume, area, and line sources to values higher than the actual exhaust release heights. However, Appendix B2 does not provide a clear justification or methodology to support these adjustments. To ensure transparency and technical accuracy in the air dispersion modeling and associated HRA, the Port should provide supporting documentation and evidence demonstrating that the applied release heights appropriately represent effective plume characteristics for these source types and include them in the Final RSEIR. SCAQMD-8

3. Initial Vertical Dimension

For the locomotive sources, a divisor of 2.15 was applied to the release height to calculate the initial vertical dimension, rather than the standard divisor of 4.3 typically used for elevated sources not located on or adjacent to buildings. As noted in footnote "b" of Table B2-1, other emission sources appear to have been classified as elevated sources, while locomotive emissions were treated as surface-based sources. However, according to Table 3-3 of the AERMOD User's SCAQMD-9

[16] Appendix B2. Table B2-1. p. B2-5.
[17] CARB's 2004 Roseville Rail Yard Study available at https://ww2.arb.ca.gov/sites/default/files/2021-02/rrstudy1014043.pdf

Guide,[18] a surface-based source is generally characterized by an effective release height of approximately zero meters. Given that locomotive exhaust is typically emitted several meters above ground level and is not associated with building wake effects, it would be more appropriate to classify these emissions as originating from an elevated source not on or adjacent to a building. Under this classification, the initial vertical dimension should be calculated by dividing the release height by 4.3, rather than 2.15.

By using a larger initial vertical dimension as relied upon in the Draft RSEIR, the modeling approach likely overestimates vertical dispersion and underestimates near-field concentrations of DPM, potentially resulting in an underestimation of localized health risks. Therefore, the Port should revise the HRA to reflect a more appropriate source characterization for locomotive emissions and evaluate the need for additional mitigation measures to address the potentially underestimated health risk impacts in the Final RSEIR.

SCAQMD-9

Outdated AERMET and Meteorological Data Used in AERMOD Modeling

Appendix B-2 of the Draft RSEIR indicates that AERMOD version 24142 and 2012 to 2016 Wilmington Community station meteorological data processed by AERMET version 16216 were used for the HRA modeling. However, South Coast AQMD released a newer, approved version of AERMOD-ready MET data files (Version 11) in October 2023.[19] The updated dataset was developed using the U.S. EPA's AERMET processor Version 22112, along with pre-processors AERMINUTE Version 15272 and AERSURFACE Version 20060.[20] The U.S. EPA's current preferred and recommended meteorological data preprocessor for the AERMOD , as of the latest release, is AERMET version 24142, released in November 2024.[21]

Use of outdated meteorological data and model versions is inconsistent with the U.S. EPA's Guideline on Air Quality Models (40 CFR Part 51, Appendix W)[22] and may result in inaccurate or non-conservative health risk estimates. To ensure accuracy and consistency with federal modeling guidelines, the Port should re-run the dispersion modeling using the more recent meteorological data processed by the most recent U.S. EPA-recommended versions of AERMET (version 24142), revise the health risk results accordingly, and include the updated results in the Final RSEIR.

SCAQMD-10

Potential Underestimation of Cancer Risk Calculations

In Appendix B3, the Draft RSEIR evaluates residential cancer risk based on a 30-year exposure duration. The methodology assumes the exposed individual is in the third trimester at the start of the exposure period, and is divided into three age-specific sub-periods: third trimester to <2 years, 2 to <16 years, and 16 to <30 years.[23] However, the technical file provided by the Port, labeled as

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[18] User's Guide for the AMS/EPA Regulatory Model (AERMOD) available at https://gaftp.epa.gov/aqmg/SCRAM/models/preferred/aermod/aermod_userguide.pdf
[19] South Coast AQMD AERMOD-Ready MET Data Files available at https://www.aqmd.gov/assets/aermet/AERMET_files_And_HRA_Tool.html
[20] South Coast AQMD Data for AERMOD available at https://www.aqmd.gov/home/air-quality/meteorological-data/data-for-aermod
[21] U.S. EPA Air Quality Dispersion Modeling - Preferred and Recommended Models available at https://www.epa.gov/scram/meteorological-processors-and-accessory-programs
[22] Code of Federal Regulations. Title 40. Part 51. Appendix W available at https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-51/appendix-Appendix%20W%20to%20Part%2051
[23] Appendix B3. p. B3-24.

Results_HRA, indicates that the third trimester exposure window was excluded from the cancer risk assessment, despite continued emissions of toxic air contaminants (TAC), including DPM, during this time. This omission of a sensitive receptor age group may have resulted in an underestimation of the lifetime cancer risk associated with the Revised Project. Early-life exposures, especially during the third trimester, are associated with heightened susceptibility to carcinogenic effects of air toxics. Considering that the maximum cancer risk was reported as 46.9 in one million,[24] the exclusion of third-trimester exposures during the operational phase represents a material gap in the HRA.

To ensure a comprehensive and health-protective evaluation, the Port should revise the cancer risk assessment to incorporate TAC and DPM exposure beginning in the third trimester through 30 years of age. The updated analysis should be included in the Final RSEIR to reflect a complete characterization of residential cancer risk under the Revised Project's operational emissions.

SCAQMD-11

Additional Explanation on Cancer Risk Results

Appendix B3 presents the revised incremental cancer risk estimates associated with the Revised Project and concludes that the cancer risk for residential receptors is less than significant. As shown in Table B3-7,[25] the maximum individual cancer risk (MICR) for the residential receptor is reported as 46.9 in one million. When subtracting from the Static Baseline and the Floating Future Baseline scenarios, the incremental cancer risks are calculated to be less than zero and 0.2 in one million, respectively.

In contrast, the 2018 Recirculated Draft Supplemental EIR[26] reported a substantially higher MICR of 140.7 in one million for the same type of receptor. The corresponding incremental cancer risks, subtracting the Static Baseline and Floating Future Baseline scenarios, were less than zero and 25.4 in one million, respectively.

SCAQMD-12

Although both documents claim to utilize the same HRA methodology, there is no clear explanation in the Draft RSEIR for the substantial reduction in cancer risk from 140.7 to 46.9 in one million at the residential receptor. Additionally, it is unclear why the incremental cancer risk, previously identified as significant for residential receptors, is less than the significance threshold for the Revised Project, despite the application of mostly the same mitigation measures (MMs), with the exception of MM-AQ-9 and MM-AQ-10.

In addition, the 2008 Draft EIR/EIS evaluated the incremental cancer risk at residential receptors and concluded that the impact would be significant, even with the application of MMs AQ-9 and AQ-10.[27] The current Draft RSEIR continues to apply the same air quality MMs, MM-AQ-9 and MM-AQ-10, as well as the other measures identified in the 2008 Draft EIR/EIS. However, the analysis presented in the current Draft RSEIR concludes that the incremental cancer risk at residential receptors associated with the Revised Project would be less than significant despite the lack of additional mitigation measures.

[24] Appendix B3. p. B3-29.
[25] Appendix B3. p. B3-29.
[26] 2018 Recirculated Draft SEIR available at https://kentico.portoflosangeles.org/getmedia/c40f0a25-5248-45f0-a0a6-8c2954f88359/Appendix_B3_HRA_CS_Draft RSEIR
[27] 2008 Draft EIR/EIS. Appendix E3. p. 42 available at https://kentico.portoflosangeles.org/getmedia/f2dbaed9-601d-4d29-9202-341c52b522de/AppendixE3_Health_Risk_Assessment

To ensure transparency and consistency in the evaluation of health risks, the Port should provide a detailed justification in the Final RSEIR, including clarification of any changes in modeling assumptions, input parameters (e.g., emission rates, receptor locations, activity profiles), or project characteristics that may have led to the revised findings. Where appropriate, additional revisions or technical appendices should be included to support the determination that cancer risk impacts are now considered less than significant.

SCAQMD-12

Part II - Failure to Demonstrate Consistency with the South Coast AQMD Air Quality Management Plans (AQMPs) and Community Emission Reduction Plan (CERP) in Wilmington, Carson, West Long Beach (WCWLB):

Inconsistency With South Coast Air Quality Management Plans

In its November 30, 2018 comment letter, South Coast AQMD recommended that the project analyzed in the 2018 Recirculated Draft Supplemental EIR should be fully evaluated in the Air Quality section for consistency with the applicable Air Quality Management Plan (AQMP), as the 2016 AQMP did not specifically account for the project as presented at that time.[28] In response, the Port disagreed, asserting that the Port regularly provides cargo throughput forecasts to the Southern California Association of Governments (SCAG) for incorporation into regional growth projections used in AQMP development. The Port contends that the emissions associated with future growth at the Port are therefore reflected in the 2016 AQMP's attainment demonstration.[29]

In Chapter 3 of the Draft RSEIR, the Port's earlier position is reiterated by asserting that the Revised Project is also consistent with the 2022 AQMP,[30] relying primarily on a qualitative assessment.[31] The Draft RSEIR references Port-wide projects, cargo forecasts, and mobile source control measures related to marine ports included in the 2022 AQMP, and on that basis, concludes that the Revised Project is consistent with the 2022 AQMP. However, unusual year-to-year variations, such as the record-high volume of containers that arrived at the San Pedro Bay Ports in 2021, are not reflected in the 2022 AQMP growth forecast or emissions inventory. While generally the inclusion of Port-wide cargo forecasts in regional emissions projections can support the AQMP development process, such forecasts alone do not constitute a project-specific consistency analysis. Listing applicable control measures or referencing regional emission projections without identifying how the Revised Project will implement those measures, or contribute to attainment through enforceable actions, as included in Draft RSEIR, does not demonstrate consistency with the 2022 AQMP. Moreover, the Draft RSEIR does not provide a clear identification or analysis of the specific emission reduction measures the tenant(s) will be responsible for implementing to ensure the Revised Project achieves its fair share of emissions reductions to attain National Ambient Air Quality Standards (NAAQS). Consequently, the consistency discussion in the Draft

SCAQMD-13

[28] South Coast AQMD November 30, 2018 comment letter available at https://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2018/LAC181002-11.pdf.
[29] Lead Agency's response to South Coast AQMD comment letter available at https://kentico.portoflosangeles.org/getmedia/9449271d-0c22-4f6a-8283-5fc02f135ae2/02_CS_Response-to-Comments_FSEIR
[30] South Coast AQMD, 2022 Air Quality Management Plan, 3.1-71, (2022), available at: https://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2022-air-quality-management-plan/final-2022-aqmp/final-2022-aqmp.pdf?sfvrsn=edcebd61_16.
[31] *Ibid*. p. 3.1-41.

RSEIR is largely conclusory and lacks substantial evidence, which is contrary to the CEQA requirements for a complete and reasoned analysis.

A complete consistency analysis should include both qualitative and quantitative components. The quantitative analysis should address the Revised Project's significant and unavoidable air quality impacts, specifically volatile organic compounds (VOC), carbon monoxide (CO), NOx, nitrogen dioxide (NO2), and PM10, as identified in the Section 3.1.6.1 of the Draft RSEIR, where these emissions or concentrations are found to exceed South Coast AQMD's CEQA thresholds for significance.[32] Given the projected emissions have increases between the Final EIR (FEIR) and Revised Project shown in Table 3.1-10, *Summary of Emission Impacts for Revised Project and FEIR Mitigated Scenario* in the Draft RSEIR[33], the analysis should clearly explain how the Revised Project that independently results in new violations of federal air quality standards can be deemed consistent with the applicable AQMPs, which are specifically designed to demonstrate attainment of ambient air quality standards especially for ozone and PM. On the other hand, the qualitative assessment should go beyond listing regional forecasts and control measures and also evaluate whether the project aligns with the 2022 AQMP's health-based goals, policy direction, and long-term emission reduction strategies. A qualitative discussion grounded in the AQMP's overall policy framework, including its trajectory and trend toward attainment, and approach calling adoption of zero-emission (ZE) technology wherever feasible, is necessary to determine whether the project is advancing or impeding progress toward clean air objectives. SCAQMD-13

In addition, the strategies in the 2022 AQMP include all feasible control measures that seek emission reductions from stationary, mobile, and indirect sources, to attain the NAAQS and California Ambient Air Quality Standards (CAAQS), as required by the Federal and State Clean Air Act. Since NOx is a precursor to form ozone, South Coast AQMD committed in the 2022 AQMP to reduce approximately 60 tons per day of NOx by 2037[34] as a means to achieve attainment with the ozone NAAQS. The 2022 AQMP includes 30 control measures for stationary sources and 18 for mobile and facility-based mobile sources, outlining strategies to reduce NOx emissions from all feasible sources within the South Coast Air Basin. These control measures will be translated into rules and regulations through a public process. All emission sources, including those at seaports, must achieve their fair share of reductions to attain the NAAQS. SCAQMD-14

At the local level, growth projections from local general plans adopted by cities located within the South Coast AQMD jurisdiction are periodically provided to SCAG, the agency that develops regional growth forecasts, and the forecasts included in the 2020 Regional Transportation Plan (RTP) were then relied upon to project emissions to future years included in the 2022 AQMP. Development occurring at the local level, that is consistent with the growth projections in the General Plans for counties and cities in South Coast AQMD's jurisdiction and confirmed by SCAG for the inclusion in their respected RTP, is considered to be consistent with the 2022 AQMP. Yet, the forecast reflects the average growth of the overall industry and commerce sector, and a more detailed analysis is warranted to ensure consistency if a specific sector experiences faster growth than others. The Port is located in the South Coast Air Basin, so the applicable recent air quality plan is primarily the 2022 AQMP for ozone, and the various other Plans for attaining the PM2.5 and PM10 standards in the South Coast Air Basin such as:

[32] *Ibid*. p. 3.1-86.
[33] *Ibid*. p. 3.1-55.
[34] *Ibid*. p. 4-36.

- South Coast Air Basin Attainment Plan for the 2012 Annual PM2.5 Standard, adopted June 2024;
- 2021 PM2.5 Redesignation Request and Maintenance Plan for the 2006 and 1997 24-hour PM2.5 Standards for South Coast Air Basin, adopted November 2021;
- South Coast PM2.5 Plan for 2006 PM2.5 Standard, adopted October 2020; and
- South Coast PM10 Maintenance Plan for 1987 PM10 Standard; adopted June 2021.

Since emissions from the South Coast Air Basin migrate eastbound due to weather patterns, and this migration contributes to the attainment status of the Coachella Valley, the following plans to demonstrate attainment with the ozone and PM10 NAAQS for the Coachella Valley are also indirectly applicable to the proposed project.

- Coachella Valley Attainment Plan for the 2008 8-Hour Ozone Standard, adopted October 2024;
- Coachella Valley Contingency Measure SIP Revision for the 2008 8-Hour Ozone Standard, adopted March 2024;
- Request to Reclassify Coachella Valley for the 2008 8-Hour Ozone Standard and the Updated Motor Vehicle Emissions Budgets, adopted November 2022;
- Coachella Valley Extreme Area Plan for 1997 Ozone Standard, adopted December 2020; and;
- Coachella Valley PM10 Plans.

SCAQMD-14

The Draft RSEIR's consistency analysis, which relies on Port-wide cargo projections and a general list of control measures, is inadequate because it does not provide the level of detail or analysis necessary to substantiate the conclusion that the Revised Project is consistent with the 2022 AQMP and the other cited Plans. Therefore, the Port should revise the AQMP consistency analysis to include a more robust and evidence-based evaluation in the Final RSEIR.

Inconsistency with Community Emission Reductions Plan (CERP) for the Designated Assembly Bill 617 (AB 617) Wilmington, Carson, West Long Beach (WCWLB) Community

SCAQMD-15

The Revised Project area includes the Assembly Bill 617 (AB 617) - designated Wilmington, Carson, West Long Beach (WCWLB) community, which is heavily impacted by air pollution generated from other existing sources such as ports, refineries, the oil and gas industry, heavy-duty diesel trucks, warehouses, and railroad activities. As part of the AB 617 process, South Coast AQMD is required to work with a Community Steering Committee (CSC) to develop a Community Emission Reductions Plan (CERP) that identifies air quality priorities and related actions to reduce air pollution in the community. The South Coast AQMD Governing Board adopted the WCWLB CERP on September 6, 2019[35] and CARB approved this CERP in 2020. The WCWLB community's 2018 designation makes it among the first of South Coast AQMD's AB 617 communities ("Year 1" communities) and highlights the disproportionality of the air pollution burden the community experiences stemming from various large-scale emission sources from

[35] South Coast AQMD. September 2019. Assembly Bill 617 Wilmington, West Long Beach, Carson Community Emissions Reduction Plan available at https://www.aqmd.gov/docs/default-source/ab-617-ab-134/steeringcommittees/wilmington/cerp/final-cerp-wcwlb.pdf

within, including refineries, oil wells, heavy-duty trucks, railyards, and ports. The WCWLB CSC identified the ports as an air quality priority in the CERP.

The CERP includes goals for each air quality priority and details a set of objectives to help address each goal. Each objective incorporates at least one of the following six strategies: regulation, air monitoring, incentives, collaboration, outreach, and enforcement. The Ports air quality priority in the WCWLB CERP includes three goals, one of which includes reducing emissions from ships and harbor craft, and another from cargo handling equipment and drayage trucks.

Given longstanding concerns over air quality and environmental justice in the WCWLB community, the China Shipping Terminal Improvements Project (Berths 97–109), as outlined in the Draft RSEIR, raises several concerns regarding consistency with the CERP. These concerns are detailed below:

SCAQMD-15

1. Lack of Alignment with WCWLB CERP Goals

The China Shipping project proposes modifications that include continued berthing of large container ships and expanded cargo throughput without sufficient enforceable commitments to mitigate associated emissions. These expansions could worsen air quality in a community already burdened by cumulative impacts, contradicting the emission reduction goals identified in the WCWLB CERP. The 2024 CERP Annual Progress Report (APR) shows that significant progress will have been made to meet the emission-reduction targets in the WCWLB CERP for NOx and DPM for targets years 2025 and 2030 mostly due to CARB's At-Berth and Commercial Harbor Craft Regulations as well as their Heavy-Duty Low-NOx Emission Standard and Airborne Toxic Control Measure for trucks and transport refrigeration units (TRUs), respectively. As shown in the 2024 APR, NOx emission reductions will have met 160% and 71% of their 5- and 10-year targets, respectively. Further, DPM emission reductions will have met 243% and 193% of their respective 5- and 10-year targets. The Draft RSEIR must therefore explain how the Revised Project will align with, and not undermine, the CERP's established community objectives and implementation progress.

SCAQMD-16

2. Insufficient Zero-Emission (ZE) Commitments

Although the Revised Project discusses transition timelines for ZE cargo handling equipment and drayage trucks, these commitments are not guaranteed or enforceable. The WCWLB CERP emphasizes accelerating the deployment of ZE technologies as a core community priority. The Port is strongly urged to include binding requirements and clear deadlines for the Revised Project's full transition to ZE operations, including ships at-berth, cargo handling equipment, and trucks. Specifically, the Port should revise the Draft RSEIR to include the following revisions to MM-AQ-17:

- Require that all yard tractors be electric within five years of a feasibility determination, with periodic reassessments if 100% deployment is initially deemed infeasible.
- Require periodic assessments on the feasibility of higher-tonnage electric forklifts (e.g., 18-ton forklifts), and a timeline for full adoption once commercially available.
- Require periodic assessments and phased adoption of electric top picks as the technology becomes feasible.
- Require the replacement of all rubber-tired gantry cranes (RTGs) at the CS Terminal with electric versions as soon as technically and economically feasible.

SCAQMD-17

3. Reducing Ship Emissions by Enforcing Shore Power Utilization

The Draft RSEIR assumes high shore power utilization of Alternative Marine Power (AMP) but lacks sufficient enforcement mechanisms or contingency plans for non-compliance. Given the WCWLB CERP's specific objective to reduce emissions from ships and harbor craft, the Revised Project must commit to 100% shore power usage at berth or equivalent emissions capture systems, with strict penalties for non-compliance. This is especially important to ensure consistency with CEQA mitigation requirements and the Port's own Clean Air Action Plan (CAAP). Additional technical and legal concerns regarding AMP enforcement and outdated exceptions are addressed later in the MM-AQ-9 Alternative Marine Power section of this letter. SCAQMD-18

4. Community Health and Cumulative Impacts

The cumulative health risks and air quality burdens outlined in the Draft RSEIR remain understated for the Revised Project. The WCWLB CERP is built on the principle that AB 617 communities face multiple environmental injustices. While using MATES (Multiple Air Toxics Exposure Study) as a guideline can provide a valuable regional baseline for cancer risk and toxic air contaminants, MATES data may not be enough on its own to satisfy cumulative impact analysis for an AB 617 community like WCWLB. MATES is regionally averaged and the community-specific exposure data could lack other factors such as the lived experience that AB 617 CERPs are designed to capture. The Port should revise the Draft RSEIR to provide a more robust cumulative impact analysis (e.g., MATES data with local air monitoring data), particularly for residents in West Long Beach and Wilmington who live directly adjacent to the terminal and bear the brunt of emissions from maritime activity. Further, since the increased cancer risk is greater than significance threshold for occupational receptors at the CS Terminal, the Port is also recommended to revise the HRA to account for the application of the recommended revisions to MM-AQ-17 for the scenario of the aggressive adoption of electric drayage trucks and cargo-handling equipment. SCAQMD-19

Part III - Inadequate Mitigation Measures and Failure to Adopt Updated, Enforceable Protections:

Air Quality and Greenhouse Gas Mitigation Measures and Revised Project Design Features for Consideration

1. Implementation and Enforcement of all Mitigation

The Port must include a binding instrument, such as a lease amendment, that implements and makes enforceable the mitigation measures included in the RSEIR as part of the final certification and approval of the Revised Project. The 2019 SEIR was set aside in large part because the Port failed to adopt a lease amendment to implement and enforce the very mitigation measures the 2019 SEIR proposed. During litigation, the Port defended this approach by arguing that the lease amendment would be subject to a separate, future action by the Board of Harbor Commissioners. (See Minute Order, June 27, 2022, *Natural Resources Defense Council, et al. v. City of Los Angeles, et. al.* (SDSC Case No. 37-2021-00023385-CU-TT-CTL), at 5 [hereinafter "Ruling"].) That argument was roundly rejected by the trial court and affirmed by the appellate court. (*Id.*; see also *Natural Resources Defense Council, Inc. v. City of Los Angeles* (2023) 98 Cal.App.5th 1176, 1235, *rev. denied (Apr. 24, 2024)* ["the Port's decision to exclude from the Revised Project's SCAQMD-20

approvals any binding instrument, such as an amendment to the Lease, that would permit the Port to enforce the mitigation included in the 2019 SEIR effectively undermined the validity of the entire 2019 SEIR"] [hereinafter "Opinion"].) Yet, despite this history, the Port seems to be repeating the same process and suggesting that if the new mitigation is approved, "the Board of Harbor Commissioners will consider amending Permit No. 999 for operations at Berths 97-109 accordingly." (Section 2.2.2; see also Section 3.1.4.4 [noting that a lease amendment would be done "after certification of the RSEIR"].). CEQA unequivocally requires feasible mitigation measures to be enforceable. (CEQA Guidelines, 14 Cal. Code Regs. § 15126.4, subd. (a)(2); Pub. Resources Code, § 21081.6, subd. (b).) As the Court of Appeal noted, the Port has no discretion as to *whether* it will comply with CEQA. (Opinion, 98 Cal.App.5th at 1236.) Neither does the Port have any discretion as to *when* it may implement feasible mitigation measures. (Ruling, at 12, *quoting POET, LLC v. State Air Resources Bd.* (2013) 218 Cal.App.4th 681, 740 ["mitigation 'cannot be deferred past the start of the project activity that causes the adverse environmental impact.'"].) Once it has determined to approve a project and determined what mitigation is feasible, those measures are required by CEQA. And they must be approved as a part of the approval of the Revised Project, not delayed to some unknown future time.[36] As part of certification of the RSEIR, the Port must include a lease amendment or other binding legal instrument to ensure implementation and enforcement of all applicable mitigation measures.

SCAQMD-20

2. Consideration of Mitigation of Significant Impacts

The Peremptory Writ of Mandate ("Writ") required the Port to prepare a supplement and/or revision to the 2019 SEIR analysis, which re-evaluates and/or revises "at a minimum" the Emissions Impact Analysis, MM-AQ-9, Alternative Marine Power ("AMP"), and LM GHG-1, GHG Credit Fund. (Writ, ¶ 2.) Given the significant impacts as analyzed, the Port erred in limiting its analysis to only consider mitigation from alternative marine power and greenhouse gas offsets. This is particularly true given that for many aspects of the project, the prior CEQA document determined that some mitigation was technologically infeasible, but many years have passed since that analysis and technology advancements (such as the commercial deployment of electric drayage trucks) warrant further evaluation as feasible means of reducing the Revised Project's significant impacts. CEQA requires adoption of all feasible mitigation, and the Port has an affirmative obligation to ensure that no additional mitigation is feasible before approving a project with significant adverse impacts. (See *Covington v. Great Basin Unified Air Pollution Control Dist.* (2019) 43 Cal.App.5th 867, 880 [noting the "relevant finding" for certifying a CEQA document despite significant environmental effects "is that no additional feasible mitigation measures were available"].) The Port should fully evaluate all potential mitigation, including re-assessing any mitigation that was previously determined technologically infeasible more than half a decade ago.

SCAQMD-21

[36] Throughout the Air Quality analysis, the Port "assumes" that the new mitigation will take effect in 2026, as that is "the earliest" that the Board could adopt a lease amendment "after certification of this RSEIR." (Section 3.1.4.4.) However, it was this same flawed assumption that "undermined the validity of the entire 2019 SEIR" (Opinion, at 70; see also Ruling, at 5 [finding the "critical assumption underlying the SEIR's environmental analysis" of a lease amendment immediately following SEIR certification "completely baseless."].) The Port's failure to include a lease amendment as part of the approval of the Revised Project risks rendering the new analysis similarly unlawful.

MM-AQ-9 – Alternative Marine Power

As proposed, MM-AQ-9 is ambiguous and the Port erred in failing to evaluate ways to strengthen the measure. At a minimum, MM-AQ-9 should incorporate the definitions from the Court's May 2, 2025 Order Enforcing the Writ ("May 2025 Order"). Specifically, the term "China Shipping ships" is ambiguous, but should include all vessels owned, operated, or chartered by the tenant, China Shipping, including any of its subsidiaries or parent corporations. MM-AQ-9 should also incorporate the definitions from the May 2025 Order, Exhibit B, for the terms "hoteling," "vessel-side equipment failure," and "terminal side equipment failure."

The Port should remove exception 1 from MM-AQ-9. As stated in Section 2.4.2, the Terminal has only two berths for vessels, both of which are AMP-capable. Exception 1 would excuse AMP usage for vessels when an AMP-capable berth is unavailable due to use by another AMP-capable vessel. The Port does not explain how (or where at the Terminal) an AMP-capable vessel could hotel without access to an AMP-capable berth. Because the Terminal only has AMP-capable berths, there should not be any reason to retain an exception that would only apply to a Terminal that has both AMP-capable and non-AMP-capable berths. SCAQMD-22

MM-AQ-9 should be strengthened by adding an enforcement mechanism for non-compliance. For example, compliance with MM-AQ-10, Vessel Speed Reduction, is enforced through a tariff which imposes escalating penalties for non-compliance. The Port should adopt a similar approach to ensure full compliance with MM-AQ-9. The Port should also ensure the reporting requirements are sufficient such that MM-AQ-9 is fully enforceable by the Port.

MM-GHG-2 – GHG Reduction Offsets

The Revised Project includes significant impacts from greenhouse gas (GHG) emissions, and cites container ships, cargo handling equipment, locomotives, and drayage trucks as among the major sources contributing to GHG emissions in the Revised Project. (Section 3.2.4.1.). However, the Draft RSEIR fails to consider or analyze any onsite direct mitigation of GHGs and proposes only an offset-based mitigation measure.[37] The Port should preference direct onsite mitigation for GHGs and require offsets only after a conclusion that additional significant GHG emissions cannot be mitigated through onsite measures. SCAQMD-23

The Port should evaluate options to obtain onsite GHG mitigation through mitigation of drayage truck emissions. For example, the Port could evaluate incentive measures to advance the Port's own CAAP goals to increase ZE drayage trucks. The Port retains an existing lease measure which offers priority access for near-zero or ZE vehicles.[38] The Port should evaluate expanding this program to include priority scheduling and reserved time slots for ZE trucks.

The Port should evaluate options to mitigate GHG emissions through further cargo handling equipment mitigation. The Port's 2017 update to the CAAP incorporated commitments from the Mayors of Los Angeles and Long Beach to achieve ZE cargo handling equipment by 2030.

[37] While the Port suggests that first priority for offsets is the "local area" this is neither specific nor a mandatory limit and thus fails to be an adequate substitute for directly mitigating the emissions from the Revised Project itself. (Section 3.2.)
[38] The Port does not quantify the emission benefits of this measure, but credited this measure for reducing emissions in the 2019 SEIR. This measure was only implemented following litigation.

(Section 3.1.3.5.) Consistent with that commitment, the Port should evaluate a phase-in schedule to achieve ZE equipment at the Terminal by 2030. Such a measure could mitigate more than 13,000 metric tons of carbon dioxide equivalents (CO_2e) in analysis year 2036 alone. (Section 3.2, Table 3.2-2.). Notably, the Port declined to analyze any modification of MM-AQ-15 and MM-AQ-17.[39] However, only a small portion of this equipment will ever be ZE under the current mitigation. The Port cannot claim it is consistent with its own CAAP commitment to have 100% ZE cargo handling equipment by 2030 where the Port's own analysis projects cargo handling equipment alone to exceed the GHG significance threshold in 2036, six years after the Port's commitment is to be met. (Section 3.2, Table 3.2.-2.) The Port's current mitigation measures do not continue any further phase-in of cleaner equipment beyond 2025, but the Revised Project continues until 2045. At a minimum, the Port could obtain GHG reductions by requiring future phase in of ZE cargo handling equipment for equipment of later model years. Doing so would not only mitigate GHGs, but would also allow the RSEIR to be consistent with the Port's own CAAP.

SCAQMD-23

Conclusion and Request for Recirculation of the Draft RSEIR

Based on the technical deficiencies, analytical inconsistencies, and lack of enforceable mitigation identified throughout this comment letter, the Draft RSEIR for the Berth 97-109 China Shipping Container Terminal Revised Project fails to meet the substantive and procedural requirements of CEQA. In particular:

- The Revised Project would result in significant and unavoidable air quality and greenhouse gas emissions impacts;
- The HRA likely underestimates cancer risk due to inconsistent and unsubstantiated modeling assumptions and input parameters;
- The Draft RSEIR fails to adequately demonstrate consistency with the 2022 AQMP and other Plans mentioned earlier in this letter; and
- The Port has not adopted feasible, enforceable mitigation measures to reduce or avoid these impacts, as required under CEQA.

SCAQMD-24

CEQA Guidelines Section 15088.5(a)(3) and (a)(4) require recirculation when "*A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the environmental impacts of the project, but the project's proponents decline to adopt it*" and when the Draft RSEIR is "*so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded*." Therefore, South Coast AQMD strongly urges the CEQA Lead Agency, City of Los Angeles Harbor Department ("Port") to revise and recirculate the Draft RSEIR. This is particularly warranted because key mitigation measures, such as those governing AMP use and ZE equipment deployment, remain vague, unenforceable, or inadequately analyzed for feasibility. Furthermore, significant changes to the cancer risk results have not been clearly explained or justified, and outdated dispersion modeling inputs further call the analysis into question.

[39] Both mitigation measures MM-AQ-15 and MM-AQ-17 as proposed contain deadlines for a phase-in of lower-emitting equipment that are all in the past. At a minimum, the Port must clarify, and provide substantial evidence for, that these deadlines have all already been achieved, or propose and fully analyze the impacts of a revised future schedule for the phase-in of cleaner equipment.

CEQA Guidelines Section 15088.5(b) further clarifies that recirculation is required when new mitigation measures are added after public review of the Draft EIR and these measures are proposed to reduce newly identified significant effects. The Port appears to be considering the adoption of additional mitigation to respond to recent legal rulings and stakeholder concerns. In such cases, CEQA mandates recirculation to allow meaningful public review and input on those new measures prior to final certification of the document.

SCAQMD-24

In accordance with Public Resources Code Section 21092.5(a) and CEQA Guidelines Sections 15088 and 15088.5, the Lead Agency shall evaluate comments from public agencies on the environmental issues and prepare a written response at least 10 days prior to certifying the Final RSEIR. As such, South Coast AQMD requests that the Lead Agency provide written responses to all comments contained herein at least 10 days prior to certification of the Final RSEIR, and further, that the document be recirculated to the public and reviewing agencies before approval of the Revised Project. In addition, as provided by CEQA Guidelines Section 15088(c), if the Lead Agency's position is at variance with recommendations provided in this comment letter, detailed reasons supported by substantial evidence in the record to explain why specific comments and suggestions are not accepted must be provided.

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DEPOSITION REPORTERS

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THE PORT OF LOS ANGELES

PUBLIC HEARING

PUBLIC HEARING ON BERTHS 97-109 [CHINA SHIPPING]

CONTAINER TERMINAL PROJECT

DRAFT REVISED SUPPLEMENTAL E.I.R.

TUESDAY, JULY 22, 2025

4:00 P.M.

VIA ZOOM VIDEOCONFERENCE

participants this evening, but I don't see anybody's hand raised to make a comment as of yet.

(A pause in the proceedings.)

MR. JENSEN: Okay. I see Joe.

And, Joe, if you would, you are good to speak.

THE COURT REPORTER: Could I get their full name please.

MR. JENSEN: Joe, if you would state your first and last name, and then once you begin --

MR. LYOU: I just hit the unmute, and you should be able to hear me.

MR. JENSEN: Yes.

MR. LYOU: My name is Joe Lyou. I am president and CEO of the Coalition for Clear Air. I have several comments I'll try to get within your three minute comment period.

On Mitigation Measure AQ-9, I would be helpful -- it would be helpful if the report could explain in detail the exceptions to this mitigation measure's 100 percent commitment of AMP for the shifts.

In particular, I am not sure that the court order required compliance with California Code of Regulations provisions for the various places where that's cited, and I also would benefit from having a very

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clear and objective description and definition of vessel side equipment failure and terminal side equipment failure so that those terms are understood well by everyone and they can be objectively measured whether or not those have occurred for a legitimate exception.

Similarly, under Mitigation Measure AQ-17, there is a commitment to do a pilot project for yard equipment, and there is a commitment to do a feasibility determination. The criteria that you will use to make that determination should be explained in detail, and if it already is in here, I haven't read the whole document from front to back -- I apologize -- but please, if you can provide us information on this term of feasibility determinations, the specific criteria that will be used to make that determination.

The MM GHG-1, Greenhouse Gas Reduction Offsets 1, is very detailed and complicated. I haven't had enough time to read and fully comprehend that. I will review it and get back to you either through comments of our council, NRDC, or through comments from our organization.

So that concludes my comments, and thank you for the opportunity to comment on this document.

MR. JENSEN: Thank you, Joe.

I do see a few folks in our attendees. Any

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PH-2

PH-3

Chapter 3
Modifications to the Draft Revised SEIR

3.1 Introduction

This chapter of the document addresses modifications to the Draft Revised SEIR for the Berths 97-109 (China Shipping) Project (Revised Project) at the Port of Los Angeles (Port). It presents all revisions related to public comments, as determined necessary by the lead agency (the Los Angeles Harbor Department), for the following areas of the document:

- Executive Summary
- Chapter 1 Introduction
- Section 3.1 Air Quality
- Section 3.2 Greenhouse Gases
- Chapter 5 References
- Appendix A

Any revisions to supporting documentation are also presented. The numbering format from the Draft Revised SEIR is maintained in the sections presented here. Only sections that have revisions based on public comment are included; sections that have no revisions are not included. Readers are referred to the Draft Revised SEIR to view complete sections.

It should be noted that most of the changes were editorial in nature. None of the revisions results in changes to significance findings.

As provided in Section 15088(c) of the State CEQA Guidelines, responses to comments may take the form of a revision to a Draft EIR or may be separate section in the Final EIR. This chapter complies with the latter of these two guidelines and provides changes to the Draft EIR in revision-mode text (i.e., deletions are shown with strikethrough and additions are shown with underline). These notations are meant to provide clarification, corrections, or minor revisions as needed as a result of public comments or because of changes in the Revised Project since the release of the Draft Revised SEIR.

3.2 Changes to the Draft EIR

The following changes to the text as presented below are incorporated into the Final RSEIR.

3.2.1 Changes Made to the Executive Summary

In Table ES-1, MM AQ-9 is revised as follows:

MM AQ-9: Alternative Maritime Power (AMP). All vessels owned, chartered or operated by China Shipping ~~ships~~ calling at Berths 97-109 shall use AMP while docked at the berth~~hoteling in the Port~~ for 100-percent of ~~ship calls~~vessel visits.

Additionally, all vessels~~ships~~ retrofitted for or capable of using AMP calling at Berths 97-109 shall use AMP while docked at the berth~~hoteling in the Port~~ for 100-percent ~~compliance~~ of ~~ship calls~~vessel visits.

"Vessels", "berth" and "visits" shall be defined as provided in California Code of Regulations, Title 17, section 93130.8, subdivision (c), and applicable future regulations that may be promulgated by CARB regarding at-berth emissions.

The following exceptions apply to this measure:

(1) ~~When an AMP-capable berth is unavailable due to utilization by another AMP-capable ship.~~

~~(2)~~ During any portion of a vessel visit that qualifies as a "safety and emergency event" under California Code of Regulations, Title 17, section 93130.8, subdivision (a).

(2~~3~~) During any portion of a vessel visit that qualifies as "commissioning" under California Code of Regulations, Title 17, section 93130.8, subdivision (c).

4. During any portion of a vessel visit that occurs during either a vessel-side equipment failure or a terminal-side equipment failure. A "terminal-side equipment failure" shall be deemed to occur when the terminal or Respondents have installed shoreside control equipment and maintains that equipment according to manufacturer recommendations, but that equipment experiences an unexpected failure at the time during the vessel visit for which the equipment failure is claimed. In addition, a "terminal-side equipment failure" cannot be claimed unless arrangements are promptly made to ensure that repair, replacement, or servicing of the failed equipment will be completed as soon as possible. A "vessel-side equipment failure" shall be deemed to occur when a vessel owner or operator has installed on-board equipment to connect with shoreside control equipment and maintains that onboard equipment according to manufacturer recommendations, but that on-board equipment experiences an unexpected failure at the time during the vessel visit for which the equipment failure is claimed. In addition, a "vessel-side equipment failure" cannot be claimed unless arrangements are promptly made to ensure that repair, replacement, or servicing of the failed on-board equipment will be completed as soon as possible. Necessary documentation to substantiate these exceptions includes, at minimum, the dates and times of the failure(s); any relevant correspondence documenting the equipment failure consistent with the

definitions above; evidence that the equipment at issue has been maintained according to manufacturer recommendations; evidence that the equipment failure was unexpected at the time during the vessel visit for which the equipment failure is claimed; and evidence that arrangements have been made to ensure that repair, replacement, or servicing will be completed as soon as possible.

If a vessel visit qualifies for an exception above, but can still feasibly control emissions using a CARB-certified alternative control technology (i.e., a barge-based capture and control system), the vessel shall use that strategy, consistent with the requirements of MM AQ-31.

In Table ES-1, MM GHG-2 is revised as follows:

MM GHG-2. GHG Reduction Offsets. The Tenant shall be required to purchase and retire carbon offsets related to activities that reduce, avoid, destroy, or sequester an amount of GHG emissions in an off-site location to offset the equivalent amount of GHG emissions generated by the Project in excess of the City's significance threshold of 10,000 metric tons. From the first year of the Permit amendment, in 2026, through the end of the term of the Permit in 2045, the Tenant shall purchase and retire carbon offsets each year in an amount that would be the equivalent of the Project's estimated residual GHG emissions. The estimated residual emissions for each calendar year shall be based upon the calculations in Appendix C of the Final Revised SEIR prepared for the Revised Project except as adjusted in accordance with paragraph a) or b), below.

The LAHD is in the process of developing a Greenhouse Gas Program. The Program shall be used for GHG-reducing projects and programs approved by the Port of Los Angeles. If that Program is established during the term of the Permit, the Tenant shall have the option to offset the required amount of GHG emissions through a funding contribution to the Greenhouse Gas Program rather than towards purchasing carbon offsets from a CARB-recognized registry.

While the LAHD Greenhouse Gas Program is currently under development, the Tenant shall purchase and retire carbon offsets from a CARB-recognized offset registry as follows:

Carbon offsets: The Tenant shall purchase and retire carbon offsets from a CARB-recognized registry to ensure that offsets will result in real, permanent, additional, quantifiable, verifiable, and enforceable reductions. The carbon offsets shall be verifiable by the City and enforceable in accordance with the registry's current applicable standards, practices, or protocols.

The order of priority for purchasing (any one or more) carbon offsets shall be considered as follows:

- Originating within the local area;
- Originating within the South Coast Air Basin;
- Originating within the state of California; or
- If sufficient local and in-state offsets are not available, the Tenant shall purchase conforming national offsets registered with a CARB-recognized registry.

Adjustment of Tenant's Required Offsets through Other Verified GHG Emission Reductions: The Tenant may pursue the following modifications to the Project's total estimated GHG emissions identified in this measure. These

modifications may be pursued in conjunction with or independent of each other on an up to annual basis.

a) Adjustment in GHG Emissions

In the event of changes in activities, efficiency, reduced operations, regulations or for any other purpose, the Tenant may request an adjustment of the required carbon offsets based on an evaluation of actual GHG emissions rather than future projected GHG emission calculations in this RSEIR. If the actual GHG emissions, minus the 2008 Actual Baseline, do not exceed the significance threshold of 10,000 mty, no carbon offsets shall be required. To adjust the Tenant's required number of carbon offsets for purchase, the Tenant shall make a request in writing to the LAHD for review and approval for the calendar year under consideration and shall submit a report within 60 days that quantifies the actual greenhouse gas emissions by an expert or an independent, qualified third-party, in accordance with CARB-registry standards. The evaluation of actual greenhouse gas emissions must be performed using acceptable industry standards and protocols—to show emissions are real, quantifiable, and verifiable— for all sources that were included in the Project's GHG emissions calculations under Impact GHG-1. LAHD review shall occur within 30 days of receipt of the submitted report. Any expenses incurred by LAHD in processing the Tenant's request, including retaining an independent third-party verifier to peer review the report, shall be borne by the Tenant.

or

b) Implementation of Additional GHG Reduction Methods

In addition, the Tenant may request a reevaluation of required carbon offsets to be purchased according to this paragraph. The Tenant may implement different and additional GHG reduction methods if new technology and/or other feasible measures become available during the term of the Permit (including, but not limited to, onsite technologies such as Zero Emission equipment and/or supporting infrastructure). To adjust the Tenant's required number of carbon offsets for purchase, the Tenant shall identify such additional GHG reduction actions and must quantify the GHG emission reductions from these GHG reduction actions by an independent, qualified third-party verifier to ensure the offsets are real, additional, quantifiable, permanent, verifiable, and enforceable. Once the GHG reduction actions are found to be feasible and are reviewed and approved by LAHD staff, the Tenant may request that LAHD reduce its required purchase of carbon offsets by the equivalent amount of demonstrated reduction. Any expenses incurred by LAHD in processing the Tenant's request, including retaining a third-party verifier, shall be borne by the Tenant.

The Tenant shall be required to purchase and retire carbon offsets related to activities that reduce, avoid, destroy, or sequester an amount of GHG emissions in an off-site location to offset the equivalent amount of GHG emissions generated by the Project in excess of the City's significance threshold of 10,000 metric tons. From the first year of the Permit amendment, in 2026, through the end of the term of the Permit in 2045, the Tenant shall purchase and retire carbon offsets each year in an amount that would be the equivalent of the Project's estimated residual GHG emissions. The estimated residual emissions for each calendar year shall be based upon the calculations in Appendix C of the Final Revised SEIR prepared for the Proposed Project except as adjusted in accordance with paragraph a) or b), below.

The LAHD is in the process of developing a Greenhouse Gas Program. The Program shall be used for GHG-reducing projects and programs approved by the Port of Los

Angeles. If that Program is established during the term of the Permit, the Tenant shall have the option to offset the required amount of GHG emissions through a funding contribution to the Greenhouse Gas Program rather than towards purchasing carbon offsets from a CARB-recognized registry. While the LAHD Greenhouse Gas Program is currently under development, the Tenant shall purchase and retire carbon offsets from a CARB-recognized offset registry as follows:

Carbon offsets: The Tenant shall purchase and retire carbon offsets from a CARB-recognized registry to ensure that offsets will result in real, permanent, additional, quantifiable, verifiable, and enforceable reductions. The carbon offsets shall be verifiable by the City and enforceable in accordance with the registry's applicable standards, practices, or protocols.

The order of priority for purchasing (any one or more) carbon offsets shall be considered as follows:

i. Originating within the local area;

ii. Originating within the South Coast Air Basin;

iii. Originating within the state of California; or

iv. If sufficient local and in-state offsets are not available, the Tenant shall purchase conforming national offsets registered with a CARB-recognized registry.

Adjustment of Tenant's Required Offsets through Other Verified GHG Emission Reductions: The Tenant may pursue the following modifications to the Project's total estimated GHG emissions identified in this measure. These modifications may be pursued in conjunction with or independent of each other on an up to annual basis.

a. Adjustment in GHG Emissions

In the event of changes in activities, efficiency, reduced operations, regulations, or for any other purpose, the Tenant may request an adjustment of the required carbon offsets based on an evaluation of actual GHG emissions rather than future projected GHG emission calculations in this RSEIR. If the actual GHG emissions, minus the 2008 Actual Baseline, do not exceed the significance threshold of 10,000 mty, no carbon offsets shall be required. To adjust the Tenant's required number of carbon offsets for purchase, the Tenant shall make a request in writing to the LAHD for review and approval for the calendar year under consideration and shall submit a report within 60 days that quantifies the actual greenhouse gas emissions by an expert or an independent, qualified third-party. The evaluation of actual greenhouse gas emissions must be performed using acceptable industry standards and protocols for all sources that were included in the Project's GHG emissions calculations under Impact GHG-1. LAHD review shall occur within 30 days of receipt of the submitted report. Any expenses incurred by LAHD in processing the Tenant's request, including retaining an independent third-party verifier to peer review the report, shall be borne by the Tenant.

or

b) Implementation of Additional GHG Reduction Methods

In addition, the Tenant may request a reevaluation of required carbon offsets to be purchased according to this paragraph. The Tenant may implement different and additional GHG reduction methods if new technology and/or other feasible measures

become available during the term of the Permit. To adjust the Tenant's required number of carbon offsets for purchase, the Tenant shall identify such additional GHG reduction actions and must quantify the GHG emission reductions from these GHG reduction actions by an independent, qualified third-party verifier. Once the GHG reduction actions are found to be feasible and are reviewed and approved by LAHD staff, the Tenant may request that LAHD reduce its required purchase of carbon offsets by the equivalent amount of demonstrated reduction. Any expenses incurred by LAHD in processing the Tenant's request, including retaining a third-party verifier, shall be borne by the Tenant.

On page ES-14, MM AQ-31 is revised as follows:

MM AQ-31: At-Berth Regulations. All vessels~~ships~~ calling at Berths 97-109 shall be subject to all applicable provisions of the At-Berth Regulations (CCR Title 17, Sections 93130-93130.22), and applicable future regulations that may be promulgated by CARB regarding at-berth emissions, while docked at the berth~~hoteling in the Port~~.

On pages ES-15 and ES-16, MM GHG-2 is revised as described above.

3.2.2 Changes Made to Chapter 1 Introduction

On page 1-4, line 12 is revised as follows:

…(see Table 1 of Appendix A-~~1~~2 for the full list…

3.2.3 Changes Made to Section 3.1 Air Quality

On page 3.1-2, line 8 is revised as follows:

…number of mitigation and lease measures (summarized in Table 1-1 of Chapter 1) intended to address…

On page 3.1-29, line 38, and page 3.1-30, line 1, the non-compliance years are revised as follows to correct typographical errors:

(~~2018~~2015-2023).

On page 3.1-31, line 18 is revised as follows:

…equipment list in accordance with the ~~revised~~ MM AQ-15, and MM AQ-17 language in…

On page 3.1-42, MM AQ-9 is revised as described above under Section 3.2.1 Changes Made to the Executive Summary.

Also on page 3.1-42, lines 7 and 9 are revised as follows:

…mitigation and lease measures…

On page 3.1-43, the paragraph beginning on line 6 is revised as follows:

Similarly, for MM AQ-10, the analysis below assumes a lower level of compliance (99.6% 6 and 99.2% for zone 4 and zone 5 respectively), based on historical data~~,~~. This assumption is~~to be~~ conservative to avoid overstating reductions associated with the Revised Project and does not modify the compliance requirements of MM AQ-

10. The assumption is reasonable because it incorporates the emergency allowances specified in the Port of Los Angeles Mariner's Guide (POLA 2025).

On page 3.1-49, MM AQ-31 is revised as described above under Section 3.2.1 Changes Made to the Executive Summary.

On page 3.1-50, lines 29 and 30 are revised as follows to correct typographical errors:

…some of the 2008 EIS/EIR mitigation measures were not fully implemented (i.e., the first period of non-compliance, 2008-~~2018~~2014, and the additional period of non-compliance, ~~2019~~2015-2023).

On page 3.1-57, lines 7 and 8 are revised as follows:

...analysis year (2012, 2014~~, 2018~~ [first period of non-compliance], 2018, 2019, 2020, 2021, 2022, 2023 [additional period of non-compliance], and 2026, 2036, and 2045).

On page 3.1-82, lines 3, 4, and 5 are revised as follows:

~~Per the Writ, the mitigation monitoring program below includes the Adopted Mitigation 3 Measures, the modified and additional mitigation measures for the Revised Project, and 4 lease measures from the 2019 SEIR.~~ The mitigation monitoring program below includes the modified and additional mitigation measures for the Revised Project from this RSEIR.

On pages 3.1-82 through 3.1-85, the text in the table is changed as shown below. These changes reflect revisions to the air quality mitigation measures prompted by comments on the Draft RSEIR, omission of measures not modified by this RSEIR, and edits in order to ensure consistency with the Mitigation Monitoring and Reporting Program.

AQ-3: The Revised Project would result in operational-related emissions that exceed an SCAQMD threshold of significance. **AQ-4: The Revised Project operation would result in offsite ambient air pollutant concentrations that exceed a SCAQMD threshold of significance.** **AQ-7: The Revised Project operation would expose sensitive receptors to significant levels of TACs.**	
Mitigation Measure	**MM AQ-9. Alternative Maritime Power (AMP).** All vessels owned, chartered or operated by China Shipping ~~ships~~ calling at Berths 97-109 shall use AMP while docked at the berth~~hoteling in the Port~~ for 100-percent of ~~ship calls~~vessel visits. Additionally, all vessels~~ships~~ retrofitted for or capable of using AMP calling at Berths 97-109 shall use AMP while docked at the berth~~hoteling in the Port~~ for 100-percent ~~compliance~~ of ~~ship calls~~vessel visits. The following exceptions apply to this measure: (1) ~~When an AMP-capable berth is unavailable due to utilization by another AMP-capable ship.~~ ~~(2)~~ During any portion of a vessel visit that qualifies as a "safety and emergency event" under California Code of Regulations, Title 17, section 93130.8, subdivision (a). (2~~3~~) During any portion of a vessel visit that qualifies as "commissioning" under California Code of Regulations, Title 17, section 93130.8, subdivision (c). (3~~4~~) During any portion of a vessel visit that occurs during either a vessel-side equipment failure or a terminal-side equipment failure. A "terminal-side equipment failure" shall be deemed to occur when the terminal or Respondents have installed shoreside control equipment and maintains that equipment according to manufacturer recommendations, but that equipment experiences an unexpected failure at the time during the vessel visit for which the equipment failure is claimed. In addition, a "terminal-side equipment failure" cannot be claimed unless arrangements are promptly made to ensure that repair, replacement, or servicing of the failed equipment will be completed as soon as possible. A "vessel-side equipment failure" shall be deemed to occur when a vessel owner or

	operator has installed on-board equipment to connect with shoreside control equipment and maintains that onboard equipment according to manufacturer recommendations, but that on-board equipment experiences an unexpected failure at the time during the vessel visit for which the equipment failure is claimed. In addition, a "vessel-side equipment failure" cannot be claimed unless arrangements are promptly made to ensure that repair, replacement, or servicing of the failed on-board equipment will be completed as soon as possible. Necessary documentation to substantiate these exceptions includes, at minimum, the dates and times of the failure(s); any relevant correspondence documenting the equipment failure consistent with the definitions above; evidence that the equipment at issue has been maintained according to manufacturer recommendations; evidence that the equipment failure was unexpected at the time during the vessel visit for which the equipment failure is claimed; and evidence that arrangements have been made to ensure that repair, replacement, or servicing will be completed as soon as possible. If a vessel visit qualifies for an exception above, but can still feasibly control emissions using a CARB-certified alternative control technology (i.e., a barge-based capture and control system), the vessel shall use that strategy, consistent with the requirements of MM AQ-31.
Timing	Starting on the effective date of a new lease amendment between the Tenant and the LAHD and annually thereafter.
Methodology	LAHD will include this mitigation measure in new lease amendment with tenant. Tenant shall submit bi-annual compliance forms documenting compliance to the Environmental Management Division; such documentation shall include all reports sent to CARB and any responses from CARB in compliance with the At-Berth Regulations. Vessel calls shall be monitored by the Environmental Management Division. Enforcement shall include oversight by the Real Estate Division. Annual staff reports shall be made available to the Board at a regularly scheduled public Board Meeting.
Responsible Parties	Tenant, LAHD
Residual Impacts	Significant and unavoidable
Mitigation Measure	**MM AQ-10. Vessel Speed Reduction Program (VSRP).** All ships (100%) calling at Berths 97-109 shall comply with the expanded VSRP of 12 knots between 40 nm from Point Fermin and the Precautionary Area.
Timing	Starting on the effective date of a new lease amendment between the Tenant and the LAHD and annually thereafter.
Methodology	LAHD will include this mitigation measure in new lease amendment with tenant. ~~Environmental Management Division will independently monitor through monitoring data provided by the Marine Exchange. Biannual tenant compliance forms shall be supplied to the Environmental Management Division~~. Tenant shall submit bi-annual compliance forms documenting compliance to the Environmental Management Division. Enforcement shall include oversight by the Real Estate Division. Annual staff reports shall be made available to the Board at a regularly scheduled public Board Meeting
Responsible Parties	Tenant, LAHD.
Residual Impacts	Significant and unavoidable
~~Mitigation Measure~~	~~**2019 MM AQ-15. Yard Tractor Emission Standards.** By January 1, 2019, all LPG yard tractors of model years 2007 or older shall be alternative-fuel yard tractors that meet or exceed Tier 4 final off-road engine standards for PM and NO_x, and by January 1, 2023, all LPG yard tractors of model years 2011 or older shall be alternative fuel yard tractors that meet or exceed Tier 4 final off-road engine standards for PM and NO_x.~~
~~Timing~~	~~During operation, as specified in the mitigation measure.~~
~~Methodology~~	~~LAHD will include this mitigation measure in agreements with tenants.~~
~~Responsible Parties~~	~~Tenant, LAHD.~~

~~Residual Impacts~~	~~Significant and unavoidable~~
Mitigation Measure	**2008 MM AQ-17. Cargo-Handling Equipment (pilot project)**. 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**.**
Timing	~~During operation, as specified in the mitigation measure~~Starting on the effective date of the sixth amendment to Permit No. 999 between the Tenant and the LAHD executed on July 3, 2024, and annually thereafter.
Methodology	~~This mitigation measure was adopted in the 2024 amendment to Permit No. 999.~~ Tenant shall submit bi-annual compliance forms to the Environmental Management Division. Enforcement shall include oversight by the Real Estate Division. Annual staff reports shall be made available to the Board at a regularly scheduled public Board Meeting.
Responsible Parties	~~Tenant,~~ China Shipping and LAHD.
Residual Impacts	Significant and unavoidable
~~Mitigation Measure~~	~~**2019 MM AQ-17. Cargo-Handling Equipment Emission Standards**. All yard equipment at the terminal, except for yard tractors, shall implement the following requirements:~~ ~~Forklifts~~ ~~• By, January 1, 2019 all 18-ton diesel forklifts of model years 2004 and older shall be replaced with units that meet or exceed Tier 4 final off-road engine standards for PM and NO_x.~~ ~~• By, January 1, 2020 all 18-ton diesel forklifts of model years 2005 and older shall be replaced with units that meet or exceed Tier 4 final off-road engine standards for PM and NO_x.~~ ~~• By January 1, 2020, all 5-ton forklifts of model years 2011 or older shall be replaced with electric units.~~ ~~• By, January 1, 2021 all 18-ton diesel forklifts of model years 2007 and older shall be replaced with units that meet or exceed Tier 4 final off-road engine standards for PM and NO_x.~~ ~~Toppicks~~ ~~• By January 1, 2019 all diesel top-picks of model years 2006 and older shall be replaced with units that meet or exceed Tier 4 final off-road engine standards for PM and NO_x.~~ ~~• By January 1, 2021 all diesel top-picks of model years 2007 and older shall be replaced with units that meet or exceed Tier 4 final off-road engine standards for PM and NO_x.~~ ~~• By January 1, 2023 all diesel top-picks of model years 2014 and older shall be replaced with units that meet or exceed Tier 4 final off-road engine standards for PM and NO_x.~~ ~~Rubber-Tired Gantry (RTG) Cranes~~ ~~• By January 1, 2021 all diesel RTG cranes of model years 2003 and older shall be replaced with diesel-electric hybrid with diesel engines that meet or exceed Tier 4 final off-road engine standards for PM and NO_x.~~ ~~• By January 1, 2023 all diesel RTG cranes of model years 2004 and older shall be replaced with diesel-electric hybrid with diesel engines that meet or exceed Tier 4 final off-road engine standards for PM and NO_x.~~ ~~• By January 1, 2025 four RTG cranes of model years 2005 and older shall be replaced by all-electric units, and one diesel RTG crane of model year 2005 shall be diesel-electric hybrid unit with a diesel engine meeting exceed Tier 4 final off-road engine standards for PM and NO_x.~~ ~~Sweepers~~ ~~Sweeper(s) shall be alternative fuel or the cleanest available by 2025.~~

	~~Shuttle Buses~~ ~~Gasoline shuttle buses shall be zero emissions by 2025.~~
~~Timing~~	~~During operation, as specified in the mitigation measure.~~
~~Methodology~~	~~LAHD will include this mitigation measure in agreements with tenants.~~
~~Responsible Parties~~	~~Tenant, LAHD.~~
~~Residual Impacts~~	~~Significant and unavoidable~~
Mitigation Measure	**MM AQ-31: Compliance with At-Berth Regulations.** All vessels~~ships~~ calling at Berths 97-109 must comply with all applicable At-Berth Regulations (CCR Title 17, Sections 93130-93130.22), and future regulations that may be promulgated by CARB regarding at-berth emissions, while docked at the berth~~hoteling in the Port~~.
Timing	~~During operation~~Starting on the effective date of a new lease amendment between the Tenant and the LAHD and annually thereafter.
Methodology	LAHD will include this mitigation measure in the new lease amendment~~agreements~~ with tenant~~s~~. Tenant shall submit bi-annual compliance forms to the Environmental Management Division. Enforcement shall include oversight by the Real Estate Division. Annual staff reports shall be made available to the Board at a regularly scheduled public Board Meeting.
Responsible Parties	Tenant, LAHD.
Residual Impacts	Significant and unavoidable
~~Mitigation Measure~~	~~**2019 LM AQ-1. Cleanest Available Cargo Handling Equipment.** For any measures that require the replacement, new purchase, or retrofit of cargo handling equipment, the tenant is required to notify LAHD in advance and engage in collaboration with LAHD on the cleanest available cargo handling equipment that is operationally and economically feasible and commercially available for the tenant's operations. LAHD will also assist with identification of potential sources of funding to assist with the purchase of such equipment.~~
~~Timing~~	~~During operation.~~
~~Methodology~~	~~LAHD will include this lease measure in lease agreements with tenants.~~
~~Responsible Parties~~	~~Tenant, LAHD.~~
~~Residual Impacts~~	~~Significant and unavoidable~~
~~Mitigation Measure~~	~~**2019 LM AQ-2. Priority Access for Drayage**. A priority access system shall be implemented at the CS Terminal to provide preferential access to zero- and near-zero-emission trucks.~~
~~Timing~~	~~During operation.~~
~~Methodology~~	~~LAHD will include this lease measure in lease agreements with tenants~~
~~Responsible Parties~~	~~Tenant, LAHD~~
~~Residual Impacts~~	~~Significant and unavoidable~~
~~Mitigation Measure~~	~~**2019 LM AQ-3. Zero Emission Equipment Demonstration and Feasibility Assessment.** Tenant shall conduct a one-year zero emission demonstration project with at least ten units of zero-emission cargo handling equipment. Upon completion of the one-year demonstration, Tenant shall submit a report to LAHD that evaluates the feasibility of permanent use of the tested equipment. Tenant shall continue to test the zero-emission equipment and provide feasibility assessments and progress reports in 2020 and 2025 to evaluate the status of zero-emission equipment technologies and infrastructure as well as operational and financial considerations, with a goal of 100% zero-emission cargo handling equipment by 2030.~~
~~Timing~~	~~During operation.~~
~~Methodology~~	~~LAHD will include this lease measure in lease agreements with tenants.~~
~~Responsible Parties~~	~~Tenant, LAHD~~
~~Residual Impacts~~	~~Significant and unavoidable~~

3.2.4 Changes Made to Section 3.2 Greenhouse Gases

On page 3.2-1, line 31 is revised as follows:

> …includes a new mitigation measure, MM GHG-2 GHG Reduction Offsets (described in Section 3.2.~~4~~6.5),…

On pages 3.2-27 and 3.2-28, MM GHG-2 is revised as described above under Section 3.2.1 Changes Made to the Executive Summary.

On page 3.2-41, line 4 is revised as follows:

> ~~The mitigation measures detailed below would be implemented for the Revised Project.~~ The mitigation monitoring program below includes the modified and additional mitigation measures for the Revised Project from this RSEIR.

The table on pages 3.2-41 through 3.2-43 is revised as follows. These changes reflect revisions to the greenhouse gas mitigation measures prompted by comments on the Draft RSEIR, omission of measures not modified by this RSEIR, and edits in order to ensure consistency with the Mitigation Monitoring and Reporting Program.

IMPACT GHG-1: The Revised Project would generate GHG emissions, either directly or indirectly, that would exceed the SCAQMD 10,000 mty CO_2e threshold.	
~~**Mitigation Measure**~~	~~**MM GHG-1: LED Lighting.** All lighting within the interior of buildings on the premises and outdoor high mast terminal lighting will be replaced with LED lighting or a technology with similar energy-saving capabilities by 2023.~~
~~Timing~~	~~Tenant must complete replacement of lighting by December 31, 2023.~~
~~Methodology~~	~~This mitigation measure was adopted in the 2024 amendment to Permit No. 999. Tenant shall implement MM GHG-1 through its own construction contractor. LAHD shall monitor implementation of mitigation measure during operation through the tenant lease.~~
~~Responsible Parties~~	~~LAHD for lease compliance.~~ ~~Tenant through its own construction contractor in conjunction with LAHD.~~
~~Residual Impacts~~	~~Significant.~~
Mitigation Measure	**MM GHG-2: GHG Reduction Offsets.** The Tenant shall be required to purchase and retire carbon offsets related to activities that reduce, avoid, destroy, or sequester an amount of GHG emissions in an off-site location to offset the equivalent amount of GHG emissions generated by the Project in excess of the City's significance threshold of 10,000 metric tons. From first year of the Permit amendment, in 2026, through the end of the term of the Permit in 2045, the Tenant shall purchase and retire carbon offsets each year in an amount that would be the equivalent of the Project's estimated residual GHG emissions. The estimated residual emissions for each calendar year shall be based upon the calculations in the Final EIS/EIR prepared for the Proposed Project except as adjusted in accordance with paragraph a) or b), below. The LAHD is in the process of developing a Greenhouse Gas Program. The Program shall be used for GHG-reducing projects and programs approved by the Port of Los Angeles. If that Program is established during the term of the Permit, the Tenant shall have the option to offset the required amount of GHG emissions through a funding contribution to the Greenhouse Gas Program rather than towards purchasing carbon offsets from a CARB-recognized registry.

	While the LAHD Greenhouse Gas Program is currently under development, the Tenant shall purchase and retire carbon offsets from a CARB-recognized offset registry as follows: **Carbon offsets**: The Tenant shall purchase and retire carbon offsets from a CARB-recognized registry to ensure that offsets will result in real, permanent, additional, quantifiable, verifiable, and enforceable reductions. The carbon offsets shall be verifiable by the City and enforceable in accordance with the registry's applicable standards, practices, or protocols. The order of priority for purchasing (any one or more) carbon offsets shall be considered as follows: i. Originating within the local area; ii. Originating within the South Coast Air Basin; iii. Originating within the state of California; or iv. If sufficient local and in-state offsets are not available, the Tenant shall purchase conforming national offsets registered with a CARB-recognized registry. **Adjustment of Tenant's Required Offsets through Other Verified GHG Emission Reductions:** The Tenant may pursue the following modifications to the Project's total estimated GHG emissions identified in this measure. These modifications may be pursued in conjunction with or independent of each other on an up to annual basis. *(a) Adjustment in GHG Emissions* In the event of changes in activities, efficiency, reduced operations, or for any other purpose, the Tenant may request an adjustment of the required carbon offsets based on an evaluation of actual GHG emissions rather than future projected GHG emission calculations. If the actual GHG emissions do not exceed the GHG threshold, no carbon offsets will be required. To adjust the Tenant's required number of carbon offsets for purchase, the Tenant shall make a request in writing to the LAHD for review and approval for the calendar year under consideration and shall submit a report within 60 days that quantifies the actual greenhouse gas emissions by an expert or an independent, qualified third-party in accordance with CARB-registry standards. The evaluation of actual greenhouse gas emissions must be performed using acceptable industry standards and protocols for all sources —to show emissions are real, quantifiable, and verifiable— that were included in the Project's GHG emissions calculations under Impact GHG-1. LAHD review shall occur within 30 days of receipt of the submitted report. Any expenses incurred by LAHD in processing the Tenant's request, including retaining an independent third-party verifier to peer review the report, shall be borne by the Tenant. *or* *(b) Implementation of Additional GHG Reduction Methods* In addition, the Tenant may request a reevaluation of required carbon offsets to be purchased according to this paragraph. The Tenant may implement different and additional GHG reduction methods that are equally or more effective if new technology and/or other feasible measures become available during the term of the Permit (including, but not limited to, onsite technologies such as Zero Emission equipment and/or supporting infrastructure). To adjust the Tenant's required number of carbon offsets for purchase, the Tenant shall identify such additional GHG reduction actions and must quantify the GHG emission reductions from these GHG reduction actions by an independent, qualified third-party verifier to ensure the offsets are real, additional, quantifiable, permanent, verifiable, and enforceable. Once the GHG reduction actions are found to be feasible and are reviewed and approved by LAHD staff, the Tenant may request that LAHD reduce its required purchase of carbon offsets by the equivalent amount of demonstrated reduction. Any expenses incurred by LAHD in processing the Tenant's request, including retaining a third-party verifier, shall be borne by the Tenant.
Timing	During operations.

Methodology	LAHD shall include MM GHG-2 in the Permit amendment with tenant. LAHD shall monitor implementation of mitigation measure during operation through the tenant lease.
Responsible Parties	LAHD, Tenant
Residual Impacts	Less than significant with full implementation of MM GHG-2

3.2.5 Changes Made to Chapter 5 References

On page 5-4, the following reference is added:

POLA (Port of Los Angeles). 2025. Mariner's Guide 2025. https://kentico.portoflosangeles.org/getmedia/3a09c8ce-a7fa-4c1b-9104-adbe554c3766/2025-pola-mariners-guide.

3.2.6 Changes Made to Appendix A2

Table 1 is revised as follows to specify the disposition and applicability of each mitigation measure to the Revised Project:

Table 1. List of the Mitigation Measures and Lease Measures Applied to the Construction and Operation of the Berths 97-109 (China Shipping) Container Terminal

2008 EIS/EIR	2019 SEIR	2025 RSEIR
MM AES-1: Landscaping	Unchanged From the 2008 EIS/EIR	Unchanged From the 2008 EIS/EIR
MM AES-2: Crane Color Study	Unchanged From the 2008 EIS/EIR	Unchanged From the 2008 EIS/EIR
MM AES-3: Beautification Plans	Unchanged From the 2008 EIS/EIR	Unchanged From the 2008 EIS/EIR
MM AES-4: Plaza Park	Unchanged From the 2008 EIS/EIR	Unchanged From the 2008 EIS/EIR
MM AQ-1: Harbor Craft used during construction	Unchanged From the 2008 EIS/EIR	Unchanged From the 2008 EIS/EIR
MM AQ-2: Cargo Ships	Unchanged From the 2008 EIS/EIR	Unchanged From the 2008 EIS/EIR
MM AQ-3: Fleet Modernization for On-Road Trucks	Unchanged From the 2008 EIS/EIR	Unchanged From the 2008 EIS/EIR
MM AQ-4: Fleet Modernization for Construction Equipment	Unchanged From the 2008 EIS/EIR	Unchanged From the 2008 EIS/EIR
MM AQ-5: Best Management Practices	Unchanged From the 2008 EIS/EIR	Unchanged From the 2008 EIS/EIR
MM AQ-6: Additional Fugitive Dust Controls	Unchanged From the 2008 EIS/EIR	Unchanged From the 2008 EIS/EIR
MM AQ-7: General Mitigation Measure	Unchanged From the 2008 EIS/EIR	Unchanged From the 2008 EIS/EIR
MM AQ-8: Special Precautions near Sensitive Sites	Unchanged From the 2008 EIS/EIR	Unchanged From the 2008 EIS/EIR
MM AQ-9. Alternative Maritime Power (AMP)	Modified From the 2008 EIS/EIR ~~MM AQ-9: Alternative Maritime Power (AMP) - revised~~	Re-instated by the Court from 2008 EIR/EIS and revised, subject to BOHC approval~~MM AQ-9: Alternative Maritime Power (AMP) - revised~~
MM AQ-10. Vessel Speed Reduction Program (VSRP)	Modified From the 2008 EIS/EIR ~~MM AQ-10. Vessel Speed~~	Re-instated by the Court from 2008 EIR/EIS and revised, subject to BOHC approval~~MM AQ-10. Vessel~~

2008 EIS/EIR	2019 SEIR	2025 RSEIR
	~~Reduction Program (VSRP) - revised~~	~~Speed Reduction Program (VSRP) - revised~~
MM AQ-11: Low-Sulfur Fuel	Unchanged From the 2008 EIS/EIR	Unchanged From the 2008 EIS/EIR
MM AQ-12: Slide Valve	Unchanged From the 2008 EIS/EIR	Unchanged From the 2008 EIS/EIR
MM AQ-13: Reroute Cleaner Ships	Unchanged From the 2008 EIS/EIR	Unchanged From the 2008 EIS/EIR
MM AQ-14: New Vessel Build	Unchanged From the 2008 EIS/EIR	Unchanged From the 2008 EIS/EIR
MM AQ-15. Yard Tractors at Berth 97-109 Terminal	Modified From the 2008 EIS/EIR ~~MM AQ-15. Yard Tractors - revised~~	Upheld by the Court and Unchanged From the 2019 EIR
MM AQ-16: Yard Equipment at Berth 121-131 Rail Yard	Deleted From the 2008 EIS/EIR	Upheld by the Court and Unchanged From the 2019 EIR
MM AQ-17: Yard Equipment at Berth 97-109 Terminal	Modified From the 2008 EIS/EIR ~~MM AQ-17. Cargo Handling Equipment - revised~~	Upheld by the Court and Unchanged From the 2019 EIR
MM AQ-17: Cargo-Handling Equipment (Electric Yard Tractor Pilot Project)	Modified From the 2008 EIS/EIR	Reinstated by the Court from 2008 EIR/EIS and revised, subject to BOHC approval
MM AQ-18: Yard Locomotives at Berth 121-131 Rail Yard	Unchanged From the 2008 EIS/EIR	Unchanged From the 2008 EIS/EIR
MM AQ-19: Clean Truck Program	Unchanged From the 2008 EIS/EIR	Unchanged From the 2008 EIS/EIR
MM AQ-20: LNG Trucks	Deleted From the 2008 EIS/EIR	Upheld by the Court and Unchanged From the 2019 EIR
MM AQ-21: Truck Idling Reduction Measure	Unchanged From the 2008 EIS/EIR	Unchanged From the 2008 EIS/EIR
LM AQ-22: Periodic Review of New Technology and Regulations	Unchanged From the 2008 EIS/EIR	Unchanged From the 2008 EIS/EIR
MM AQ-23: Compact Fluorescent Light Bulbs	Unchanged From the 2008 EIS/EIR	Unchanged From the 2008 EIS/EIR
LM AQ-23: Throughput Tracking	Deleted From the 2008 EIS/EIR	Upheld by the Court and Unchanged From the 2019 EIR
LM AQ-24: General Mitigation Measure (lease measure).	Unchanged From the 2008 EIS/EIR	Unchanged From the 2008 EIS/EIR
MM AQ-25: LEED.	Unchanged From the 2008 EIS/EIR	Unchanged From the 2008 EIS/EIR
MM AQ-26: Compact Fluorescent Light Bulbs	Unchanged From the 2008 EIS/EIR	Unchanged From the 2008 EIS/EIR
MM AQ-27: Energy Audit	Unchanged From the 2008 EIS/EIR	Unchanged From the 2008 EIS/EIR
MM AQ-28: Solar Panels	Unchanged From the 2008 EIS/EIR	Unchanged From the 2008 EIS/EIR
MM AQ-29: Recycling	Unchanged From the 2008 EIS/EIR	Unchanged From the 2008 EIS/EIR
MM AQ-30: Tree Planting	Unchanged From the 2008 EIS/EIR	Unchanged From the 2008 EIS/EIR
		MM AQ-31: Compliance With At-Berth Regulations
	LM AQ-1. Cleanest Available Cargo Handling Equipment.	Upheld by the Court and Unchanged From the 2019 EIR
	LM AQ-2. Priority Access for Drayage	Upheld by the Court and Unchanged From the 2019 EIR
	LM AQ-3. Demonstration of Zero-Emissions Equipment	Upheld by the Court and Unchanged From the 2019 EIR
	MM GHG-1: LED Lighting	Upheld by the Court and Unchanged From the 2019 EIR
	LM GHG-1: GHG Credit Fund.	Replaced by MM GHG-2: GHG Reduction Offsets
MM BIO-1: Mitigation Credits	Unchanged From the 2008 EIS/EIR	Unchanged From the 2008 EIS/EIR

2008 EIS/EIR	2019 SEIR	2025 RSEIR
MM BIO-2: Vessel Speed Reduction Program	Unchanged From the 2008 EIS/EIR	Unchanged From the 2008 EIS/EIR
MM BIO-3: Noise Reduction during Pile Driving	Unchanged From the 2008 EIS/EIR	Unchanged From the 2008 EIS/EIR
MM CR-1: (encountered artifacts)	Unchanged From the 2008 EIS/EIR	Unchanged From the 2008 EIS/EIR
MM GEO-1: Emergency Response Planning	Unchanged From the 2008 EIS/EIR	Unchanged From the 2008 EIS/EIR
MM GW-1: Site Remediation	Unchanged From the 2008 EIS/EIR	Unchanged From the 2008 EIS/EIR
MM NOI-1: Construction Limitations	Unchanged From the 2008 EIS/EIR	Unchanged From the 2008 EIS/EIR
MM NOI-2: Noise Walls	Unchanged From the 2008 EIS/EIR	Unchanged From the 2008 EIS/EIR
MM PS-1: Recycling Construction Materials	Unchanged From the 2008 EIS/EIR	Unchanged From the 2008 EIS/EIR
MM PS-2: Materials with Recycled Content	Unchanged From the 2008 EIS/EIR	Unchanged From the 2008 EIS/EIR
MM PS-3: Long Term Solid Waste Management	Unchanged From the 2008 EIS/EIR	Unchanged From the 2008 EIS/EIR
MM TRANS-1: Avalon Boulevard and Harry Bridges Boulevard	Unchanged From the 2008 EIS/EIR	Unchanged From the 2008 EIS/EIR
MM TRANS-2. Alameda and Anaheim Streets	Modified From the 2008 EIS/EIR	Upheld by the Court and Unchanged From the 2019 EIR
MM TRANS-3: John S. Gibson Boulevard and I-110 N/B Ramps	Modified From the 2008 EIS/EIR	Upheld by the Court and Unchanged From the 2019 EIR
MM TRANS-4: Fries Avenue and Harry Bridges Boulevard	Deleted From the 2008 EIS/EIR	Upheld by the Court and Unchanged From the 2019 EIR
MM TRANS-5: Broad Avenue and Harry Bridges Boulevard	Unchanged From the 2008 EIS/EIR	Unchanged From the 2008 EIS/EIR
MM TRANS-6: Navy Way and Seaside Avenue	Deleted From the 2008 EIS/EIR	Upheld by the Court and Unchanged From the 2019 EIR
MM TRANS-7: Avalon Boulevard and Harry Bridges Boulevard	Not Adopted By the BOHC	Not Adopted By the BOHC
MM TRANS-8: Harbor Boulevard and SR-47 WB On-Ramp	Not Adopted By the BOHC	Not Adopted By the BOHC
MM TRANS-9: Harbor Boulevard and Swinford Street	Not Adopted By the BOHC	Not Adopted By the BOHC
MM TRANS-10: John S. Gibson Boulevard and I-110 NB Ramps	Not Adopted By the BOHC	Not Adopted By the BOHC
MM TRANS-11: Figueroa Street and C Street/I-110 Ramps	Not Adopted By the BOHC	Not Adopted By the BOHC
MM TRANS-12: Pacific Avenue and Front Street	Not Adopted By the BOHC	Not Adopted By the BOHC
MM TRANS-13: Neptune Avenue and Harry Bridges Boulevard	Not Adopted By the BOHC	Not Adopted By the BOHC
MM TRANS-14: John S. Gibson Boulevard and Channel Street	Not Adopted By the BOHC	Not Adopted By the BOHC

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