



# Air Resources Board



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June 5, 2017

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Dear Mr. Cannon and Dr. Stevens:

Thank you for providing the California Air Resources Board (CARB or Board) staff the opportunity to comment on the Draft Environmental Impact Report (DEIR) for the City of Los Angeles Harbor Department (LAHD) and U.S. Army Corps of Engineers Everport Container Terminal (ECT) Improvements for Berths 226-236 (Project). We understand that the proposed Project would improve container handling efficiency, increase container capacity, and accommodate larger vessels at ECT.

California's 2016 Sustainable Freight Action Plan (State Plan) supports projects that seek to improve system efficiencies and port competitiveness. But the State Plan also highlights the need to reduce or eliminate the health impacts on communities disproportionately affected by freight operations and to accelerate the transition to zero and near-zero emission equipment powered by renewable energy sources, including supportive infrastructure. The efficiency, competitiveness, and environmental objectives of the State Plan are echoed in the San Pedro Bay Ports 2017 Clean Air Action Plan Discussion Draft. For the proposed Project to achieve these objectives, we recommend that LAHD strengthen the proposed mitigation measures and include additional measures to directly address the increase in locomotive, vessels, and truck throughput projected to account for the increases in harmful diesel particulate and nitrogen oxides (NOx) emissions.

*The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our website: <http://www.arb.ca.gov>.*

California Environmental Protection Agency

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LAHD has been a worldwide leader in reducing harmful emissions from maritime and support operations, and would continue that role under the 2017 Clean Air Action Plan with strong support for zero and near-zero emission technologies. CARB commends LAHD for its collaborative efforts on Everport's Enhanced Cargo Demonstration Project. CARB is aware that ECT was awarded a grant from the California Energy Commission in late 2016 and recently took possession of a portion of the near-zero liquefied natural gas yard tractors and battery electric yard tractors.

### **Project Description**

The proposed Project site is located within the Port of Los Angeles. The existing site is a 205-acre area that includes 20.5 acre area associated with the existing on-dock railyard (Terminal Island Transfer Facility) and 25 acres of a backland area. The proposed Project includes adding 23.5 acres for development, adding new backlands, relocating the main gate, adding parking and amending the lease to include the new parcels and extend Everport's lease through 2038. Construction of the proposed Project will take approximately 24 months and includes improvements, such as dredging, adding wharf piles and spacers, raising and adding cranes, installing additional shorepower and associated infrastructure which will allow the terminal to accommodate up to 16,000 ton equivalent units (TEU) vessels.

Cargo containers at ECT are moved off-terminal by both rail and trucks. Operations at ECT are projected to increase from the current maximum capacity of 1,818,000 TEUs to a maximum projected capacity of 2,379,525 by 2038 (peaking in 2033), resulting in an increase projected throughput of 561,525 TEUs.

### **Results of the DEIR**

The DEIR shows that the largest sources of harmful PM2.5 and NOx emissions are ships and locomotives. However, the DEIR does not propose any new mitigation measures to minimize or eliminate the increases that directly affect nearby disadvantaged communities. While ECT may have a lesser ability to effect change, the Evergreen Line and the Port can and must secure reductions in these ship and locomotive emissions. The operational and construction emission tables presented in Chapter 3, Section 3.2, include proposed Project emissions per day, with and without mitigation. In 2033, NOx emissions from the source category "ships: main propulsion engines" drop a surprising 53 percent "with mitigation". Given that LAHD has not proposed mitigation measures that would achieve reductions from ship main engines other than the existing Voluntary Speed Reduction Program (VSRP), LAHD should recalculate the emissions and revise the tables, accordingly. In addition, LAHD should

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revise all of the emission tables to include a break-down of the expected emission reductions attributable to each of the proposed mitigation measures and any additional mitigation measures.

Construction of the proposed Project will result in significant and unavoidable impacts for NOx in 2018 and 2019, volatile organic compounds (VOCs) in 2019, and overlapping construction and operations impacts for NOx in 2019. For operations, the proposed Project results in significant and unavoidable impacts for carbon monoxide (CO) and VOCs in 2033 and 2038. Furthermore, the mitigated proposed Project results in significant and unavoidable, cumulative air quality and health impacts in the region and to the nearby community. Even where impacts will remain significant and unavoidable after mitigation, CEQA nevertheless requires that all feasible<sup>1</sup> mitigation measures be incorporated. (See Cal. Pub. Resources Code § 21081; 14 CCR § 15126.2(b).)

### **General Recommendations**

CARB finds that the DEIR needs improvement in clarity and requires further development and consideration of our comments below. Furthermore, given the increased emissions from future terminal operations and cumulative impacts, LAHD should aggressively deploy the lowest emission technologies possible. This deployment should include those technologies that are “capable of being accomplished in a successful manner within a reasonable period of time” (Public Resources Code §21061.1; California Code of Regulations, title 14, section 15364), such as zero and near-zero emission technologies that are expected early in the life of the project. With these technologies, CARB staff believes that the proposed Project’s air quality, health, and greenhouse gas impacts can feasibly be further mitigated. To that end, CARB staff recommends that the Final EIR include the additional mitigation measures outlined below.

In addition, the 2017 Clean Air Action Plan Discussion Draft identifies that reductions in emissions can be achieved by shifting to on-dock rail, where possible. Projected truck trips per day is estimated to increase by nearly 60 percent, therefore CARB recommends that LAHD evaluate options to expand the on-dock rail capacity at ECT.

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<sup>1</sup>For the purposes of CEQA, “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. (California Code of Regulations, title 14, section 15364.)

### **Mitigation Measures**

- 1) LAHD should add a mitigation measure that requires accelerating the turnover of older line-haul locomotives servicing ECT to ones meeting Tier 4 emission standards. By the proposed Project's interim year (2026), LAHD should require that all line-haul locomotives servicing Everport meet Tier 4 emission standards. To monitor the progress of this acceleration, include the distribution of engine tiers used in determining the locomotive emissions for the baseline year (2013) and the opening year (2019). Furthermore, CARB recommends that LAHD incentivize or require the use of cleaner locomotive technologies, through lease agreements, as rail use increases. This would include, but is not limited to, a hybrid-electric locomotive with all electric capability. CARB's Technology Assessment: Freight Locomotives provides information on projected development of cleaner freight locomotives. This assessment can be found at [https://www.arb.ca.gov/msprog/tech/techreport/freight\\_locomotives\\_tech\\_report.pdf](https://www.arb.ca.gov/msprog/tech/techreport/freight_locomotives_tech_report.pdf).
- 2) Mitigation Measure (MM) AQ-7 requires an 85 percent shore power compliance rate by 2020 and 95 percent compliance by 2026. Recipients, such as the LAHD, of Proposition 1B funding for grid-based electric power at T227, must meet a 90 percent utilization rate by 2020. Furthermore, the proposed Project includes adding five alternative maritime power (AMP) terminal vaults. With these added AMP vaults and given the terminal operator owns the majority of the ships that will call at ECT's berths (specifically T227 and T230), it is reasonable that ten vaults are sufficient to achieve a 100 percent compliance rate. In March 2017, our Board directed staff to expand the at-berth regulation to achieve up to 100 percent compliance. In anticipation of CARB's regulatory amendments, LAHD should expand MM AQ-7 to require a 100 percent shore-power compliance rate from vessels equipped with shore power starting in 2020 and require alternative capture and control systems for all ships that are not equipped to use shore-based electricity. This includes all vessels subject to MM AQ-4. Currently, MM AQ-4 only requires ships and barges used to deliver construction-related materials to comply with the expanded Vessel Speed Reduction Program. All ocean-going vessels as part of the construction phase of the proposed Project should also be required to use alternative capture and control systems if they are not equipped to use shore-based electricity for the duration of their stay. Furthermore, LAHD should utilize mechanisms to incentivize or encourage the terminal operator to bring their cleanest ships to ECT.

- 3) Given the projected increase in throughput of cargo containers at ETC, LAHD should require the use of cargo handling equipment (CHE), including yard trucks, handlers, gantry cranes, fork lifts, that includes technologies beyond those required by the mobile CHE regulation, and includes use of zero and near-zero emission technology as it becomes commercially available. CARB's Technology Assessment: Mobile Cargo Handling Equipment, provides information on current and projected development of CHE. This assessment can be found at [https://www.arb.ca.gov/msprog/tech/techreport/che\\_tech\\_report.pdf](https://www.arb.ca.gov/msprog/tech/techreport/che_tech_report.pdf).
- 4) According to LAHD, the container throughput at ECT includes refrigerated shipping containers; however, the DEIR does not include information regarding this emission source or associated emissions. The LAHD should revise the DEIR to include refrigerated shipping containers as an emission source category, including their dwell times and mitigation that will eliminate or reduce these emissions. CARB recommends that the LAHD consider requirements that refrigerated shipping containers on rail cars be plugged in to a containerized hydrogen fuel cell generator carried on adjacent rail car or other available technology. ARB's Technology Assessment for Transport Refrigerators is available at [https://www.arb.ca.gov/msprog/tech/techreport/tru\\_07292015.pdf](https://www.arb.ca.gov/msprog/tech/techreport/tru_07292015.pdf).
- 5) MM AQ-1 requires that the harbor craft used for construction must be equipped with engines meeting the U.S. Environmental Protection Agency Tier 3 emission standards or cleaner at all times during construction. LAHD should expand this measure to require the use of the cleanest available commercial harbor craft (CHC) (LPG/LNG, biodiesel, electric hybrid) during operations. CARB's Technology Assessment: Commercial Harbor Craft, provides information on current and projected development of CHC, including current and anticipated costs at widespread development. This assessment can be found at [https://www.arb.ca.gov/msprog/tech/techreport/draft\\_chc\\_technology\\_assessment.pdf](https://www.arb.ca.gov/msprog/tech/techreport/draft_chc_technology_assessment.pdf).
- 6) MM AQ-6 requires Evergreen vessels to comply with the expanded VSRP (12 knots at 40 nautical miles) by 95 percent. CARB recognizes that LAHD implements an incentive based, voluntary VSRP and based on the VSRP Operator Summary Report, Evergreen vessels met a 99 percent participation rate to 20 nautical miles and a 97 percent participation rate to 40 nautical miles in 2016. Since LAHD is already achieving projected emission reductions beyond what MM AQ-6 requires, there is no additional benefit. Therefore, LAHD should propose further mitigation to achieve reductions from vessels calling at ECT.

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- 7) Lease Measure AQ-1 requires tenants to meet with LAHD when a tenant needs to replace or turnover equipment to determine the availability and feasibility of cleaner equipment. Furthermore, the tenant is required to assess any new technology for feasibility and report back to LAHD every five years. Given the changing market conditions and advances in technology, LAHD should reduce the tenant's reporting and technology review requirements to every two years.
- 8) LAHD should describe the type of dredging (i.e. mechanical, hydraulic, hybrid, etc.) and the expected emissions from this activity, as well as adding mitigation that requires using the cleanest available technology.
- 9) Starting in 2033, off-dock truck traffic is projected to increase by 18 percent from the 2013 baseline. According to Table 3.2-20, truck emissions account for 40 percent of the total PM10, 17 percent of total PM2.5, and approximately six percent of the total emissions for NOx and CO in 2033. As technology becomes available, LAHD should require that medium-heavy and heavy-heavy duty trucks traveling within 100 miles of the terminal use zero and near-zero technology. CARB's Technology and Fuels Assessments provide information on the current and projected development of mobile source technologies and fuels, including current and anticipated costs at widespread deployment. The assessments can be found at <http://www.arb.ca.gov/msprog/tech/tech.htm>.

### **Recommendations to Improve the Health Risk Analysis Discussion**

- 1) Appendix B3, Section 4.3, Page B3 13; "Exposure Scenarios for Individual Cancer Risk", indicates that Project emissions spanning construction and operation of the proposed Project were averaged and applied chronologically to each age bin identified in the OEHHA Air Toxics Hot Spots Program, Risk Assessment Guidelines (2015). This approach can mask any peak emissions and the associated potential health impacts that may occur over the lifetime of the project. Therefore, LAHD should revise the DEIR to include an evaluation of the potential cancer risk starting when peak emissions occur (e.g. PM10 and PM2.5 appear to increase in 2033 according to tables 3.2-11 and 3.2-20). The reason for starting the risk analysis at these point(s) is because pregnancy, and the age bin encompassing birth through age two, can occur concurrently with the emissions peaks over the course of the construction and operation of the proposed project. Presenting the potential health impacts beginning at these points throughout the project will provide the public with a more comprehensive understanding of the project and how the potential health risk estimates may change as the project is completed and the facility changes to full operation.

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- 2) Appendix B3, Table B3-5; "Maximum CEQA Health Impacts Estimated for Construction and Operation of the Proposed Project Without Mitigation": LAHD should revise this table, and any other table presenting similar information, to more clearly present the potential cancer and noncancer health impacts from the proposed Project. In this table, it is difficult to understand the potential health impacts and where they occur for each receptor type (i.e., residential, occupational, and sensitive) and what the column headers (e.g., Proposed Project, CEQA Baseline, CEQA Increment, Future CEQA Baseline, and Future CEQA Increment) actually represent. For example, it is not clear in the table that the potential health impacts for the receptors under the column headers may occur at different locations. To address this, please add additional receptor description information (e.g., receptor index) to clarify the table. Furthermore, to better provide transparency and clarity to the public, LAHD should revise the text associated with these tables to fully explain any necessary information.

### **Additional Comments**

- 1) Appendix F2 provides an evaluation for the disposal of the dredged material, concluding that the only disposal option feasible and practical is 100 percent ocean disposal at LA-2 Facility, located 11 kilometers offshore from the entrance to LAHD. However, Tables 3.2-10A and Table 3.2-10B include both upland and ocean disposal and associated emissions. LAHD should revise these tables and include the emissions and assumptions associated with the ocean disposal option.
- 2) Air Quality Emissions, Appendix B1 includes sweepers as part of the CHE emission inventory. Sweepers are no longer part of CARB's CHE regulation and should be removed. Sweepers are regulated under either CARB's Off-Road Regulation or the Statewide Truck and Bus Regulation, depending on the sweeper engine. LAHD should revise these emission inventories, appropriately. To determine which regulation applies to sweepers, please reference CARB's Enforcement Advisory Number 401, which can be found at <https://www.arb.ca.gov/enf/advs/advs401.pdf>.

### **Closing**

CARB recognizes the role the proposed Project can have in supporting a more efficient and economically competitive Port, but we urge you to augment the mitigation measures to ensure the community is not adversely impacted. We appreciate the opportunity to comment on the DEIR, and CARB is available to provide further assistance, as needed.

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Please include CARB on your State Clearinghouse list of selected State agencies that will receive the Final Environmental Impact Report as part of the comment period.

If you have questions, please contact me at (916) 322-8277, or Robbie Morris, Air Pollution Specialist, at (916) 327-0006 or [robbie.morris@arb.ca.gov](mailto:robbie.morris@arb.ca.gov).

Sincerely,



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cc: (continued)

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