

US EPA ARCHIVE DOCUMENT



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U.S. Army Corps of Engineers  
Los Angeles District, Regulatory Division  
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ATTN: Theresa Stevens, Ph.D.

Subject: Draft Environmental Impact Statement/Environmental Impact Report for the Berths 212-224 (YTI) Container Terminal Improvements Project, (CEQ # 20140131)

The U.S. Environmental Protection Agency is providing comments on the Draft Environmental Impact Statement (DEIS) for the YTI Container Terminal Improvements Project. Our comments are provided pursuant to the National Environmental Policy Act, Council on Environmental Quality regulations (40 CFR Parts 1500-1508), and Section 309 of the Clean Air Act.

The applicant – the Port of Los Angeles – has made noteworthy long-term operational air quality improvements over the last nine years, specifically to reduce diesel particulates and health risks to nearby residents (see Inventory of Air Emissions – 2012, dated July 2013; [http://www.portoflosangeles.org/pdf/2012\\_Air\\_Emissions\\_Inventory.pdf](http://www.portoflosangeles.org/pdf/2012_Air_Emissions_Inventory.pdf)). Construction and operation of the proposed renovations would result in greater emissions from the terminal. According to the DEIS, emissions from many aspects of the proposed project would be controlled through regulatory compliance, sustainable construction guidelines, project conditions, mitigation measures, and lease measures. EPA recommends the incorporation of additional measures into the proposed project that would require the adoption of available emission reduction technologies by container ships and rubber tired gantry cranes serving the Port. We also recommend that the Final EIS provide additional information about truck freight hauling efficiency (i.e., hauling both import and export freight in the same truck round-trip) to facilitate assessment of whether additional efficiency improvements are possible.

With regard to water quality, we are concerned that the DEIS does not acknowledge the ecologically significant increase in mortality for amphipods that is predicted by the sediment toxicity testing results in Appendix F, Draft Sediment Characterization Report for Berths 212-224. Based on the information provided in the DEIS, EPA believes that sediment at Berths 212 – 216 is not suitable for ocean disposal.

The DEIS concludes that the action alternatives' construction and operational adverse air quality impacts on the local community and the air basin would be significant, and that operations would also have significant cumulative adverse impacts on health. In addition, the DEIS predicts significant adverse impacts from greenhouse gas emissions and the introduction of nonnative species. It also acknowledges disproportionately high and adverse air quality and noise impacts

to low-income and minority communities. Based on these impacts and our concerns about air and water quality, we have rated the DEIS as “Environmental Concerns – Insufficient Information” (EC-2, see the enclosed “Summary of EPA Rating Definitions”). Our concerns and recommendations are discussed further in the enclosed detailed comments.

We appreciate the opportunity to review this DEIS and are available to discuss our comments. When the FEIS is released to the public, please send a copy to this office at the address above (mail code ENF 4-2). If you have any questions, please contact me at 415-972-3521, or contact Tom Kelly, the lead reviewer for this project, or Jeanne Geselbracht. Mr. Kelly can be reached at 415-972-3856 or [kelly.thomasp@epa.gov](mailto:kelly.thomasp@epa.gov); Ms. Geselbracht can be reached at 415-972-3853 or [Geselbracht.jeanne@epa.gov](mailto:Geselbracht.jeanne@epa.gov).

Sincerely,

/S/

Kathleen Martyn Goforth, Manager  
Environmental Review Section

Enclosure: Summary of EPA Rating Definitions  
Detailed Comments

cc: Christopher Cannon, Port of Los Angeles  
John Hummer, U.S. Maritime Administration  
Susan Nakamura, South Coast Air Quality Management District  
Cynthia Marvin, California Air Resources Board  
Linda Frame, YTI  
Richard Cameron, Port of Long Beach

## Air Quality

### *Ocean-Going Container Vessels*

The DEIS notes that YTI, which is leasing Berths 212-221 from the Port of Los Angeles, is a wholly owned subsidiary of Nippon Yusen Kabushiki Kaisha or NYK Line (p. 1-5). NYK Line would likely be the primary shipping line served by the proposed Project, but the relative percentage by shipping lines is not specified in the DEIS. The DEIS describes the use of Alternate Marine Power to comply with the California Air Resources Board's regulations requiring an 80% reduction in hoteling emissions from ocean-going vessels at berth in California ports by 2020 (p. 3.2-41). The DEIS then proposes to exceed that requirement through mitigation measure MM AQ-10. It states that 95% of NYK Line container ships will connect to Alternate Marine Power by 2026. EPA acknowledges and appreciates this voluntary commitment by NYK Line. It is difficult, however, to assess the magnitude of the reduction that would be achieved through this measure, relative to the total emissions of the project, without know the percentage of NYK Line ships calling at the YTI terminal.

The International Maritime Organization has required new engines to meet Tier II emissions standards since 2011. Tier III engines are available now, but are not required on new vessels until 2016. Tier II and III engines reduce NOx emissions by 20% and 80%, respectively, compared to older Tier I engines. We commend the Port of Los Angeles for its Environmental Ship Index Program (p. 3.2-28), which provides financial incentives for ocean cargo fleets to bring these newer and cleaner vessels to the Port of Los Angeles. Despite this incentive, the average age of container ships calling on the YTI Terminal in 2012 was ten years old, meeting only the IMO Tier I standards (p. 3.2-39).

As the DEIS notes, existing container ships can be retrofitted to improve combustion, lower fuel use, and reduce emissions (3.2-41). It also states that 27% of ships calling on the YTI Terminal in 2012 were equipped with slide fuel valves (p. 3.2-41), but makes no commitment to retrofit ships (unequipped with slide valves) serving the YTI Terminal. We note that the Final EIS for the Port of Long Beach Pier S Terminal and Back Chanel Improvements project included an environmental control measure (AQ-4) that stated:

“All OGV (*ocean-going vessels*) that call at the Project container terminal and that are capable of being so equipped shall have slide fuel valves installed on their main engines, or implement an equivalent emission reduction technology. This technology would reduce emissions of NOx and diesel particulate matter (DPM) from OGV main engines.”

The proposed project's significant impacts and disproportionately high and adverse effects to minority and low income communities call for the best efforts of all sectors in the chain

of goods movement. As the primary beneficiary of the proposed project, the NYK Line has a significant opportunity to demonstrate leadership in this regard.

*Recommendations:*

Disclose, in the FEIS, the percentage of YTI terminal use that was represented by the NYK Line and each other ocean carrier line using the terminal in the baseline year (2012) and provide estimated percentages for the NYK Line versus other lines in future years, to the extent known (e.g. through current contracts).

Encourage YTI's partner shipping lines to commit to mitigation measure AQ-10.

Encourage NYK Line, and other partners calling on the YTI Terminal, to develop an emissions reduction strategy through the use of Tier II and Tier III ships, slide fuel valves on auxiliary engines used for transit, and other measure to retrofit older ship engines.

Consider documenting commitments by NYK Line and other YTI partners in lease measures described in the FEIS.

*Rubber-Tired Gantry Cranes*

The DEIS discusses the use of 11 diesel-powered rubber-tired gantry cranes (p. 2-10 and 2-12), without mention of hybrid diesel-electric retrofit technology. The Port's Technology Advancement Program prepared a final report, *Rubber-Tired Gantry Crane Hybridization Demonstration* in January 2012, noting, "Ports America will demonstrate this next generation EcoCrane™ at their West Basin Container" and "following successful completion of the [next generation] demonstration phase, it is expected that EcoPower Hybrid Systems, Inc. will seek EPA and CARB verification for the EcoCrane™ system." EPA verified the emissions reductions associated with this technology in June 2013.<sup>1</sup>

*Recommendation for the FEIS:*

Include a mitigation measure to ensure that rubber-tired gantry cranes are retrofitted to achieve emissions reductions equivalent to the Ecocrane Hybrid System.

*Drayage Trucks*

As noted by EPA's SmartWay program, when a truck carrier cannot arrange for both an inbound and outbound shipment to a destination, such as the port, the resulting empty truck trip, also called a bobtail in the DEIS, increases traffic, fuel use, and transportation costs.<sup>2</sup> The DEIS indicates that the Port Area Travel Demand Model was used to estimate the number of one-way truck trips generated by the proposed project (p. 3.7-9). According to Port staff, the model estimated that only 29% of truck trips to the YTI terminal were dual transaction (carrying incoming and outgoing freight in the same roundtrip) in 2012, and that

<sup>1</sup> See EPA's letter to MJ EcoPower Hybrid Systems Inc., dated June 13, 2013 at <http://www.epa.gov/cleandiesel/documents/verif-letter-eco-hybrid.pdf>

<sup>2</sup> Improved Freight Logistics, A Glance at Clean Freight Strategies  
<<http://www.epa.gov/smartway/forpartners/documents/trucks/techsheets-truck/EPA-420-F00-037.pdf>>

such trips would rise to 45% by 2026.<sup>3</sup> The DEIS, however, does not contain this information nor explain how dual transactions would increase in the future. Since nearly 50% of the export freight is empty containers, this appears to represent a potentially fruitful opportunity for increasing dual transactions.

*Recommendation for the FEIS:*

Clarify the number of trucks arriving at the YTI Terminal that involve single transactions, dual transactions, empty chassis, and any other categories of truck transactions.

Describe barriers that limited YTI dual transactions to 29% in 2012, particularly for empty containers, and describe plans to increase dual transactions to 45% by 2026.

*Zero and Near Zero (tailpipe) Emission Technologies*

The air basin is unlikely to attain EPA's National Ambient Air Quality Standards (NAAQS) without widespread adoption of new technologies by the freight movement sector. By 2023, the South Coast Air Quality Management District expects heavy duty trucks, ships and commercial boats, and locomotives to represent the first, third and fifth largest sources, respectively, of nitrogen oxides in the South Coast Air Basin.<sup>4</sup> EPA provided funding for demonstration and deployment of new freight movement technologies by the Ports of Los Angeles and Long Beach, such as the replacement, repowering or retrofit of 27 pieces of equipment including port harbor craft.<sup>5</sup> We look forward to continued coordination on the development of zero and near zero freight transport technologies.

*Recommendations for the FEIS:*

Continue to demonstrate and deploy new technologies, particularly zero and near zero tailpipe emission technologies that could allow the air basin to attain the NAAQS within the timeframes required by the Clean Air Act.

*Environmental Justice*

The DEIS acknowledges disproportionately high and adverse impacts to low-income and minority communities (AQ-2, 3, 4 and 7 and NOI-1). As the Council on Environmental Quality guidance on Environmental Justice notes, this determination does not preclude the Army Corps from proceeding with the proposed project, but should encourage consideration of alternatives, mitigation measures, monitoring needs, and preferences expressed by the affected community or population.<sup>6</sup>

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<sup>3</sup> Personal Communication between Shozo Yoshikawa, Port of Los Angeles and Tom Kelly, EPA on June 11, 2014.

<sup>4</sup> Final 2012 Air Quality Management Plan, South Coast Air Quality Management District, December 2012

<sup>5</sup> [American Recovery and Reinvestment Act: Reducing Diesel Emissions at the Port of Los Angeles](#): The Port of Los Angeles was selected for \$1,991,750 in funding to replace, repower, and/or retrofit a total of 27 pieces of equipment, including harbor craft, currently in operation at the port.

<sup>6</sup> Environmental Justice Guidance Under the National Environmental Policy Act, December 1997

The DEIS briefly discusses the Harbor Community Benefits Foundation (p. 7-28), noting that the Foundation provides funding for grants and projects that “assess, protect and improve public health, quality of life, and the natural environment (p. 7-28). For projects that commit to implementing all feasible mitigation, but still have remaining disproportionate impacts, a health based grant program is a sound method to partially reduce project-related impacts. The DEIS, however, contains little detail about the foundation grants and does not explain whether there is any relationship between the proposed project and the Foundation (e.g. would the applicant provide additional funding for future grants?).

*Recommendations for the FEIS:*

Expand the discussion of the Harbor Community Benefits Foundation, including:

- The goal(s) of Foundation grants (e.g. health education, improved access to healthcare, reduced exposures etc.);
- A summary of past and current grants; and
- Quantifiable measures of success.

Disclose whether the action alternatives would include additional funding for community projects or grants.

## **Water Resources**

### *Disposal of Contaminated Sediment*

The DEIS is open-ended on the disposal location for sediment dredged from Berths 212 – 224, stating “all of the dredged material, approximately 27,000 cubic yards, would be disposed of at an approved site, which may include LA-2, the Berths 243-245 CDF [Confined Disposal Facility], or another approved location” (p. 2-15). Section 3.15 of the DEIS appears to suggest that all the sediment is appropriate for ocean disposal: “... toxicity testing on sediments from the two composites showed no statistically or ecologically significant effects.” This statement is inconsistent with the Appendix F - Draft Sediment Characterization Report, Berths 212-224. Table 3-3 of Appendix F (Solid Phase Toxicity Results) shows a 30% higher mortality for amphipods in Composite Sample A (representing sediment at Berths 212 – 216) than at the reference location (the LA-2 Ocean Dredged Material Disposal Site). As the Sediment Characterization Report notes, “the Composite A amphipod survival level (68 percent) is not within the allowable 20 percent reference survival window” (Appendix F, p. 4-3).

The Report appears to diminish the importance of the amphipod toxicity testing, stating in several sections that the result may be due to un-ionized ammonia;<sup>7</sup> however, it notes that the testing is acceptable for reporting (p. 3-12), and that control test animals had an acceptable survival rate (97%) in excess of the 90% threshold for an acceptable test. Pursuant to EPA Ocean Dumping Regulations at 40 CFR 227.13, bioassays are the primary basis to determine suitability for ocean disposal. EPA relies less heavily on sediment chemistry because many factors can affect chemical bioavailability. Additionally, many

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<sup>7</sup> Un-ionized ammonia is likely to volatilize in the dredging process, so it would not be present when sediment is deposited at another location, such as LA-2.

metals and organic contaminants exceeded Effects Range Low (ERL) concentrations,<sup>8</sup> where toxic effects are occasionally observed, but below Effects Range Medium (ERM), where toxic effects are more likely.

EPA is also particularly concerned about the concentration of pyrethroids. Pyrethroids are elevated in Composite A relative to Composite B (representing sediment at Berths 217 – 224), and not detected in the reference sample at LA-2 (<1.4 ug/L). According to a review of pyrethroid monitoring and toxicity for the California Stormwater Quality Association:<sup>9</sup>

Over the past ten years, pyrethroid pesticides have become the predominant group of chemicals deployed for insect control in urban areas in California (TDC Environmental, 2010b), and are the primary cause of toxicity in urban water bodies in the state (Anderson et al., 2011).

The concentration of total pyrethroids in Composite A was 4.5 ug/L. As Appendix F notes, total pyrethroids do not have ERL and ERM concentrations. We note the following from the California Stormwater Quality Association review:

What is most notable about the information . . . is that the pyrethroids are generally toxic to the most sensitive aquatic arthropods at extremely low levels – generally at concentrations in the single-digit (or lower) nanograms per liter (ng/L) (parts per trillion) range.

Based on unambiguous bioassay results and absent additional data, EPA concludes that all of the sediments from Berths 212-216 are unsuitable for ocean disposal; however, additional sampling could show that contamination is localized and some of the sediment from this area may be suitable for ocean disposal.

*Recommendations for the FEIS:*

State that test results indicate that sediment at Berths 212 – 216 is not suitable for ocean disposal.

*No Discharge Zone*

The DEIS does not appear to discuss the California No Discharge Zone. Effective March 28, 2012, the following vessels will be prohibited from discharging all sewage, whether treated or not, while in California marine waters:

- Large Passenger Vessels of 300 gross tons or greater that have berths or overnight accommodations for passengers.
- Large Oceangoing Vessels of 300 gross tons or greater, including private, commercial, government, or military vessels equipped with a holding tank that has

<sup>8</sup> ERL and ERM concentrations are benchmark concentrations developed in cooperation with National Oceanic and Atmospheric Administration.

<sup>9</sup> Review of Pyrethroid, Fipronil and Toxicity Monitoring Data from California Urban Watersheds, California Storm Water Quality Association, July 2013 < [https://www.casqa.org/sites/default/files/library/technical-reports/casqa\\_review\\_of\\_pyrethroid\\_fipronil\\_and\\_toxicity\\_monitoring\\_data\\_-\\_july\\_2013.pdf](https://www.casqa.org/sites/default/files/library/technical-reports/casqa_review_of_pyrethroid_fipronil_and_toxicity_monitoring_data_-_july_2013.pdf)>



remaining capacity or containing sewage generated prior to entry in to California marine waters.

EPA established this regulation under our Clean Water Act Section 312(f)(4)(A) authorities. For more information, see the joint EPA-CalEPA Fact Sheet for the California No Discharge Zone.<sup>10</sup>

*Recommendation for the FEIS:*

Discuss the California No Discharge Zone and measures that the Port of Los Angeles and YTI Terminal could take to raise awareness of it among the shipping lines serving the YTI terminal.

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<sup>10</sup> <http://www.epa.gov/region9/water/no-discharge/pdf/CaNdzFinal-RuleFactSheet.pdf>