

US EPA ARCHIVE DOCUMENT



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION IX  
75 Hawthorne Street  
San Francisco, CA 94105-3901

December 9, 2011

John W. Markham  
U.S. Army Corps of Engineers  
Los Angeles District, Ventura Field Office  
Alessandro Drive, Suite 110, Ventura  
California 93001

Attention: File Number SPL-2006-2062, 2151

Subject: Pier S Marine Terminal + Back Channel Improvements Project Draft Environmental Impact Statement / Draft Environmental Impact Report Los Angeles County, California (CEQ # 20110316)

The U.S. Environmental Protection Agency (EPA) is providing comments on the Pier S Marine Terminal + Back Channel Improvements Project Draft Environmental Impact Statement (DEIS). Our comments are provided pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality regulations (40 CFR Parts 1500-1508), and our NEPA review authority under Section 309 of the Clean Air Act. Our comments are also prepared under the authority of, and in accordance with, the provisions of the Federal Guidelines promulgated at 40 CFR 230 under Section 404(b)(1) of the Clean Water Act. We appreciate the Corps of Engineers' willingness to accept this letter as timely, after the close of the comment period, as discussed in the telephone conversation and email exchange of November 30, 2011, with Tom Kelly of my staff.

The project proponent, the Port of Long Beach, along with the Port of Los Angeles, has made great strides in reducing goods movement related emissions, and in doing so, has positioned itself as a leader in controlling air pollution from cargo transport. Although we acknowledge the progress and goals that the Port of Long Beach has made in reducing health risks, the proposed project is not aggressive enough in committing to the most advanced, current technological solutions to minimize and reduce air quality impacts associated with goods movement. This is of utmost importance in a region where the community is already heavily burdened by the environmental impacts due to cargo throughput, and during a time when multiple planning efforts provide an opportunity for cross-agency and cross-project coordination. We understand that BNSF Railway, along with the Port of Los Angeles, is currently planning the Southern California International Gateway (SCIG)(comments due February 1, 2012), the Southern California Association of Governments will soon be releasing its Regional Transportation Plan/SCS, and Caltrans is considering modifications to local highways (including I-710).

We commend the Corps and the Port of Long Beach for including a risk assessment acknowledging that this project will result in cancer risk as a disproportionately high and adverse impact; however, according to the DEIS, the preferred alternative clearly exceeds the Port's voluntary Clean Air Action Plan site specific standard. The standard states that projects will not exceed a 10 in 1,000,000 excess residential cancer risk.

Based on our review of the DEIS, we are rating both federal action alternatives as *Environmental Objections - Insufficient Information (EO-2)* (please see the enclosed "Summary of EPA Rating Definitions"). While the DEIS describes a thorough set of practical mitigation measures to reduce air quality impacts, consistent with the 2010 Clean Air Action Plan Update, it fails to build upon a subset of that plan, the Technology Advancement Plan's initiative to move towards an emissions free port. We note

the Mission of the TAP is to "...accelerate the verification or commercial availability of new, clean technologies, through evaluation and demonstration, to move towards an emissions free port." The DEIS does not propose zero or near-zero emission technologies for trucks, cargo handling equipment or locomotives, even though there may be technologies that could be incorporated as elements of each Build Alternative. The Port of Long Beach is ideally situated to demonstrate and accelerate deployment of zero emission technologies that meet the needs of our national freight gateway and minimize community health impacts.

We recommend additional measures to more fully respond to health concerns for the affected environmental justice community, including: calculation of morbidity and mortality effects of particulate matter exposure; clarification of nitrogen dioxide health effects, such as childhood asthma; and a clear presentation and discussion of diesel particulate matter emissions for the project. We acknowledge that the Port of Long Beach's grant program is an innovative and potentially effective way to attempt to address project impacts that cannot be fully mitigated. We offer suggestions for improvement and encourage the Port to consider steps that will allow the measurement of the grant program's effectiveness. Further efforts to reduce environmental justice impacts could assist the Port and the City of Long Beach, as recipients of Federal funds, to meet their potential obligations under Title VI of the Civil Rights Act.

The Department of Defense is signatory to the August 4, 2011 Memorandum of Understanding (MOU) on Environmental Justice and Executive Order 12898. In addition to reinforcing the Federal government's commitment to environmental justice, the MOU is relevant to actions such as the Pier S project through its focus on goods movement, NEPA, and Title VI. In light of this renewed commitment and focus, we recommend that the Corps seriously consider changes to alternatives and mitigation measures, as proposed in this letter and by other stakeholders, to avoid or further mitigate the project's disproportionately high and adverse impacts.

Please see the enclosed detailed comments for a more thorough discussion of the comments provided above, as well as additional comments related to the No-Action alternative, sediment sampling, climate change and groundwater, off-site storage, and biological resources. We appreciate the opportunity to review this DEIS. When the FEIS is released for public review, please send one hard copy and one electronic copy to the address above (mail code: CED-2). If you have questions, please contact me at (415) 972-3856 or [kelly.thomasp@epa.gov](mailto:kelly.thomasp@epa.gov).

Sincerely,

/S/

Enrique Manzanilla, Director  
Communities and Ecosystems Division

Enclosures: EPA's Detailed Comments  
Summary of EPA's Rating Definitions

cc: Rick Cameron, Port of Long Beach  
Susan E. Anderson Wise, Port of Long Beach Harbor Commissioners  
Mayor Bob Foster, City of Long Beach  
Christopher Cannon, Port of Los Angeles  
Susan Nakamura, South Coast Air Quality Management District  
Cynthia Marvin, California Air Resources Board  
(continued on next page)

cc: (continued from previous page)  
Hassan Ikrhata, Southern California Association of Governments  
David Seep, BNSF Railway  
Lanny Schmid, Union Pacific Railroad  
Martin Tuttle, Caltrans  
Bimla Rhinehart, California Transportation Commission  
Alan Hicks, U.S. Department of Transportation, Maritime Administration

## Air Quality

### *Zero and Low Emission Trucks*

The DEIS summarizes the Clean Trucks Program, a key element of the Clean Air Action Plan, that has substantially reduced port-related air emissions, especially diesel emissions, from both San Pedro Bay ports (p. 3.2-20). While we acknowledge the success of the current program, and the challenges that the Port undertook to implement it, the FEIS needs to incentivize and require continuous improvement for drayage trucks. Additionally, the Port of Long Beach needs to fulfill its promise “to accelerate the verification or commercial availability of new, clean technologies, through evaluation and demonstration, to move towards an emissions free port<sup>1</sup>.”

#### *Recommendation:*

The FEIS should describe zero and near zero emission tailpipe demonstration and deployment projects. The FEIS should consider mechanisms to incentivize and require the cleanest trucks at the port, including:

- Zero emission tailpipe class 7 and 8 trucks, including battery electric and fuel cell.
- Hybrid trucks, including advanced low-emitting, high efficiency trucks.
- Expansion of the liquefied natural gas truck fleet operating at the port, which currently represents 7% of the truck fleet.

### *Terminal Operations and Cranes*

The DEIS discusses a grounded or “stacked” system (containers stacked in high-density arrays) and chassis or “wheeled” system (containers stored on individual wheeled chassis and not stacked), or a combination of the two (p. 1-32). The DEIS does not quantify any emissions differences between the stacked and wheeled systems; however, some crane manufacturers have cited increased efficiency and lower emissions with automated stacking cranes.

The Three-Berth alternative includes electric Rail Mounted Gantry cranes (RMGs), while the Two-Berth alternative includes diesel Rubber-Tired Gantry cranes (RTGs) (p. ES-8). The DEIS does not explain the reason for the proposal to use different technologies between the two alternatives. Additionally, the DEIS does not consider electric RTGs or battery-hybrid RTGs. The *Roadmap for Moving Forward with Zero Emission Technologies at the Ports of Long Beach and Los Angeles*<sup>2</sup> notes that electric conversion kits are commercially available and have been used in other countries. The same report notes that Port of Long Beach awarded \$2.5 million to two RTG electrification projects, however, “both projects were cancelled due to financial constraints and/or a decision by the terminal operator to wait until the project would better fit into future terminal plans.”

#### *Recommendations:*

The FEIS should quantify emission differences among stacked, wheeled and automated stacking terminal operations and should explain the reason for proposing different technologies for each of the build alternatives.

<sup>1</sup> Technology Advancement Program, San Pedro Bay Ports, accessed November 18, 2011 <  
<http://www.cleanairactionplan.org/programs/tap/default.asp> >.

<sup>2</sup> *Roadmap for Moving Forward with Zero Emission Technologies at the Ports of Long Beach and Los Angeles*, Technical Report, August 2011, Final.

The Two-Berth alternative should include electric RTGs. If that is not feasible, it should require hybrid-battery RTGs.

### *Rail*

The DEIS provides information on the locomotive fleet for the Pacific Harbor Line, on-dock rail (p. 3.2-19 and 20). We recognize the commitment to transition to a cleaner diesel fleet through the Clean Air Action Plan, and note the retrofit of 16 older locomotives with Tier 3+ engines<sup>3</sup>. Still, the Port of Long Beach is investigating a number of zero (exhaust) emission rail options, such as linear synchronous motor, catenary wire, and battery electric tender car. These options can begin the Port's transition to an emission free port.

The DEIS notes the expected release of the Southern California International Gateway (SCIG) (p. 2-10). The opportunity to build a new container terminal that includes an on-dock rail system a little more than a mile from a new near dock intermodal container transfer facility appears to be ideal opportunity to create a short-haul zero emissions corridor. Unfortunately, the DEIS proposes to use diesel drayage trucks to haul containers to the SCIG.

We note that one of the CEQA goals of the project involves maximizing the use of rail, however, only 15% of the containers leaving Pier S will be transported by rail, in the proposed (Three-Berth) alternative (p. 1-36). More than two thirds of the containers leaving by rail must first be trucked to near-dock rail yards. We encourage consideration of possible methods to increase on-dock rail. One conceptual idea that has been presented to us is the Green Rail/Intelligent Development (<http://www.aqmd.gov/aqmp/2012aqmp/symposium/Panel3-Alba.pdf>). For more information, please contact Judy Bergstresser at [bergstressers@sbcglobal.net](mailto:bergstressers@sbcglobal.net) or (626) 644-9674.

#### *Recommendation:*

The FEIS should discuss the potential for zero emission rail transportation systems, and evaluate methods to increase the use of on-dock rail. Opportunities for advancing newer technologies through coordination with BNSF and the SCIG project should be further considered and described.

### *Air Emissions and Health*

The DEIS does not calculate morbidity and mortality effects of particulate matter emissions, but considers PM<sub>2.5</sub> a significant impact, since it exceeds the South Coast Air Quality Management District threshold (2.5 ug/m<sup>3</sup>). In evaluating the need for morbidity and mortality analysis for PM<sub>2.5</sub> emissions, the DEIS states, "...no persons live within the 2.5 ug/m<sup>3</sup> PM<sub>2.5</sub> peak daily isopleths. Therefore, no increase in mortality and morbidity would result" (3.2-51). This statement is not an accurate conclusion. In EPA's most recent *Integrated Science Assessment for Particulate Matter, Final Report*<sup>4</sup> (December 2009), it was determined that there was little scientific evidence that a threshold exists in the association between either long-term or short-term PM<sub>2.5</sub> and premature mortality (see Section 2.4.3, [www.epa.gov/ncea/pdfs/partmatt/Dec2009/PM\\_ISA\\_full.pdf](http://www.epa.gov/ncea/pdfs/partmatt/Dec2009/PM_ISA_full.pdf)). Thus, any increase in PM<sub>2.5</sub> concentration, even below the chosen significance threshold, is likely to lead to an increase in mortality, and likely morbidity. Furthermore, in areas such as the project area that are already at or exceeding the PM<sub>2.5</sub> NAAQS, any increase in PM<sub>2.5</sub> concentrations should be

<sup>3</sup> In the News: New Less Polluting Locomotives Arrive at Ports Complex, Anacostia and Pacific Company. (Pacific Harbor Line) accessed 11/21/2011, <<http://www.anacostia.com/latestnews/phl110929.html>>

<sup>4</sup> available at <http://cfpub.epa.gov/ncea/isa/recordisplay.cfm?deid=216546#Download>

considered significant, since the air quality in the area is already exceeding thresholds considered to be safe. Therefore, we recommend that the FEIS include a calculation of morbidity and mortality impacts, as a means of better disclosing health impacts of the project for the impacted environmental justice community.

Table 3.2.12b (and the corresponding tables for other alternatives) contains maximum operational modeled air concentrations that exceed the NAAQS. A comparison of a project's maximum values to a standard may be appropriate when the maxima do not exceed the standard. In this case, the maximum values modeled for NO<sub>2</sub> exceed the NAAQS annual (arithmetic average) and 1-hour (3 year average of the 98<sup>th</sup> percentile) concentrations. We are also concerned that the background NO<sub>2</sub> concentrations are elevated within the study area and the proposed alternative will significantly increase those concentrations (see Table 3.2.12b); however, the DEIS does not further quantify or discuss this significant health impact. The *Integrated Science Assessment for Oxides of Nitrogen – Health Criteria* would be a particularly valuable for assessing impacts to children and vulnerable populations.

The DEIS air emissions estimates are intended to represent maximum reasonable impacts. We note that the Clean Air Action Plan commits to substantial reductions in diesel particulate matter, nitrogen oxides (NO<sub>x</sub>) and sulfur oxides (SO<sub>x</sub>) for both the Ports of Long Beach and Los Angeles. The Plan is based on the ports' best estimate of future emissions. We acknowledge that the scope of the Clean Air Action Plan may be beyond the scope of the DEIS, and both documents may have been developed with differing assumptions. Despite this, a comparison and discussion of Pier S emissions increases to the future estimates of the Clean Air Action Plan would provide valuable context to assess the relative importance of Pier S air emissions.

*Recommendations:*

The FEIS should:

- Calculate morbidity and mortality effects of PM<sub>2.5</sub> for the project.
- Compare the project's modeled impacts with EPA's NAAQS using the appropriate form of the standards, including comparable averaging times (at a minimum, 24-hour and annual PM<sub>2.5</sub> and 1-hour and annual NO<sub>2</sub>) and statistical form (e.g. 98<sup>th</sup> percentiles, etc.).
- State the NO<sub>2</sub> NAAQS and modeled values in parts per million, the values of EPA's standard.
- Quantify and discuss NO<sub>2</sub> health effects and map the results of dispersion modeling.
- Discuss and compare Pier S emissions relative to future emission goals for the Clean Air Action Plan.
- Include a table or narrative summarizing operational annual emissions of criteria pollutants for comparison to the conformity de minimis thresholds.
- Include a brief summary of the current risk posed by air quality for the local community as estimated by the South Coast District's Multiple Air Toxics Exposure Study (MATES) III.

*Periodic Technology Review*

EPA commends Port of Long Beach for including Environmental Control Measure AQ-8: Periodic Technology Review. This requirement has the potential to substantially reduce on-dock emissions from cargo handling equipment, as lower emitting (e.g. all-electric) cargo handling equipment becomes available. While the DEIS provides the factors to be considered in evaluating new technologies – cost, technical and operational feasibility, it does not include guidelines on

equipment replacement. While technical and operational capabilities can reasonably be expected to be interchangeable for new equipment, the cost to replace existing equipment can be significant.

*Recommendations:*

To clarify the commitment for Periodic Technology Review, the FEIS should provide guidelines on cost feasibility. For example, guidelines could compare the cost of zero-emission cargo handling equipment based on the replacement cost of new or used equipment.

The FEIS should also more fully discuss lease conditions that will enforce this requirement.

*Tier 3 Tugboats*

Mitigation Measure AQ-3b specifies that all tugboats used in construction meet EPA Tier 2 marine engine standards, and if feasible, Tier 3. The DEIS does not discuss the potential benefits of diesel-hybrid tugs, which the California Air Resources Board recently studied<sup>5</sup>.

*Recommendation:*

The FEIS should consider the expanded use of diesel-hybrid tugs.

## **Environmental Justice**

To reduce air quality impacts to the affected community, the Port will require the project to fund grant programs for the “Schools and Related Sites” and the “Healthcare and Seniors Facilities” (p. 3.2-99). EPA acknowledges these grants are an innovative and a potentially effective way to address project impacts that cannot be feasibly mitigated at the source. The DEIS should summarize the grant guidelines to further clarify how these programs will assist the community. In reviewing the guidelines, we support the focus on air filtration systems for sensitive receptors such as schools and senior facilities; education, screening and treatment for asthma, respiratory illness and cardiovascular disease; and support for new and existing health clinics.

While we recognize the considerable level of analysis in the DEIS, as well as the commitment to fund the above-listed grant programs, we note the need for additional mitigation to fully offset the significant project-related impacts to the local community. The EJ analysis and conclusions in the DEIS state that there will be disproportionately high and adverse effects on minority and low-income populations due to air quality and a significant increase in residential cancer risk. The local community is already heavily impacted<sup>6</sup>, a condition that could be exacerbated by the many projects currently planned at and around the Port. Therefore, all impacts, even seemingly small ones, are important to consider and mitigate in order to fully offset the adverse Project-related impacts to the local community.

There is a growing body of evidence that environmental justice communities are more vulnerable to pollution impacts than other communities<sup>7</sup>. As discussed in EPA’s *Framework for Cumulative Risk*<sup>8</sup>

<sup>5</sup> Evaluating the Emissions Benefit of a Hybrid Tug Boat, Final Report, October 2010, < <http://www.arb.ca.gov/ports/marinevess/harborcraft/documents/hybridreport1010.pdf>>.

<sup>6</sup> Final Report, Multiple Air Toxics Exposure Study in the South Coast Air Basin, MATES-III, September 2008, South Coast Air Quality Management District.

<sup>7</sup> Symposium on the Science of Disproportionate Environmental Health Impacts, March 17 - 19, 2010, see the fourteen scientific reviews commissioned by EPA and published in the American Journal of Public Health at: <http://www.epa.gov/compliance/ej/multimedia/albums/epa/disproportionate-impacts-symposium.html>.



and *Integrated Science Assessment for Oxides of Nitrogen – Health Criteria*<sup>9</sup> (July 2008), disadvantaged, underserved, and overburdened communities are likely to come to the table with pre-existing deficits of both a physical and social nature that make the effects of environmental pollution more, and in some cases, unacceptably, burdensome. Thus, certain subpopulations may be more likely to be adversely affected by a given stressor than is the general population. In the past, EPA has recommended using a Health Impact Assessment (HIA) or an HIA type approach to examine this issue. Identifying additional mitigation supported by the community will further protect from the disproportionate and adverse health impacts of the proposed project.

As stated by the Council on Environmental Quality<sup>10</sup>, the identification of disproportionately high and adverse human health or environmental effects on a low-income or minority population does not preclude a proposed agency action from going forward nor compel a finding that a proposed project is environmentally unacceptable. Instead, the identification of such effects is expected to encourage agency consideration of alternatives, mitigation measures, monitoring needs, and preferences expressed by the affected community or population. EPA recommends the additional mitigation measures in light of the significant impacts anticipated.

*Recommendations:*

Considering the magnitude of potential cumulative health impacts, the FEIS should vigorously consider all feasible mitigation strategies, monitoring measures, and the preferences expressed by the local community.

The Port of Long Beach and the Corps should propose mitigation measures to reduce the community's exposures and reduce community vulnerability, such as:

- Fund anti-idling enforcement measures in neighboring impacted communities;
- Fund proactive measures to improve in-home quality;
- Engage in proactive efforts to train and hire local residents for construction or operation of the project to improve their economic status and access to health care;
- Provide public education programs about environmental health impacts and land use planning issues associated with the Port and port-related impacts to better enable local residents to make informed decisions about their health and community;
- Improve access to healthy food through the establishment of farmer's market or urban gardening programs;
- Expansion and improvement of local community parks and recreation system, in areas where air quality is highest, in order to provide increased access to open space and exercise opportunities; and
- Please note our Air Quality recommendations provided above.

The Port of Long Beach and the Corps should also conduct long-term mitigation monitoring to determine the effectiveness of the grant program.

---

<sup>8</sup> Available at: <http://cfpub.epa.gov/ncea/raf/recordisplay.cfm?deid=54944>.

<sup>9</sup> Available at: <http://cfpub.epa.gov/ncea/cfm/recordisplay.cfm?deid=194645#Download>.

<sup>10</sup> Environmental Justice Guidance Under the National Environmental Policy Act, Council on Environmental Quality, 10 December 1997.

## Water Resources

### *Sediment Characterization and Disposal*

The DEIS (p. 3.4-9) discusses sediment quality, mentioning specific reports – SAIC<sup>11</sup>, MEC 1997 (this report does not appear to be listed in Chapter 9 of the DEIS, References), SWRCB 1998<sup>12</sup>, and SWRCB 2010<sup>13</sup>. While these reports provide information on the quality of surface sediments, they do not characterize below surface sediments to the dredging project (design) depth and overdredge depth. Characterization to full depth of dredging is required to determine suitability of and proper placement of dredged material among alternative fill locations and the LA-2 ocean disposal site. Additional characterization information, provided by bioassays, is required to determine suitability for placement at LA-2.

The DEIS notes (p. 1-27) the use of the Middle Harbor Landfill (i.e., Piers D, E, and F) for the placement of sediment. It states (p. 3.1-14) that “contaminated soil encountered during construction . . . would be remediated and/or disposed of in accordance with all federal state, and local regulations,” but does not provide existing data or propose a sampling plan to demonstrate that the material to be placed in the Middle Harbor Landfill is not hazardous waste. The DEIS states at multiple locations (p. 1-27 and 3.4-14) that disposal of sediment at LA-2 will only occur with approval from the Army Corps and the LA RWQCB; however, EPA must concur on ocean disposal at any EPA-designated ocean dredged material disposal site accessible to LA County projects, including LA-2 and LA-3.

The DEIS discusses the Contaminated Sediments Task Force (or CSTF) within the context of the Water Resources Action Plan (WRAP) (p. 3.4-11). The CSTF is composed of the Army Corps, Los Angeles Regional Water Quality Control Board California Coastal Commission and EPA. The DEIS also notes that “once these [CSTF] goals are established in NPDES permits, the WRAP will focus on achieving compliance with those permits,” but it does not indicate the regulatory role of the agencies that comprise the CSTF. Sediment characterization studies are required to be completed to the satisfaction of the agencies of the CSTF. Additionally, in the absence of a CSTF-approved WRAP, the sediment management options outlined in the DEIS must also be approved by the agencies of the CSTF. Further, although the DEIS states at multiple locations (p. 1-27 and 3.4-14) that disposal of sediment at LA-2 will only occur with approval from the Army Corps and the LA RWQCB, EPA must concur on ocean disposal at any EPA-designated ocean dredged material disposal site accessible to LA County projects, including LA-2 and LA-3.

#### *Recommendations:*

The FEIS should:

- Address the need for full characterization of sediment quality, including hazardous waste characteristics (ignitability, corrosivity, reactivity and toxicity), for the full dredging project depth plus overdredge depth.

---

<sup>11</sup> Biological Surveys of Los Angeles and Long Beach Harbors Prepared for Port of Los Angeles and Port of Long Beach. San Pedro and Long Beach, California., 2010.

<sup>12</sup> Sediment Chemistry, Toxicity, and Benthic Community Conditions in Selected Water Bodies of the Los Angeles Region – Final Report. Prepared by: California State Water Resources Control Board, Division of Water Quality, Bay Protection and Toxic Cleanup Program; California Department of Fish and Game, Marine Pollution Studies Laboratory; University of California Santa Cruz, Institute of Marine Sciences; San Jose State University, Moss Landing Marine Laboratories. August 1998.

<sup>13</sup> State Water Resources Control Board (SWRCB). 2010. 2010 Integrated Report: Clean Water Act Section 303(d) List / 305(b) Report. Approved August 4, 2010.

- Discuss the requirement to submit detailed sampling and analysis plan for approval by the Southern California Dredged Material Management Team prior to sediment testing and any subsequent approved dredging.
- Correct references to EPA-designated disposal site LA-2 by noting the requirement for EPA concurrence prior to disposal and discuss the concurrence on placement options that shall be obtained from the agencies that comprise the Contaminated Sediments Task Force.

#### *Clarification of Alternatives*

Table 1-1 of the DEIS summarizes the differences among the alternatives (p. 1-16). The Two-Berth alternative will have a 2,800 foot wharf, 44 acre dredge footprint, and create 9.4 acres of new water surface. The Three-Berth alternative will create a 3,200 foot wharf, 51-acre dredge footprint and create 10.3 acres of new water. Both alternatives will be dredged to the same project depth and overdredge depth. Given the specifics for these alternatives, it is surprising that the dredged material volumes for both projects are identical, according to Table 1-1. Page 1-39 confirms that the dredge material volumes would be the same for both alternatives, but does not clarify the reason that alternatives with different footprints would generate the same quantities of dredged material.

#### *Recommendation:*

Correct the dredged material volumes for the appropriate alternative in the FEIS, or provide an explanation for the apparent contradiction between dredged areas and volumes.

#### *Western Anchorage Disposal Site*

The Western Anchorage (or Anchorage Road site) disposal site is identified as a placement option for sediment throughout the DEIS (e.g., pps. ES-7, 1-27, and 3.4-14). We recently attended a meeting, on October 11, 2011, hosted by the RWQCB regarding beneficial reuse of dredged material and opportunity to construct a storage, treatment, and reuse (STAR) facility in LA County. We were informed by the Port of Long Beach that the Anchorage Road site is expected to be decommissioned, and therefore would be closed to any further sediment placement.

#### *Recommendation:*

The FEIS should discuss the decommissioning of the Western Anchorage disposal site and future limitations on the use of the site.

#### **No Action Alternative**

The DEIS provides three NEPA alternatives – Three-Berth Alternative, Two-Berth Alternative and Multi-Use Storage (No Federal Action) Alternative, and a fourth alternative considered under the California Environmental Quality Act, No Project Alternative. The Multi-Use Storage Alternative is considered by the DEIS as the no action alternative under the NEPA, because no federal (Army Corps Clean Water Act (CWA) Section 404) permit is necessary. It would not include a new wharf, dredging activities or new rail lines. The alternative would still include construction of five buildings and the terminal, plus terminal operations (p. 1-40).

EPA is concerned that actual impacts of the Three-Berth and Two-Berth alternatives, such as air emissions, were not accurately presented in the DEIS. As an example, by 2020, the Multi-Use Storage Alternative (the NEPA baseline) would move more than a 1.27 million (twenty-foot equivalent) units of cargo through Pier S using 4,731 trucks and 3.4 trains per day (Table 1-1) in an area that is currently bare soil; but the document states that “No impacts on air quality would occur”

(p. 3.2-80). Because the NEPA baseline assumes a great amount of infrastructure and building operations, the impacts associated with these activities are zeroed out when presenting impacts. This results in confusing and underestimated comparisons of impacts.

We suggest the No Project Alternative serve as the baseline, from which to compare the three NEPA alternatives. This would provide the federal decision-maker with an accurate estimate of the project impacts, such as health risk, for all three NEPA alternatives, rather than incremental risk for two alternatives, and an assumed zero risk for the Multi-Use Storage Alternative. The Multi-Use Storage Alternative can still serve as the No Federal Action alternative, but the federal decision-maker will more fully understand its impacts. In a letter to the Department of Agriculture, the Council on Environmental Quality<sup>14</sup> similarly suggested “You may contrast the impacts of the proposed action and alternatives with the current conditions and expected future conditions in the absence of the project.”

*Recommendation*

Revise the presentation of impacts in the FEIS so that all three NEPA alternatives are equally compared to the No Project Alternative.

### **Climate Change**

The DEIS describes an automated terminal scheduling system that allows drayage truck drivers to schedule tips to avoid peak traffic and congestion. The DEIS did not mention a similar system for ocean going vessels. Knowledge of virtual ship arrival times would provide the chance to eliminate inefficiency within the transport freight chain through a managed practice that reduces vessel passage speed. By reducing speed to meet an agreed upon arrival time, the vessel can avoid spending time at anchor awaiting a berth, tank space or cargo availability. Virtual arrival practices were developed for the tanker trade. These practices are suitable for adoption in other trades where the required time of arrival at a destination port is not fixed or is subject to change due to operational or commercial reasons. For more information, we suggest reviewing Virtual Arrival – a Way to Reduce Greenhouse Gas (GHG) emissions<sup>15</sup>.

*Recommendation:*

Commit to the use of ship scheduling to reduce greenhouse gas emissions.

### **Groundwater**

As part of the action alternatives, the project would replace an existing clay core dike with a three foot thick groundwater barrier, constructed by mixing a cement bentonite grout into existing subsurface soils (p. 1-27). The DEIS does not clarify the reason for construction of the clay core dike. We assume it was intended to prevent the migration of contaminated groundwater into San Pedro Bay. The DEIS does not show the location of the new barrier relative to the old barrier. If these barriers are not adjacent, groundwater between them may drain into the active excavation area or San Pedro Bay.

The DEIS notes Pier S has been remediated under the Department of Toxic Substances Voluntary Cleanup Unit. It does not state whether the current Pier S plans have been reviewed by the same

---

<sup>14</sup> Memorandum on Guidance for Environmental Assessments of Forest Health Projects, from James L. Connaughton, Chairman, Council on Environmental Quality to Ann M. Veneman, Secretary of Agriculture, dated December 9, 2002.

<sup>15</sup> Virtual Arrival – a way to reduce greenhouse gas (GHG) emissions, by Erik Ranheim INTERTANKO and Garry Hallett OCIMF, March 2, 2010. <http://www.seaat.org/GetFile.aspx?fileid=69>.

group. Even if the DEIS has been provided to DTSC, it does not contain maps or detailed information on the actions planned.

*Recommendations:*

The FEIS should discuss the physical separation between the new groundwater barrier and the old dike, and, if appropriate, plan for the management of contaminated groundwater and soil between them. The FEIS should also include an approval from the DTSC for removal and reconstruction of the groundwater barrier, and management of contaminated soils for the area under their voluntary cleanup oversight.

### **Off-Site Storage**

The Multi-Use Storage Alternative addresses two needs, “(1) provide additional backland for San Pedro Bay container terminals, and (2) provide a storage site for empty containers” (p. 1-40). The DEIS also notes that the Multi-Use Storage facility would serve terminals that are projected to be berth constrained by 2025, replacing distant off-site storage facilities. The selection of either the Two-Berth or Three-Berth alternative would appear to create a need for off-site storage, which has not been discussed in the DEIS.

In the past, community members have raised concerns to EPA about off-site storage facilities, many of which are located near communities close to the Ports. Some facilities stored empty containers, while others refurbished portions of containers, such as the refrigerator units. The concerns include noise impacts, night operations, nighttime lights and the discharge of refrigerants. While identification and enforcement of local environmental requirements should be straightforward, it falls to overburdened municipalities and regulatory agencies.

Within the context of the Two-Berth or Three Berth alternatives, a periodic audit requirement for the tenant of Pier S may be appropriate mitigation for operations shifted off-site (i.e. by the unmet need for multi-use storage at the Port). In the spirit of proactively addressing unintended community impacts, we encourage the Port of Long Beach to commit to organization of an audit program for all off-site tenant support functions.

*Recommendations:*

The FEIS should quantify the port-wide off-site storage needs and off-site support necessary for the Three-Berth and Two-Berth Alternatives, and discuss the impacts of off-site storage, depicting such needs with possible locations on a map clearly indicating adjacent land use, and (schools, residences, etc). The FEIS should also consider an audit program to mitigate off-site impacts.