



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

**REGION IX**

**75 Hawthorne Street**

**San Francisco, CA 94105-3901**

July 21, 2008

Dr. Spencer D. MacNeil  
U.S. Army Corps of Engineers  
Los Angeles District  
Attn: Regulatory Division  
P.O. Box 532711  
Los Angeles, California 90053-2325

Subject: Recirculated Draft Environmental Impact Statement (RDEIS) for the Berth 97-109  
Container Terminal Project (Project) in the Port of Los Angeles (CEQ # 20080169)

Dear Dr. MacNeil:

The U.S. Environmental Protection Agency (EPA) has reviewed the above project pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), and our NEPA review authority under Section 309 of the Clean Air Act. These comments were also prepared under the authority of, and in accordance with, the provisions of the Federal Guidelines (Guidelines) promulgated at 40 CFR 230 under Section 404(b)(1) of the Clean Water Act (CWA) and EPA's ocean dumping regulations promulgated at 40 CFR 220-227 under the Marine Protection, Research and Sanctuaries Act (MPRSA). Our detailed comments are enclosed.

EPA previously provided comments on the since retracted Draft Environmental Impact Statement (DEIS) for the Project in our letter dated October 16, 2006. This letter supersedes our October 16, 2006 letter. In addition, we met to discuss our preliminary comments with you and Port of Los Angeles (Port) staff at the Port on July 15, 2008. We very much appreciate the opportunity to have met with you and the Port and look forward to continued coordination as Port projects proceed. We are confident that continued coordination between our agencies will result in improved information sharing and reduced environmental impacts. Based on our review of the RDEIS, we have rated the document EC-2, Environmental Concerns – Insufficient Information. While the document is very well done, and substantial mitigation efforts have been identified, we remain concerned with significant and unavoidable impacts to air quality, environmental justice communities, aquatic and biological resources, and with the wording of the Project purpose and need statement.

EPA commends the Corps and Port for the implementation of a high quality Health Risk Assessment to identify cancer risk in the Port area as a result of the Project. We consider this an example analysis for other federal agencies to refer to. We remain concerned with the

cumulative impacts to the already health burdened community and recommend the Port and Corps commit in the Final Environmental Impact Statement (FEIS) and Record of Decision (ROD) to implementing measures that will reduce cancer risks as described in the DEIS. We are also concerned with unmitigated impacts to air quality in the South Coast Air Basin from construction and operations and recommend the Ports and Corps commit in the FEIS and ROD to implementing mitigation measures that go beyond the San Pedro Bay Ports Clean Air Action Plan (CAAP). Conformity with the 1997/1999 South Coast State Implementation Plan should also be clarified.

We also recognize the efforts of the Port and Corps to assess and disclose impacts to the Environmental Justice (EJ) community adjacent to the Project. However, we remain concerned over the significant and unavoidable impacts to the already disproportionately affected EJ community and recommend additional measures to fully offset these impacts. We suggest the Corps and Port develop a Health Impact Assessment to better identify these impacts and work with the community to identify offset measures. In addition to health impacts from construction and operational emissions, we are also concerned with potential impacts from construction noise resulting from the Project.

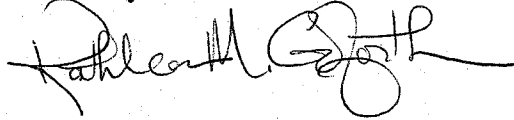
The preferred project alternative would result in the fill of approximately 1.3 acres of soft bottom habitat to provide for construction of an Extension to Berth 100. We recognize the intent of the Port to increase efficiency but remain concerned that the Project purpose and need could be met without this additional fill. At the same time, we recognize that increased efficiency could avoid environmental impacts to air quality and consequently recommend that fill be avoided, or the additional environmental impacts without fill be fully described in the FEIS. Lacking this additional information, EPA does not consider the preferred alternative to be the Least Environmentally Damaging Practicable Alternative (LEDPA), consistent with Clean Water Act Section 404 (b)(1) Guidelines. We also recommend that any dredged sediment be characterized appropriately and disposed of at a beneficial reuse location prior to disposal at the Anchorage Road site and that the Port coordinate with the Dredge Material Management Team on dredging and disposal issues.

The Port and Corps have identified vessel strikes to whales and other marine mammals as a significant but unavoidable impact and EPA remains concerned that additional mitigations beyond the Vessel Speed Reduction Program are not provided. We recommend the Port work with the Port of Long Beach to develop a port-wide vessel strike reduction program, similar to the one under development at Cape Cod Bay, to better identify whales through audible detection. We appreciate your willingness to look into this further as previously discussed.

Finally, as described in our October 16, 2006 letter, we continue to be concerned with the use of the word "maximize" in the Project purpose and need statement and recommend it be changed to "optimize" to avoid favoring the preferred alternative. At a minimum, the Corps and Port should describe in the FEIS why the current purpose and need statement does not favor the preferred alternative.

We appreciate the opportunity to review this DEIS and look forward to continued coordination with the Corps and the Port. When it is published, please send us a copy of the FEIS to the address above (Mail Code: CED-2). If you have any questions, please contact me at 415-972-3846 or Paul Amato, the lead reviewer for this project. Paul can be reached at 415-972-3847 or [amato.paul@epa.gov](mailto:amato.paul@epa.gov).

Sincerely,



Kathleen Goforth, Manager  
Environmental Review Office

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

cc: Dr. Ralph Appy, Director, Environmental Management Division, Port of LA;  
Lena Maun-DeSantis, Marine Environmental Supervisor, Port of LA;  
Cindy Tuck, Assistant Undersecretary, California Environmental Protection Agency;  
Cynthia Marvin, Assistant Division Chief for Planning and Technical Support, California Air Resources Board;  
Susan Nakamura, South Coast Air Quality Management District;  
Hassan Ikrhata, Executive Director, Southern California Association of Governments;  
Paul Simon, Director, Division of Chronic Disease and Injury Prevention, Los Angeles County Department of Health

### Air Comments

***Commit in the Final Environmental Impact Statement (FEIS) and Record of Decision (ROD) to fully implement mitigations that will reduce cancer risks.*** EPA commends the efforts of the Port and Corps to conduct a high quality health risk assessment (HRA) for toxic air contaminants (TACs) emitted from all alternatives assessed in the Recirculated Draft Environmental Impact Statement (RDEIS). We consider this HRA to serve as an excellent example of the level of analysis that should be conducted for projects of this scale and will encourage other federal agencies to refer to it in developing HRAs to assess health impacts and appropriate mitigations for their projects. We note that while any cumulative impacts to air quality in the Port region should be considered significant, we also recognize the mitigation efforts that have reduced additional cancer risks from 90 in a million individuals to 8 in a million.

EPA continues to have concerns with any increases in cancer risks that may result from Project emissions while acknowledging the level of effort of the Port and Corps to assess these risks and mitigate them through the San Pedro Bay Ports Clean Air Action Plan (CAAP).

#### *Recommendation:*

The Port and Corps should commit in the FEIS and the ROD that CAAP mitigation measures necessary to reduce cancer risk will be fully implemented, as described in the HRA. This should include a commitment to implement additional mitigations if CAAP implementation measures are delayed or insufficient to meet cancer risk reduction targets.

***Commit in the FEIS and ROD to implement in a timely manner, mitigation measures that exceed CAAP emission reductions.*** EPA is concerned about the significant and unavoidable impacts of construction and operational air emissions associated with the Project, even after mitigation measures have been taken into account. The DEIS includes a very thorough air quality analysis and description of the mitigation measures that will be implemented to reduce the significant adverse air impacts identified in the DEIS. However, even with implementation of these aggressive mitigation measures, the DEIS states that Project peak daily emissions from construction would exceed the peak daily NEPA emissions significance levels for NO<sub>x</sub>, SO<sub>x</sub>, and PM<sub>2.5</sub> in Phases 2 and 3 (Table 3.2-20). Significant impacts from peak daily emissions associated with operations are also predicted for VOC, CO, NO<sub>x</sub>, SO<sub>x</sub>, PM<sub>10</sub> and PM<sub>2.5</sub> for all project analysis years (Table 3.2-29).

Given the severe air quality problems within the project area, all feasible measures should be implemented to reduce and mitigate air quality impacts to the greatest extent possible. This is especially important for the SCAB nonattainment criteria pollutants CO, SO<sub>x</sub>, NO<sub>x</sub>, PM<sub>10</sub> and PM<sub>2.5</sub>. The DEIS states that Project compliance with the CAAP and other Project mitigation measures in some cases exceeds the emission reduction strategies of the CAAP. However, the CAAP includes a number of port-wide requirements and is still in the implementation phase. Changes to the CAAP measures (as listed in Table 3.2-26) may occur, such as specific implementation dates, compliance rates, and other requirements. The Port and Corps should ensure that CAAP measures and additional mitigation measures that go beyond the CAAP are

implemented on a schedule that will reduce construction and operational emissions to the maximum extent feasible. This is especially important for criteria pollutants that are nonattainment in the SCAB.

*Recommendations:*

All proposed mitigation measures in the DEIS should be included in the FEIS and the ROD. The FEIS should describe how these mitigation measures will be made an enforceable part of the project's implementation schedule. We recommend implementation of the mitigation measures prior to or, at a minimum, concurrent with the construction of Phase II and III of the Project.

The ROD should demonstrate how measures beyond the CAAP meet or exceed current CAAP emissions requirements. EPA recommends that the ROD ensure that mitigation measures that exceed the CAAP emissions reductions continue to do so despite potential future changes to the CAAP measures.

The ROD should be as explicit as possible regarding the feasibility of clean technology that could be employed as stated in several of the proposed mitigation measures (i.e., AQ MM-4). EPA strongly recommends that the mitigation measures that are stated to yield possible additional reductions (i.e., pp. 3.2-90) be quantified and implemented in a timely manner.

***Update the air analysis to include IMO MARPOL Annex VI NOx reductions.*** Section 3.2-16 (IMO MARPOL Annex VI) indicates that in order to provide a conservative estimate, the proposed Project did not incorporate IMO MARPOL Annex VI NOx reductions from main ship engines. As this section correctly states, engines installed on new vessels are retroactive to the year 2000. However, EPA believes that there should be some NOx reduction benefits from these main ship engines, especially since a significant percentage of the ocean-going vessels that visit the Port are five years old or newer (i.e., these engines would be meeting the Tier 1 NOx standard).

*Recommendation:*

To provide a more accurate assessment of the NOx emissions associated with main engines from ships visiting the Port, the FEIS could include an updated analysis that incorporates the IMO MARPOL Annex VI NOx reductions.

***Update tugboat emission assumptions.*** It is unclear why the tugboat emissions were calculated "conservatively" in Section 3.2-26 using uncontrolled emission factors, especially when most of the tugboats operating at the Port have been retrofitted with Tier 2 engines and are now complying with a 15 ppm sulfur fuel cap.

*Recommendation:*

The FEIS should clarify the emissions assumptions used in calculating the tugboat emissions.

***Update Phase 2 and 3 emissions as the Inventory of Air Emissions is adjusted.*** The Port's 2005 Inventory of Air Emissions (Starcrest, 2007) was used to estimate vessel emissions (i.e.,

main engines, auxiliary engines, boilers on container ships, etc.). Although this emissions inventory was developed with the best available information, EPA understands that Port emissions will be subject to significant changes in the near future due to implementation of the CAAP and other projects.

*Recommendation:*

The ROD should include a commitment to update the Project's Phase 2, and 3 analyses as the Port's air emissions inventory is adjusted.

**General Conformity**

***Demonstrate general conformity with the South Coast State Implementation Plan (SIP).*** A complete analysis is required to determine if the emissions associated with the Federal action (both construction and operational emissions) are subject to the requirements of a formal conformity determination under the General Conformity rule codified at 40 CFR 93, subpart B. The "applicability" analysis involves quantification of emissions caused by a Federal action that are generated within nonattainment or maintenance areas, that are reasonably foreseeable, and that the Federal agency can practicably control and will maintain control over, due to a continuing program responsibility. A formal conformity determination is required for all such emissions that exceed de minimis thresholds set forth in the rule.

The discussion in the DEIS regarding whether the Project meets the applicable general conformity requirements does not demonstrate that the emissions associated with the Federal Action are explicitly accounted for in the 1997/1999 SIP.

*Recommendation:*

EPA recommends that the FEIS clarify consistency with the 1997/1999 South Coast SIP. The FEIS should demonstrate whether the emissions associated with the Federal Action are specifically accounted for in the 1997/1999 South Coast SIP.

**Environmental Justice**

Overall, the Environmental Justice (EJ) analysis in Chapter 5 is well done. EPA acknowledges the efforts of the Port and Corps to analyze impacts of the Project on the EJ community and we will use the analysis as an example for other federal agencies to use in preparing their environmental justice analyses. Specifically, the following parts of the EJ analysis were particularly well thought out:

- Consideration of the high cost of living in Southern California and factoring that in the low income calculations (p. 5-1);
- Figure 5-1 and 5-2. These maps are very clear and easy to interpret;
- Section 5.3 on *Applicable Regulations* is very thorough and provides good context for the rest of the chapter;
- Section 5.4.1 clearly explains the methodology used for determining impacts;
- Section 5.4.2 summarizes the public comments that have been received, and is a very important part of Chapter 5;

- Section 5.4.2.1 and Section 5.4.2.2 are very thorough in that they address every resource with a clear discussion of whether there are environmental justice impacts or not;
- Table 5-3 presents a clear, relatively easy to understand summary of the environmental justice impacts.

However, the section lacks appropriate mitigations to fully offset the adverse project related impacts to the local community. The Environmental Justice Chapter of the Draft EIS concludes that there will be disproportionately high and adverse effects on minority and low-income populations due to aesthetic, air quality, transportation, and noise impacts. The local community is already heavily impacted which could be exacerbated by the many projects currently planned at and around the Port. In addition, we note that Wilmington and East San Pedro are designated as Health Professional Shortage Areas.<sup>1</sup> Therefore, all impacts, even seemingly small impacts, are important to consider and mitigate in order to fully offset the adverse project related impacts to the local community.

As stated in Section 5.3.2 the Council on Environmental Quality states that the identification of disproportionately high and adverse human health or environmental effect on a low-income or minority population does not preclude a proposed agency action from going forward or 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, and preferences expressed by the affected community or population.

The RDEIS does not propose any measures to mitigate significant and unavoidable impacts identified in Chapter 5. Considering the magnitude of potential cumulative health impacts related to the Project and the CEQ guidance to encourage agency consideration of mitigation measures and preference of the local community, EPA has developed potential measures for mitigating the impacts to the local community. For further coordination on EJ issues, please contact Steven John, Director of the Los Angeles Office at (213) 244-1804, or by email at [john.steven@epa.gov](mailto:john.steven@epa.gov).

***The Port and Corps should conduct a port-wide health impact assessment (HIA).*** There is a growing body of evidence that environmental justice communities are more vulnerable to pollution impacts than other communities.<sup>2</sup> EPA's Framework for Cumulative Risk<sup>3</sup> and the National Environmental Justice Advisory Council's Ensuring Risk Reduction in Communities with Multiple Stressors: Environmental Justice and Cumulative Risks/Impacts<sup>4</sup> talk about the concept of vulnerability that disadvantaged, underserved, and overburdened communities come

<sup>1</sup> <http://hpsafind.hrsa.gov/HPSASearch.aspx>

<sup>2</sup> O'Neill M, Jerrett M, Kawachi I, Levy J, Cohen AJ, Gouveia N, Wilkinson P, Fletcher T, Cifuentes L, Schwartz J.. Health, Wealth, and Air Pollution: Advancing Theory and Methods. Environmental Health Perspectives. Vol 111, No 16, December 2003. This article evaluated 15 different studies of particulate air pollution and socioeconomic conditions and found the majority of the studies evaluating individual-level characteristics did show effect modification with higher health impacts (such as mortality or asthma hospitalizations) among those with lower socioeconomic position. Low educational attainment seemed to be a particularly consistent indicator of vulnerability in these studies.

<sup>3</sup> Available at: <http://cfpub.epa.gov/ncea/raf/recordisplay.cfm?deid=54944>

<sup>4</sup> Available at: <http://www.epa.gov/environmentaljustice/nejac/past-nejac-meet.html>

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. Or in other words, a subpopulation is more vulnerable if it is more likely to be adversely affected by a stressor than the general population.

Low-income and minority communities are potentially experiencing more health impacts than would be predicted using traditional risk assessments and an HIA is a potential tool for examining this complex issue. HIAs look at health holistically, considering not only bio-physical health effects, but also broader social, economic, and environmental influences. HIA also explicitly focuses on health benefits and the distribution of health impacts within a population. HIA strives to anticipate potential impacts for decision-makers and to deliver a set of concrete recommendations targeted at minimizing health risks and maximizing benefits.<sup>5</sup>

A helpful resource for examples of HIAs is the Dannenberg et al (2008)<sup>6</sup> study that examined 27 case studies of Health Impact Assessment in the US, with six HIAs in California and Alaska conducted in conjunction with environmental impacts assessment processes. The study includes eleven additional HIA analyses in California. Most of the HIAs evaluated included recommendations to mitigate predicted adverse health impacts of the proposed policy or project and/or to increase predicted health-promoting components of the proposal.

*Recommendation:*

We recommend the Ports and Corps consider development of a port-wide health impact assessment (HIA). Given the magnitude and complexity of potential health impacts related to Port projects, EPA recommends the Corps and Port partner with the local health department and the local community to conduct an HIA which encompasses this project and all upcoming Corps/Port projects. An additional resource that provides information about Health Impact Assessments is the following Center for Disease Control and Prevention (CDC) website: <http://www.cdc.gov/healthyplaces/hia.htm>.

***Provide additional mitigations to fully offset impacts to the environmental justice community.***

The Port should use both information from an HIA and continued input from the local community to develop mitigation measures that would help fully offset port-related health impacts. The Los Angeles Environmental Justice (LAEJ) Network is an example of a forum that the Port could engage to solicit input on priority mitigation measures. In addition, many groups impacted by ports and goods movement came together in late 2007 at Moving Forward, the first North American community-oriented gathering on this topic, which was organized by The Impact Project and cosponsored by private groups along with National Institute of Environmental Health Scientists and EPA-funded centers. The Corps and Port should contact the conference organizers to see if potential mitigation measures were discussed at this conference and whether they would be appropriate for this project.

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<sup>5</sup> Bhatia, Rajiv and Wernham, Aaron. Integrating Human Health into Environmental Impact Assessment: An Unrealized Opportunity for Environmental Health and Justice. Environmental Health Perspectives. Available online April 16, 2008.

<sup>6</sup> Dannenberg, A, Bhatia R, Cole B, Heaton S, Feldman J, Rutt, C. Use of Health Impact Assessment in the US. 27 Case Studies, 1999-2007. American Journal of Preventive Medicine. 2008; 34(3).



Furthermore, the Corps and Port should contact those involved with the mitigation trust fund associated with the expansion of the Tra Pac Terminal Expansion Project to get their input on appropriate mitigation measures. Finally, some of the recommendations of the Port Community Advisory Committee (PCAC) such as the recommendation for a Public Health Trust Fund, Health Survey, Partners for Kids Health (mobile clinic) and the Health and Environmental Directory should be considered as potential environmental justice mitigations.

EPA is available to participate as a partner with the community, the Port and Corps to assist in the identification of mitigation measures to reduce the impacts on the affected communities for this and future projects. For further coordination on EPA involvement with the EJ community, please contact Steven John, Director of the Los Angeles Office at (213) 244-1804, or by email at [john.steven@epa.gov](mailto:john.steven@epa.gov).

*Recommendation:*

The Port and Corps should consider and work with communities to further develop the following mitigation measures to fully offset health impacts to the already burdened community in the Project area:

- Proactive efforts to hire local residents and train them to do work associated with the construction and long term operations at the facility in order to improve economic status and access to healthcare;
- Provide public education programs about environmental health impacts and land use planning issues associated with the Port to better enable local residents to make informed decisions about their health and community;
- Ensure enforcement of anti-idling requirements;
- Establish Environmental Management Systems at the Port to improve efficiency and reduce environmental impacts from operations;
- Improve access to healthy food through establishment of farmer's markets or retail outlets on Port lands;
- Continue expansion and improvements to the local community's parks and recreation system in order to provide increased access to open space and exercise opportunities. EPA supports increased parks and open space but strongly encourages the Port to implement emission reduction measures as soon as possible to prevent increased health risk from greater exposure opportunities.

**Fill of Water of the U.S.**

***Avoid fill of soft bottom habitat as part of the Berth 100 extension or demonstrate additional environmental impacts that would result from avoidance.*** Based on the existing information, the proposed project does not appear to be the Least Environmentally Damaging Practicable Alternative (LEDPA), consistent with Clean Water Act Section 404 (b)(1) Guidelines (Guidelines). The Guidelines state that no discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem. The Guidelines also require that no discharge of dredged or fill material be permitted unless appropriate and practical steps have been taken to avoid and minimize adverse impacts to the aquatic ecosystem. Other alternatives, including Alternative 4, appear to be practicable.

EPA notes that proposed fill into waters of the United States primarily comes from the extension of wharves (Berth 100 extension). EPA acknowledges that the Port has proposed to avoid fill into waters of the U.S. from construction of the two bridges.

Fill associated with the extension of Berth 100 should be avoided unless it can be demonstrated that greater environmental impacts would occur in the absence of the proposed fill. The Proposed Project would result in approximately 1.3 acres of fill of soft bottom habitat from dike, fill and new piles to extend Berth 100. This area would also be obstructed by piles and shaded by the deck of the new Berth 100 extension, resulting in marginal aquatic habitat. The Port would mitigate the impact using credits at Bolsa Chica, Outer, or Inner Harbor Mitigation Banks, but EPA is concerned that these impacts could be fully avoided.

As described in the RDEIS, Alternative 4, *Reduced Fill: No South Wharf Extension at Berth 100* would avoid additional fill at Berth 100 and achieve a similar level of service as the Proposed Project. As stated earlier under EPA's "Alternatives" comments, the project purpose and Proposed Project are based on throughput projections for 2030. We support considering an alternative that reduces impacts by constructing the Project over time and in phases to meet throughput demands as they come on line.

*Recommendation:*

We recommend the Corps and Port consider an alternative that avoids fill at the proposed Berth 100 extension and reevaluate throughput capacity requirements at a later date to determine whether the Berth 100 extension is necessary to meet throughput demands. As discussed at our July 15, 2008 coordination meeting, the FEIS should clearly demonstrate that the Proposed Project is the LEDPA and that avoiding fill for the Berth 100 extension would result in increased environmental impacts greater than Alternative 4, Reduced Fill.

***Beneficial reuse opportunities should be identified for clean dredging sediment.*** The RDEIS states that minor dredging activities might occur to remove sediments that have settled near Berth 102 since the Channel Deepening Project dredging occurred. This material would be disposed of at the Anchorage Road disposal site. The document also states that a portion of the material removed for the Channel Deepening Project was found to be unsuitable for unconfined ocean disposal and therefore taken the upland Anchorage Road site, typically used for contaminated sediments. The FEIS should describe sediment characterization protocols that will be used to determine disposal options for dredged material. EPA strongly encourages the Corps and Port to identify beneficial reuse opportunities for clean dredged material. Otherwise, we agree that the Anchorage Road disposal site is appropriate for contaminated sediments.

EPA and the Corps have recently established a Dredged Material Management Team (DMMT) for the Southern California region. Regular monthly meetings are occurring to facilitate interagency discussion of dredging projects. The DMMT meetings provides a forum for the Port to present projects, discuss sediment sampling and analysis plans, testing results, beneficial use, and other dredging related issues. For additional information on the DMMT, please contact EPA staff Allan Ota at (415) 972-3476 or by email at [ota.allan@epa.gov](mailto:ota.allan@epa.gov), or Jorine Campopiano at (213) 244-1808 or by email at [campopiano.jorine@epa.gov](mailto:campopiano.jorine@epa.gov).

*Recommendation:*

The FEIS should describe sediment characterization methods for any dredged material and identify beneficial reuse opportunities for clean sediment. EPA also encourages the Port to take advantage of the DMMT to discuss dredging related issues.

## **Biological Resources**

***A port-wide marine mammal vessel strike reduction program should be developed.*** The RDEIS describes potential direct and cumulative impacts to several marine species including marine mammals. According to the document, vessel strikes in the eastern North Pacific have been recorded for blue whale, fin whale, humpback whale, and sperm whale (p. 4-43). As described in the document, over the past twenty-five years reported whale strikes along the California coast have averaged less than three per year, however this number is misleading in that it is limited to strikes that were both known and reported. Based on the likelihood that all whale strikes are not known or reported, it can be assumed that the actual number is higher.

NOAA Fisheries has identified vessel strikes as a major, if not the single most significant human-caused direct impact to whales. EPA recognizes the Port's mitigation measure BIO-2, Vessel Speed Reduction Program and the benefits to both potentially reduced vessel strikes as well as to air quality. However, we do not agree with the statement in the document that no other mitigation measures are available to avoid vessel strikes.

Recent research at Cornell University has found that listening for whales using underwater microphones has improved the ability to locate whales near shipping lanes, when compared to visual observation<sup>7</sup>. This research in Cape Cod Bay has led to a warning system for vessels to reduce their speed to 10 knots when whales are observed in the area. With the cumulative increase of projected ship traffic, the Port should consider improving methods to identify whales in and near shipping lanes serving the San Pedro Bay Ports.

*Recommendation:*

The Port of LA should work with the Port of Long Beach to institute improved methods for identifying whales that are potentially in harms way from vessels using the San Pedro Ports. A sound-based system similar to that used in Cape Cod should be considered as a way to inform ships of whales detected in the area and as a trigger to reduce their speeds. This is particularly important given the increasing vessel calls to the ports that are likely to result from increased throughput.

## **Noise**

***Consider changes in the construction schedule to reduce noise impacts on the local community.*** The RDEIS clearly describes basic information on noise, baseline noise conditions, and potential human health affects associated with excessive noise. The analysis indicates a significant and unavoidable impact from construction for the proposed project and alternatives 2 through 7, and from operations for the proposed project and alternative 4. Cumulative impacts to

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<sup>7</sup> Lindsay, Jay. The Associated Press, Eavesdropping on Wales to Avoid Ship Strikes describes, May 7, 2007. Available on line at: <http://www.msnbc.msn.com/id/24501872/>

sensitive receptors from construction of the proposed project or any alternatives are considered cumulatively considerable.

Several mitigation measures are proposed to reduce noise impacts from construction, including consistency with construction hours prescribed in the City of Los Angeles Noise Ordinance. This includes prohibiting construction between the hours of 7:00 AM and 9:00 PM on weekdays and between 8:00 AM and 6:00 PM on Saturdays. Given the construction duration and close proximity to sensitive receptors that are already disproportionately affected by noise and other port-related health impacts, EPA suggests soliciting input from the local community to determine whether construction until 9:00 PM on weekdays could be characterized to be, "In a manner as to disturb the peace and quiet of neighboring residents or any reasonable person of normal sensitiveness residing in the area" (41.40 LAMC- Construction Noise). The Port should also consider whether it would be appropriate to further mitigate noise impacts by avoiding the use of louder equipment, like hydro hammers, after 6:00 PM on weekdays.

*Recommendation:*

To further reduce noise-related health impacts to sensitive receptors near the Project, the Corps and Port should solicit input from the local community to determine whether construction until 9:00 PM on weekdays would be a disturbance. Consider avoiding the use of louder construction equipment, like hydrohammers, after 6:00 PM.

**Purpose and Need**

***Replace the word "maximize" with "optimize" in the purpose and need statement.*** A project purpose of maximizing container-handling efficiency and capacity could unfairly favor the selection of the Proposed Project. As stated in EPA's October 16, 2006 comment letter on the retracted DEIS for the Project, we recommend replacing the word "maximize" with "optimize" when describing the overall project purpose. The RDEIS still states that the "overall purpose of the proposed Project is to establish and maximize container-handling efficiency and capacity at Berths 97-109 in the West Basin to address the need to optimize Port lands and terminals for current and future containerized cargo handling." EPA acknowledges the Port's projected growth of throughput and the forecast modeling that indicates that "Port container facilities are expected to be constrained by the physical capacity of the terminals... in the year 2030" (p. 1-10). However, as stated in our October 16, 2006 letter, we are concerned that "a standard to maximize use could potentially eliminate less damaging but still practicable alternatives that would otherwise meet the basic project purpose."

*Recommendation:*

EPA recommends replacing the word "maximize" with "optimize" in the purpose and need statement. Based on our July 15, 2008 meeting, the Corps and Port should at a minimum, provide an explanation in the FEIS why the current purpose and need statement will not unfairly favor selection of the Proposed Project.

**Alternatives**

***Consider a longer construction timeframe to further mitigate Project impacts.*** The RDEIS analyzes a reasonable range of alternatives, but could go further in refining the alternatives to

potentially reduce impacts by modifying the construction schedules. The RDEIS states that while construction of the Project would be completed by 2012, throughput would continue to grow between 2012 and 2030. While there may be cost and logistical advantages to completing the entire project by 2012, EPA is concerned with the level of Project impacts that might otherwise be reduced if construction were to take place over a longer period of time. Potential impacts that EPA believes could be avoided or minimized include air quality emissions and noise from construction and resulting health impacts to the neighboring environmental justice communities, fill of waters of the US, and biological resources.

The current proposal is to complete the entire project by 2012, 18 years in advance of forecasted throughput limits. The current construction proposal would also occur prior to the full implementation of the CAAP. The Corps and the Port should discuss environmental benefits of an alternative that would wait to construct the Berth 100 extension and develop all available backlands as projected throughput demands come on line.

*Recommendation:*

We recommend considering a modified alternative that would alter the construction time frame to reduce impacts, coincide with throughput projections, and benefit more from implementation of CAAP measures.

# **SUMMARY OF EPA RATING DEFINITIONS**

This rating system was developed as a means to summarize EPA's level of concern with a proposed action. The ratings are a combination of alphabetical categories for evaluation of the environmental impacts of the proposal and numerical categories for evaluation of the adequacy of the EIS.

## **ENVIRONMENTAL IMPACT OF THE ACTION**

### ***LO" (Lack of Objections)***

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

### ***"EC" (Environmental Concerns)***

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

### ***EO" (Environmental Objections)***

The EPA review has identified significant environmental impacts that must be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

### ***"EU" (Environmentally Unsatisfactory)***

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potentially unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the CEQ.

## **ADEQUACY OF THE IMPACT STATEMENT**

### ***Category 1" (Adequate)***

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

### ***"Category 2" (Insufficient Information)***

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analysed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

### ***"Category 3" (Inadequate)***

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analysed in the draft EIS, which should be analysed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

\*From EPA Manual 1640, "Policy and Procedures for the Review of Federal Actions Impacting the Environment."