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

August 20, 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: Draft Supplemental Environmental Impact Statement (DSEIS) for the Pacific L.A. Marine Terminal LLC Pier 400, Berth 408 Project (Project) in the Port of Los Angeles, California (CEQ # 20080217)

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). Our detailed comments are enclosed.

We appreciate having met with you and Port of Los Angeles (Port) staff on July 15th to discuss and visit this and other Port projects. We also appreciate having had the opportunity to coordinate with you and Port staff on our preliminary comments on the Project. Based on review of the SDEIS and our discussions, 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, and aquatic and biological resources.

EPA commends the Corps and Port for the implementation of a high quality Health Risk Assessment to identify cancer and non-cancer health risks 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). We suggest additional measures to reduce emissions, including shore-side electric pumps for transferring crude oil from ships, use of Tier 3 emission standards for construction equipment, and capture of additional vessel boiler flue gasses. 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 Project would include fill as part of the construction of a new wharf and associated pilings to accommodate oil tankers at Berth 408. The Port and Corps do not consider the pilings to be fill, but recognize that rock placed at the base of pilings would be fill. No mitigation is discussed for the placement of fill and conversion of soft bottom habitat in the outer San Pedro Bay Harbor. EPA is concerned with the lack of justification for not considering the pilings to be fill, and the lack of mitigation for conversion of soft bottom habitat. We also suggest the Port consider additional water quality protection measures at proposed tank farms and at over-water pipeline crossings. A mitigation program to fund water quality and aquatic habitat cleanup and restoration is also recommended in order to mitigate for oil spills in the Harbor vicinity.

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 also recommend the Port and Corps relocate the proposed Tank Farm 1 and use the undeveloped land to expand the existing California least tern preserve that is described in the SDEIS as significant to this species' local and state-wide populations.

We appreciate the opportunity to review this SDEIS and look forward to continued coordination with the Corps and the Port. When it is published, please send a copy of the FEIS to the address above (Mail Code: CED-2). If you have any questions, please contact the lead reviewer for this project Paul Amato or me. Paul can be reached at 415-972-3847 or amato.paul@epa.gov; I can be reached at 415-972-3521 or goforth.kathleen@epa.gov.

Sincerely,

/s/

Kathleen M. 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;
Ms. Lena Maun-DeSantis, Marine Environmental Supervisor, Port of LA;
Ms. Cindy Tuck, Assistant Undersecretary, California Environmental Protection Agency;
Ms. Cynthia Marvin, Assistant Division Chief for Planning and Technical Support, California Air Resources Board;
Ms. Susan Nakamura, South Coast Air Quality Management District;
Mr. Hassan Ikrhata, Executive Director, Southern California Association of Governments;
Dr. Paul Simon, Director, Division of Chronic Disease & Injury Prevention, Los Angeles County Department of Health;
Mr. Bryant Chesney, NOAA Fisheries;
Mr. Ken Corey, U.S. Fish & Wildlife Service;
Mr. Bill Paznokas, California Department of Fish & Game

Air Comments

Commit in the Final Environmental Impact Statement (FEIS) and Record of Decision (ROD) to fully implement mitigations that will reduce cancer risks. Similar to our July 21, 2008 comments on the Port of Los Angeles (Port) China Shipping Project Recirculated Draft Environmental Impact Statement, 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 Supplemental Draft Environmental Impact Statement (SDEIS). 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.

While the cumulative impacts to air quality in the Port region should be considered significant, we also recognize the mitigation efforts that have reduced additional risks of cancer, and both acute and chronic non-cancer health impacts.

EPA continues to have concerns with any increases in cancer risks and both chronic and acute non-cancer health impacts 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). We also understand that project-specific CAAP mitigation measures will be enforceable through lease agreements between the Port and the terminal operator Plains All American Pipeline, L.P. For questions regarding air quality issues, please contact Francisco Donez, EPA Air Division, in our Los Angeles Office at (213) 244-1834, or by email at donez.francisco@epa.gov.

> *Recommendation:*
> The Port and Corps should commit, in the FEIS and the ROD, that CAAP mitigation measures necessary to reduce cancer risk and both acute and chronic non-cancer health impacts 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 and health impact 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 Proposed Project, even after mitigation measures have been taken into account. The SDEIS 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 SDEIS. However, even with implementation of these aggressive mitigation measures, the SDEIS states that Proposed Project peak daily emissions from construction of phase 1 would have direct and cumulative air quality impacts, exceeding peak daily South Coast Ambient Air Quality District (SCAQMD) emission thresholds for volatile organic compounds (VOC), carbon monoxide (CO), nitrogen oxides (NOx), particulate matter greater than 2.5 and 10 microns (PM_{10} and $PM_{2.5}$) (pp. 3.2-51 & 4-41). Proposed Project construction would also result in direct and cumulative air quality impacts to offsite ambient air pollutant concentrations, exceeding SCAQMD thresholds of significance for 1-hour and annual nitrogen dioxide (NO_2) and 24-hour PM_{10} and $PM_{2.5}$ (pp. 3.2-53 & 4-42).

While we acknowledge the reported operational air quality benefits of a terminal that accommodates fewer very large crude container (VLCC) vessels, as opposed to relying on increased numbers of smaller vessels (also called "lightering"), we remain concerned with direct and cumulative operational impacts of the Proposed Project to air quality, exceeding SCAQMD peak daily CO emission thresholds (Table 3.2-25, p. 4-43) and offsite ambient NO_2 concentrations (pp. 3.2-71 & 4-44).

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 South Coast Air Basin (SCAB) nonattainment criteria pollutants ozone, $PM_{10,}$ and $PM_{2.5,}$ as well as CO, for which the Basin is designated attainment/maintenance. The SDEIS states that Project air quality mitigation measures are consistent with the CAAP and, in some cases, exceed the emission reduction strategies of the CAAP (p. 3.2-26). However, changes to the CAAP measures 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.

> *Recommendations:*
> All proposed mitigation measures in the SDEIS should be included in the FEIS and the ROD. We recommend implementation of the mitigation measures prior to or, at a minimum, concurrent with the construction of phase 1 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.

Consider shore-side electric pumps that would transfer crude oil from vessels to Tank Farm 1. Shore-side electric pumps would be used to transfer crude oil from Tank Farm 1 to Tank Farm 2 as a measure to reduce emissions from a vessel's diesel powered boilers. According to the document, the vessel's boilers would still be required to pump crude oil from the ship to Tank Farm 1, and could be in operation for up to a day at a time (p. 2-13). To further reduce emissions from vessels at the proposed terminal, EPA requests a discussion of the feasibility of installing shore-side electric pumps with enough power to pull crude from the vessel to Tank Farm 1 in addition to pumping from Tank Farm 1 to Tank Farm 2.

> *Recommendation:*
> The FIES should discuss the feasibility of using shore-side electric pumps to transfer crude oil from ships to Tank Farm 1. If this is feasible, the Corps and Port should commit to this additional measure in the FEIS and ROD.

Use equipment meeting Tier 3 engine standards and commit to the best available emissions control technology. Mitigation Measure AQ-3: Construction Equipment Standards commits to meeting Tier 2 emission standards and California Air Resources Board (CARB)-certified Level 3 diesel emissions control devices for construction equipment diesel engines greater than 50 horse

power. Tier 3 engine standards will be available in the 2008-model year and should be used for Project construction equipment to the maximum extent feasible. Lacking availability of non-road construction equipment that meets Tier 3 engine standards, the Corps and Port should commit to using the best available emissions control technologies on all equipment.

> *Recommendation:*
> The Corps and Port should commit in the FEIS and ROD to using construction equipment meeting Tier 3 engine standards, to the maximum extent feasible, and to using the best available emissions control technologies on all equipment.

Commit to capturing the remaining 65 percent of vessel boiler flue gasses. The document describes the capture of 35 percent of vessel boiler flue gasses in the vessel tank headspace (p. 3.2-37). The remaining 65 percent would be released to the atmosphere. These releases have been accounted for in the Project emissions inventory and would have a negative impact on air quality. EPA encourages the Port to implement mitigation measures, such as the Advanced Maritime Emission Control System (AMECS) technology, to capture these emissions in an effort to improve air quality.

> *Recommendation:*
> The Corps and Port should commit in the FEIS and ROD to capturing the remaining 65 percent of the vessel boiler flue gasses using AMECS or other best available emissions control technology.

Correct or clarify CO emissions from construction. In Table 3.2-11, pre-mitigation peak daily CO emissions from construction are 2,195 lbs/day. This is lower than post-mitigation peak daily CO emissions of 2,541 lbs/day in Table 3.2-50. This appears to be an error.

> *Recommendation:*
> The FEIS should clarify or correct peak daily construction emission totals for CO in Tables 3.2-11 and/or 3.2-50.

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 SDEIS 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. For questions regarding general

conformity, please contact John Kelly, EPA Air Division, at (415) 947-4151, or by email at kelly.johnj@epa.gov.

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 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 the factoring of that into the low-income calculations (p. 5-3);
- Figures 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 to be used.
- Interpreting "meaningfully greater" to mean simply "greater" which provides for a conservative analysis (p. 5-19);
- Section 5.4.2 summarizes the public comments that have been received, and is a very important part of this Chapter.
- Section 5.4.2.1 and Section 5.4.2.2 are very thorough in that they discuss and address every resource with a clear discussion on whether there are environmental justice impacts or not.
- Table 5-3 presents a clear, relatively easy to understand, summary of the environmental justice impacts.

The above strengths notwithstanding, 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 air quality, noise, recreation and risk of upset. The local community is already heavily impacted, a condition 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.[1] 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 effects on a low-income or minority population does not preclude a proposed agency action from going forward nor compel

[1] http://hpsafind.hrsa.gov/HPSASearch.aspx

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 SDEIS 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.

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 are other communities.[2] As discussed in EPA's *Framework for Cumulative Risk*[3] and the *National Environmental Justice Advisory Council's Ensuring Risk Reduction in Communities with Multiple Stressors: Environmental Justice and Cumulative Risks/Impacts*[4], 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.

Low-income and minority communities are potentially experiencing more health impacts than would be predicted using traditional risk assessments. 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. HIAs also explicitly focus on health benefits and the distribution of health impacts within a population. HIAs strive to anticipate potential impacts for decision-makers and to deliver a set of concrete recommendations targeted at minimizing health risks and maximizing benefits.[5]

A helpful resource for examples of HIAs is the Dannenberg et al (2008)[6] study that examined 27 case studies of Health Impact Assessment in the US, with six HIAs in California and Alaska

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[2] 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.

[3] Available at: http://cfpub.epa.gov/ncea/raf/recordisplay.cfm?deid=54944

[4] Available at: http://www.epa.gov/environmentaljustice/nejac/past-nejac-meet.html

[5] Bhatia, Rajiv and Wernham, Aaron. Integrating Human Health into Environmental Impact Assessment: An Unrealized Opportunity for Environmental Helth and Justice. Environmental Health Perspectives. Available on-line April 16, 2008.

[6] 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).

conducted in conjunction with environmental impacts assessment processes. The study includes eleven 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 a 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 on 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 the EPA-funded Children's Environmental Health Sciences Center. 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.

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 the 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.

> *Recommendation:*
> The Port and Corps should consider and work with communities to further develop the following mitigation measures to more fully offset health impacts of the Project to the already burdened community in the Project area:
> - Engage in 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.

Mitigate for placement of fill and conversion of soft bottom Outer Harbor habitat. The Draft Section 404(b)(1) Alternatives Analysis in Appendix Q states that the 150 or 258 wharf pilings (depending on the final design) would not be considered fill because they are not close enough to each other to have the effect of fill. The Corps and Port should clarify in the FEIS why the pilings do not meet the description of fill materials consistent with 33 CFR 323, "Handbook on Dredging". Rock fill at the base of the pilings is, however, considered to constitute 0.1 acre of fill, but mitigation is not described in the DEIS. This appears to be inconsistent with the Port of LA China Shipping Project that proposed to mitigate for placement of rock fill on soft bottom habitat in the Inner Harbor, with credits from the Port's Bolsa Chica mitigation site. We also note that the placement of pilings and rock will convert higher quality Outer Harbor soft bottom habitat, and shade from the new wharf may degrade aquatic habitat. For questions regarding Clean Water Act compliance and other issues related to fill, please contact Jorine Campopiano, EPA Water Division, in our Los Angeles Office at (213) 244-1808, or by email at campopiano.jorine@epa.gov.

Recommendation:
The FEIS should clarify why the pilings are not considered fill, consistent with 33 CFR 323, and commit to providing adequate mitigation for conversion of Outer Harbor soft bottom habitat resulting from the placement of rock and pilings for wharf construction. The Port and Corps should also consider mitigation for impacts to aquatic resources resulting from shade beneath the proposed wharf.

Water Quality

Provide additional secondary containment for tank farms. The DEIS describes the secondary containment dikes that would surround the tank farms (p. 2-24). The dikes would contain the volume of the largest volume tank plus the estimated rainfall of the 24-hour, 25-year rainfall event. This capacity appears to be adequate to contain an unlikely event but may not be adequate under catastrophic conditions.

Recommendation:
Additional capacity should be considered in order to more adequately contain an oil spill in the event of a catastrophic event. This may be achievable through raising the elevation or increasing the perimeter of the containment dike, and should be discussed further in the FEIS.

Consider additional pipeline mainline block valves at bridge crossings. According to the DEIS, remotely operated mainline block valves are planned at the beginning and end of the 42-inch pipeline and at the connections with the tank farm sites (p. 2-35). Additional block valves at the two water crossings may improve spill prevention and reduction in the event there is a leak or rupture at the bridge crossings.

Recommendation:
The Corps and Port should consider whether additional remotely operated mainline block valves would help reduce impacts to water quality in the event of a leak or rupture at bridge crossings.

Consider a mitigation fund for impacts to water quality from oil spills. According to the SDEIS, operational impacts to water quality could be significant due to oil spills (p. 3-14-39). Mitigation measures are intended to reduce the risks and impacts of spills, but lack any compensation for potential impacts. Due to the increased potential for impacts from oil spills associated with the Proposed Project and cumulative impacts from other oil terminal projects, the Corps and Port should identify mitigation measures to compensate for these impacts when they occur. While EPA recognizes the difficulty of identifying mitigation for unknown impacts, we note that the SDEIS anticipates these impacts could occur. We suggest the Port consider a mitigation program that could be funded through penalties to parties responsible for oils spills. The funds could be used to implement projects that improve water quality and clean, enhance, or create new habitat in the region, while providing additional safety incentives to responsible parties.

Recommendation:
The Port should develop a mitigation program that would improve water quality and clean, enhance, or create new aquatic habitat in the San Pedro Bay Harbor area. The fund could be based on penalties to responsible parties for oils spills in the Harbor. We also encourage the Port to coordinate with the Port of Long Beach and applicable federal, state, and local agencies on such a program.

Biological Resources

A port-wide marine mammal vessel strike reduction program should be developed. The SDEIS 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. 3.3-19). 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. As stated in the SDEIS, the actual number of vessel strikes is likely to be greater because not all strikes are reported.

NOAA Fisheries has identified vessel strikes as a major, if not the single most significant, human-caused direct impact to whales. EPA recognizes benefits of the Port's mitigation measure BIO-1.2f, Expanded Vessel Speed Reduction Program, with regard to potentially reduced vessel strikes, as well as to air quality; however, we believe more could be done to avoid impacts to whales.

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[7]. 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:*
> Consistent with EPA's comment in our July 21, 2008 letter regarding the China Shipping DEIS, the Port of LA should work with the Port of Long Beach to institute improved methods for identifying whales that are potentially in harm's 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.

Relocate Tank Farm 1 and expand the California least tern preserve. The Proposed Project would construct Tank Farm 1 on undeveloped land adjacent to the existing California least tern Pier 400 preserve. The SDEIS describes the importance of the preserve to the population of the species, including survey data indicating that the number of fledglings produced ranged from 45 percent of the state's total in 2005 to 20 percent in 2006, and 8 percent in 2007 (p 3.3-14). While it is unclear exactly why this percentage declined so dramatically over three breeding seasons, it may provide additional support for the importance of relocating the tank farm and expanding the preserve. It is also worth noting that an expanded preserve could increase the population of tern and other species, and improve their resilience to cumulative impacts of oil spills described in the SDEIS (p. 4-54). The Corps and Port should consult with the U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Game (CDFG) regarding benefits to California least tern, and other species, that would result from expanding the preserve.

> *Recommendation:*
> The Corps and Port should relocate the proposed Tank Farm 1 and use the undeveloped land to expand the California least tern Pier 400 preserve. The Corps and Port should consult with the USFWS and CDFG to identify the benefits to California least tern and other species that would inhabit the site.

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

Consider mitigations for cumulatively considerable impacts to eelgrass beds. The SDEIS describes cumulatively considerable impacts to eelgrass beds from oil spills but does not consider potential mitigation in the event this occurs (p. 4-56). The Corps and Port recognize eelgrass habitat as a special aquatic site and acknowledge that they could be significantly affected by oils spills, but consider mitigation unfeasible. Due to the increased potential for impacts from oil spills associated with the Proposed Project and cumulative impacts from other oil terminal projects, the Corps and Port should identify mitigation measures to compensate for these impacts when they occur. As described in our previous water quality comment, the Port should consider a mitigation program that could be funded through penalties to parties responsible for oils spills.

Recommendation:
The Port should develop a mitigation program that would clean, enhance, or create new eelgrass habitat in the San Pedro Bay Harbor area. The fund could be based on penalties to responsible parties for oils spills in the Harbor. We also encourage the Port to coordinate with the Port of Long Beach and applicable federal, state and local agencies.

Noise

Consider changes in the construction schedule to reduce noise impacts on the local community. The SDEIS clearly describes basic information on noise, baseline noise conditions, and potential human health affects associated with excessive noise. The analysis predicts a significant and unavoidable impact from construction for the Proposed Project. Cumulative impacts to sensitive receptors from construction of the Proposed Project or any alternatives are considered cumulatively considerable.

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, EPA suggests soliciting input from the potentially affected 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 potentially affected 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.