



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

August 8, 2008

Mr. Antal Szijj
U.S. Army Corps of Engineers
Los Angeles District
Attn: Regulatory Division
P.O. Box 532711
Los Angeles, California 90053-2325

Subject: Draft Environmental Impact Statement (DEIS) for the Port of Long Beach Middle Harbor Redevelopment Project, Long Beach, CA (CEQ # 20080206)

Dear Mr. Szijj:

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.

Thank you for the opportunity to meet with you and Port of Long Beach (Port) staff during our visit on July 15, 2008 to discuss the Middle Harbor Redevelopment Project (Project). We very much appreciate the opportunity to have met, and look forward to continued coordination as Port projects proceed. We also appreciate meeting with you on the phone on August 8, 2008 to discuss our preliminary comments. Based on our review of the DEIS, we have rated the document EC-2, Environmental Concerns – Insufficient Information. While the document is well done, and mitigation efforts have been identified, we remain concerned with significant and unavoidable impacts to air quality, environmental justice communities, waters of the U.S., and biological resources.

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, but recommend including analysis of additional alternatives. 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. It is unclear whether the DEIS also considered emissions resulting from the import of 6.73 million cubic yards of fill material, and we recommend this be described in the FEIS, consistent with our discussion on August 8, 2008. In general, we have continuing concerns with unmitigated impacts to air quality in the South Coast Air Basin from construction and operations. We 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) by implementing the latest emission standards as soon as they are available and by implementing the best available emission control technologies. We also recommend general conformity with the 1997/1999 South Coast State Implementation Plan be clarified.

With regard to environmental justice (EJ), we recognize the efforts of the Port and Corps to assess and disclose impacts to the already disproportionately affected community adjacent to the Project; however, we remain concerned over the significant and unavoidable impacts to the community and the absence of measures to fully offset these impacts. We suggest the Corps and Ports develop a Health Impact Assessment to better identify these impacts and work with the community to identify appropriate offset measures. We have provided possible measures to offset impacts. We also recommend the Port develop a community mitigation fund, with input from neighboring EJ communities, to help offset cumulative impacts from Port projects.

The Proposed Project alternative would result in the net fill of approximately 55 acres of waters of the U.S. primarily to provide for construction of additional backlands and on-dock rail. We recognize the intent of the Port to increase throughput capacity and efficiency, and we support the expansion of on-dock rail as a means to reduce truck traffic and emissions, but remain concerned that the Project purpose and need could be sufficiently met without 55 acres of additional fill. 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 recommend the FEIS further analyze and disclose the practicability of Alternatives 2 and 3, as well as the modified Alternative 3 discussed at our July 15, 2008 meeting at the Port. For Alternatives 1 and 2, an additional 10.7 acres of waters would be created as a result of excavating Slip 3, and a functional assessment is recommended to assure that the new waters will adequately replace the San Pedro Bay Inner Harbor functions lost due to fill. This should be described in the FEIS. We also recommend chemical characterization of excavated and import material that would be used as fill, as well as a discussion of methods to safely dispose of contaminated sediments from Slip 3 to partially fill Slip 1.

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 CAAP Vessel Speed Reduction Program are not provided. We recommend the Port

work with the Port of Los Angeles 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 the opportunity to review this DEIS and look forward to continued coordination with the Corps and the Port. When the FEIS is published, please send a copy to the address above (Mail Code: CED-2). If you have any questions, please contact Paul Amato, the lead reviewer for this project, at (415) 972-3847 or amato.paul@epa.gov, or me at (415) 972-3521 .

Sincerely,

/S/

Kathleen M. Goforth, Manager
Environmental Review Office

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

cc:

Richard Cameron, Director of Environmental Planning, Port of Long Beach
Stacey Crouch, Senior Environmental Specialist, Port of Long Beach
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 of Long Beach (Port) and U.S. Army Corps of Engineers (Corps) to conduct a high quality health risk assessment (HRA) for toxic air contaminants (TACs) emitted from the 345-Acre Alternative, Proposed Project (Project). 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; however, we suggest the Port consider including all alternatives in future HRAs to allow for a more balanced review of health risks for decision makers.

While the cumulative impacts to air quality in the Port region should be considered significant, we recognize the mitigation efforts that have reduced additional Project-related cancer risks from 18 in a million to 5 in a million for residents, from 19 in a million to 11 in a million for occupational, and from 12 in a million to 5 in a million for sensitive receptors.

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). 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.

Recommendations:

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.

The Port and Corps should include all project alternatives in future HRAs to allow for a more balanced review.

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 direct and cumulative impacts of construction and operational air emissions associated with the Project, even after mitigation measures have been taken into account. The DEIS includes a 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 describes significant impacts to air quality. According to the analysis, peak daily emissions from construction would exceed South Coast Air Quality Management District (SCAQMD) emissions significance levels for volatile organic compounds (VOC), carbon monoxide (CO), nitrogen oxides (NO_x) and particulate matter smaller than 10 and 2.5 microns (PM₁₀, and PM_{2.5}), as well as exceed SCAQMD offsite ambient air pollutant concentrations for one-hour nitrogen dioxide (NO₂) and

24-hour PM₁₀ thresholds. Project operations emissions would exceed SCAQMD thresholds for annual average daily emissions of VOCs and NO_x and peak daily emissions of VOCs, CO, NO_x, sulfur dioxide (SO₂), and PM_{2.5}. Operations would also exceed SCAQMD one-hour and annual NO₂ thresholds.

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 SO_x, NO_x, PM₁₀ and PM_{2.5}. The DEIS states that Project-specific mitigations are largely consistent with the CAAP and, in some cases, exceed CAAP emission reduction strategies (p. 3.2-20). However, the CAAP includes a number of port-wide requirements and is still in the implementation phase. 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 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 applicable mitigation measures prior to or, at a minimum, concurrent with the construction of Phase 1, Stage 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.

The FEIS should assess additional air quality impacts that would result from imported fill.

The DEIS states that an additional 6.73 million cubic yards of fill material would be imported from within and outside the Harbor District, but it is not clear how this material would be imported and whether emissions from this activity have been accounted for in the DEIS. The Ground Transportation section of the DEIS does state that the Project is not expected to have recurrent heavy trucks delivering materials to the site (p. 3.5-8). EPA supports the Port's minimization of truck traffic.

Recommendation:

Consistent with our conversation between the Port, Corps, and EPA, on August 8, 2008, the FEIS will describe emissions from importing fill material and include them as part of the air quality impacts analysis. Impacts to other resources, resulting from importing fill, should also be included.

Commit to Tier 4 standards for non-road construction equipment. The DEIS states that Tier 4 non-road engine standards will be used for construction were feasible and that standards will be available in 2012 (p. 3.2-27). Because of Project impacts to currently impaired air quality in the Project area and South Coast Air Basin (SCAB), the Corps and Port should commit to using Tier

4 standards when they become available, and ensuring the use of best available emission control technology for construction equipment that is used prior to Tier 4 standard availability.

Recommendation:

The FEIS and ROD should commit to using non-road construction equipment that meets Tier 4 emission standards, when available, and best available emission control technology, for construction that occurs prior to Tier 4 standards availability.

Update tugboat emission assumptions and commit to using Tier 2 and Tier 3 standards. It is unclear why the tugboat emissions were calculated "conservatively" in Section 3.2-27, assuming partial implementation of Tier 2 engine standards, when the DEIS commits to using only construction tugs that meet Tier 2 marine engine standards. Similar to our previous comment on non-road construction equipment, the Port and Corps should commit to using tugs that meet Tier 3 standards, or best availability emission control standards, for construction prior to Tier 4 availability. This is especially important in light of the statement that construction tugs are the main source of construction emissions (p. 3.2-28).

Recommendation:

The FEIS should clarify the emissions assumptions used in calculating the tugboat emissions and include the commitment to use, at a minimum, construction tugs with Tier 2, and where feasible, Tier 3 marine engine standards. Because Tier 3 standards become available in 2009, their use should be feasible.

Commit to supporting and using best available emission control technology for construction equipment. The DEIS states that there are few feasible mitigation measures available to further reduce combustive emissions from construction sources. EPA appreciates the efforts of the Port, through implementation of the CAAP and other measures, to reduce emissions from Project construction. However, the Project construction timeframe is ten years (2009-2019) and air quality in and around the Port and SCAB is already heavily impacted. The Port and Corps should commit to supporting development of, and implementing, best available emission control technologies for construction.

Recommendation:

The FEIS and ROD should include a commitment that the Port and Corps will support development of, and implement best available technologies for reducing construction emissions.

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. For questions regarding general conformity, please contact Rebecca Rosen, EPA Air Division, at (415) 947-4152, or by email at rosen.rebecca@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

While we recognize the level of effort that has gone into the DEIS Environmental Justice (EJ) analysis, the EJ section lacks appropriate mitigations to fully offset the adverse Project-related impacts to the local community. The EJ section concludes that there will be disproportionately high and adverse effects on minority and low-income populations due to air quality and noise impacts. 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 Long Beach is designated as a Medically Underserved Area.¹ 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.

As stated by the Council on Environmental Quality, 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, and preferences expressed by the affected community or population.

The DEIS does not propose any measures to mitigate significant and unavoidable impacts identified in Section 3.15. 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, and suggested below, 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.

Include additional environmental justice (EJ) information in the FEIS. Section 3.15.3 of the DEIS discusses public outreach efforts for the project. In addition, The Port's website for the

¹ <http://muafind.hrsa.gov/>

Project provides *The White Paper on Environmental Justice: Opportunities in Port of Long Beach Projects*, which makes numerous recommendations on public outreach opportunities in the Sections titled *Public Participation Principles, Reaching Out to Communities, Strengthening Ties to Communities, and Specific Tactics to Consider*. Section 3.15.3 should summarize which public outreach opportunities from the White Paper were used for the Project.

We have identified additional information that was included in the Port of LA China Shipping DEIS EJ Chapter that should be included in the FEIS to strengthen the analysis:

- On page 5-1, the China Shipping DEIS includes consideration of the high cost of living in Southern California, and factors that into the low income calculations. Please include this consideration in the FEIS.
- In the China Shipping DEIS, Section 5.3 on Applicable Regulations contains a more thorough and detailed discussion of applicable regulations than is found in the Project DEIS. Please include this information in the FEIS.
- In the China Shipping DEIS, Section 5.4.2 summarizes the public comments that have been received. Please include this type of information in the FEIS or include a reference to another section of the DEIS where this information can be found.
- In the China Shipping DEIS, Table 5-3 presents a clear, relatively easy to understand summary of the environmental justice impacts. Please provide a similar table in the FEIS.

Recommendation:

We recommend the FEIS include the additional information described above in order to strengthen the analysis and clarify which public outreach opportunities were used.

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.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.

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>

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 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 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 HIAs is the following Center for Disease Control and Prevention (CDC) website:

<http://www.cdc.gov/healthypaces/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 identify 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 TraPac Terminal Expansion Project to get their input on appropriate mitigation measures.

⁵ 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.

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).

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:

- 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 of, 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.

Develop a mitigation fund for priority mitigation measures for air quality impacts to the community. EPA acknowledges the current efforts on behalf of the Ports to reduce pollutant levels and cancer risks. However, based on the substantial list of proposed and approved projects, EPA anticipates cumulative air quality impacts to the LA and Long Beach communities will continue to be a significant health issue. To help address immediate impacts of the proposed Project and impacts of future projects, EPA recommends the development of a mitigation fund, similar to what was created for the TraPac project in the Port of Los Angeles, to mitigate cumulative community impacts caused by Port operations. The fund should be financially supported by the Port and other project proponents in the area and include appropriate involvement of members from the impacted communities. Mitigation measures such as health clinics and air filtration systems, or other measures identified by the community, could be developed and funded through this mitigation fund to help address immediate needs of the communities.

Recommendation:

EPA recommends the Corps and Port work with the local communities to develop a mitigation fund that directly addresses health related air quality impacts of the proposed

Fill of Water of the U.S.

The FEIS should describe compliance with Clean Water Act Section 404(b)(1) Guidelines.

Clean Water Act Section 404(b)(1) Guidelines (Guidelines) require applicants to clearly demonstrate that the Proposed Project represents the least environmentally damaging practicable alternative (LEDPA) that achieves the basic project purpose, taking into account the costs, technical, and logistical feasibility factors associated with that basic purpose. To make such a demonstration, a project proposal must comply with all restrictions on discharges outlined in the Guidelines [40 CFR 230.10(a)-(d)].

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 DEIS reviewed four alternatives:

- Alternative 1 – 345 Acre Alternative (The proposed Project, 55 net acres of fill)
- Alternative 2 – 315 Acre Alternative (24.7 acres of fill)
- Alternative 3 – Landside Improvements Alternative (no fill)
- Alternative 4 – No Project

Based on information provided in the DEIS, Alternatives 2 and, potentially, 3 appear to be practicable under the Guidelines. The first of these, Alternative 2, proposes to fill less than half as many acres (24.7 acres as opposed to 55 acres), would provide the same on-dock rail facilities, and according to the DEIS, “would meet part of the project purpose and need and improve cargo handling efficiency necessary to accommodate project growth in containerized cargo” (p. 1-42). This statement supports the practicability of this alternative. We also note that the DEIS identifies Alternative 2 as the environmentally preferred alternative as it would reduce impacts to several resources, including hydrology and water quality, and biota in the harbor. Even though Alternative 3’s annual twenty-foot equivalent unit (TEU) container capacity would be closer to Alternative 1 than Alternative 2, it is unclear whether it is practicable, as discussion of such is missing from the DEIS.

During discussions between the Port, Corps, and EPA during the DEIS review period, a fifth alternative was proposed. This alternative would be a variant of Alternative 3, which would include no fill, but would add on the channel deepening and widening components of Alternatives 1 and 2, so that large containerhips could enter the terminal. As described by the Port at our July 15, 2008 meeting, this modified alternative would not provide sufficient backlands and on-dock rail to meet the project purpose, and dredged sediment identified as fill for Alternatives 1 and 2 would need a new disposal location(s) and additional sediment characterization. EPA requests that this alternative’s practicability be described in the FEIS. For questions regarding CWA compliance and other issues related to fill and dredging, 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 include a detailed discussion of the practicability of Alternatives 2 and 3. Additionally, the Alternative discussed by EPA which involves minimal to no fill and channel deepening and widening should be explored.

Describe the Bolsa Chica mitigation agreement in light of the new Compensatory Wetlands Mitigation Rule and clarify available mitigation credits. The applicant has proposed to mitigate for unavoidable impacts at Bolsa Chica, a quasi-mitigation bank, governed by an interagency memorandum of agreement (MOA). Under the new Corps and EPA approved *Compensatory Mitigation for Losses of Aquatic Resources; Final Rule* (Mitigation Rule) 33 CFR Parts 325 and 332, and 40 CFR Part 230, EPA views the Bolsa Chica mitigation agreement as a grandfathered bank, with the MOA acting as a quasi-banking instrument. The Mitigation Rule states that mitigation banks approved prior to July 9, 2008 may continue to operate under the terms of their existing instruments (40 CFR 230.98(v)(1)). However, any future modifications to the MOA, will subject the Bolsa Chica MOA to comply with the new mitigation rule.

Table 3.4-4 in the DEIS provides a summary of mitigation credits at the Bolsa Chica mitigation site. According to the table, as of January 2006, the Port had 270.7 credits available for use. However, according to the Section 15 of the 1996 MOA, the POLB received only 227 credits (454 credits total to be divided equally between POLA and POLB). It is unclear why this discrepancy exists.

Recommendation:

The FEIS should disclose the acceptability of the Bolsa Chica mitigation agreement in the context of the new Mitigation Rule. Additionally, the FEIS should clarify the above noted discrepancy in the Bolsa Chica “credit ledger”.

Provide a functional assessment of created waters. The POLB has proposed to mitigate at Bolsa Chica for the “net loss” of waters, after considering the creation of 10.7 acres on-site to offset loss of aquatic functions. The DEIS states that 6.3 acres of marine habitat would be created through the widening of Slip 3, and 4.4 acres of marine habitat would be created by the excavation at Berth F201. As the newly created waters will be used to offset the lost aquatic function of 10.7 acres of fill, a functional assessment of the newly created areas should be completed to ensure that there is no net loss of aquatic function. Since this project has a 10-year timeframe, an assessment of temporal impacts should also be included. For instance, Table 3.4-3 states that the 4.4 acres of created waters from the excavation of Berth F201 will not be created until construction Phase 2. This will result in a significant temporal loss.

Recommendation:

The FEIS should clearly demonstrate that the created waters adequately replace lost aquatic functions from 10.7 acres of fill in both inner and outer harbor. This information should be based on a functional assessment, using methodologies approved by the Corps and EPA. This assessment should also account for temporal losses. If temporal losses are significant, additional mitigation for temporal losses should be proposed.

Describe consistency with goals of the Los Angeles Contaminated Sediment Task Force: EPA acknowledges and appreciates the Port’s willingness to accept contaminated sediments from

throughout the Los Angeles Region, and the DEIS statements about the potential to use contaminated “borrow material”. The incorporation of contaminated sediment into projects is critical to effectively manage contaminated sediment in the Los Angeles Region and is in line with the Los Angeles Contaminated Sediment Task Force (CSTF) goals.

Recommendation

While the DEIS does acknowledge that contaminated sediments could be used, the text should be expanded in the FEIS to specifically discuss this project’s consistency with CSTF goals.

Provide additional information describing imported fill. The DEIS documents that 6.7 million cubic yards of import material are needed to complete the fill. However, the DEIS is unable to fully delineate the origination sources of the material, and the anticipated environmental effects to import such material (truck traffic, air quality, etc.). The DEIS does identify a volume of approximately 4.4 million cubic yards from within the Harbor District, but that leaves a 2.3 million cubic yard shortfall of unidentified material.

Recommendation:

To the extent possible, source sites for the entire anticipated fill should be identified in the FEIS. If this is not practicable, the Port should, at minimum, determine whether other local projects would make up for the shortfall, or if material would need to be brought in from an off-site location. Environmental effects of bringing in a large amount of a material from off-site should also be examined in the FEIS.

Discuss management of contaminated materials in Slip 3. Table 3.3-4 (p. 3.3-6) summarizes pollutant levels in the sediments of Slip 3, which are proposed to be dredged and placed into the adjacent fill site of Slip 1 and East Basin. The top layer of material exceeded the Effects Range Low (ER-L) for fourteen of eighteen contaminants including PAHs, PCBs, DDT and several others. Without acute toxicity tests demonstrating otherwise, this material should be treated as contaminated material and managed separately than the bottom cleaner sediments.

Recommendation:

The FEIS should discuss special management of the Slip 3 material (top). To avoid potential harm to marine resources, this material should be capped and isolated by the placement of uncontaminated materials on top and the sides. If special management is not proposed, additional tests will be necessary to demonstrate its suitability for unconfined disposal into marine waters.

Discuss sediment chemistry of excavated and imported materials. The DEIS does not discuss any chemical characterization of the proposed material to be excavated for the widening of Slip 3 nor of import fill material. This material and any other material coming from upland sites should be adequately characterized.

Recommendation:

At the minimum, chemical characterization of sediment for both excavated and imported fill material should be described in the FEIS.

Biological Resources

A port-wide marine mammal vessel strike reduction program should be developed. The DEIS describes impacts to marine mammals, including gray and blue whales, to be less than significant. According to the document, few vessel strikes to whales are known to occur in the area. Based on the Port of LA China Shipping Recirculated DEIS, over the past twenty-five years, reported whale strikes along the California coast have averaged less than three per year. Low frequency of recorded vessel strikes is misleading in that it is limited to strikes that were both known and reported. Based on the likelihood that not all whale strikes are known and 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 benefits of the Port's Vessel Speed Reduction Program with regard to potentially reduced vessel strikes, as well as air quality; however, we do not necessarily agree impacts would be less than significant.

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 observation⁷. 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 should work with the Port of LA to institute improved methods for identifying whales that are potentially in harm's way from vessels using the San Pedro Port. 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.

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/>