

**Memorandum**

**Date:** April 19, 2010

**To :** Ryan Miya  
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**From:** Tami Nakahara, Environmental Scientist TRN  
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**Subject:** **Comments on the Final Wetlands Mitigation and Monitoring Plan (WMMP), Parcels B, E, and E-2, Hunters Point Shipyard, San Francisco, California (Site # 200050)**

The California Department of Fish and Game, Office of Spill Prevention and Response (DFG-OSPR) has completed its review of the subject document, received on January 5, 2010. The comments that follow are provided as part of our role as a natural resource Trustee for the State of California's fish and wildlife and their habitats. DFG-OSPR's review focused on the ecological risk assessment and biological resource related sections of the document. The DFG is the State's Trustee for fish and wildlife resources pursuant to Fish and Game Code Section 711.7. The DFG is also designated to act on behalf of the public as a Trustee for natural resources pursuant to Comprehensive Environmental Response, Compensation, and Liability Act Section 107 (f)(2)(B).

**Background**

Hunters Point Shipyard (HPS) is in southeast San Francisco, on a peninsula that extends east into San Francisco Bay. The shipyard is divided into six parcels (A through F). Parcel B is comprised of approximately 59 acres along the shoreline and lowland coast in the northeastern part of HPS. Parcel B was used for ship service and repair, metal fabrication, a machine shop, an acid mixing plant, a tank farm for diesel fuel, sandblasting, photographic development, storage, office and maintenance facilities, a police station, a cafeteria, and a dormitory. Parcel E occupies 173 acres of shoreline along the southwestern part of HPS. Parcel E was used to store construction and industrial materials and as a landfill for industrial waste, municipal waste, and construction debris. It consists of 46 percent ruderal habitat; 41 percent former industrial area; 8 percent non-native grassland; with the remaining area in freshwater wetlands, saline emergent wetlands, intertidal habitat; and developed landscape. In 2004, the Navy subdivided Parcel E, creating Parcel E-2, which comprises 47.4 acres. Areas of wetlands impacted by past and future environmental removal actions and site restoration activities are located within Parcels B, E, and E-2.

The Navy performed a wetland delineation and a functions and values assessment at Parcels B, E, and E-2 in 2001 (Tetra Tech EM Inc., 2003). This wetlands investigation

provided not only for a revised Remedial Investigation, but also served as a basis for future wetland enhancement and development alternatives at HPS. WMMP wetland impacts refer to U.S. Army Corps of Engineers jurisdictional waters, not wetlands as defined by the U.S. Fish and Wildlife Service or DFG.

The proposed WMMP was developed for both past and future Time Critical Removal Action (TCRA)-related wetland impacts at Parcels B, E, and E-2 at HPS. Permanent impacts to approximately 0.48 acres of tidal wetlands have occurred at the Metals Slag Area and to approximately 0.12 acres of tidal wetlands at the Metals Debris Reef. Future remedial actions will permanently impact approximately 0.03 acres of tidal wetlands in Parcel B, 0.61 acres of tidal wetlands in Parcel E, and 0.21 acres of seasonal freshwater wetlands in Parcel E-2. Future remedial actions will also temporarily impact approximately 1.89 acres of tidal wetlands in Parcel E-2 and 1.07 acres of seasonal freshwater wetlands in Parcel E-2. The WMMP indicates that the main goal of the TCRA's is to reduce the risk of radioactive materials migrating from the site to the surrounding environment.

The DFG-OSPR commented on the Draft and Draft Final Wetlands Mitigation and Monitoring Plans in memoranda dated February 27, 2007 (Gray, 2007a) and March 19, 2009 (Huang and Nakahara, 2009), respectively. This review focuses on whether DFG-OSPR's comments on the previous version were adequately addressed. The following comments are referenced according to the original comment number.

## **Responses to comments on the Draft WMMP:**

### **General Comments**

1. *General Comment #1b.* DFG-OSPR requested the Navy explain how it will determine if contaminants are leaching from the landfill and asked if soil, surface water, or groundwater will be monitored for contaminant levels. The Navy responded, "In addition to groundwater monitoring, site inspections will be conducted during the 5-year reviews. The health of the vegetation in the wetlands will be observed. The vegetative success in the wetlands will be an indirect indicator that the remedy selected in the future ROD has been successful." DFG-OSPR disagrees that monitoring of vegetative success in the wetlands will be an accurate indirect indicator that contaminants are not leaching from the landfill. Vegetation is currently growing in contaminated soils, which indicates this vegetation can tolerate exposure to current concentrations of contaminants. Therefore, observing the health of the vegetation is not an accurate method to determine whether contaminants are leaching from the landfill.

In addition, DFG-OSPR does not agree that groundwater monitoring and site inspections alone will adequately detect any contaminants leaching from the landfill. The Navy should also include other methods of monitoring, such as soil and surface water monitoring for contaminants. These monitoring methods, including who will be responsible for the funding, monitoring, and maintenance of

the site, should be evaluated in the Feasibility Study as part of the remedial alternatives.

2. *General Comment #1d.* DFG-OSPR still recommends the use of a biotic barrier in the landfill cap. We requested the Navy explain why a biotic barrier was not included in the design of the landfill cap and how the Navy will ensure that that cap will not be damaged by burrowing animals and will be maintained in perpetuity. The Navy responded, "As discussed during a working meeting with the regulatory agencies on July 9, 2009, the Navy does not believe that a biotic barrier consisting of cobbles is required to protect terrestrial wildlife at Parcel E-2 and that alternative engineering controls and site management practices will be adequately protective." However, the Navy did not explain how alternative engineering controls and site management practices will be adequately protective. The Navy should substantiate their claim and provide specific evidence in the FS from other similar military sites that demonstrate how these sites have successfully used the same landfill cap design, as well as the maintenance and monitoring program to prevent damage to the cap from burrowing animals. The Navy should also identify which regulatory agencies attended the meeting on July 9, 2009. Please note that DFG-OSPR was not notified of the July 9, 2009 meeting and therefore did not attend this meeting or participate in any decisions made at this meeting regarding biotic barriers.
3. *General Comment #1e.* DFG-OSPR asked the Navy who will be responsible for monitoring and maintenance of the wetlands after the first five years. The Navy responded, "After property transfer, the transferee (initially the City and County of San Francisco) will be responsible for conducting Five Year Reviews and maintenance activities." The Navy should identify and document who will be responsible for maintenance, monitoring, any additional remediation needed, and the funding source for these activities. This information should be provided in documents such as the FS, Proposed Plan (PP), Record of Decision (ROD), Remedial Design (RD), operation and maintenance agreements, deeds, and other land transfer or permitting documents. Costs associated with activities should be evaluated in the Feasibility Study.
4. *General Comment #5.* DFG-OSPR commented on the Draft WMMP that Applicable or Relevant and Appropriate Requirements (ARARs) for the wetlands mitigation and monitoring should be provided in the WMMP. The Navy responded that a full list of ARARs for the WMMP will be provided in the Draft Parcel E-2 Remedial Investigation/FS. The Draft Parcel E-2 RI/FS only considered two of the thirteen ARARs DFG-OSPR submitted as ARARs (Gray, 2007b). DFG-OSPR commented on the Draft Final WMMP that "We believe all of the previously submitted ARARs apply to both the environmental removal actions at Parcel E-2 and the wetland mitigation and monitoring at Sites B, E, and E-2. Therefore, we request the inclusion of these ARARs in the Final Parcel E-2 RI/FS."

The Navy did not provide a response to this comment in the Final WMMP. Our previous request still stands.

### Specific Comments

1. *Specific Comment #1: Page 1-1, Section 1.0.* DFG-OSPR commented, "See response to General Comment #5 (above)." The Navy responded, "Comment noted." Our previous request still stands.
2. *Specific Comment #6: Page 3-1, Section 3.0.* DFG-OSPR commented that it is unclear whether the proposed liner will serve its intended purpose as a barrier between subsurface contaminants and clean backfill, or whether the liner will remain in place after the placement of backfill. The Navy responded that, "The liners will remain in place following placement of backfill." Please explain in the FS how the Navy will ensure the liner will remain in place, and provide substantiation that this proposed design will be protective of the environment.

Please also see DFG-OSPR response to General Comment 1b.

3. *Specific Comment #10: Drawings S-301.* DFG-OSPR commented that erosion of rock riprap due to continued wave fetch should be addressed. The Navy responded that erosion of rock riprap should not be an issue if engineered according to the latest design standards. They also stated the condition of the riprap will be evaluated in Five Year Reviews and any deficiencies will be corrected. The Navy should identify who will be responsible for monitoring, maintenance, addition remediation, and funding these activities in documents such as the FS, PP, ROD, RD, operation and maintenance agreements, deeds, and other land transfer or permitting documents. Costs associated with activities should be evaluated in the FS.

DFG-OSPR commented that alternative measures of erosion control and bank stabilization, that may provide better long-term protection as well as function to control predaceous rodents, should be evaluated. The Navy responded that the Remedial Design will include provisions for control of predaceous rodents. The Navy should include information on the methods of rodent control in the FS since these methods will affect maintenance, monitoring, and cost of the remedial alternatives as well as approval by the regulatory agencies. As stated before, DFG-OSPR does not recommend the use of rodenticides due to their ability to bioaccumulate and kill non-target species. Ultrasonic devices are also not recommended because these devices have not proven to be effective according to the University of California Statewide Integrated Pest Management Program (Salmon and Gorenzel, 2002). DFG-OSPR is also concerned that installing raptor perches adjacent to potential habitat for State and/or Federally-listed species, such as California Clapper Rail, California Black Rail, California Least Tern, and salt marsh harvest mouse, may increase the rate of predation of these species.

DFG-OSPR commented that, "Even with a diligent monitoring and control program, it will be difficult to prevent every burrowing animal from damaging the landfill cap in perpetuity. Therefore, DFG-OSPR stresses the relevance and importance of including a biotic barrier in the design of the landfill cap to prevent burrowing animals from breaching the cap." The Navy responded, "As discussed during a working meeting with the regulatory agencies on July 9, 2009, the Navy does not believe that a biotic barrier consisting of cobbles is required to protect terrestrial wildlife at Parcel E-2 and that alternative engineering controls and site management practices will be adequately protective." Please see DFG-OSPR response to General Comment # 1d regarding the use of a biotic barrier and the July 9, 2009 meeting.

We appreciate the opportunity to review the document. If you have any questions regarding this review or require further details, please contact Tami Nakahara at (916) 324-8452 or via e-mail at [tnakanar@ospr.dfg.ca.gov](mailto:tnakanar@ospr.dfg.ca.gov).

Reviewer: Patty Velez, Staff Environmental Scientist

References:

- Gray, Frank. 2007a. Memorandum to Tom Lanphar, DTSC Remedial Project Manager. RE: Review of Draft Wetlands Mitigation and Monitoring Plan, Metal Debris Reef and Metal Slag Areas Parcels E and E-2, Hunters Point Shipyard, San Francisco County (Site #200050). February 27, 2007. Sacramento, CA: California Department of Fish and Game.
- Gray, Frank. 2007b. Memorandum to Thomas Lanphar, DTSC Remedial Project Manager. RE: Applicable or Relevant and Appropriate Requirements (ARARs) for the Parcel E-2 Feasibility Study, Hunters Point Shipyard, San Francisco County (Site 200050). September 7, 2007. Sacramento, CA: California Department of Fish and Game.
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April 19, 2010  
Page 6 of 7

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Ryan Miya  
April 19, 2010  
Page 7 of 7

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