

**DEPARTMENT OF FISH AND GAME**

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ALAMEDA POINT  
SSIC NO. 5090.3.A

June 24, 1998

Ms. Mary Rose Cassa  
Department of Toxic Substances Control  
700 Heinz Avenue, Bldg. F, Suite 200  
Berkeley, CA 94710

**Subject: Review of Ecological Risk Assessment Work Plan and Field Sampling and Analysis Plan for West Beach Landfill, West Beach Landfill Wetland, and Runway Wetland, Alameda Point, Alameda, California, Draft Dated May 13, 1998**

Dear Ms. Cassa:

The Department of Fish and Game has reviewed the Draft Ecological Risk Assessment Work Plan and Field Sampling and Analysis Plan for the West Beach Landfill, West Beach Landfill Wetland, and Runway Wetland at Alameda Point. These comments are provided as part of our role as natural Resource trustee for the State's fish and wildlife and their habitats. They do not include review by our Staff Toxicologist. Dr. Jim Polisini, DTSC, will provide toxicological review.

### **Background**

Alameda Point, formerly Naval Air Station Alameda, is on Alameda Island, at the western end of the city of Alameda in Alameda County, and along the eastern side of San Francisco Bay. This document includes three sites, the West Beach Landfill, the West Beach Landfill Wetland, and the Runway Wetland.

The West Beach Landfill (WBL) occupies approximately 77 acres. It was created from dredged material in 1936 and used historically for the disposal of waste material from NAS Alameda and other naval facilities in the San Francisco Bay Area. From 1936 to the early 1970's an estimated 30,000 pounds per month of solid and liquid wastes were disposed in the WBL. Disposed wastes may have contained PCBs, radium, pesticides, asbestos, mercury, waste oils, inert ordnance, and infectious waste from the Oak Knoll Naval Hospital. From about 1937 to the early 1970's waste oils were released directly on the roads that traverse the landfill. Two unlined oil sumps at WBL were used for waste oils that were not reclaimed or sold. In 1978 waste disposal at WBL was terminated. Various activities associated with Class II landfill closures were implemented. In 1986

the area was graded to eliminate ponding, and earthen berms were constructed around WBL.

The West Beach Landfill Wetland (WBLW) occupies approximately 33 acres in the southwest corner of WBL. It was created in the 1980's by excavating the dredge fill down to the water table and using this material as landfill cover. There are two ponds at WBLW (northern pond and southern pond). A 36-inch culvert connects the northern pond to San Francisco Bay.

Runway Wetland (RW) is approximately 20 acres along the southern boundary of Alameda Point. It created naturally on land created from dredged material before 1986. Two zones of standing water seasonally occur in the central portion of RW (western pond and eastern pond). The wetland is subject to limited tidal flow at high tides and during storm events.

The document presents the Screening-Level Ecological Risk assessment for these three sites and describes the methods that will be used for collection and analysis of data to support the Ecological Risk Assessments.

#### **General Comments:**

1. The species selected as surrogates for wading birds and raptors should be reconsidered. The black-necked stilt and the northern harrier would be more appropriate, and a nesting bird, such as the Caspian tern should be included in the Conceptual Site Model.
2. The West Beach Landfill should be included in the area-wide baseline ERA.

#### **Specific Comments:**

1. West Beach Landfill Wetland – Section 1.2.2, page 5: This section should include a sentence clarifying the existence or nonexistence of any exchange of surface water between the southern pond and the northern pond; and the southern pond and the Bay.
2. Previous Site Investigations – Section 1.3, pages 6 & 7: Please send us copies of the following references:  
Naval Air Station Alameda Preliminary Wetland Delineation  
Threatened and Endangered Species Survey, Draft Report
3. West Beach Landfill – Section 2.1, page 11: The Navy selected the red-tailed hawk as the representative species for raptors. The red-tailed hawk diet includes rodents, insects and their larvae, fishes, and larger mammals such as squirrels and rabbits. The diet of the northern harrier, which is known to breed on site, includes birds for males and mammals for females. The northern harrier, with its smaller foraging area (and larger SUF) would better represent raptors on the site.

4. West Beach Landfill – Section 2.1, page 11: The Navy selected the California ground squirrel as the representative receptor for small omnivorous mammals. The calculations for intake of chemicals should consider that while the ground squirrel does eat the seeds, berries, and leaves of grasses, forbs and woody plants, other components of the diet include corms and tubers, which could be in direct contact with contaminated soil, and road-killed carrion.
5. West Beach Landfill – Section 2.1, page 11: The COPEC selection process depicted in Figure 4 which requires a frequency of detection of 5% for a chemical to be considered a COPEC, does not take into consideration the possibility of hot-spots.
6. West Beach Landfill – Section 2.1, page 14: The COPECs in the groundwater were evaluated using the Ambient Water Quality Criteria for chronic or acute exposure. These do not take into account other exposure pathways to marine organisms. Subsequent analysis should not be limited to modeling.
7. Problem Formulation and Study Design – Section 3.0, page 16: The West Beach Landfill should be included in the area-wide baseline ERA. The rationale for including an interim step is not clear.
8. Conceptual Site Model – Section 3.1, page 18: Because we do not have a copy of the Threatened and Endangered Species Survey, it is difficult to evaluate the appropriateness of the selected representative receptors. The Navy's selection of the dowitcher for the species to represent wading birds should be reconsidered. The black-neck stilt breeds locally and is a better surrogate for species on site. In addition, the Navy should include a nesting species, such as the Caspian tern, for use in the CSM.
9. Conceptual Site Model – Section 3.1, page 19: Potential chemical effects identified by the Navy include eggshell thinning and egg production. Since there are nesting birds on site, comparison to TRVs should be supplemented with direct measurement of eggshells.
10. Data Needs – Section 3.4, page 25: The Navy plans to collect invertebrates and fishes opportunistically, and may not have enough tissue to analyze for all of the target analyte groups. Adequate justification for the priority established in Table 15, not Section 4.5.2.2, should be discussed in this section.
11. Future Steps in the Ecological Risk Assessment Process – Section 3.5, page 25: As mentioned in Specific Comment 8, the Caspian tern also nests on-site and should be considered a key receptor.
12. Sampling Stations – Section 4.1, page 28: The criteria for selection of the sampling locations is unclear and does not always relate to the highest concentrations of chemicals. More descriptive rationale than provided in Table 14 is necessary.

13. West Beach Landfill Wetland – Section 4.1.2, page 29: Pickleweed and brass buttons are incorrectly called grasses in the first paragraph.
14. Aquatic Invertebrates – Section 4.6.2, page 37: It is unclear why it is necessary to try to collect specimens of the same species to produce a single sample. Mixed species samples would be more indicative of prey items. Also, different sampling techniques, such as coring, should be employed to ensure that enough invertebrate tissue is collected.
15. Fishes – Section 4.6.3, page 37: See Specific Comment 13. The use of beach seines might ensure that enough fish tissue is available for analysis.
16. Small Mammals – Section 4.6.4, page 39: Please provide rationale for the removal of fur and skin prior to residue analysis.

### Conclusion

In order for the document to be acceptable, further consideration should be given to the proper selection of surrogate species. We recommend the northern harrier, the black-necked stilt and the Caspian tern as representative species.

The Navy should provide additional rationale for selection of the sampling stations, in relation to high concentrations of chemicals. In addition, sampling techniques should be modified to ensure that adequate tissue is collected and that it represents prey for higher trophic levels.

Thank you for the opportunity to provide comments on this document. If you have any questions, please contact Susan Ellis at (916) 327-3196, e-mail: [sellis@ospr.dfg.ca.gov](mailto:sellis@ospr.dfg.ca.gov).

Sincerely,



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Office of Spill Prevention and Response



Reviewer: Scott Flint  
Senior Biologist

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June 24, 1998  
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