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ALAMEDA POINT
SSIC NO. 5090.3

United States Department of the Interior



FISH AND WILDLIFE SERVICE

Sacramento Fish and Wildlife Office
2800 Cottage Way, Room W-2605
Sacramento, California 95825-1846

In reply refer to:
FWS/EC-05-004

NOV 1 2004

Thomas Macchiarella
BRAC Environmental Coordinator
Department of the Navy, Southwest Division
Naval Facilities Engineering Command
1230 Columbia Street, Suite 1100
San Diego, California 92101

Subject: Alameda Offshore Sediment Core Study Work Plan

Dear Mr. Macchiarella:

Thank you for providing the U.S. Fish and Wildlife Service (Service) with the opportunity to review and comment on the Navy's Draft *Offshore Sediment Core Study Work Plan* that was received September 30, 2004. The following comments were made by Environmental Contaminants staff in accordance with the National Contingency Plan (40 CFR, part 300, subpart G).

Overall Concerns:

1. Site data was frequently referred to as comparable to ambient or reference conditions without any supportive data provided. Please present the statistical analysis that compares the two populations. In addition, please state the concentration (e.g. ER-M for total PCBs at 0.18 mg/kg) when referring to specific ambient or effects-range median (ER-M) values.
2. The use of only surface (top 5 cm) sediment data does not address the exposure of organisms to deeper sediments, both for benthic invertebrates that utilize deeper sediments and organisms exposed indirectly to deeper sediment through the bioturbation activities of several benthic invertebrate species.

Specific Comments:

Page 11. Please revise the phrases "this storm sewer system" as having "no significant discharges [that] were related to industrial sources" to clarify whether it refers to all three lines. Furthermore, this statement appears contradictory to the service of buildings and areas that stored chemical hazardous waste including solvents, acids, alkalis, heavy metals, resins, diesel, and oil.

Page 12. Please identify in which locations the dredge material from the Pier area was disposed.



Page 12. Based on information provided on page 13 that site concentrations of total polychlorinated biphenyl (PCBs) exceeded ER-M levels (0.18 mg/kg), PCBs should be added to the list of organic constituents exceeding San Francisco sediment ambient levels (0.015-0.022 mg/kg, depending on congeners included).

Page 13. Please state where the reference sites were located.

Page 14. Please revise the statement regarding primary ecological habitat locations because deeper water habitats also provide habitat for species, including fish and invertebrates. In addition, please provide a current bathymetry map of the area.

Pages 15, 24, 27, 28. Ecological receptors can be exposed to sediments deeper than the surficial 5 centimeters. Therefore, the Service recommends that data from deeper sediments also be used to evaluate potential ecological risk and that, at a minimum, at least one other discrete sample be taken at one foot depth.

Page 15. Please revise the statement regarding test pits to note that it refers to the investigation of the construction debris pile specifically.

Page 23. Please include information regarding tern and pelican use in other offshore areas, particularly the pelican roost site.

Pages 23, 24. Please provide additional evidence that supports the assumption the marine mammals would not be exposed to the sediments offshore of Alameda, particularly given the presence of a harbor seal haul-out area at Yerba Buena Island.

Page 24. Please note that benthic invertebrates can also be exposed via sediment porewater and suspended sediment particles.

Page 24. Please include assessment endpoints at the level of populations or individuals of species, not communities of multiple species.

Page 26. Please detail how the potential confounding factors will be addressed when using the historical bioassay data in the risk assessments.

Page 27. Please include indirect exposure through the food chain for fish species as well.

Page 27. Please revise the phrase “indications of a possibility of risk that may require verification” to “indications of a possibility of risk that require further evaluation.”

Page 27. Effects range-low (ER-L) values represent sediment concentrations associated with adverse effects to invertebrates, particularly amphipod mortality, and do not apply to direct fish toxicity.

Page 29. The Service recommends use of hazard indices to account for cumulative risk between similarly acting chemicals.

Page 30. Please describe what ambient datasets will be used.

Page 31. The least tern was missing from the list of receptors.

Page 31. Please use either field-collected forage fish data or modeled forage fish concentrations based on the site-specific bioaccumulation factors to estimate dietary exposure to piscivorous birds, rather than using short-term laboratory data for clams.

Page 31. Please note that seasonal migration is appropriately excluded because the risk assessment is based on per day units for both exposure and toxicity.

Page 45. Additional data collected from the Western Bayside area is necessary to fully characterize contamination and potential risk, not just to “confirm the ... recommendation of No Further Action.” Please revise or remove this statement.

Page 46. As mentioned on the earlier conference call, the Service believes the currently proposed “reference” location that is directly outside the lagoon and near where a sample is being collected as part of the Western Bayside area effort (WBC-1) may not be representative of reference conditions. The Service recommends that more than one sample location would be needed to define reference conditions and make statistical comparisons, and that such samples be collected from further offshore or at deeper depths where the potential contamination from other Alameda sites is not likely.

Page 48. Please show on Figure 3-6 the locations of previous Seaplane Lagoon samples on the northern side of the pier area.

Page 48. The surface sediment in the area to the southeast of the piers was sampled previously, but no sediment cores are proposed to address the lack of deeper sediment data. Please include several sediment cores in this area.

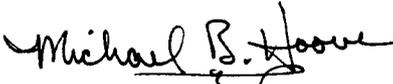
Pages 50, 51. Please include the following chemicals in the proposed sediment analysis: barium, beryllium, boron, cobalt, manganese, vanadium, heptachlor epoxide, and total petroleum hydrocarbons in the diesel, gasoline, and motor oil ranges.

Page 50. Please describe what analyses are proposed for the wood shavings.

Page 51. The pile is described as being six feet above the water surface so presumably the debris continues down to the adjacent water depth (generally 0 to 5 feet mean low low water (MLLW) based on the Seaplane Lagoon bathymetry map). However, the only sampling proposed are test pits to 6 foot depth (i.e., to the water surface). Please describe how contamination below the adjacent water surface will be investigated.

If you have any questions regarding this letter, please contact Dr. Beckye Stanton at (916) 414-6733 or beckye_stanton@fws.gov.

Sincerely,


for David L. Harlow
Acting Field Supervisor

cc:

Marge Kolar, U.S. Fish and Wildlife Service, Don Edwards San Francisco Bay National Wildlife Refuge Complex, Newark, CA

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