



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-05-012

NOV 16 2004

Ms. Andrea Espinoza
Southwest Division, Naval Facilities Engineering Command
1220 Pacific Highway
San Diego, California 92132-5190

Dear Ms. Espinoza:

The U.S. Fish and Wildlife Service (Service) has reviewed the Draft *Record of Decision for Site 27 – Northern Channel* for Former Naval Air Station Moffett Field received on October 15, 2004, (comments requested by December 14, 2004). The following comments represent concerns of Environmental Contaminants staff provided in accordance with the National Contingency Plan (40 CFR, part 300, subpart G).

Overall Concerns:

The Service agrees with the selection of Alternative 2 as the selected remedy, but is concerned that the action levels proposed are not sufficiently protective of wildlife species, including benthic organisms.

Specific Comments:

Pages 20, 21. Please include the actual concentrations for all locations on the figures, rather than “<AL” or no data posted for those less than the action goal. The yellow highlighting of those concentrations above the action goals is sufficient to distinguish between the two types of results.

Page 18. Please provide a separate set of figures for the inorganic chemicals of concern that are similar to those provided for the organics, but with all data posted. In addition, please provide figures and/or summary data tables for surface water and biotic tissue sample results.

Pages 23, 28, 31. Please relate the statement regarding “little or no likelihood of adverse effects from exposure to surface water” on page 28 and similar statements on page 31 to the exceedances of ambient water quality criteria note on page 23.

Pages 29, 32. Please note whether the toxicity reference values (TRV) used were based on no or lowest observable adverse effect levels (NOAEL) or lowest observable adverse effect levels (LOAEL), respectively or mid-range adverse effects (e.g., high TRV). In addition, please identify what level of TRV was used in the calculation of the hazard quotient (HQ).

Page 31. Surface water, even if not independently toxic, contributes to the overall exposure of the organism. The exclusion of this component in the risk calculations increases the uncertainty and may result in underestimation of potential risk.

Page 32. Please explain how the allowable exposure levels for sediment relate to potential surface water concentrations and whether the estimated surface water conditions would exceed ambient water quality criteria for aquatic life.

Pages 35, 64. The statement that criteria developed for avian receptors will be protective of benthic invertebrates is not supported by any presented analysis. Based on comparison to sediment toxicity data for freshwater benthic invertebrates, it appears that the proposed criteria for avian receptors may not be protective of benthic invertebrates and/or fish. For example, the values proposed for cadmium (184 mg/kg) exceed by over 10 times all the probable effects level benchmarks (up to 10 mg/kg) for freshwater benthos (MacDonald et al., 2000). In addition, the proposed sediment action goals for lead, mercury, zinc, and total chlordanes exceeded adverse effect thresholds for benthos.

Pages 45, 47. Please explain why ongoing monitoring and five-year reviews would not be required for remedial alternatives 2, 3A, and 3B to ensure restoration activities were successful and residual contamination did not cause ecological impacts, particularly since potential adverse effects may occur at concentrations below the action goals.

Page 49. Please describe the change in amount and quality of habitat under the proposed capping of sediments.

We are available to discuss these comments further, if you so desire. Please direct any comments or questions to Dr. Beckye Stanton at (916) 414-6590.

Sincerely,



David L. Harlow
Acting Field Supervisor

cc:

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References cited:

MacDonald, D. D., Ingersoll, C. G. and Berger, T. A. (2000) Development and evaluation of consensus-based sediment quality guidelines for freshwater ecosystems. Arch Environ Contam Toxicol **39**, 20-31.