



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

April 23, 2001

Ms. Andrea Muckerman
BRAC Environmental Coordinator
Southwest Division, Naval Facilities Engineering command
BRAC Operations Office
1230 Columbia Street, Suite 1100
San Diego, CA 92101-8517

Dear Ms. Muckerman:

The U.S. Environmental Protection Agency has reviewed the Draft Addendum to the Revised Final Stationwide Feasibility Study, dated March 23, 2001, for Moffett Federal Airfield. This report presents sites proposed by the Navy for No Further Action (NFA) at Moffett. Our comments, which are enclosed, need to be addressed before EPA could concur or nonconcur with the Navy's NFA determinations.

Please call Ms. Michelle Schutz, Chief, Air Force and Navy Section at (415) 744-2202, if you have any questions regarding our comments, and for further discussion. We appreciate the opportunity to provide comments to you on this report, and look forward to receiving the Draft Final document.

Sincerely,

A handwritten signature in cursive script that reads "Roberta Blank".

Roberta Blank
Remedial Project Manager

Enclosure (4 pages)

cc: Michelle Schutz, EPA
Lynn Suer, RWQCB
James McClure, RAB
Hilary Waites, TechLaw
Don Chuck, NASA
Arturo Tamayo, Navy

**Review of the Draft Addendum to the
Revised Final Stationwide Feasibility Study
Moffett Federal Airfield**

GENERAL COMMENTS

1. In Dr. Trulio's reports on the burrowing owl, she indicates that the population of owls appears to be stable, but that the owls are reproducing at a lower rate than in other areas of the western U.S., and the reason is not known. It should be acknowledged in the Addendum that there may be some uncertainty in the judgement of no risk to the owls. Also, we understand that additional data has been collected by Dr. Trulio that could provide a more current assessment of the situation. Please include copies of Dr. Trulio's reports, since they are relatively short, and any updated information, in the next version of the Addendum
2. It is not clear which potential human health or ecological receptors were identified for each of the areas proposed for no further action (NFA). Please summarize the potential receptors identified at each NFA site, according to residential, occupational, recreational, or ecological scenarios.
3. The Addendum provides references to other documents for analytical data. In order to better evaluate the NFA determinations, please include a summary of analytical data for each of the NFA sites. This data summary could be provided in tabular format (e.g., maximum concentrations of COCs detected at each site) or added to existing Figures 3, 4, and 5, where sample locations for the NFA sites are depicted.
4. The Addendum indicates that groundwater data for Golf Course Fill Area 3, the Weapons Bunkers, and Marriage Road Ditch is available, but that groundwater at MFA is addressed separately. However, the presence of contaminants in groundwater in excess of background concentrations may be indicative of a release of contaminants at these three areas. Please include the available groundwater quality data for Golf Course Fill Area 3, the Weapons Bunkers, and Marriage Road Ditch, and provide a discussion of the data with respect to contamination found in groundwater samples collected from upgradient groundwater monitoring wells.
5. The Addendum indicates in several places that PAH concentrations were below action levels established in the petroleum sites Corrective Action Plan (CAP). The petroleum CAP may or may not be applicable to these CERCLA sites. Please indicate what these action levels are, how they compare to current screening levels (year 2000 Preliminary Remediation Goals), and how PAH concentrations were addressed in the Human Health Risk Assessments for the NFA sites.
6. The Addendum should include a summary table for each site where ecological risk was identified, listing the chemical, hazard quotient, and the receptor where any hazard quotient was greater than 1 in the SWEA.

SPECIFIC COMMENTS

1. **Section 1.3, Page 4:** The Addendum states that an exposure area approach was used to evaluate risks to potential residential, occupational, and recreational receptors. The exposure area is described as a ½-acre lot for residential and occupational exposure scenarios, but the exposure area for the recreational exposure scenario is not described.
2. **Section 2.2, Page 9:** This section states that detections of SVOCs at the Golf Course Fill Area 3 “reflect the presence of asphalt and other PAH-bearing materials within the disposal area.” Please clarify what “other PAH-bearing materials” were identified within the disposal area.
3. **Section 2.2, Page 11:** This section states that “no ecological risk was identified specifically for Golf Course Fill Area 3.” However, on page 27, the Addendum states that risk to the burrowing owl was identified for “upland soil.” Since Golf Course Fill Area 3 is classified as upland soil, please clarify whether soils at Golf Course Fill Area 3 present a potential risk to the burrowing owl.
4. **Section 2.2, Page 11:** The final paragraph of this section states that the results of the investigation at the Golf Course Fill Area 3 indicate that the area was used only for incidental disposal of excess soil, grass, brush, and other golf course-derived debris. However, the description of the fill material on page 9 (including concrete, disaggregated asphalt, airplane parts) and the nature of contamination (including benzene, toluene, SVOCs and TPH) indicate possible disposal of other wastes in addition to golf course-derived debris.
5. **Section 2.3, Page 13:** The final paragraph on this page states that the Northern Weapons Storage Bunkers includes 24 exposure areas and that of these areas only two grids were evaluated for occupational exposure, because soil samples had been collected within the grids. It is not clear how grids were selected; why were samples only collected from two grids? Also, since four soil samples were collected from three borings on three sides of the Northern Weapons Storage Bunkers, it is not clear where the two “grids” are located with respect to the soil boring locations. Please describe the exposure areas and grids with respect to soil boring locations, and show these areas on a figure.
6. **Section 2.3, Page 14:** The paragraph describing the risk levels on this page states that the cancer risk is a result of Aroclor 1260, and the noncancer risk is a result of nickel. However, the description on page 12 states that samples were analyzed for SVOCs, TPH-p and TPH-e. Please clarify whether samples were also analyzed for PCBs and metals and, if not, explain how the Aroclor 1260 and nickel concentrations used in the risk assessment were derived.
7. **Section 2.3, Page 14:** The discussion of ecological risk at the Northern Weapons Storage Bunkers states that “only common laboratory contaminants were detected in soil samples.” However, at the top of the page the Addendum quantifies cancer risk due to Aroclor 1260 and noncancer risk due to nickel. Please clarify whether pesticides and/or metals were detected in soil at the Northern Weapons Storage Bunkers and discuss possible risk to the

burrowing owl from PCBs and metals in soil.

8. **Section 2.4, Page 16:** This section refers to a letter submitted by the EPA to the Navy indicating that it had no comments related to the closure report for the Wastewater Flux Ponds. For completeness, please include a copy of this letter as an appendix to the Addendum.
9. **Section 2.4, Page 16:** The Addendum states that during the stationwide RI, eight soil samples were collected from three soil borings in the area of the Wastewater Flux Ponds. However, the soil borings shown on Figure 4 do not appear to be in the area of the flux ponds. Also, it is not clear how the borings are located with respect to excavated areas. Please provide the rationale for these boring locations and clarify how the area investigated may have been impacted by the Wastewater Flux Ponds.
10. **Section 2.5, Page 20 and 21:** Concentrations of lead and zinc detected in surface water samples collected from Marriage Road exceed Ambient Water Quality Criteria for saltwater and freshwater aquatic life. Please address both aquatic life protection and surface water quality in San Francisco Bay, in making the recommendation for this site.

Additionally, the Addendum indicates (page 19) that Aroclor1260 was detected at a concentration of 630 ug/kg in a soil sample collected at the Marriage Road which exceeds the RAO for PCBs of 470 ug/kg. According to the SWEA, this sample was collected from soil immediately adjacent to the ditch. How were the samples in soil adjacent to the ditch evaluated for ecological risk? The RAO for Site 25 is for total DDT; it is not Aroclor specific. Please include a table listing all of the PCB detections in soil and sediment samples from Marriage Road Ditch and clarify the maximum concentrations.

11. **Section 2.8, Page 28:** It is not clear whether ecological risk was evaluated for Human Health Risk Assessment Exposure Areas (HHRAEA) 3782, 3785, 3974, 4090, and 4158. Please clarify whether ecological risk was evaluated for these areas, or why it was not considered.
12. **Section 2.8.1, Page 29, and Section 2.8.2, Page 31:** The Navy presents anecdotal evidence that a third party removed the contaminated sediments at both areas 3782 and 3785. Further documentation is needed regarding these actions, and if remedial action was taken, these are not NFA sites.
13. **Section 2.8.3, Page 32:** The Navy indicates that no further action for area 3974 is required, as it will be addressed during the remediation of Site 22. It does not seem that the Site 22 preferred alternative will address the area 3974 contamination; please clarify this. If this area will be addressed in the Site 22 ROD, or requires separate action, then it is not an NFA site.
14. **Section 2.8.4, Page 32:** The Addendum states that HHRA Exposure Area 4090 overlies a portion of North Patrol Road Ditch; however, on Plate 1, Exposure Area 4090 overlies the Northern Channel. Please clarify the location of Exposure Area 4090, sampling location

SND1, and the associated risk evaluation.

15. **Section 2.8.4, Page 33:** The conclusion that the North Patrol Road Ditch is an NFA site, is not well supported. Contamination with a hazard index of 7 under a residential scenario would remain in place. The fact that this property is a ditch does not necessarily mean a residential scenario is not a potential future land use. In addition, as the hazard is posed by metals in a drainage ditch, the surface water transport of these metals to San Francisco Bay should be evaluated.

16. **Section 2.8.5, Page 35:** The rationale for the Navy's conclusion that no further action is warranted at HHRAEA 4156 is not clear. It would appear that site risks could relatively easily be addressed by excavation of a limited area of surface soil at a reasonable cost.