N00296_004229
MOFFETT FIELD
SSIC NO. 5090.3.A

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

January 29, 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 Final Responses To Comments on the Revised Final Stationwide Feasibility Study Report, Moffett Federal Airfield,* dated December 27, 2000. We look forward to our scheduled informal dispute resolution meeting of February 7, 2001, as the means to reach agreement on our remaining comments (see EPA letter of November 17, 2000). Our main concerns are outlined below; additional detailed comments are attached.

1. We want to further review the assumptions for the proposed lead and zinc cleanup levels for ecological receptors, in our meeting. In particular for zinc, site-specific data we have reviewed indicates that the uptake rate assumption used may not be conservative. Also, we question the assumption that only 25% of the food is contaminated.

2. The Draft Final RTCs included Remedial Alternative 3 (Excavation and Ex-Situ Bioremediation), as requested. Since Alternative 3 will only address treatment of organic chemicals of concern, not zinc and lead, more detail is needed on the disposition of metals contaminated soil after treatment and the recalculated disposal costs. The CERCLA nine criteria analysis needs to be presented for *revised* Alternative 3.

3. We are in receipt of your letter of January 9, 2001, regarding the language for the monitoring associated with the five-year review. In our meeting on the 7th, we plan to provide further clarification of EPA's five-year ecological monitoring requirements and the associated level of effort, for your benefit.

Please contact me at (415) 744-1685, if you have any questions regarding this evaluation, and to discuss preparation for our upcoming meeting. We appreciate the opportunity to provide comments to you on this project.

Sincerely,

Roberta Blank

Roberta Blank
Remedial Project Manager

Attachment (Pages)

cc: Lynn Suer, RWQCB
Sandy Olliges, NASA
Jim Haas, U.S. FWS
Dr. James McClure, RAB
Kevin Woodhouse, City of Mt. View
James Boarer, MEW

EPA Review of the *Draft Final Responses To Comments on the Revised Final Stationwide Feasibility Study Report, Moffett Federal Airfield*

GENERAL COMMENTS

1. We would like a presentation of the exposure model used in Tables A2 and A3, including the supporting data and calculations used. It is unclear how the total DDT and zinc concentrations in Table A2 were derived. We would like to see the data and the calculations for the contaminant concentrations in plants and invertebrates.

2. In Table A1 it says that the SUF is 1, but it also says that only 25% of the food is contaminated based on Attachment A; it appears that two SUFs are being used. EPA recommends only applying one SUF when calculating exposure and applying it when the dose is calculated.

3. Please footnote that the TRVs used are not the BTAG TRVs; but in fact were developed specifically for Moffett.

4. The zinc cleanup goal presented in the Draft RTCs was 266 mg/kg, but the new zinc cleanup goal presented in the RTCs is 990 mg/kg. This concentration is well above ambient concentrations measured elsewhere in the Bay Area, including the San Francisco Bay Ambient concentration of 158 mg/kg established by the Water Quality Control Board Regional Monitoring Program. The text on page 8 states that the highest concentration of zinc left in place after excavation will be 250 mg/kg. As stated above, further justification for the zinc cleanup level, including a more conservative exposure estimate and a clear description of the concentrations of zinc that will be left in place on the site, should be provided.

5. The RTCs discuss Alternative 3 (Excavation and Ex-Situ Bioremediation) as a remedial alternative for the site. However, since the *revised* Alternative 3 has not been previously analyzed with respect to the CERCLA nine criteria, please prepare this evaluation including any revised cost assumptions regarding disposal of inorganic constituents.

6. Table 4C does not include the Clean Water Act, Section 404 and implementing regulations, as an ARAR. This ARAR was listed as applicable in the *Revised Final Feasibility Study*, dated September 1999 and addresses the backfilling activities associated with the alternatives (disposal of fill material in waters of the U.S.). In addition, there are no cost items listed in tables in Attachment C for backfilling the excavation areas.

7. In addition, the ARARs table in the FS included a list of To Be Considered regulations and requirements (TBCs). However, this table has not been updated in the RTCs.

8. The description of the proposed remedies should indicate that all excavated areas will be backfilled. In addition, the remedy descriptions should indicate that the sediment settling

basin will be maintained and cleaned out regularly to prevent stormwater sediments from entering the site. The Proposed Plan and ROD should present a complete description of remedy features.

SPECIFIC COMMENTS

1. **Section 2.0, Page 10:** The bullet list of alternatives does not indicate that preconstruction sampling is considered part of the remedial design effort for Alternative 3. For completeness, please include preconstruction sampling as part of the remedy for Alternative 3.

2. **Specific Comment 2 (Version 2):** The EPA comment states that it is assumed that the extent of the contamination will be confirmed by sampling prior to the remedial action. However, it is unclear from the RTCs what kind of sampling will be performed prior to excavation. Additional detail should be provided to assess the pre-construction sampling effort. Part of the EPA's concern was due to the fact that in some areas, polygon sizes were large due to a lack of sampling points.

3. **Table 4C, Page 3 of 4:** Please indicate that CCR Title 22 66264.553, which establishes the design, operation, and closure of temporary treatment units, is relevant and appropriate for Alternative 3 (Bioremediation), not Alternative 2 (Excavation).

4. **Figure 2:** The figure does not include all sampling locations for zinc, lead, DDT, and PCBs, which was requested during the November 28, 2000 meeting. To better evaluate the sample data coverage and polygon selection method, please include all sampling points for lead, zinc and DDT on the respective Figure (i.e., Figures 3 through 5 in Draft RTCs) and indicate compound concentrations by using a color coding method as presented in the figures included in Appendix A of the Stationwide Revised Final Feasibility Report dated September 1999 (FS). In addition, please indicate where the stormwater outfall areas are in Figure 2.

5. **Figure 3:** Please indicate where in relation to prominent features at Moffett Federal Air Field the Corrective Action Management Unit (CAMU) will be located.

6. **Attachment A, Page A3:** The text states, "...the bioavailability of contaminant to prey would be greater than the bioavailability of the contaminant to sediment." Please clarify this statement.

7. **Attachment A, Page A3:** The results of the residual risk analysis are not clearly described. For example, the text describes the proportion of habitat that poses risk to the mallard duck from residual concentrations of DDT, but does not discuss the HQ ranges presented in Figure A3.

8. **Attachment A, Figures A1 and A2:** The area marked as "Area to be Excavated" in Figures A1 and A2 does not match Figure 2. Please cross-hatch all areas to be excavated

in Figures A1 and A2.

9. **Attachment A, Figure A3:** Comparing Figure A3 to the previous Figure 3 in the Draft RTCs, there were fewer areas marked for HQ_4 between 10 and 100 (in both cases the DDT AEL is 178 ug/kg). Please explain this discrepancy.

10. **Attachment B, Page B2 through B6:** The text refers to AVS-SEM results and pore water pH, but does not provide the sample locations where these parameters were measured. For each of these parameters, please indicate how many samples were collected, the sample locations, and a more detailed summary of the AVS-SEM and pore water pH results, so that the stated conclusions can be evaluated with regard to the representativeness of these data.

11. **Attachment C, Alternative 2: Off-Site Disposal, Page 1:** The RTCs state that a permanent channel will be established in the Eastern Diked Marsh for movement of water from the settling basin to the Storm Water Retention Pond. Please provide a sketch of this proposal for our understanding.