

**DEPARTMENT OF TOXIC SUBSTANCES CONTROL**

REGION 2  
700 HEINZ AVE., SUITE 200  
BERKELEY, CA 94710-2737



March 25, 1996

Commander  
Department of the Navy  
Engineering Field Activity, West  
Naval Facilities Engineering Command  
Attn: Mr. Stephen Chao, Project Manager  
900 Commodore Drive, Bldg. 101  
San Bruno, California 94066-2402

Dear Mr. Chao:

**THE DRAFT RECORD OF DECISION (ROD), OPERABLE UNIT-5, MOFFETT  
FEDERAL AIRFIELD**

The Department of Toxic Substances Control (DTSC) and the San Francisco Regional Water Quality Control Board (RWQCB) have reviewed the subject document and prepared following comments for your consideration. If you have any questions, please contact me at (510) 540-3830 to ensure a coordinated approach for all regulatory comments.

Sincerely,

A handwritten signature in black ink that reads "C. Joseph Chou".

C. Joseph Chou  
Remedial Project Manager  
Base Closure Unit  
Office of Military Facilities

cc:Mr. Michael Bessette  
Regional Water Quality Control Board  
2101 Webster Street, Suite 500  
Oakland, California 94612

Mr. Michael D. Gill  
U.S. Environmental Protection Agency  
Region IX, Mail Stop H-9-2  
75 Hawthorne St.  
San Francisco, California 94105

Ms. Sandy Olliges  
Assistant chief  
Safety, Health and Environmental Services  
National Aeronautics and Space Administration  
Ames Research Center  
Moffett Field, CA 94035-1000

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Mr. Peter Strauss  
MHB Technical Associates  
1723 Hamilton Avenue, Suite K  
San Jose CA 95125

Mr. James McClure, Ph.D.  
Harding Lawson Associates  
105 Digital Drive  
Novato, California 94949

Mr. Ramon Perez, Esq.  
Department of Toxic Substances control  
400 P Street, 4th Floor  
P.O. Box 806  
Sacramento, California 95812-0806

#### GENERAL COMMENTS

1. The State agreed with the Navy that additional data to confirm the extent of the plume and subsurface geology could be collected during the remedial design phase. Even though, it will be appropriate to outline the proposed investigations in the subject document. Currently, there is no proposed investigation mentioned in the text; the term "phase approach" appeared many times in the responsiveness summary but without any description. The vagueness of "phase approach" may raise more concerns from regulatory agencies and communities about how those information will be properly generated.

2. Please include a statement regarding the need to continue to operate the Building 191 pumping station. Without continuing operation of the pumping station, flooding of the site is likely which would cause the need for more extensive remedial work.

3. The Applicable or Relevant and Appropriate Requirements (ARARs) section does not provide enough detail as presented in the OU5 Feasibility Study (FS). Several potential ARARs listed in the OU5 FS were not included in the subject document need to be addressed in the draft final version. To clarify the unnecessary confusion, a summary table of chemical-, location- and action-specific ARARs is recommended.

#### SPECIFIC COMMENTS

1. Page 1, 5th Paragraph; Section 1.1

Please verify the size of wetlands on Moffett Federal Airfield. If the Navy Storm Water Retention Pond, Eastern and Western Diked Marsh area have been included as part of the wetlands, then its size appears to be more than 40 acres as described in the subject document.

2. Page 10, 1st Paragraph; Section 1.4

The State recognizes that Sites 8, 9, 16, 17, 18 and portion of Site 10 were affected by the regional Middlefield-Ellis-Whisman (MEW) volatile organic compound (VOC) plume. However, these sites are subject to conditions of the MEW ROD but are not included with MEW ROD.

3. Page 10, 5th Paragraph; Section 1.5

Please consider including a paragraph of future Remedial

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Design/Remedial Action (RD/RA) work and related field work such as more detailed groundwater investigation in this section.

4. Page 11, 2nd Paragraph; Section 1.5

Please clarify that Tables 1 and 2 refer to the chemicals of concern (COC) list in the OU5 human health risk assessment while Table 4 represent the refined COCs list.

5. Page 11, 3rd Paragraph; Section 1.5

A brief explanation of the petroleum corrective action process should be added before the last sentence.

6. Page 11, 4th Paragraph; Section 1.5

The earlier detections were not clearly addressed. Please explain where those chlorinated VOCs were found and what are their concentration levels.

7. Page 18 to 21; Section 1.6, Ecological Risk Summary

It is repeatedly mentioned that there is no ecological risk to the receptors in Marriage Road ditch and the Navy channel from OU5 groundwater contamination. Please clarify if burrowing owl has been considered in the assessment.

8. Page 22, Section 2.0, Alternative 1

Please explain how to conclude that it takes at least 50 years to remediate the OU5 southern plume to MCLs.

9. Page 23, Section 2.0, Alternative 4A

The third sentence should read "As contaminated groundwater flow through the reaction cells, chlorinated hydrocarbons will react with iron fillings and be detoxified".

10. Page 24, Section 2.0, Alternative 4A

Hydraulic barriers, such as slurry walls, was considered as part of the remedy in the OU5 Feasibility Study (FS) and it should be included in the ROD as well.

11. Page 34, Section 5.0

It is stated that the cleanup goals may not be technically feasible, due to the silt and clay formations in Moffett Field. Therefore, the selected remedy may be reevaluated. However, it is not clear how the evaluation criteria will be determined.

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12. Page 35, 5th Paragraph; Section 6.0

In addition to the cost factor, it is very important to mention that the selected remedy will reduce toxicity, mobility and volume of contaminants in a shorter period of time than the passive alternative.

13. Attachments

The administrative record index should be included as part of the attachments.

**Prepared By:** Michael Bessette Rochette **Phone No.:** (510) 286-1028  
**Date:** March 25, 1996 **File No.:** 2189.8009 (MMBR)  
**Subject:** Draft Operable Unit 5 Record of Decision, February 7, 1996

**General Comments:**

- 1) The declaration statement, "...the selected remedy is protective of human health and the environment, complies with federal and state requirements that are legally applicable or relevant and appropriate to the remedial action, and is cost effective." requires the inclusion and analysis of the proposed discharge method for the treated groundwater or the inclusion of the proposed discharge options with comparative analysis of each alternative.
- 2) The discussions regarding ecological impacts need to be presented in a clearer manner. For example statements similar to the one on page 10, "Potential risks to ecological receptors were evaluated at OUS. No ecological risks were identified." should be removed or supporting text should be provided. Additionally, ecological assessment of the inhalation pathway for burrowing owls has not been completed and should be included in the ecological risk summary.
- 3) Please provide more information regarding the implementation and time frames of the groundwater monitoring program and of the institutional controls restricting groundwater and land uses, as the text does not provide a clear picture of how these components of the remedy are protective of human health and the environment.
- 4) Pumping operations at Building 191 need to be identified as a part of the remedial system and discussed within the text regarding groundwater hydraulic control and surface water flood control.
- 5) Groundwater monitoring of the northern plume should be evaluated and analyzed as the selected remedy and incorporated as such in the ROD.

**Specific Comments:**

- 6) **Page DS-2:** The method of discharge should be identified as a major component of the selected remedy for the southern plume.
- 7) **Page DS-2:** Groundwater monitoring should be evaluated as the major component of the selected remedy for the northern plume.
- 8) **Page DS-3:** Please correct the spelling of the RWQCB executive officer to Loretta Barsamian.
- 9) **Page 4, Figure 2:** Please revise the conceptual cross section of hydrology to include the approximate water level and the contaminated groundwater plume.

Prepared By: Michael Bessette Rochette Phone No.: (510) 286-1028  
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**Specific Comments:**

- 10) **Page 3, Sec. 1.1:** The discussion regarding the groundwater flow is deficient. The importance of the impact from the pumping at Building 191 on the groundwater flow within OUS needs to be discussed fully with the impacts of potential future changes to the pumping operations analyzed.
- 11) **Page 11, Sec. 1.5, par. 3:** Please expand the discussion of the Navy's petroleum corrective action program and provide text briefly detailing the status of investigations and removal actions.
- 12) **Page 34, Sec. 5.0, par. 1:** Please clarify if both the groundwater extraction and the monitoring are being proposed for 50 years.
- 13) **Page 35, Sec. 6.0, par. 1:** The text does not provide sufficient information to support the statement that "The selected remedy is protective....through restricting access to the southern plume, containing migration of the plume..." Please provide a text detailing the method to restrict access and how "containing migration of the plume" will be performed as opposed to groundwater extraction.

Concurred by: Ron Gervason Date: 3/26/96  
Ron Gervason, DOD Section Leader