



Department of
Toxic Substances
Control

700 Heinz Avenue
Suite 200
Berkeley, CA
94710-2737

February 25, 1997

Pete Wilson
Governor

James M. Strock
Secretary for
Environmental
Protection

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:

**DRAFT OPERABLE UNIT-1 ALTERNATIVE ANALYSIS TECHNICAL
MEMORANDUM, MOFFETT FEDERAL AIRFIELD**

The Department of Toxic Substances Control (DTSC) and the San Francisco Regional Water Quality Control Board (SFRWQCB) have reviewed the subject document and prepared the following comments for your consideration. If you have any questions regarding these comments, please call me at 510-540-3830.

Sincerely,

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

Enclosures

cc: Mr. Michael Rochette
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

Mr. Glen Young
California Integrated Waste Management Board
8800 Cal Center Drive
Sacramento, California 95826

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Ms. Patricia Velez
California Department of Fish and Game
20 Lower Ragsdale Drive, Suite 100
Monterey, California 93940

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

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

Mr. James G. McClure, Ph.D.
Moffett Field RAB, THE Committee
c/o Harding Lawson Associates
P.O. Box 6107
Novato, California 94948

COMMENTS

1. Page 7, 2nd Para.; Section 1.2.2

The State suggests the Navy should consider working with Pacific Gas and Electric Company (PG&E) to relocate the 36-inch main pipeline at Site 2 prior to commencement of Site 2 remedial construction starts. We understand that the existence of the pipeline may not have any immediate impacts for either of the two remedial alternatives. However, pipeline relocation will minimize future maintenance problems and will provide more incentives for unrestricted land use. In addition, the relocation work can be very helpful in determining the extent of the waste at Site 2.

2. Page 10, Figure 4

Please explain how to determine the existence and extent of the sand layer in cross section A-A'. There is no soil boring or trenching data were shown in the southern part of the cross section. Similarly, in cross section B-B', there is no direct data between T8 and EB2-1 to support the assumption of discontinuity (dotted line) of waste material.

3. Page 16, Table 1

Title 22 closure requirements should be considered as applicable or relevant and appropriate requirements (ARARs) for OU1 ROD. This concern has been brought to your attention by the State several times through the remedial project manager meetings and our OU1 comment letter (July 18, 1996). The sections listed below are to help the Navy to revise the ARAR Table: 22 CCR, Division 4.5, Chapter 11, Article 1 to 5; 22 CCR, Division 4.5, Chapter 12 Article 1; 22 CCR, Division 4.5, Chapter 14, Article 1 to 4, 7, 9, 11, and 12; 22 CCR, Division 4.5, Chapter 18, Article 1 to 5.

4. Page 24, 3rd Para; Section 5.0

In this section, a concise summary of Corrective Action Management Unit (CAMU) regulations has been presented by the Navy. However, the procedure of CAMU designation was not discussed in this section. The Navy should submit the request of CAMU designation for regulatory agencies review and approval, and the CAMU requirements shall be incorporated into OU1 Record of Decision.

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5. Page 25, 2nd Para; Section 5.1

Please specify that the seven criteria are from 22 CCR
66264.552(c).

6. Page 30, 2nd Para., Section 5.3.4

Detailed site specific information of establishing closure
requirements at Site 1 should be provided in the text.

RWQCB	San Francisco Bay Region	Department of Defense Section
Prepared By:	Michael Bessette Rochette	Phone No.: (510) 286-1028
Date:	February 28, 1997	File No.: 2189.8009 (MBR)
Subject:	Draft Operable Unit 1, Alternatives Analysis Technical Memorandum, February 3, 1997	

General Comments:

1) The RWQCB staff supports the consolidation alternative for OU1. However, our primary concern is that all non-inert wastes within Site 2 are fully delineated and completely removed, such that, with sufficient follow-up monitoring, consolidation is demonstrated to be protective of human health and the environment as well as enhancing the future reuse opportunities at Site 2. This document should identify the challenges of full delineation and complete removal of the non-inert wastes and clarify that the details of these issues shall be fully addressed in the RD/RA phase if that is what the Navy is proposing.

2) The RWQCB staff has agreed in principle to the iterative groundwater monitoring strategy proposed by the Navy for Site 2, however, a clear statement of that strategy needs to be agreed upon and presented in this document.

Consider text stating "Groundwater monitoring of the aquifers underlying Site 2 shall be conducted to a) insure that all potential source contaminates have been removed, b) to assess any groundwater impacts, and c) to create an ambient groundwater data set which can be used to evaluate the statistical significance of any future detections.

Site 2 groundwater monitoring shall include a minimum of one year of quarterly events commencing upon the completion of waste excavation, and two years of subsequent semi-annual events during the tail ends of the wet and dry seasons. After this minimum groundwater monitoring period of three years, the Site 2 schedule may be reevaluated. If monitoring results demonstrate, to agency satisfaction, complete contaminate source removal and that no groundwater impacts have occurred or may potentially occur, groundwater monitoring may be discontinued. However, monitoring shall continue on a semi-annual basis until the Navy and agencies reach agreement on a revised monitoring schedule. The specific chemical analysis and monitor well locations shall be fully addressed in the RD/RA phase."

Specific Comments:

1) **Page 4, Sec. 1.2.1:** Present the aerial photographs which best show the waste deposition areas, and the small arms range. Include transparent overlays showing the sampling trenches, all data collection points, and the anticipated excavation boundaries.

2) **Page 4, Sec. 1.2.1:** What is the assessment of the impacts associated with the small arms range? Is the former range within the anticipated excavation area?

3) **Page 5, Figure 2:** Identify the nature of the two metal anomalies, one is shown south of monitoring well W2-7 and the other is shown west of soil boring EBS-5. The scale of 1 inch equal to 100 feet is appreciated and increases the maps value significantly. Please add groundwater contour lines to this map or, preferably, generate a separate groundwater contour map.

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- 4) **Page 6, Sec. 1.2.1, par. 2:** Please discuss the potential existence of abandoned coarse-grained stream beds in the area of Site 2 (as shown in cross sections) and the impacts on the overall horizontal hydraulic conductivity.
- 5) **Page 7, Sec. 1.2.2:** Please include the following information; the soil type and depth of the backfill material surrounding the gas pipeline, the depth below grade of the pipeline itself, the depth to groundwater in the pipeline area, the installation date of the pipeline, and the anticipated life span of the pipeline.
- 6) **Page 7, Sec. 1.2.2:** Detail the communications with PG&E and any alternatives and implications considered regarding relocating the gas pipeline.
- 7) **Pages 10 and 11, Figures 4 and 5:** The cross sections require certain revisions and show a significant data gap. First, the intersection of transects A-A' and D-D' is not shown on the respective cross sections and the intersection of transects B-B' and D-D' does not agree in cross section. Secondly, what data is being used to support the interpretation of the south end of cross sections A-A' and B-B'? This information needs to be shown on the cross section as projected data or as data collected along the transect itself. If the cross sections are to be reviewed as they are it appears there appears to be a large data gap in the southern area of Site 2 and this needs to be addressed.
- 8) **Page 12, Sec. 2.0, par. 4:** Provide the basis for the excavation strategy. The discussion detailing the visual screening of waste removal is not sufficient. Who, how, frequency, oversight all should be addressed.
- 9) **Page 13, Sec. 2.0, par. 3:** Provide additional information on the sampling analysis and frequency of groundwater collected during the dewatering activities. What is the plan for groundwater if contamination is detected above AWQC?