



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX

75 Hawthorne Street
San Francisco, Ca. 94105-3901

June 21, 1995

Mr. Stephen Chao
Naval Facilities Engineering Command
Engineering Field Activity, West
900 Commodore Way, Bldg. 101
San Bruno, CA. 94066-2402

Re: Marked-Up *Final Operable Unit 5 Feasibility Study*,
dated June 1, 1995

Dear Mr. Chao,

The U.S. Environmental Protection Agency (EPA) has received the subject document. On May 5, 1995, EPA sent correspondence to the Navy stating that the April 21, 1995 Draft Final OU5 Feasibility Study (FS) Response to Comments were satisfactory and that the document should be finalized. We had also concurred that the submittal date of the Final FS should be May 22, 1995. We appreciated the additional work on Appendix E to better describe the hydrogeology at OU5, the work on Appendix I regarding commingling of petroleum with CERCLA substances and the incorporation of our draft final comments. However, we were surprised when the Navy notified us that we would receive this redline/strikeout version, rather than a truly FINAL version of the FS. This marked up Final version of the FS, received on June 5, 1995 (Volumes 1/2) and June 12, 1995 (Volume 3) should be considered a Revised Draft Final.

In an effort to move ahead with an accelerated schedule, EPA provided comments to the Navy on the Draft Final OU5 FS in less than two weeks. Forty-nine (49) comments were submitted to the Navy on February 13, 1995 after receiving the document on February 1, 1995. We would all probably agree that this is not an insignificant number of comments, especially on a draft final document. These comments, cooperatively worked on for three and a half months with the Navy to help provide an acceptable final document, were necessary because of the numerous changes between the Revised Draft and Draft Final versions. But when we expected a Final, we received this redline/strikeout version containing additional, unsolicited information that has been added to the report.

This is an unusual time in the process to be changing this primary document. While the regulatory agencies have provided the Navy with timely review periods, these additional Navy changes at the last minute have prolonged the schedule. As specified in the Federal Facility Agreement (FFA), the period between the draft final and the final submittal of a primary document is considered an informal dispute period. If the regulatory agencies have any issues that must be addressed, the document should not be finalized. With the additional comments provided on this newest version of the FS, this informal dispute period has now unfortunately been extended.

Many discussions held between the Navy and the regulatory agencies have centered around the Navy's apparent desire to propose Alternative 2 of the FS (natural attenuation with funding to the local communities for environmental projects) in the Final Proposed Plan. Although no Final Proposed Plan has been submitted, EPA has stated at these meetings, including the Restoration Advisory Board meeting of June 8, 1995, that this alternative is unacceptable. The effort put into this marked-up "Final" version of the FS (above and beyond the incorporation of the response to comments from the draft final) was not time well spent. It has delayed the schedule and cost all parties additional time and money. While an FS can present any number of alternatives, it seems to us that this change to Alternative 2 at this time was unnecessary.

Below are comments for the marked-up version of the "Final" (Revised Draft Final) OU5 FS. The Final version of the FS should be submitted with a second response to comments letter within 30 days of receipt of these comments. If you have any questions, please call me at 415-744-2385.

Sincerely,



Michael D. Gill
Remedial Project Manager
Federal Facilities Cleanup Office

cc: C. Joseph Chou (DTSC)
Michael Bessette (RWQCB)
Ken Eichstaedt (URS)
Sandy Olliges (NASA)
Peter Strauss (MHB)
Mike Young (PRC) (Fax)

COMMENTS

Marked-Up *Final Operable Unit 5 Feasibility Study*, dated June 1, 1995

1. Figure 1-17, page 47. Great differences in interpretation are apparent between the TPH plume map in the Draft Final version of the FS and this version with no explanation for the change. Please explain this re-interpretation of the TPH contamination plume.
2. Section 6.2, p. 146, Alternative 2. If the Navy wishes to retain this change to Alternative 2, then it requires more detail. EPA is skeptical of the feasibility of ever being able to implement this alternative, indirect restoration. Does the Navy have any insurance from its funding source that environmental restoration budget money can be used to fund an activity like that contained in Alternative 2? Also, how was \$2.5M reached as an amount to provide the community?
3. Section 6.2, p. 150, State Acceptance. EPA feels that the language deleted in this version should be retained. This language consists of "The state considers the A1 aquifer zone in the southern plume area to be a future drinking water source. This alternative is not acceptable to the state since it will not actively restore this zone as a potential source of drinking water." We have not heard the State echo these sentiments.
4. Section 6.3, p. 155. Same comment as Section 6.2.
5. Section 6.4.1, page 163, Cost. In looking at this alternative's cost estimate in some detail, there appear to be some inconsistencies that may artificially increase the cost in the draft final. EPA realizes that adding the slurry walls will increase the cost of the alternative. But do they need to be included in system replacement costs? Why does this new estimate have twice the volume (and cost) of iron filings? Why did the cost of a dozer and front end loader rise about 20%. All of these items raise the cost of this alternative, perhaps incorrectly.
6. Section 6.6.2, page 194, Cost. An almost 60% cost estimate increase for this pump and treat alternative has occurred since the draft final FS. This appears to be because the number of extraction/injection wells has increased from 10 to 36 wells. We assume this increase in wells has occurred because of new modeling results. This increase in wells has driven construction costs up by ten times and the total capital and construction costs up by almost eight times. Please clarify the reasons for these cost increases.
7. Section 6.7, page 197, last para. Is the pumping rate of 60 gpm truly achievable in this aquifer?
8. Appendix E's expansion is appreciated. The additional work done on groundwater flow and fate and transport modeling allows a better understanding of how chlorinated solvents in the subsurface have moved and will move in the future. While modeling can never provide inconclusive answers, it certainly can be an aid in evaluating a situation.
9. Appendix I. The Remedial Action Objectives in this appendix discuss "further characterization" in the Tanks 2 and 43 areas. It is also mentioned on page I-7, paragraph 3. Please elaborate on this additional work. How will it impact a decision document for

OU5? When will the work be performed?

10. Response to Comment 15. This response stated that certain text would be included in the Final FS. We were unable to find this text in the FS.
11. Response to Comment 21. This response was not incorporated into the text.

Editorial Comments

12. Section 4.4.1, p. 110. On page 100 and in other places within the document, the No Action alternative was changed to Groundwater Monitoring. This is not the case in Section 4.4.1. Was this an oversight? It appears to be inconsistent.
13. Section 5.0, p. 137. The season of flooding should have been winter 1995, not 1994.
14. Figures 6-1 and 6-2. These figures have the same title label. It appears that Figure 6-2 should be labeled "Conceptual Single-Interval Configuration".
15. Figure 6-2, page 165. This figure appears as a blank page in our copy of the document. In addition, there is already a Figure 6-2 on page 140. Are they the same figure?
16. The redline/strikeout method helps, was not always consistently used. It was not used for all tables (e.g. ARARS). This makes it difficult to review the document without concern that other sections were updated and not highlighted as well. While the technique is helpful, we would urge the Navy to use it consistently throughout a document.