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

August 2, 1993

Mr. Stephen Chao
Naval Facilities Engineering Command
Western Division
900 Commodore Way, Bldg. 101
San Bruno, CA. 94066

Re: Draft OU6 Baseline Human Health Risk Assessment Work Plan, dated July 1, 1993

Dear Mr. Chao,

The U.S. Environmental Protection Agency (EPA) has reviewed the subject document and provides the following comments. The document was reviewed by EPA's Daniel Stralka, Ph.D., Regional Toxicologist. Call me at 415-744-2383 if you have any questions.

Sincerely,

Michael D. Gill
Remedial Project Manager
Federal and Technical Programs Branch

cc: Elizabeth Adams (RWQCB)
Chip Gribble (DTSC)
Josh Marvil (PRC) (Fax)
Fred Molloy (SAIC)

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Draft OU6 Baseline Human Health Risk Assessment Work Plan, dated July 1, 1993

General Comments

1. EPA has found this document to be deficient in critical areas and inadequate for the purposes of a work plan. The current document presents an extensive background presentation of the area including past sampling results and current sampling efforts. However, the outline of the risk assessment is only a repeat of what is contained in the general RAGS guidance. A site specific work plan must discuss, based on the current site conceptual model, the chemicals of concern from the scoping process and whatever sampling that has already been done, possible complete exposure routes, possible receptors, and data gaps that will limit the risk characterization. The work plan then should present the methodology for how the work will be done to fill those gaps. The proposed work plan should include a schematic of possible releases, media transport, exposure routes and possible receptors that will be evaluated in the risk assessment and the exposure parameters that will be used in the calculations. Additionally, preliminary remediation goals can be calculated for those exposure routes and receptors that have been identified. The revision of this document must include all of these aspects or reference previous OU risk assessments, if appropriate.

2. The figures in the document are not always in order or referenced; sometimes they do not appear at all.

3. More detail is needed to describe the path the Navy may take if a human health risk is found at OU6. It would help if a little history were presented here, possibly a summary of the RPM meeting discussion of March 23, 1993, where the idea of performing a human health baseline risk assessment was presented. EPA understands from the March 23, 1993 meeting that if the outcome of this workplan shows it necessary, a human health Feasibility Study and Record of Decision will be written for OU6. If no risk is found, any human health considerations will be forwarded to the station-wide RI/FS process and be considered from a cumulative risk perspective. More detail on this subject should be presented.

Specific Comments

1. Section 3.2, page 9, para. 2. More effort should be made to locate HAZWRAP, EBASCO and EKI data studies to provide a clearer historical perspective for OU6.

2. Section 3.2.1.2, page 10, para. 1. It appears that Figure 11 should be Figure 9.

3. Section 3.2.1.2, page 11, para. 1. The Figure 12 reference appears incorrect.

4. Section 3.2.1.4, page 11, para. 1. No references to metals appear in Figure 7. Also in this paragraph, the concentration of calcium as 0.5.4 (third line from the bottom of the page) does not make any sense.

5. Section 3.2.2.1, page 12, para. 1. Please annotate Figure 11, the extent of the TCE plume, with a date.

6. Section 3.2.2.2, page 12, para. 1. Figure 15 does not exist.

7. Section 4.2.1, page 15, para. 2. Is the description of how intrusive holes will be "filled with bentonite pellets" detailed in any other documents? Please provide a reference if available.

8. Section 4.2.1.1, page 17, para. 1. As mentioned on page 21, paragraph 1, risk calculations should be performed for all possible scenarios of future use. The statement here that "Future use will likely be the same as current use" is a premature statement.

9. Section 5.0, page 19, para. 1. Table 3 does not exist in this document.

10. Section 5.1, page 20, para. 2. Metals should also be included as contaminants of potential concern at OU6.

11. Section 6.0, page 22, para. 1. The introduction of this report should review the history of what path the Navy will take if a human health risk assessment is necessary at OU6. See general comment #3 above.

12. Figure 5. This figure is never referenced by the text.

Editorial Comments

1. Section 1.0, page 2, under para. 1. In the breakout of operable units, please designate both East and West OU2 sites as SOILS.

2. Section 3.2.1.1, page 10, para. 1. Units designations for micrograms/kilogram would be more understandable as ug/kg instead of _g/kg. The Greek symbol mu for micro would be most preferable instead of u.

3. Section 4.2.1, page 14, para. 2. It would make more grammatical sense if sentence two read "Samples for laboratory submittal...".

4. Section 4.2.1, page 14, para. 3. In the very last line on the page, please annotate 0 with degrees C or F, as appropriate.

5. Section 4.2.1, page 15, para. 2. Please provide a full name for USCS in the acronym list and text.

6. Section 4.2.1, page 15, para. 4. Please provide an explanation of the vertical and horizontal accuracies, e.g., _ 1.0 foot horizontally.