UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
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OCT 26 1993

Captain Terry Dillon
Commanding Officer
Western Division
Naval Facilities Engineering Command
900 Commodore Dr.
San Bruno, CA 94066-2402

Dear Captain Dillon:

The U.S. Environmental Protection Agency (EPA) has the enclosed specific comments regarding the Draft Alternative Selection Report (ASR), Interim-Action Group 5, for Hunters Point Annex. This is the last of the ASR reports for this site. We wish to draw to your attention that we have continuously raised a number of issues on the ASRs that have not been satisfactorily addressed by the Navy. This could result in disputes over the Parcel RI/FSs, which would be counterproductive to our efforts to work together as a team. These issues are as follows:

1. We have consistently requested the Navy use a 10-6 excess lifetime cancer risk as a point of departure for risk management decisions, as opposed to the 10-4 risk level used in the ASRs. We have been told and expect that the Parcel RI/FSs will use the more conservative 10-6 level. Had the ASRs been presented using a 10-6 point of departure, extensive reworking of the Parcel RI/FSs would not have been necessary and could have resulted in a significant cost savings to the Navy.

2. We have repeatedly requested that the Navy discontinue the practice of assessing risk for TPH as a mixture. Rather, risk should be assessed for the individual TPH components. This means that for the remedial investigation work currently planned, analysis of the individual components of TPH needs to be done.

3. The Hunters Point Annex team (Navy, State, EPA) is currently evaluating appropriate background levels for the site. In the Parcel RI/FSs these levels should replace those the Navy has been using for the ASRs.

4. The work performed at the site so far has involved filtered groundwater samples. EPA supports either unfiltered samples or collecting both filtered and unfiltered. The rationale provided by the Navy's consultant for providing only filtered samples is not acceptable. All future field work for the remedial investigation should conform to EPA policy on this matter, or the risk assessments will be jeopardized.

5. The Agency supports the use of the biokinetic model for determining risks associated with lead in soil; however, this model only addresses children. The California lead spread model is a modification of the biokinetic uptake model and also addresses adults; therefore it would be sufficient to use only the California lead model to determine lead hazard levels. The Navy consistently uses the California TTLC value as a comparison point, which is not appropriate.

6. The most protective of the Federal or State toxicity values should be used. The Navy has only been using Federal values.

7. The ASRs have not provided sufficiently detailed information on Applicable or Relevant and Appropriate Requirements (ARARS). In the Parcel RI/FSs, the specific ARARS for each alternative must be identified, including how and whether the alternative meets these requirements.

In addition to these points, we have the enclosed comments specifically regarding the Group 5 ASR. We appreciate your attention to the above matters. If you believe you will be unable to fulfill any of the above requests, please let me know as soon as possible.

Sincerely,

Julie Anderson

Julie Anderson, Chief
Office of Federal and Technical Programs

Enclosure

cc: Henry C. Gee, WestDiv
Raymond E. Ramos, WestDiv
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U.S. EPA Group 5 Alternative Selection Report Comments

1. There are a number of point sources with elevated levels of contaminants in soil and groundwater (including those with Hazard Indices greater that 1) that are not proposed for interim remedial action (IRA) for Group 5 sites. For the most part, IRA is only proposed for areas where free product was encountered (except surface soils at IR-11 and debris at IR-12).

The ASR does not state that appearance of free product is the main criteria for taking an IRA or explain why this approach is taken. Other contaminants such as numerous metals and other organics (PCBs, VOCs, various SOCs including cPAHs and nPAHs) are left unremediated, to be addressed in the Parcel RI/FSs. Because of this approach, the Navy is deferring most everything to Parcel remediation.

2. With respect to hydrocarbon remediation, EPA still does not concur with the attempted risk based approach for the TPH or TOG, including the calculation of TRGs based on this approach.

3. Groundwater IRAs for IR-12 and IR's-11, 14, and 15, are proposed as pilot studies, with unknowns regarding effectiveness, treatment and disposal requirements. These pilot studies are described as fulfilling both the objective of determining feasibility and beginning remediation. It is not clear what the Navy envisions as the procedural steps for documenting and following up on these studies. A pilot study would normally be documented in a work plan and a report of results, to be incorporated into a Feasibility Study. An interim remedial action would be documented in a Interim Action ROD and a removal action in an Action Memorandum. What is intended for these "pilot" studies?

4. Please provide a discussion of the significance of the bedrock aquifer being in hydraulic communication with the overlying A aquifer at sites IR-11 and IR-15.

5. For the surface soil removal at IR-11, how will hot spot removal to attain TRGs be verified?

6. It is unclear that the risks associated with IR-11 surface soil are so different from those at IR-12 such that the former but not later are proposed for IRA.

7. How will the presence of elevated levels of VOCs and metals in groundwater impact the free product removal pilot study, especially with respect to the treatment train and discharge limits for the POTW?

8. In the detailed analysis of alternatives, the draft final ASR should provide an analysis of how and whether each alternative would comply with the ARARs identified in Section 5.

9. Neither the text, nor the Tables in Appendix H provide sufficient breakdown of materials, quantities and unit prices to review the total cost of alternatives. Some of the numbers do not appear reasonable. For example, Table H5 indicates $837,000 for transportation and incineration of excavated soils which may be 11,000 cubic yards per the text, implying a unit rate of $76 per cubic yards for transportation and incineration, which is very low. Similarly, the volume of water to be pumped and unit rate of treatment are not provided in other tables in Appendix H.

10. Figure F-1 shows the streamlines of groundwater flow to the extraction wells and not the groundwater elevation contours. The Figure should identify the groundwater elevation contours at steady state superimposed with the extent of the free product, in order to illustrate that the free product is effectively captured.

11. A table or a figure in Appendix F, summarizing the modeling results would be helpful in determining the effectiveness of the pumping scheme. The calculated drawdown of various monitoring points (from center of the well to 200 feet away from the well) should be presented with their respective pumping times and the distance from the extraction well. The figure should show the cross section of the subsurface that includes location of the extraction wells and groundwater table, and well drawdown at steady state.

12. To efficiently capture the free product from groundwater, a trade off between the number of wells and flow rate should be considered. A drawdown analysis using a one-dimensional unconfined aquifer model indicated that the proposed pumping scheme may not be able to capture the free product plume. Additional extraction wells may be needed to completely capture the free phase hydrocarbon plume at Site IR-12.

13. In Appendix A, Page A-22, why was 500 mg/kg chosen as a reference concentration for lead when the IU/BK model indicated that 250 mg/kg would be the appropriate level? The decision is inconsistent with the effort to be conservative.

14. Page A-23. TTLCs are used in California to identify hazardous wastes, not the level at which a chemical in soil becomes hazardous. The TTLC for lead is not risk based; hence, it is not an appropriate reason for choosing 1,000 ppm as a reference level for workers.

15. Appendix A, Page A-27, Paragraph 1, states that the subchronic RfD for diesel was obtained by multiplying the chronic RfD for diesel by 10 because the chronic RfD for diesel is based on a subchronic toxicity test. However, on page A-29, the subchronic RfD for gasoline was given the same value as the chronic RfD because the chronic RfD was based on a chronic toxicity test. Please explain the logic of those decisions.

Subchronic RfDs should be larger than chronic RfDs because the

exposure time is shorter. So, if a chronic RfD were based on the results of a chronic toxicity test, the subchronic RfD should be adjusted so that it is larger than the chronic RfD. If the chronic RfD were based on the results of a subchronic toxicity test and no adjustment were made for the difference in exposure time, the chronic and subchronic RfDs should be equal. However, if in the process of deriving the chronic RfD an exposure time adjustment were made to obtain a lower RfD, the adjustment should be reversed to obtain a subchronic RfD.

16. Page A-27, Paragraph 2. Since the Hunters Point facility is in California, California's guidelines on soil cleanup levels for diesel and gasoline should be included in the discussion of State-established cleanup levels for those products (cf. Leaking Underground Fuel Tank Manual, State of California, October 1989).

17. Page A-32. The first unnumbered paragraph states that commercial and industrial workers were assumed to be exposed to groundwater contaminants by ingestion only. Nowhere on Page A-31, 32, or 33 is a statement made regarding how residents are assumed to be exposed. Please correct this.

18. Page A-31 states that "there are no wells within the San Francisco city limits that have been used for drinking purposes since 1935..." The existence of the bottled water company in the vicinity of HPA would make this statement incorrect.

19. Page A-37 states that for TPH as diesel the Regional Water Quality Control Board recommended a soil cleanup level of 1,000 ppm. This number appears to be in error. We are unaware of the RWQCB recommending a level this high.

20. Why was the cancer risk to the 0-6 year-old child estimated? This in not a conventional procedure. The 30-year residence time may be divided into two age segments (0-6 years and 7-30 years) to account for the larger soil ingestion rate of the 0-6 year old child, but the risk to each age segment should be summed.

21. In Section 6.7.1, page 72, Volume I, the target remedial goal (TRG) tentatively established for mercury is not clear. Is the mercury TRG for total mercury, elemental, or organic mercury?