



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: *Draft Additional Sites Investigation (ASI) Phase II Report*, dated April 20, 1995

Dear Mr. Chao,

The U.S. Environmental Protection Agency (EPA) has received the subject document and provides the following comments. If you have any questions, please call me at 415-744-2385.

Sincerely,

A handwritten signature in cursive script that reads "Michael D. Gill".

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

Draft Additional Sites Investigation (ASI) Phase II Report, dated April 20, 1995

GENERAL COMMENTS

1. The Additional Sites Investigation (ASI) was successful in meeting the project objectives. The report is well organized, and the conclusions reached are generally well presented.
2. The former source area at the Zook Road Spill Site, which is depicted on the figures included in the report, is not addressed in the text or by the investigations performed.
3. The extent of groundwater contamination at the Zook Road Spill Site has not been determined. The wells appear to be within the area of groundwater contamination and downgradient of the suspected source area. The site requires establishment of a "background" well upgradient of the source area and additional downgradient characterization.
4. Although not a specific project objective, the metals results for soil are not fully presented in the report. In addition, the metals results should be compared individually to background concentrations and standards to identify if specific metals may present a risk to human health and the environment. The extent of metals contamination should then be presented graphically. This is a helpful step when trying to conclude the origin of the metals; naturally occurring or anthropogenic.
5. Much of the data presented in this report is unvalidated. Data needs to be validated data before the report is finalized.
6. Please use double-sided copies whenever possible.

SPECIFIC COMMENTS

7. Section 2.4.1, page 15, first paragraph, third sentence. The purpose for drilling the nine reconnaissance borings at the Zook Road Fuel Spill Area should be more completely explained. The rationale for installing two sets of borings at the same locations should be presented.
8. Section 2.4.2, page 17, first paragraph, first sentence. This sentence refers to the depictions of soil borings SBPR-4 through SBPR-6 on Figure 4. These borings are not depicted on Figure 4 and are depicted on Figure 10. The text should be changed to reflect this.
9. Section 3.1.3.2, page 27, first paragraph, fourth sentence. This sentence states that

metals "in soils at Zook Road will be further addressed in the Station-Wide RI." Examination of the station-wide RI reveals that the occurrence of metals at the Zook Road Spill Fuel Spill Site is not addressed. This inconsistency should be explained. In addition, see general comment no. 4.

10. Section 3.1.4.2, page 28. Please provide the source of the background data presented in the text. Is background considered naturally occurring or anthropogenic? The last sentence of this section states "No other groundwater results were more than five times greater than the background concentration." Is this limit of five times the background concentration considered an important criteria? Please provide a reference.
11. Section 3.3.2, pages 32 through 33. Since MFA is in close proximity to San Francisco Bay and other surface water features, it may be possible that tidal fluctuations have some effect on groundwater flow. There is no mention throughout this section of whether or not tidal effects on groundwater flow are important at MFA, or whether any investigations have been completed to assess this. Section 3.3.3 should contain a reference as to whether tidal fluctuations are an important factor; if so, the magnitude of the effect, and if not, the investigations conducted or the rationale for eliminating tidal influence as a factor in evaluating groundwater flow.
12. Section 3.3.2.2, page 35, third paragraph, first sentence. The assumed porosity of the subsurface material is presented; however, the porosity value was not used in the calculation of groundwater velocity. Please provide the rationale for presenting an assumed value which is not used.
13. Section 3.3.3.2, page 38, first paragraph, fifth sentence. This sentence explains the source of metals detected in soil samples as being the extraction conducted during sample digestion. This statement should be further explained and supported. Do the results of the field or laboratory quality assurance (QA) samples results support this statement?
14. Section 3.3.4.1, page 39, first paragraph. Analysis of the Hydropunch samples for Total Petroleum Hydrocarbons (TPH) purgeable and extractable would have provided useful data on the extent of groundwater contamination at Golf Course Landfill 2. Why were these Hydropunch samples not analyzed for TPH? Any future sampling conducted in this area should be analyzed for TPH.
15. Section 3.3.4.1, page 39, third paragraph, fifth sentence. The statement "Results of Hydropunch sampling are probably indicative of localized natural conditions because the relative amplitude of sample results compared to the background levels is evident for all metals..." requires further explanation. The relative amplitude of the results has not been discussed in the text, nor has use of this rationale to establish background conditions been referenced.
16. Section 5.3, page 58, second paragraph, first sentence. This sentence makes reference

to Hydropunch samples collected from the A1-aquifer zone. Section 3.3.4 (p. 38) states that the Hydropunch samples along the north side of the landfill were collected from the A2-aquifer zone. This inconsistency should be explained.

17. Figures 3, 10 and 11. It is unclear why no soil samples have been collected at the suspected source of the fuel spill. Has this area been investigated and remediated previously? If so, this should be reported. If not, a source characterization should be conducted.
18. Figure 11. See comment No. 3.
19. Figure 17. The depth of sample collection should be referenced on the figure.
20. Figure 18. The vertical extent of groundwater contamination has not been established beneath the landfill. At least one permanent A2-aquifer zone monitoring well should be installed at this site to confirm the Hydropunch results, and to establish a long-term monitoring point for Golf Course Landfill 2 in the A2-aquifer zone.
21. Tables 6, 10, 13 and 14. The actual sample results for metals should be included in the report. In addition, a comparison to background levels or standards (such as CERCLA Region 9 PRGs) would also be helpful.
22. Table 15. The depth of sample collection should be included on this table.
23. Plate 1. The data presented on this plate should include data collected during Phase I.