

## CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

SAN FRANCISCO BAY REGION

201 WEBSTER STREET, SUITE 500

OAKLAND, CA 94612

Tel: 286-1255



Gary Munekawa  
Department of the Navy  
Naval Facilities Engineering Command, Western Division  
900 Commodore Drive  
San Bruno, CA 94066-2402

August 17, 1993  
File No. 2199.9285 (JBN)

**Subject: Comments on Pre-Draft Implementation Work Plan for the Interim Removal Action of Lead and Acid Soils Removal at the Intermediate Maintenance Facility (IMF) Site, Naval Air Station Alameda, August 3, 1993**

Dear Mr. Munekawa,

Regional Water Quality Control Board staff have reviewed the above mentioned workplan. We have prepared our comments on the report with the understanding that this interim removal action is a only a source removal. Full cleanup at the IMF Site will be addressed in the Remedial Investigation/Feasibility Study.

GENERAL COMMENTS:

1. The excavation of lead contaminated soils should not necessarily stop at five feet below ground surface(bgs). The entire zone of contaminated soils with lead concentrations above 100 parts per million(ppm) shall be removed. Groundwater is fairly shallow at the IMF site. With all of the equipment and manpower mobilized for this interim removal action it would be more cost-effective for the Navy to clean up the entire zone of contaminated soils with lead at a concentration higher than 100 ppm. In particular, all soils around boring B-7 with a lead concentration over 100 ppm or an abnormally low pH should be excavated, even if the excavation occurs below the groundwater table.

2. The interim removal action at the IMF Site coincides with the larger RI/FS being performed at this site. The IMF Site is located within Installation Restoration (IR) Site Number 13. We request that one of the two reports fully characterize the lateral and vertical extent of contamination at the IMF Site and to describe how best to remediate it. This Interim Removal Work Plan shall mention how the two reports will overlap. We want to know if the Navy plans to use the final excavation confirmation sampling as data in the RI/FS report.

3. Any excavation as a result of this removal action needs to be backfilled with clean soil, especially if the excavation was to be limited to five feet bgs. Backfilling will reduce the potential of the residual soil contamination leaching into the groundwater.

4. The final confirmation sampling plan for the bottom and sidewalls of the excavation, or any groundwater that would be encountered shall test for all chemicals that would be expected at a former oil refinery. Volatile Organic Compounds, Semi-Volatile Organic Compounds, a full suite of metals, pH, and total petroleum hydrocarbons (TPH), for both gasoline and diesel, shall be analyzed during final confirmation at the IMF site. For soil samples a California Waste Extraction Test (a solubility test) shall be used for the metals to look at the leaching potential of the metals.

SPECIFIC COMMENTS:

1. Section 2.1.3: Please explain how you will restrict access to the excavation area? Will you use any fencing?

2. Section 2.2.2: The abandonment of monitoring well MW-IMF-02 shall be done according to the Destruction of Monitoring Wells Section in the Water Well Standards: State of California (Department of Water Resources, Bulletin 74-81 and Bulletin 74-90) On page 51 of Bulletin 74-90 the regulations ask that "The monitoring well casing, and any other significant voids within the well, shall, at a minimum, be completely filled with sealing material, if . . . the monitoring well is located in an area of known or potential pollution or contamination." The second bullet item is unclear as to how much of the hole is to be filled with neat cement. Please amend this sentence to say that the hole will be filled up to ground surface with cement.

3. Section 2.2.3 (first paragraph): The report mentions that in the ten foot by ten foot excavation around boring B-7, lead-contaminated soils will be removed from below the elevated lead concentration of 13,000 ppm at B-7. Please describe how groundwater will be extracted and disposed of from the excavation pit in the event that there is excavation below the water table.

4. Section 2.2.3 (last sentence, first paragraph): The excavation of lead-contaminated soils shall not necessarily stop at five feet below ground surface. The entire zone of contaminated soils should be excavated. Please see General Comment #1.

5. Section 2.2.3 (last paragraph): If this excavation of lead-contaminated soils is going to be done partly in this interim removal action and partly under the RI/FS process, please explain if and how the final lead, total petroleum hydrocarbons, and pH soil confirmation sampling data will be incorporated in the RI/FS report.

6. Section 2.2.6: It is not acceptable to leave a depression at the IMF site after excavation, especially if there is residual lead and TPH contamination in the soil. Clean backfill shall be used to restore the excavation pit to the original grade. Leaving contaminated soil exposed during the winter months is likely to

cause additional leaching of contaminants from the soil to the groundwater.

7. Section 3.2.1: There is no apparent correlation between the lead and pH screening samples for each phase of excavation listed in Table 1 and the geographic boundaries of the actual phase depicted in Figure 5. For example, for the ten foot by ten foot excavation which is centered around B-7 (Phase 1) the report proposes to sample the soil at locations, 1W, 1F, 2W, 3W, and 4W, which are at least 25 feet away from the Phase 1 boundaries. Please include some explanation of this apparently random screening sampling in Section 3.2.1.

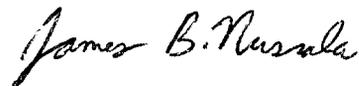
8. Section 3.5.2: This section gives the method for analyzing lead in the soil without listing the detection limit. Please reference the detection limit for lead given in Table 3-10 in the Quality Assurance Project Plan (QAPP, Appendix B), titled Inorganic Target Analyte List Detection Limits.

9. Section 3.5.3: Please reference the detection limit for lead in the soil listed in Table 3-10 of the QAPP.

10. Table 1: Please add the appropriate phase numbers to the corresponding excavation areas.

If you have any questions on the above letter, please contact me at (510) 286-0301.

Sincerely,



James Nusrala  
Remedial Project Manager

cc:  
Joseph Chou  
Department of Toxic Substances Control  
700 Heinz Avenue, Suite 200  
Berkeley, CA 94710

Randy Cate  
Alameda Naval Air Station  
Building 114, Code 52  
Alameda, CA 94501