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Mr. Stephen Chao
WestDiv Engineer in Charge
Department of the Navy
Naval Facilities Engineering Command
900 Commodore Way, Bldg. 101
San Bruno, CA 94066-0720

February 2, 1993
File No: 2189.8009

Subject: Comments on the Draft Additional Tank and Sump Field Investigation Memorandum, December 1992

Dear Mr. Chao:

The following comments are based on the San Francisco Regional Water Quality Control Board staff's review of the Draft Additional Tank and Sump Field Investigation Technical Memorandum.

Specific Comments:

pg. 6 Please include more detail in the descriptions of the subsurface locations of the tanks and sumps. For instance, how deep were the excavations associated with the removal of the tanks and sumps, and how far below land surface does the existing sump 91 extend.

pg. 6 Were there any concentrations of VOCs or TPH in the soil sampled during the removal of sump 60?

pg. 35, section 5.2 Be more specific as to where the Navy envisions the remediation of the soils at tank 53 fitting into the current site schedule. It appears as though further investigation will be needed to determine the actual extent and distribution of the soils and groundwater contaminants.

pg. 36, section 5.4 The conclusion that the soils are being contaminated by the concentrations of VOCs in the regional groundwater plume at sump 91 can not be upheld by the data that is presented in this report. One borehole and groundwater sample can not accurately describe the regional groundwater concentrations or the profile of the adjacent soils surrounding sump 91. The conclusion presented can not be accepted for several reasons.

1) The boring log for SBS91-001 shows that the saturated soils begin at approximately 19 feet below land surface (bls) which would indicate that the concentrations of VOCs found in the soils at 12.5 and 15.0 bls are within the unsaturated soils, not the saturated zone as described in the text. The potentiometric surface of the groundwater is located at approximately 7 feet bls, but that does not describe the saturated soil zone. The higher potentiometric surface indicates that the saturated zone is under locally confined

conditions. The presence of these conditions is supported by the boring log which shows over one foot of clay directly above the sand and gravel layer, clayey silt for ten feet above the clay zone and then an additional five or more feet of clay above that zone.

2) Building 88 is a documented source of VOCs at Moffett Field. Sump 91 obviously contained wastes containing these contaminants based on the grab sample that was collected from the sump. The potential for this sump to have leaked is very high and the profile of the soil contamination in the boring supports the conclusion that the sump was a source.

3) No data on the groundwater concentrations in the surrounding wells, upgradient or down gradient of the sump was supplied to confirm the hypothesis that the VOC concentrations in the surrounding A1 aquifer were high enough to migrate through several feet of clay into the silty clay zone of the borehole and contaminate the soils.

4) No additional data is available on the soils beneath and surrounding the sump to validate that the soil profile in the area is consistent with contamination migrating into the soils from the groundwater, and not consistent with contamination migrating down from the sump.

In conclusion, the staff of the San Francisco Bay Regional Water Quality Control Board can not concur with the conclusions set forth in this document regarding the contamination at sump 91. Further investigation of the area would be required to develop enough data to confirm that sump 91 was not the source of the VOC contamination at Building 88.

If you have any questions or concerns, please call me at the San Francisco Bay Regional Water Quality Control Board at (510) 286-3980.

Sincerely,

Elizabeth J. Adams

Elizabeth J. Adams
Project Manager

cc: Cyrus Shabahari, DTSC

Roberta Blank, US EPA
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