

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

SAN FRANCISCO BAY REGION

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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

April 20, 1993
File No: 2189.8009 [EA]

Subject: Comments on the Draft Final Additional Tank and Sump Field Investigation
Technical Memorandum, March 1993

Dear Mr. Chao:

The staff of the San Francisco Bay Regional Water Quality Control Board has reviewed the subject document and can not concur with the statements which conclude that Sump 91 is not a VOC contaminant source for the following reasons.

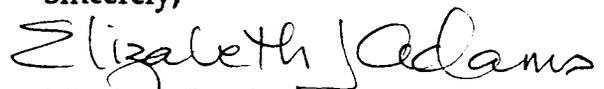
- 1) Sump 91 is known to have contained solvents, and the sampling of the rinse residue from drainage tests showed the presence of TCE and 1,2 DCE in the sump. Therefore Sump 91 is considered to be a known potential source for TCE contamination. There are no sidewall samples or samples directly below the sump to conclusively determine that no leakage has occurred.
- 2) The TCE soil contamination profile does not conclusively prove that Sump 91 was not a source or that groundwater contamination from upgradient sources is responsible for the soil contamination. If borehole SBS91-001 was directly below the sump, it is likely that the highest concentrations of contaminants would be found in the shallower soils below the sump and decrease with depth; however this borehole is off to the side and the analytical results may be showing the expression of lateral movement of contaminants away from the source area. Additionally, the difference between the analytical results for TCE in soil samples from 12.5 and 15 feet, 160 parts per billion (ppb) and 550 ppb, is not great considering the margin for error within the approved analytical methods and laboratory practices. Of greater significance is that there is documented TCE contamination in the soils at varying depths in an area of a known potential source.
- 3) TCE contamination from groundwater would be required to migrate upward through nearly seven feet of fine-grained sediments (including 3.5 feet of clay) in order to impact the soils at 12.5 feet below land surface (bls). This requirement is complicated by the lack of any moist soil samples recorded from 15 feet bls upwards to land surface. Though groundwater contamination could migrate through the capillary fringe into soils above the saturated zone, the likelihood of groundwater contamination impacting unsaturated soils seven feet above the saturated zone is unlikely.

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Due to the lack of conclusive evidence in the area of Sump 91, the San Francisco Bay Regional Water Quality Control Board requests that further investigation be conducted before Sump 91 can be excluded as a potential source of soil and groundwater contamination in the area. The text of the Additional Tank and Sump Field Investigation Technical Memorandum stating that Sump 91 is not considered to be a VOC contaminant source should be changed to reflect the inconclusive nature of the analytical results from borehole SBS91-001.

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

Sincerely,



Elizabeth J. Adams
Project Manager

cc: Mike Gill, US EPA Region IX
Mail Stop H-9-2

Cyrus Shabahari, DTSC