

STATE OF CALIFORNIA

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

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File No. 2119.1057 (LHG)
November 13, 1991

Mr. Paul M. Ko
Environmental Project Manager
Western Division
Naval Facilities Engineering Command
P.O. Box 727, Code 1213PE
San Bruno, CA 94065

RE: Review of "Point Molate Treatment Ponds Area Characterization"
Proposal.

Dear Mr. Ko:

The Western Division, Naval Facilities Engineering Command (WestDiv) submitted a Revised Site Inspection Field Work Plan in July 1990, for Point Molate Naval Supply Center Fuel Depot, Richmond, California. During part of September and October 1990 PRC made reconnaissance investigations of the onsite landfill, grit disposal areas and the wastewater treatment ponds. Results of this reconnaissance investigation were reported on in January 1991. Board staff commented on March 8, 1991, on the results of this investigation and a proposed Point Molate Naval Fuel Depot, Groundwater Monitoring Plan/ Site Characterization Study, part of the report. A further report entitled Point Molate Naval Fuel Depot Site Inspection Draft Summary Report was issued in April 1991, commenting on the 1990 investigation results. In July 1991 a further report was issued, titled Final Groundwater Monitoring Plan/ Site Characterization Study, which incorporated comments made by Board Staff. However no substantive investigations, excepting the 1990 reconnaissance investigation have been conducted to date in 1991.

Board staff has been very concerned about the oily waste water ponds. The limited data presently available indicate that hydrocarbons are entering bay waters from this location. As a result, WestDiv decided in October 1991 to delay implementation of the Site Characterization, Groundwater Monitoring Plan and at this time embark on a work proposal focused only on the wastewater treatment ponds. The proposal titled Treatment Ponds Area Characterization and Interim Corrective Action Field Work Plan was submitted in October 1991. The narrowly focused proposed investigation must be expanded as further discussed.

COMMENTS

The corrective action work plan is to include the construction of a hydraulic barrier and extraction trench system to prevent

migration of floating hydrocarbons originating from the pond area, from entering bay waters. At present the trench location and length has not been determined, nor has the depth to which the hydraulic barrier and the extraction trench must be installed.

Proposed soil borings to determine the extent of hydrocarbon contamination are inadequate in numbers and too widely spaced to allow a definitive design to be prepared. Further, the proposed location of the hydraulic containment barrier and extraction trench has not been determined and must be shown on maps which show location of soil borings along the proposed alignment.

As an alternative remedial action, the work proposal discusses the installation of one extraction well downgradient of the ponds. The ponds have a length of approximately 1,500 feet paralleling the shore line. As this area consists chiefly of heterogenous fill, one extraction well will not furnish reliable data regarding the effectiveness of this alternative. To determine the numbers and spacing of extraction wells required for installation of this alternative and its effectiveness, it is recommended that a small segment of such a system be installed, consisting of no less than three extraction wells. Such wells must be installed at distances determined in previous field aquifer tests, to assure that radiuses of influence of these well overlap. Piezometers adequately located must also be installed to monitor the performance of the extraction wells.

Should the preferred alternative chosen consist of installation of the hydraulic containment and extraction trench it must be constructed with sumps and cleanouts capable of producing a hydraulic gradient to facilitate hydrocarbon movement into the trench for an extended time period.

Several adequately spaced groundwater monitoring wells must also be located in the area between the administration building and the ponds to determine if hydrocarbons are migrating into the pond area from this upgradient area.

Groundwater monitoring wells also must be installed to the west of the oily water ponds. The area hosting tank E also requires further soil borings and at least one monitoring well, unless the extraction well located in the western corner of the site will serve as a monitoring well.

Monitoring well PRC 3 located west of the pond area exhibited 6" of floating hydrocarbons. To help determine the possible migration pathway for this contamination a well located slightly upgradient and west of building 83 should be installed.

1. It is recommended that groundwater monitoring wells be constructed using 0.02" well screens rather than smaller screens of 0.01" Clay and silt will enter finer screens as readily as somewhat coarser screens, while inhibiting water and hydrocarbon entry. Wells intercepting the water table can be constructed with

screen length exceeding 10 feet if necessary, to permit floating hydrocarbon entry regardless of groundwater level fluctuations.

2. Staff of the Board has been informed that the final report of the ponds area will be submitted no later than June 1992.

3. The proposed work program addresses only a minor portion of the site. Limited data indicates that hydrocarbon contamination may also be migrating into the bay along the shore line to the east and west of the pond area. It therefore is essential that the work program presented in the site characterization, groundwater monitoring plan be initiated as rapidly as feasible, upon completion of work in the ponds area.

As previously reported, six carloads of acid batteries were disposed of in the sump area on which the present oily water ponds have been constructed. Although reportedly most of the batteries have been removed, no certainty exists that all batteries have been removed. Several soil borings must be installed in the reported battery disposal area. Soil samples of this area must be analyzed for pH in addition to TPH and lead.

If you have any questions or wish to arrange for a meeting please contact Louis H. Goldsmith at (510) 464-1095

Sincerely



Richard K. McMurtry, Chief
Land Disposal Division

cc: David West, PRC
LTCOMDR Jim Dolan, Point Molate