STATE OF CALIFORNIA—CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY

DEPARTMENT OF TOXIC SUBSTANCES CONTROL
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December 27, 1994

Mr. Lou Ocampo
Department of the Navy
EFA - WEST
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TRANSMITTAL OF COMMENTS REGARDING WASTE DISPOSAL AREA DRAFT PHASE I REMEDIAL INVESTIGATION (RI) REPORT AND 2ND QUARTERLY GROUNDWATER (GW) SAMPLING REPORT, POINT MOLATE NAVAL FUEL DEPOT, RICHMOND, CALIFORNIA, OCTOBER 18, 1994

Dear Mr. Ocampo:

The Department of Toxic Substances Control (Department) has completed its review of the Waste Disposal Area Draft Phase I RI Report and the 2nd Quarterly GW Sampling Report (subject reports). These subject reports are preceded by the Navy Energy and Environmental Support Activity (NEESA) Preliminary Assessment (PA) Report prepared in 1988 and the Site Investigation (SI) Report prepared by PRC Environmental in 1992. Additionally, EMR West conducted shallow soil investigations of this area in 1990. The subject reports investigation for the Waste Disposal Area were conducted in accordance with the Shoreline/Landfill Investigations Quarterly GW Sampling Final Field Sampling Work Plan (WP) Sampling Analysis Plan (SAP) prepared by PRC Environmental, in 1994. The Final Field WP SAP was previously reviewed and approved by the Regional Water Quality Control Board (RWQCB), San Francisco Bay Region.

The RWQCB will provide comments to the subject documents under separate cover. The Department's comments are provided in the enclosure. Comments are organized in accordance with the format of the two subject reports.

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If you have any questions regarding this review, please contact me at (916) 255-3591.

Sincerely,

Randy S. Adams
Hazardous Substances
Engineering Geologist

Enclosure

cc: Ms. Gina Kathuria
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WASTE DISPOSAL AREA DRAFT PHASE I RI REPORT

1. Section 3.1.1 Soil Sample Collection

According to Table 3-1, only two samples were taken in "bedrock"; one in bore hole SB02-05 and one in bore hole SB02-07. Contaminants consist of JP-4, JP-5, diesel, and bunker fuel; volatile organics (VOC); and semi-volatile organics (SVOC). Since the bedrock is described as being fractured and weathered near the bedrock/colluvial contact, it is highly likely that contamination exists in this zone at other bore hole locations.

The Department recommends that additional sampling into the bedrock be performed at other locations.

2. Section 4.0 Geologic and Hydrogeologic Setting

The site specific discussion of the geology of the Waste Disposal Area is incomplete. The following information is lacking and needs to be provided: strike and dip of rock units, strike and dip of joints in rock units (trends), and density of fracturing and jointing (i.e., relative spacing of joints and fractures). A discussion of secondary porosity due to fracturing is referenced to the Treatment Ponds Area, Final Site Characterization Report, 1994. Please include the referenced secondary porosity discussion in the subject report. This information should be provided sense it will aid in evaluating the data.

The hydrogeologic discussion states that one sample of colluvium from bore hole SB02-01 was analyzed for physical properties, including permeability. This sample apparently has a hydraulic conductivity similar to permeability samples obtained from the colluvium of Treatment Ponds Area. The Department believes this to be a premature conclusion based on the fact that only one sample from the Waste Disposal was evaluated for hydraulic conductivity. Comparing the Treatment Ponds Area colluvium to the Waste Disposal Area colluvium may also not be valid based on differences in topography between the two areas and possible differences in rock lithology, i.e., variations in lithology between metasediments, sandstones, and siltstones.

3. Section 5.3 Summary of Analytical Results

Section 3.3.1, Soil Sample Collection, states that soil samples collected for VOC analysis were collected by using brass selves and other samples were removed from sample barrels and placed in glass containers. Sample intervals from bore hole number SB02-01 at 17.5 to 18.0, 19.5 to 20.0 and 20.0 to 20.5 feet deep were sampled with brass selves for VOC analysis. However, Appendix G, Soil and Groundwater Analytical Data, only shows VOC data for

SB02-01 at the 20.0 to 20.5 foot interval. Please provide this missing analytical data.

It would also be very useful to compare the VOC soil data from samples obtained from and transported in brass selves to those removed from sample barrels and placed in glass containers. The preferred method for sampling and transporting soil samples for VOC analysis is by brass selves or by placing samples in containers pre-weighed with methanol. The method used in this sampling program (removing the sample from the sample barrel and placing it in a glass container) generally results in lower VOC detection in the laboratory.

4. Appendix E, Data Quality Assessment

In general, there are a significant number of laboratory and validation qualifiers used in the data presentation in Appendix G. These qualifiers range from 1) Method Compliance, 2) Holding Times, 3) Calibration, 4) Blank Contamination, 5) Surrogate Recovery, to 6) Matrix Spikes and Matrix Spike Duplicates. The largest number of validation qualifiers are related to calibration problems. Please discuss details of the calibration problems and discuss methods to prevent future calibration problems.

2ND QUARTERLY GROUNDWATER SAMPLING REPORT

5. Section 5.0 Analytical Results

The focus of the analytical results discussion is primarily the Shoreline Area, IR-04. Review of groundwater data from the 2nd Quarterly Groundwater Sampling Report and the Waste Disposal Area Draft Phase I RI Report suggests that there is a correlation of groundwater contamination in monitoring wells from the Waste Disposal Area IR-01 and some monitoring wells in the Shoreline Area, IR-04. The following relationships exist between groundwater contamination detected in Landfill Area wells and Shoreline Area wells.

Shoreline Area Wells	Disposal Area Wells	Common Contaminant
ERM10-01	MW02-07 MW02-06 MW02-01	VOC SVOC TPH
ERM10-02	MW02-07 MW02-06 MW02-01	VOC TPH
MW10-09	MWO2-07 MW02-06 MW02-01 ERM-EW2	SVOC TPH
MW10-14	MW02-07 MW02-06 MW02-01 ERM-EW2	SVOC TPH
MW10-10	MW02-07 MW02-06 MW02-01 ERM-EW2	VOC

The Department recommends further evaluation of this relationship between wells in order to develop the extent of the contaminated groundwater plume originating from the Waste Disposal Area.