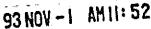


Environmental and Geologic Services

Fax: 510-547-5043 Phone: 510-450-6000



October 29, 1993

Mr. Scott O. Seery Alameda County Department of Environmental Health Hazardous Materials Division 80 Swan Way, Room 200 Oakland, CA 94621-1426

> Re: Closure Investigation Workplan Shell Service Station 1285 Bancroft Avenue San Leandro, California WIC #204-6852-0703 WA Job #81-423

Dear Mr. Seery:

Real Land

As we discussed in our October 14, 1993 meeting, Weiss Associates (WA), on behalf of Shell Oil Company, is submitting this brief workplan for additional investigation at the site referenced above. We are conducting this investigation to secure the data you indicated would be necessary for the Alameda County Department of Environmental Health (ACDEH) to consider case closure for this site. Presented below is the scope of work that we agreed upon in our meeting.

## Well Installation

As you requested, we will install one ground water monitoring well downgradient of the waste oil tank near the northwest corner of the station building (Figure 1). This well will be installed to assess whether hydrocarbons detected in soil beneath the waste oil tank are in ground water downgradient of the tank. We agreed to install the well in this location instead of immediately adjacent to the tank because potential preferential hydrocarbon flow pathways in the vadose zone may have allowed hydrocarbons to migrate horizontally prior to encountering ground water. Our agreed upon location will better allow us to assess whether hydrocarbons have impacted ground water downgradient of the tank. Drilling, sampling and well installation procedures will be similar to those outlined in our September 23, 1991 workplan for the existing wells.

## Soil Borings

Since 1,500 ppm total petroleum hydrocarbons as gasoline (TPH-G) were detected at 27 ft in a gravelly sand in the boring for well MW-2, and since this gravelly sand may allow horizontal migration of hydrocarbons in the vadose zone, we will drill two additional borings

Mr. Scott O. Seery October 29, 1993



adjacent to well MW-2 to assess the extent of the gravelly sand and to assess the extent of the hydrocarbons detected in the gravelly sand. Proposed boring locations are shown on Figure 1.

These borings will be drilled and sampled using hollow-stem augers to a depth of about 30 ft. Since our objective is to assess the extent of hydrocarbons detected in the gravelly sand at 27 ft in the boring for well MW-2, we will continuously sample the borings from 25 to 30 ft depth to locate and sample the sand. We will analyze one to two samples from this interval for TPH-G and BETX. If obvious field indications of hydrocarbons are detected in either of these two borings, the borings will continue until the vertical extent of hydrocarbons is assessed and additional borings will be drilled further from well MW-2 until no hydrocarbons are detected.

## HVOCs Analyses

Since the halogenated volatile organic compounds (HVOCs) detected in the site wells appear to be part of a regional problem, we will no longer analyze the wells for HVOCs. We will continue to analyze samples annually from one well for HVOCs in cooperation with the ongoing regional HVOCs study.

Please call if you have any questions.



Sincerely, Weiss Associates

N. Scott MacLeod, R.G. Project Geologist

## NSM:nm

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cc: Dan Kirk, Shell Oil Company, P.O. Box 5278, Concord, California 94520-9998 Lester Feldman, California Regional Water Quality Control Board - San Francisco Bay Region, 2101 Webster Street, Oakland, California 94612

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