RMT INC

West Coast Office
Suite 370
3250 Ocean Park Blvd.
Santa Monica, CA 90405
Phone: 213-452-5078
FAX: 213-450-5787

STID 337

December 17, 1992

Ms. Susan Hugo
Alameda County
Health Care Services Agency
Department of Environmental Health
Hazardous Materials Division
80 Swan Way, Rm. 200
Oakland, CA 94621

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Subject: **Remedial Action Workplan**
Former 7,000-gallon Gasoline UST Area
Former Servisco Facility
958 28th Street
Oakland, California

Dear Ms. Hugo:

This letter presents a proposal for initiation of remedial action at the former Servisco facility referenced above.

Background

In 1988 three underground storage tanks (USTs) were removed from the former Servisco facility located at 958 28th Street, Oakland, California: a 500-gallon fuel oil tank, a 1,000-gallon gasoline tank, and a 7,000-gallon gasoline tank. During the removal of these tanks, petroleum hydrocarbons were identified in the soils beneath the 500-gallon fuel oil tank and the 7,000-gallon gasoline tank.

Subsequent subsurface investigations were performed to investigate the extent of petroleum hydrocarbons in the soil. Results of these investigations are described in RMT's report, Expanded Assessment and Preliminary Remediation Report (September 1992). As a result of these investigations, the extent of soil contamination around the former fuel oil tank was determined, and in February 1992 through April 1992, the contaminated soils were excavated and disposed.

The results of the subsurface investigations also identified the presence of free product in the vicinity of the former 7,000-gallon gasoline UST. The free product was first identified in a relatively thin sandy gravel/gravelly sand layer during drilling of MW-4. This layer is present at a depth of approximately 11 to 13 feet below grade and groundwater is present at about 15 feet below grade. Because the completion of MW-4 allowed product to accumulate on the water table, MW-4 was abandoned and replaced by MW-4A which is not screened in the sandy gravel/gravelly sand layer. Free product has not accumulated on the water table since abandonment of MW-4 to the northeast of the facility. Geoprobe sampling of soil, soil vapor, and groundwater was later conducted in an effort to define the extent of impacted soils and groundwater to the northeast of the former 7,000-gallon gasoline UST. Observations during the latter investigation indicated that soils in borings GP-2, GP-4, GP-6, and GP-7 did not contain free product, and the sandy gravel/gravelly sand layer was not present. The sandy gravel/gravelly sand layer was observed in borings GP-3 and GP-8, where it contained free product (Figure 1).

Objective and Proposed Scope of Work

The objective of the remedial action in the vicinity of the former 7,000-gallon gasoline UST is to remove the free product present in the unsaturated sandy gravel layer. The following tasks are proposed to achieve this goal:

- Prepare a site-specific health and safety plan.
- Drill and install one 4-inch-diameter PVC product recovery well at the location shown on Figure 1. This well will be installed to a depth of 19 feet and will be screened from 9 to 14 feet below grade (well construction will be as shown on Figure 2). The sandy gravel/gravelly sand layer containing the free product is present at 11 to 13 feet below grade. The borehole will be sealed below a depth of 14 feet to prevent cross contamination with saturated soils.
- Install a removable free product recovery canister in the well. This canister will contain a semi-permeable membrane which will prevent the sump from filling with water if groundwater rises into the screened section of the well.
- Empty the free product canister manually, as necessary. Record the volume of free product removed.
- If free product recovery occurs at a rate which makes manually emptying the canister impractical, install a free product pump and aboveground storage system. It is

anticipated that the need for an automated system will be evaluated within the first two months of operation.

- Prepare a quarterly progress report for submittal to Alameda County Health Care Services Agency and the Regional Water Quality Control Board. This report will contain the boring log, well completion data, summary of field methods, and a summary of the volume of product removed during the quarter.

Anticipated Schedule

The product recovery well and canister are expected to be installed during the week of January 4, 1993. Free product recovery rate will be monitored and the product recovery canister will be maintained on a regular basis; at least two site visits will be conducted during the first month after installation, and monthly site visits will be conducted thereafter. A quarterly progress report is anticipated to be submitted in April 1993.

Waste Disposal

Drilling cuttings will be drummed and left on-site pending characterization for disposal. Free product removed will be placed in a 55-gallon drum and left on-site for pick-up by a recycler.

If you have any questions regarding the proposed investigation, please call Cathy Lielausis at (310) 452-5078.

Sincerely,

Jeffrey Bremer
Project Engineer

Cathy L. Lielausis, RG 4426
Senior Geologist
Project Manager

REGISTERED GEOLOGIST
CATHY L. LIELAUSIS
No. 4426
STATE OF CALIFORNIA

Enc: Figure 1 - Site Plan
Figure 2 - Product Recovery Well Construction
Product Recovery Canister Installation Procedure

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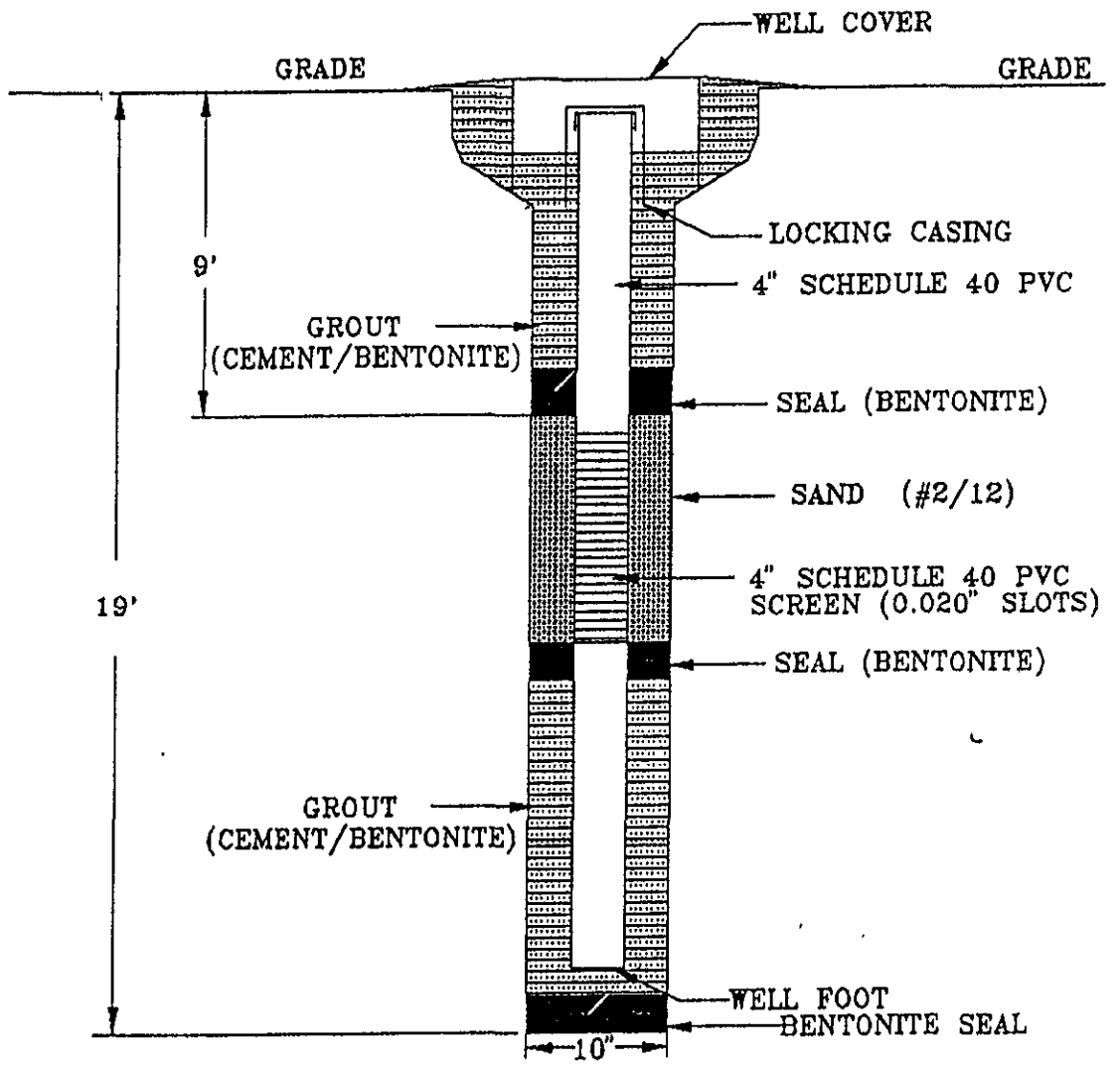

PRODUCT RECOVERY WELL CONSTRUCTION
FORMER SERVISCO FACILITY
OAKLAND, CALIFORNIA

NOT TO SCALE

RMT INC.

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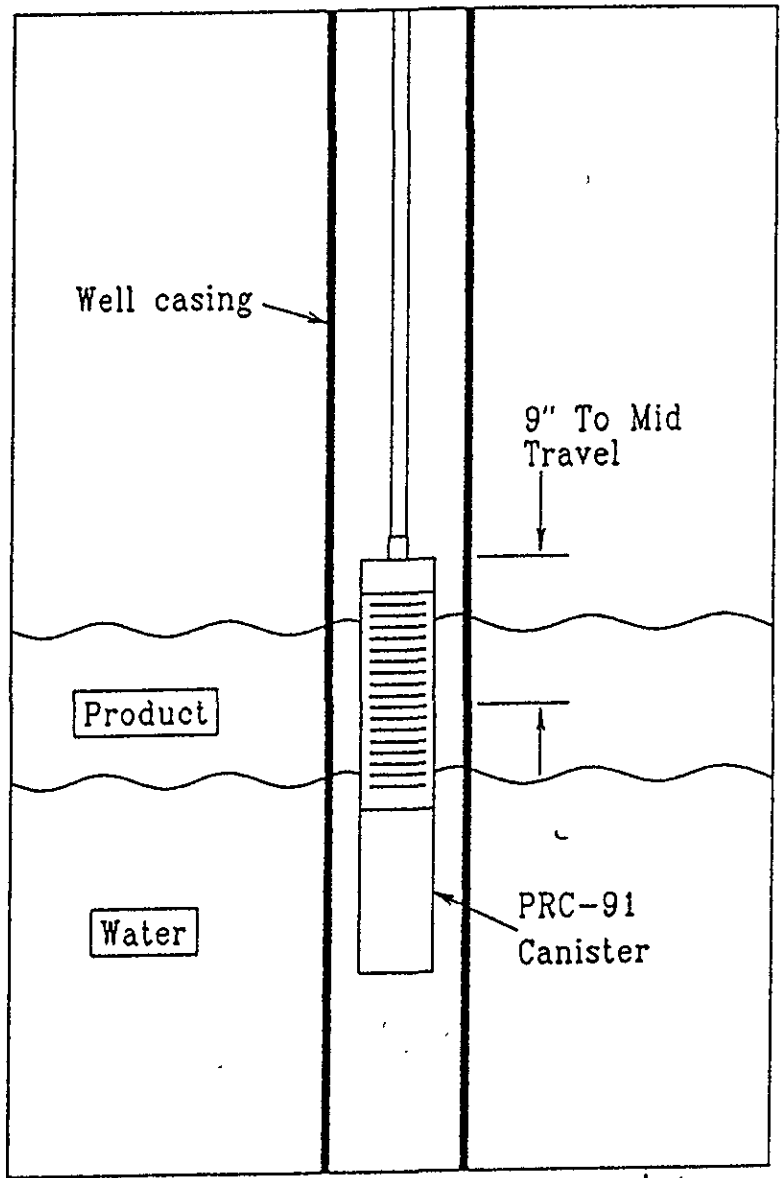
FIGURE 2

Keck PRC-91
4" Model
Installation Procedure

The Keck PRC-91 Product Recovery Canister consists of 2 major components, a screen section and a recovery canister. The screen section pre-filters the passage of hydrocarbons and protects the buoy through it's travel during water table fluctuations. The travel of the buoy will accommodate fluctuations of up to 16 inches. The canister section retains the recovered hydrocarbons and is evacuated by a small drain valve at the bottom of the PRC-91.



Installation of the 4" PRC-91 Canister.

To install the PRC-91, measurements of the water and product levels must be taken from the well. Measuring from the top of the PRC-91 canister, measure out the same amount of hose as your water level reading less 9 inches. Suspend the PRC-91 at this point using the supplied suspension method, making sure the connections are tight. This places the buoy approximately at the midpoint of its travel. To empty the PRC-91, simply pull it out of the well, open the drain valve and transfer the product into an approved container. When re-installing, make sure that the drain valve is completely closed to avoid the possibility of water entering the canister. It is also suggested at this time, to re-check your water and product levels to verify proper setting of the PRC-91 before returning it to service.

PRC-91 4" MODEL OPTIONAL CANISTER REPLACEMENT

To change a canister from one capacity to another on the PRC-91, simply unscrew the bottom portion of the PRC-91 and replace it with the desired size. If changing from a one Liter capacity canister to a larger one, you must also change the top cap of the unit to the weighted top cap. To change the top cap, a pipe wrench and 5/8" wrench will be required. Turn the brass fitting at the top of the PRC-91 counter clockwise to remove, and then unscrew the top cap from the screen. Installation is the reverse order except using the weighted top cap. Failure to use this cap with the 2 or 3 Liter sizes may result in improper operation. When switching from a 2 or 3 Liter capacity to a smaller size, it is not necessary to change from the weighted top cap.

PRC-91 4" PARTS LIST