

7/2/99 left memo for De Meit
to get me a copy of
the site plan including
the proposed boring location.

June 9, 1999

Larry Seto
Alameda County Health Care Services Agency
Environmental Protection Division
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502

RE: Boring Investigation Work Plan
2040 Grand Street, Alameda, California
ACC Project No. 99-6209-013.00

Dear Mr. Seto:

ACC Environmental Consultants, Inc. (ACC), is pleased to provide this Work Plan for work to be performed at the site located at 2040 Grand Street, Alameda, California (Figure 1) as requested by the Alameda County Health Services Agency (ACHCSA). The work proposed includes drilling one boring to groundwater (approximately 5 feet below ground surface (bgs)) inside the maintenance service center. The boring position is in the presumed downgradient position.

BACKGROUND

On February 18, 1998, Scott Co. of California removed one 500-gallon UST formerly used to store waste oil from an area adjacent to the maintenance service center at 2040 Grand Street. Soil in the vicinity of the former remote fill location was sampled and found to contain elevated concentrations of total extractable petroleum hydrocarbons (TEPH), total petroleum hydrocarbons as diesel (TPHd), and five metals. Overexcavation was performed in the area to remove impacted soil, but soil removal was limited due to proximity to the building wall and footing. Additional analysis indicated reductions in levels of constituents of concern; however concentrations above regulatory action levels remained in the soil.

After reviewing the results of the UST removal, the ACHCSA requested, in their letter dated June 23, 1998, that a grab groundwater sample be collected near the former remote fill location to verify the impact to groundwater from the previous underground storage of waste oil. ACHCSA also requested that a site plan be submitted identifying the sample locations and limits of overexcavation.

On April 21, 1999, ACC oversaw the advancement of two soil borings at the subject property. Boring B-1 was advanced in the area located between the former UST and the remote fill location. Boring B-2 was advanced in the presumed downgradient position, located on the south-side of the service center. Grab groundwater samples from B-1 were analyzed for total petroleum hydrocarbons as gasoline (TPHg), TEPH, benzene, toluene, ethylbenzene, and xylenes (BTEX), chlorinated hydrocarbons, and methyl tertiary butyl ether (MTBE). Analytical results indicate concentrations of TEPH as diesel at 220 parts per billion (ppb) in B-1. All other constituents were

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below laboratory detection limits. A report summarizing the work performed and conclusions was submitted to ACHCSA on May 13, 1999.

On May 26, 1999, ACHCSA requested additional work be performed at the site. The request asked for additional analysis not requested in the June 23, 1998 request. Based on the additional work requested, ACC proposes to advance an additional boring (B-3) to be located inside the maintenance service center. The boring will be advanced using a Geoprobe® and will terminate at the soil/groundwater interface. One soil sample and one water sample will be collected and analyzed per Tri-Regional Board requirements for waste-oil tanks. Analysis will include TPHg, TPHd, BTEX, oil and grease (O&G), chlorinated hydrocarbons, polychlorinated biphenols (PCBs), dioxins (PCPs), polynuclear aromatics (PNAs), creosote, cadmium, chromium, lead, nickel, and zinc.

SCOPE OF WORK

In order to further characterize soil and groundwater conditions at the site, ACC proposed the following scope of work:

- Drill one soil boring to the soil/groundwater interface (approximately 5 to 12 feet bgs);
- Collect one soil and one groundwater sample;
- Submit samples to a State certified analytical laboratory for analysis of TPHg, TPHd, BTEX, oil and grease (O&G), chlorinated hydrocarbons, polychlorinated biphenols (PCBs), dioxins (PCPs), polynuclear aromatics (PNAs), creosote, cadmium, chromium, lead, nickel, and zinc.

DRILLING PROGRAM

A drilling permit is being obtained from the Alameda County Public Works Agency before drilling activities commence. The location of the boring will be determined at the time of drilling. The boring will be located in the presumed downgradient position, approximately 10 to 15 feet south of the former remote fill location.

One boring will be drilled using a hydraulically driven Geoprobe® sampling tool equipped with 1.5-inch, inside diameter, clear, acetate liners. Drilling will be performed under the observation of a Registered Geologist, and the subsurface materials in the borings will be identified and logged using visual and manual methods. The sampling probe and rods will be pre-cleaned prior to use. The work will be conducted in one day. No drill cuttings will be generated using the pneumatic process.

Soil samples will be collected every five feet (if possible) Grab groundwater samples will also be collected. The pre-cleaned Geoprobe® will be hydraulically driven to the desired depth, retracted, and the 4-foot long screen exposed to the formation. Water samples will then be collected using

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disposable polyethylene tubing equipped with a check valve or polyethylene bailers which were inserted into the Geoprobe® screen. The water samples will be placed in approved, laboratory supplied sample vials without headspace, sealed, and stored in a pre-chilled, insulated container pending transport to a State certified analytical laboratory. The soil samples will be collected in the clear, acetate liners. Every effort will be made to minimize disturbance of the groundwater samples prior to placement in the sample containers.

The samples will be submitted to a State certified analytical laboratory under chain-of-custody protocol for analysis of TPHg, BTEX, and MTBE by EPA Method 5030/8015/8020 and 8260, TPHd by EPA Method 3550 and 3510/8015M, O&G by EPA Method 5520, chlorinated hydrocarbons by EPA Method 8010, cadmium, chromium, lead, nickel and zinc by EPA Method 6010, creosote, and PNAs by EPA Method 8270, and PCBs by EPA Method 8080M. Standard turnaround time for analytical results is 5 to 7 working days.

Following drilling and sample collection, the boring location will be abandoned with neat cement to just below the surface (1 to 2 inches). The surface of the boring location will be completed with concrete to grade to match the surrounding material.

Report Preparation

A technical report will be prepared discussing the boring investigation and summarizing groundwater conditions will be submitted to the client and to ACHCSA.

If you have any questions, please call me at (510) 638-8400.

Sincerely,



David R. DeMent, RG
Senior Project Geologist

/sps:drd

cc: Mr. Pete Carrai, City of Alameda