

ALCO
HAZMAT

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April 29, 1994

Mr. Tom Peacock
Alameda County Health Care Services Agency
Hazardous Materials Division
80 Swan Way, Room 200
Oakland, CA 94621

RE: Additional Field Investigation
Peralta Maintenance Yard, 501 5th Avenue, Oakland, California

Dear Mr. Peacock:

Per your request, this work plan addresses proposed work for additional soil and groundwater investigation for the above referenced site.

Background

Five underground storage tanks were installed prior to the 1960's. The tanks were used for storage of fuel and waste oil for the City of Oakland Corporation Yard. The tanks consisted of two 6,000-gallon gasoline, one 2,000-gallon diesel, one 2,000-gallon ethyl (premium) gasoline and one 550-gallon waste oil tank. In 1980 Peralta Community College District acquired the property. The District abandoned the existing five underground tanks by filling with water and installed three fiberglass underground storage tanks. The new tanks consisted of two 6,000-gallon and one 4,000-gallon fiberglass tanks to store gasoline. The new tanks were installed approximately 150 feet from the original tanks.

In 1992, the five original underground storage tanks were removed. A total of eight soil samples and one grab groundwater sample was collected from the excavation. Laboratory analysis of the soil indicated up to 228 parts per million (ppm) of Total Petroleum Hydrocarbons (TPH) as diesel, 134 ppm to TPH as gasoline, 2,407 parts per billion (ppb) benzene, 4,617 ppb toluene, 7,170 ppb ethylbenzene, 6,147 ppb total xylenes and 5,477 ppm oil and grease. Laboratory analysis of the water collected in the excavation indicated 170 ppm TPH as diesel, 15 ppm TPH as gasoline, 286 ppb benzene, 698 ppb toluene, 300 ppb ethylbenzene, 808 ppb total xylenes and 284 ppm oil and grease.

In September 1992, a preliminary study was performed by Environ of Emeryville to evaluate the soil and groundwater conditions on the site and on neighboring sites. This study indicated that hydrocarbons constituents are regional.

In November of 1992, ACC performed a site assessment of the soil around the former tank excavation. Hydrocarbons as gasoline and motor oil were observed in the soil and groundwater collected from the borings. Laboratory analysis of the soil indicated up to 370 ppm of TPH as gasoline, 12 ppm TPH as diesel, 5,342 ppm motor oil, 76.94 ppm benzene, 73.9 ppm toluene, 30.4 ppm ethylbenzene, and 95.41 ppm xylenes.

In November 1994, three underground gasoline tanks were removed from the property. Soil samples collected from the excavation indicated up to 1.3 ppm TPH as gasoline, 190 ppb benzene, and 18 ppb toluene. Initial groundwater sample collected from the excavation indicated 27 ppm TPH as gasoline, 1,200 ppb benzene, 5,100 ppb toluene, 690 ppb ethylbenzene and 5,700 ppb xylenes.

Approximately 3,500 gallons of water was removed from the excavation. Subsequent groundwater sample was collected. Analysis of the second groundwater sample from the excavation indicated .21 ppm TPH as gasoline, and 14 ppb xylenes.

Due to the elevated levels reported in the soil and groundwater on-site, additional groundwater investigations are required from the regulatory agencies.

In February, 1994, four additional borings (MW-1, MW-2, MW-3 and MW-4) were drilled and converted into 2-inch monitoring wells, on-site. The monitoring wells were used to evaluate the extent of contamination from the two tank excavations.

Laboratory analysis of the groundwater samples collected from monitoring wells MW-1 and MW-4 (down gradient from the tank excavations) indicated below detectable levels of constituents evaluated. The groundwater results indicated a downgradient extent of groundwater contamination. Laboratory analysis of groundwater collected from monitoring wells MW-2 and MW-3 (upgradient of the former tank excavations) indicated detectable levels of constituents. Samples collected from borings MW-2 and MW-3 indicated detectable levels of TPH as diesel, TPH as gasoline with BTEX. Motor oil was reported in the soil from boring MW-2. However, the motor oil was not detected in the groundwater sample from monitoring well MW-2 and therefore motor oil does not appear to impact the groundwater. TPH as diesel was only detected in the soil from boring MW-2.

Proposed Work

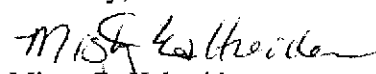
To further evaluate the extent or source of contamination, 4 to 5 borings will be drilled up-gradient of monitoring wells MW-2 and MW-3. The proposed locations of the borings are illustrated on Figure 1, attached. The borings will be drilled with a B-53 truck mounted drill rig equipped with hollow stem augers. Continuous core samples will be collected with a California modified split-spoon sampler equipped with three 6-inch brass rings. The drilling and sampling equipment will be pre-cleaned with TSP solution and deionized water rinsed between sample collection. Continuous samples will be collected from 3 feet below ground surface to the estimated groundwater depth of 10 feet. A grab groundwater sample will be collected from the open borehole.

A minimum of two soil samples and one groundwater sample will be obtained from each boring and submitted to an EPA/California State Certified laboratory for analysis of Total Petroleum Hydrocarbons (TPH) as gasoline with benzene, toluene, ethylbenzene, and total xylenes by EPA method 8015/80/20 and Total Extractable Petroleum Hydrocarbons (TEPH) as kerosene, diesel and motor oil by EPA method 8015-modified.

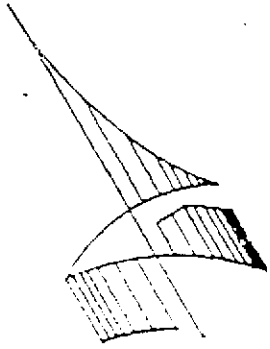
A report of the findings including results of analytical data will be prepared and submitted, under signature of a California Registered Geologist, to Alameda County Health Care Services Agency.

If you have any comments regarding the proposed scope of work, please call me.

Sincerely,


Misty C. Kaltreider
Geologist

cc: Mr. Robert Mibach - Peralta Community College District



SCALE 1" = 100'

STREET

7TH

APPROXIMATE PROPERTY LINE

EXISTING FENCE

EXISTING BUILDING

MW3

Former Fuel Tank Excavation (1992)

MW2

EXISTING BUILDING

MW1

EXISTING TRAILERS

Former Gasoline Tank Excavation (1994)

EXISTING BUILDING

MW4

5TH AVENUE

Proposed boring locations ●

Site Plan
Peralta Maintenance Yard
Oakland, CA

February 14, 1994	Drawn By: MCK	Project: 6045-4	Figure 1
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