

Phone: (925) 283-6000

Fax: (925) 283-6121

May 5, 2000

Mr. Barney Chan Alameda County Health Care Serives Agency 1131 Harbor Bay Parkway Alameda, CA 94502-6577

Subject:

Workplan

8275 San Leandro Street Oakland, CA 94621 AEI Project No. 3724

Dear Mr. Chan:

Enclosed is the Workplan for the property referenced above. Once the you have approved the Workplan, AEI will shedule a date for the field work. Please call me at (925) 283-6000 if you have any questions.

Sincerely,

Carrie E. Locke Project Engineer

ENVIRONMENTAL PROTECTION

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May 5, 2000

#### WORKPLAN

8275 San Leandro Street Oakland, California

Project No. 3724

Prepared For

Alameda County Health Care Services Agency 1131 Harbor Bay Parkway Alameda, CA 94502

Prepared By

AEI Consultants
3210 Old Tunnel Road, Suite B
Lafayette, CA 94549
(800) 801-3224





Phone: (925) 283-6000

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Mr. Barney Chan Alameda County Health Care Services Agency 1131 Harbor Bay Parkway Alameda, CA 94502

Re: Workplan

8275 San Leandro Street Oakland, California Project No. 3724

Dear Mr. Chan:

The following scope of work is in response to your request for a workplan to characterize the extent of petroleum contamination at the above referenced site as stated in your February 17, 2000 letter. The workplan describes activities to conduct a subsurface investigation at the above referenced site. AEI is providing environmental consulting services to Mr. Steve Bacciocco, the property owner, and is submitting this letter on his behalf.

### Site Description and Background

The site is located in an industrial area of Oakland, approximately 900 feet southeast of the intersection of 85<sup>th</sup> Avenue and San Leandro Street. Monterey Mechanical, a general contracting business, currently occupies the property. Please refer to Figure 1 for the site location.

On June 3, 1999, a 2,000-gallon gasoline UST was removed from the property. Prior to removal, 325 gallons of waste liquid were removed, transported and disposed off-site. The tank was transported under non-hazardous waste manifest to the Ecology Control Industries' disposal facility in Richmond, California where the tank was cleaned and disposed of as scrap metal.

A total of 5 soil samples were collected during the tank removal activities. Minor concentrations of Total Petroleum Hydrocarbons (TPH) as gasoline were detected in the soil samples collected from the stockpile at 1.3 mg/kg. Minor concentrations of BTEX and MTBE were also detected in stockpile soil samples. No concentrations of petroleum hydrocarbons or associated constituents were detected in soil samples collected from the sidewalls of the tank excavation. Concentrations of lead were detected in all of the soil samples ranging from 10 mg/kg to 22 mg/kg. These concentrations can be considered background levels in the soil. All other constituents were not present in the soil samples above laboratory detection limits.

Groundwater was encountered at 5 feet bgs during the tank removal activities. One grab groundwater sample was collected during the tank removal activities. Elevated concentrations of TPH as gasoline were detected in AEI GW 5' at 34,000  $\mu$ g/L. Concentrations of MTBE were detected at 43,000  $\mu$ g/L. Elevated concentrations of BTEX were also detected in AEI GW 5'.

The results of the sample analysis is summarized in the following tables. Please refer to Figure 2 for the sample locations.

TABLE 1 - Soil Sample Analyses

	AEI ES N 5'	AEI ES S 5'	AEI ES E 5'	AEI ES W 5'	AEI STKP 1-4
TPH-GASOLINE (mg/kg)	<1.0	<1.0	<1.0	<1.0	1.3
MTBE (mg/kg)	< 0.05	< 0.05	< 0.05	< 0.05	0.092
BENZENE (mg/kg)	< 0.005	< 0.005	< 0.005	< 0.005	0.005
TOLUENE (mg/kg)	< 0.005	< 0.005	< 0.005	<0.005	0.098
ETHYL BENZENE (mg/kg)	< 0.005	< 0.005	< 0.005	<0.005	0.034
TOTAL XYLENES (mg/kg)	< 0.005	<0.005	< 0.005	< 0.005	0.20
TOTAL LEAD (mg/kg)	21	10	15	14	22

mg/kg = milligrams per kilogram (ppm)

TABLE 2 - Groundwater Sample Analyses

	AEI GW 5'		
TPH-GASOLINE (μg/L)	34,000		
MTBE (μg/L)	43,000		
BENZENE (μg/L)	650		
TOLUENE (µg/L)	5,600		
ETHYL BENZENE (μg/L)	1,300		
TOTAL XYLENES (µg/L)	7,300		
TOTAL LEAD (mg/L)	0.13		

 $\mu$ g/L = micrograms per liter (ppb) mg/L = milligrams per liter (ppm)

The excavation was backfilled with the stockpiled soil and clean imported ¾" aggregate base rock to replace the volume of the former tank and compacted. The excavation area was resurfaced with asphalt.

Based on the results of the groundwater sample collected during the tank removal activities, the Alameda County Health Care Services Agency (ACHCSA) requested a soil and groundwater investigation to determine the extent of petroleum contamination from the UST release.

#### **Geologic Conditions**

The native soil encountered during the excavation activities consisted of a sandy clay. Groundwater was encountered at 5 five bgs during tank removal activities. Based on a review of the San Leandro, California Topographic Quadrangle, published by the U.S. Geological Survey (USGS) and dated 1959 (photorevised in 1980), groundwater below the site likely flows to the northwest/west, towards the San Francisco Bay.

#### Scope of Work

AEI proposes to advance 4 soil borings (AEI-1 through AEI-4) at the site in the locations shown in Figure 3. Since only background concentrations of lead were detected in the soil samples collected during tank removal activities and the grab groundwater sample collected from the tank excavation showed elevated levels of petroleum hydrocarbons and associated gasoline constituents, the locations of the soil borings were chosen to assess whether groundwater has been impacted at a greater distance from the source in the northwestern, western, southern, and northeastern directions. The borings will be advanced with a direct push, Geoprobe drilling rig. The borings will be advanced to first encountered groundwater which is expected no deeper than 15 feet bgs.

The soil borings will be logged on-site by an AEI engineer using the Unified Soil Classification System. Undisturbed, native soil samples will be collected at 5-foot intervals beginning at 5 feet bgs. Soil samples will be collected within acrylic liners within the drive sampler. A six-inch section of the liners will be selected for analysis. The soil samples will be sealed with teflon tape and caps. Soil samples obtained during drilling will be screened in the field using a portable organic vapor meter.

Groundwater samples will be collected from each boring. The water samples will be collected by exposing a screened interval of the direct push rods within the groundwater bearing zone. Water samples will be collected with a drop tube inserted through the hollow push rods. The water samples will be collected into 40-ml VOA vials.

Following sample collection the borings will be filled with cement slurry.

All samples will be put on ice and transported, under chain of custody procedures to McCampbell Analytical, Inc. of Pacheco, California. One soil sample will be analyzed from each boring. Selected soil samples and the groundwater samples will be analyzed for total petroleum hydrocarbons (TPH) as gasoline (EPA method 3550/8015), benzene, toluene, ethylbenzene and xylenes (BTEX), and methyl tertiary butyl ether (MTBE) (EPA method 5030/8020). If samples contain high levels of TPH as soline of MTBEs they will be reanalyzed for fuel oxygenates by EPA method 6260.

The remaining soil samples will be placed on hold at the laboratory

Minimal cuttings will be generated from the drilling. Any soil cuttings will be stored onsite in a 55-gallon drum. On-site treatment or off-site disposal of contaminated drill cuttings is not a part of this work scope. It is likely that a licensed hauler will be contracted to transport the soils as non-hazardous waste, under appropriate manifests, to a local landfill facility.

#### **Site Safety**

Prior to commencement of field activities, a site safety meeting will be held at a designated command post near the working area. Emergency procedures will be outlined at this meeting. Also, the hazards of the known or suspected chemicals of interest will be explained. Level D personal protection equipment is the anticipated maximum amount of protection needed. A site safety plan conforming to Part 1910.120 (i) (2) of 29 CFR will be on site at all times during the project.

A working area will be established with barricades and warning tape to delineate the zone where hard hats and steel-toed shoes must be worn, and where unauthorized personnel will not be allowed. If, during drilling, fuel product odors are deemed to be substantial, half-face respirators with organic vapor cartridges will be worn.

A nearby hospital will be designated in the site safety plan as the emergency medical facility of first choice. A map with a course plotted to the hospital will be on-site.

#### **Estimated Schedule**

Work will commence within two weeks after approval of this workplan by the ACHCSA. The ACHCSA will be given adequate notification of the scheduled day of drilling to schedule field inspectors if desired. Laboratory analytical results will be obtained within one week of collection. The final report will be prepared promptly, and copies will be delivered to the client and the ACHCSA.

AEI requests your approval to proceed with this project. Please let me know if you need additional information and please do not hesitate to call me at (925) 283-6000 if you have any questions.

Sincerely,

Carrie E. Locke Project Engineer

Joseph P. Derhake, PE, CAC

Principal

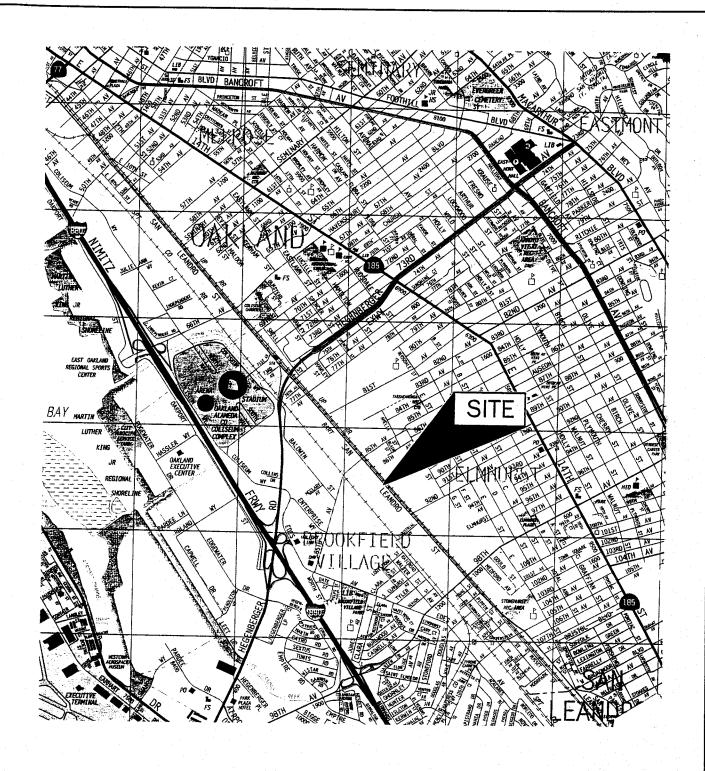
cc. Steve Bacciocco
Monterey Mechanical
8275 San Leandro Street
Oakland, CA 94621

#### **Attachments**

Figure 1 – Site location map

Figure 2 – Site plan with excavation and sample locations

Figure 3 – Proposed boring locations





AEI CONSULTANTS 3210 OLD TUNNEL ROAD, SUITE B, LAFAYETTE, CA

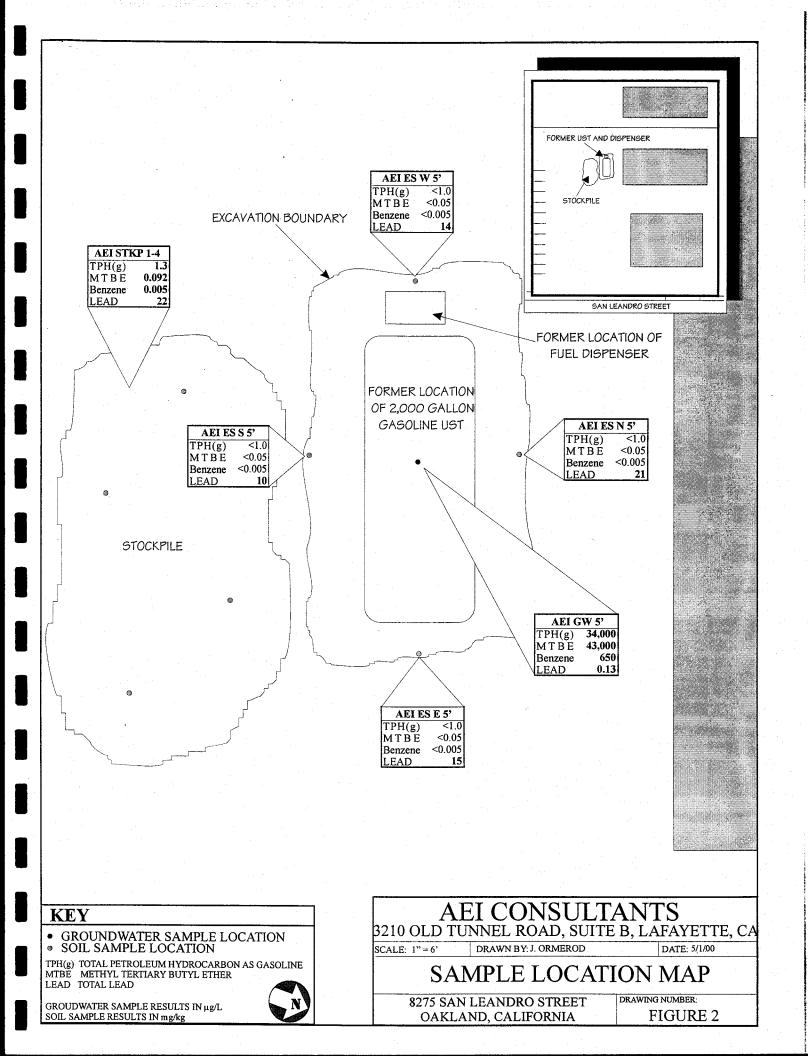
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DATE: 1997

# SITE LOCATION MAP

8275 SAN LEANDRO STREET OAKLAND, CALIFORNIA

DRAWING NUMBER: FIGURE 1



**EQUIPMENT STORAGE** DIRT ASPHALT AEI-2 FORMER LOCATION OF FUEL DISPENSER EXCAVATION BOUNDARY AEI-4 EQUIPMENT STORAGE FORMER LOCATION OF AEI-3 2,000-GALLON GASOLINE UST (12 ) ESTIMATED GROUNDWATER FLOW SUBJECT PROPERTY BOUNDARY SIDEWALK DRIVEWAY

SAN LEANDRO STREET



O PROPOSED SOIL BORING LOCATIONS

# AEI CONSULTANTS 3210 OLD TUNNEL ROAD, SUITE B, LAFAYETTE, CA

SCALE: 1" = 20'

DRAWN BY: J.ORMEROD

DATE: 5/1/00

## SITE MAP

8275 SAN LEANDRO STREET OAKLAND, CALIFORNIA

DRAWING NUMBER: FIGURE 3