



ALL ENVIRONMENTAL, INC.

Environmental Engineering & Construction

October 13, 1998

ENVIRONMENTAL
PROTECTION

98 OCT 19 PM 4:55

Mr. Larry Seto
Alameda County Health Care Services
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502

Re: 1310 Central Avenue
Alameda, California
Project No. 1900

Dear Mr. Seto:

The following workplan is a revised version of the previous workplan submitted by All Environmental, Inc. (AEI) on July 30, 1998. The following revised workplan includes the additional information you outlined in your August 12, 1998 letter. All Environmental, Inc. (AEI) is providing environmental consulting services to Mr. Pritpaul Sappal, and is submitting this letter on his behalf.

Site Description and Background

The site is a triangular shaped parcel located at the intersection between Encinal Street and Central Avenue in the city of Alameda as shown in Figure 1. The site is occupied by an active gasoline service station.

Three underground storage fuel tanks and one waste oil tank, associated piping and dispensers were removed from the property in May, 1996 by Petrotek. No reports detailing the tank removals or any subsequent remedial work were issued by Petrotek. According to Mr. Sappal, the tanks consisted of one 10,000 gallon, one 7,500 gallon and one 5,000 gallon gasoline fuel tanks formerly located in the western corner of the site. The fuel tanks were located adjacent to one another and one excavation was created from their removal. The bottom of the 10,000 gallon fuel tank was set at a greater depth (approximately 12 feet bgs) than the other fuel tanks and groundwater was observed upon its removal. One 500 gallon waste oil tank was located adjacent to the subject property building. Refer to Figure 2 for locations of the former fuel tanks and dispenser.

Soil samples were collected from beneath the 7,500 gallon and 5,000 gallon fuel tanks and from beneath the waste oil tank. Contaminated soil was reportedly removed from the fuel tank excavation and possibly from beneath the former dispensers. The 7,500 gallon and 5,000 gallon fuel tanks excavation was extended to groundwater and laterally in the north, south and west direction. Soil samples were also collected from beneath the

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dispenser islands. Two soil samples were collected from trenches believed to be created when the piping was removed. The exact location of the trench samples is unknown. Refer to Table 1 for a summary of the analytical results and Figure 2 for approximate locations of the soil samples and the lateral limits of the excavation.

The analytical results indicated that elevated levels of petroleum hydrocarbons were present in the soil. Mr. Sappal reports that approximately 600 tons of contaminated soil was removed and disposed of off-site. No confirmation soil samples were collected following the soil removal.

According to Mr. Sappal, free-floating product was observed on the groundwater in the fuel tank excavation. Nevertheless, the previous analytical data indicates that a grab groundwater sample was collected from the fuel tank excavation. Groundwater was also encountered in the waste oil tank excavation and a grab groundwater sample was collected. Refer to Table 2 for a summary of the grab groundwater analytical results.

Approximately 15,000 gallons of water and product were reportedly removed from the fuel tank excavation. The water was treated prior to discharging into the sanitary sewer. Two new underground storage tanks were installed within the same fuel tank excavation. New dispenser islands and associated piping were also installed. Refer to Figure 2 for the present day station configuration.

The following scope of work is designed to characterize the soil and groundwater beneath the property and to confirm the remedial activities that took place in 1986.

Scope of Work

AEI proposes to advance fourteen (14) soil borings (SB-1 through SB-14) around the former underground storage tank excavation, former dispenser islands and waste oil tank as shown on Figure 2. The borings will be advanced with a Geoprobe drilling rig. The borings will be drilled to a depth of 20 feet bgs or until first groundwater, whichever is encountered first. The soil borings will be continuously logged on-site by a geologist using the Unified Soil Classification System. Undisturbed soil samples will be collected at five-foot intervals, starting at 5 feet bgs. The samples will be collected for visual classification and chemical analysis in four-foot acrylic liners. A six-inch section of the liner will be sealed, labeled and transported to a state certified laboratory. Soil samples obtained during drilling will be screened in the field with a portable organic vapor meter. Up to two of the most impacted soil samples from each boring will be selected for analysis. *Minimum of one*

Groundwater samples will be collected from all of the borings. The groundwater samples will be collected through the direct push rods. If groundwater samples cannot be collected through the rods, then the borings will be Hydropunched. If the Hydropunch fails to generate water, then the rods will be removed and a grab water sample will be collected. Following sample collection the borings will be filled with cement slurry.


Soil and groundwater samples will be analyzed for TPH as gasoline (EPA method 5030/8015), TPH as diesel (EPA method 3550/8015), BTEX and MTBE (EPA method 5030/8020). In addition, soil and groundwater samples collected near the waste oil pit will be analyzed for total oil & grease (EPA method 5520 D & F), volatile halocarbons (EPA method 8010) and CAM 17 metals.

AEI requests your approval to proceed with this project. AEI is eager to complete this work as soon as possible. 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.

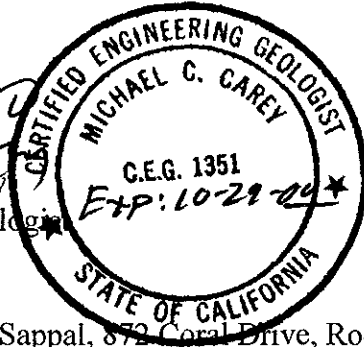
Sincerely,



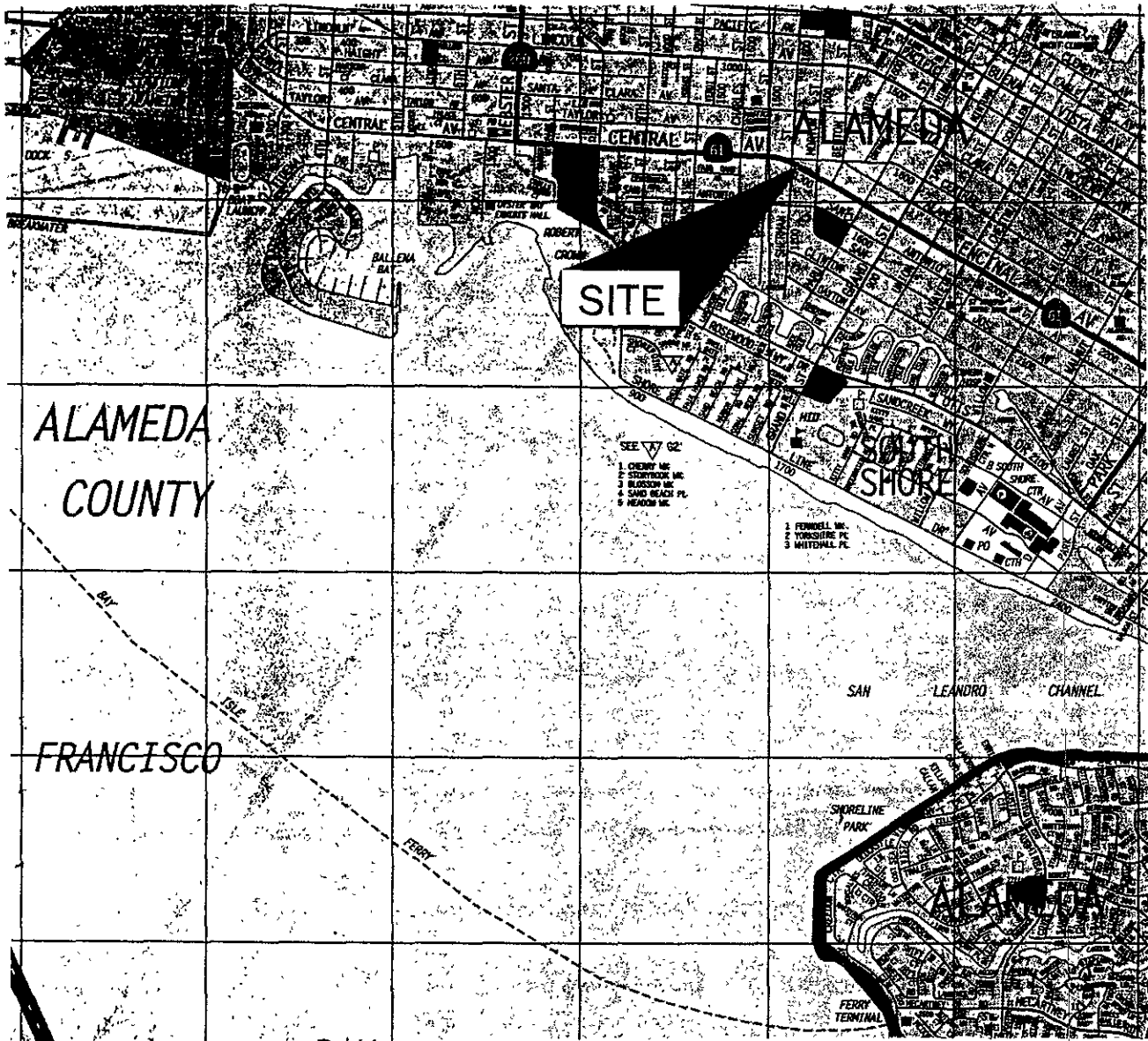
Jennifer Pucci
Project Manager



Michael C. Carey
Engineering Geologist
CEG 1351



cc: Mr. Pritpaul Sappal, 872 Coral Drive, Rodeo, California, 94572



FROM:
THOMAS GUIDE MAPS
1997

ALL ENVIRONMENTAL, INC.
901 MORAGA ROAD, SUITE C, LAFAYETTE, CA

SITE LOCATION MAP

1310 CENTRAL AVENUE
ALAMEDA, CALIFORNIA

FIGURE 1

CENTRAL AVENUE

FORMER LOCATION OF UNDERGROUND FUEL STORAGE TANKS

DRIVEWAY

SB-14 PLANTER

SB-1

SB-2

SB-5

SB-13

10,000 GALLON

7,500 GALLON

5,000 GALLON

D1 D2 D3

SB-6

SB-3

FORMER FUEL ISLANDS

APPROXIMATE LATERAL LIMITS OF EXCAVATION FOLLOWING SOIL REMOVAL

SB-4

SB-7

SB-8

SB-9

SB-10

5

6

0.2

SB-11

FORMER WASTE OIL PIT

SUBJECT PROPERTY BUILDING

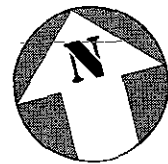
ENCINAL AVENUE

DRIVEWAY

SB-12

- APPROXIMATE LOCATION OF SOIL SAMPLES COLLECTED BY PETROTEK
- ⊙ APPROXIMATE LOCATION OF GRAB GROUNDWATER SAMPLES COLLECTED BY PETROTEK
- ◆ PROPOSED SOIL BORING LOCATIONS

— CURRENT UNDERGROUND STORAGE TANK, PIPING AND DISPENSER SYSTEM



ALL ENVIRONMENTAL, INC.
901 MORAGA ROAD, SUITE C, LAFAYETTE, CA

SCALE: 1"=10' DRAWN BY: S. LEE DATE: 10/9/98

SITE PLAN

1310 CENTRAL AVENUE
ALAMEDA, CALIFORNIA

DRAWING NUMBER:
FIGURE 2

**TABLE 1:
PETROTEK
SOIL SAMPLE ANALYTICAL RESULTS**

Sample ID	Date Sampled	Location	TPH as gasoline mg/kg	TPH as diesel mg/kg	TOG mg/kg	MTBE mg/kg	Benzene mg/kg	Toluene mg/kg	Ethyl-benzene mg/kg	Xylenes mg/kg	VOC's µg/kg	Cd mg/kg	Cr mg/kg	Pb mg/kg	Ni mg/kg	Zn mg/kg
1	5/2/96	Fuel Tank Exc.	5000	-	-	<5.0	31	250	74	560	-	-	-	1.8	-	-
2	5/2/96	Fuel Tank Exc.	2900	-	-	<5.0	<2.0	16	8.3	190	-	-	-	13.3	-	-
3	5/2/96	Fuel Tank Exc.	4400	-	-	<5.0	25	190	75	400	-	-	-	1.9	-	-
4	5/2/96	Fuel Tank Exc.	3600	-	-	<5.0	2.6	34	21	250	-	-	-	8.9	-	-
5	5/2/96	N. Waste Oil Tank	<5.0	<200	1400	<0.10	<0.05	<0.05	<0.05	<0.05	ND	<0.50	20.8	2.2	13.5	14
6	5/8/96	Waste Oil Tank	470	<1000	3000	<0.50	<0.25	<0.25	0.30	0.85	ND	-	-	-	-	-
D1	5/9/96	Beneath Dispenser	6800	-	-	<40	63	370	120	680	-	-	-	-	-	-
D2	5/9/96	Beneath Dispenser	3700	-	-	<20	<10	20	9.7	280	-	-	-	-	-	-
D3	5/9/96	Beneath Dispenser	1500	-	-	<8.0	<4.0	<4.0	<4.0	20	-	-	-	-	-	-
D5	5/9/96	Beneath Dispenser	2600	-	-	<16	<8.0	28	12	200	-	-	-	-	-	-
D6	5/9/96	Beneath Dispenser	<5.0	-	-	<0.10	<0.05	<0.05	<0.05	<0.05	-	-	-	-	-	-
T1	5/9/96	Unknown Trench	2100	-	-	<8.0	<4.0	5.7	<4.0	140	-	-	-	-	-	-
T2	5/9/96	Unknown Trench	1400	-	-	<5.0	<2.0	5.1	<2.0	20	-	-	-	-	-	-

- = Not Analyzed

ND = Not detected above the Method Detection Limit

µg/kg = micrograms per kilogram (ppb)

mg/kg = milligrams per kilogram (ppm)

VOC's = Volatile Halocarbons

Cd = Cadmium

Cr = Chromium

Pb = Lead

Ni = Nickel

Zn = Zinc

**TABLE 2:
PETROTEK
GRAB GROUNDWATER SAMPLE ANALYTICAL RESULTS**

Sample ID	Date Sampled	Location	TPH as gasoline µg/L	TPH as diesel µg/L	TOG µg/L	MTBE µg/L	Benzene µg/L	Toluene µg/L	Ethylbenzene µg/L	Xylenes µg/L	Cd µg/L	Cr µg/L	Lead µg/L	Nickel µg/L	Zinc µg/L
G1	5/20/96	Fuel Tank Excavation	2,800	-	-	66	100	60	<13	560	-	-	-	-	-
G2	5/2/96	Waste Oil Excavation	1,300	<5,000	35,000	<1.0	<0.5	<0.5	<0.5	1.6	<5.0	114	453	115	753

- = Not Analyzed

µg/L = micrograms per liter (ppb)

mg/L = milligrams per liter (ppm)

Cd = Cadmium

Cr = Chromium