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Tel (408) 559-1248 Fax (408) 559-1224

April 13, 2004

Mr. Barney Chan Alameda County Environmental Health Services 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577

RE:

Addendum to Work Plan for Site Characterization

2926 - 2942 San Pablo Avenue (Fuel Leak Case No. RO0002567)

Oakland, CA

Dear Mr. Chan:

Thank you for your prompt review of the above-referenced work plan. This addendum addresses those items listed in your review letter of March 31, 2004.

**Technical Comment No. 1:** a copy of the November 1999 Globe Soil Engineers report is attached.

**Technical Comment No. 2:** Boring logs for borings B5, B6, B10B, B11 and B12 will be included in the next technical report. Cross-sections will be prepared that include the information from these borings and future borings.

**Technical Comment No. 3:** To further investigate petroleum hydrocarbons in addition to VOCs, all of the proposed soil and groundwater samples will be analyzed by EPA Method 8260 constituents, including the fuel oxygenates and lead scavengers. This analytical method includes all of the VOCs that are detected on the EPA Method 8010 analyses. Also, all of the grab groundwater samples will be analyzed for Total Petroleum Hydrocarbons (TPH) as gasoline by EPA Method 8015. If soils are encountered that represent a source of petroleum hydrocarbons, these samples will also be analyzed for TPH as gasoline.

**Technical Comment No. 4:** PIERS proposes to remove the underground hoist and to obtain a soil sample from directly beneath the hoist, if possible, or directly adjacent to it. The sample will be analyzed for Total Petroleum Hydrocarbons (TPH) as hydraulic fluid and PCB's.

**Technical Comment No. 5:** A copy of Table 1C showing the appropriate ESLs for the metals detected in soil is attached.

**Technical Comment No. 6:** As stated above, all of the soil and groundwater samples will be analyzed by EPA Method 8260 constituents, and all of the grab groundwater samples will be analyzed for TPH as gasoline by EPA Method 8015. Also, all of the grab groundwater samples will be analyzed for Total Petroleum Hydrocarbons (TPH) as gasoline by EPA Method 8015. If soils are encountered that represent a source of petroleum hydrocarbons, these samples will also be analyzed for TPH as gasoline.

Per your request, and to attempt to correlate the "hot spot" of TCE contamination in groundwater at B9 with a source in soil, additional soil samples will be collected from boring B9B between the surface and ten feet below grade. It is anticipated that three additional samples will be collected, based on detector readings during the MIP work.

Per your request, additional borings to the north and south are proposed. B16, as shown on the revised Figure 5, is to be located along the northern perimeter of the Property. B17 is located along the southern perimeter of the Property, within the auto body shop.

At your recommendation, offsite delineation by previously proposed borings B16 through B18 will not be pursued at this time.

Additional Proposed Work: it is additionally proposed that monitoring wells be installed at the locations of some of the borings that are cored and sampled (in addition to and after MIP probing). These locations would include B9B, B14, and B17. These three points would allow triangulation for determination of the direction of groundwater flow.

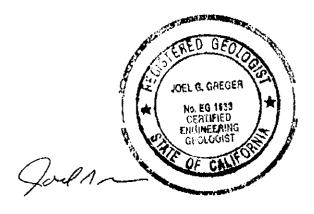
The wells would be completed using one-inch casing (3/4-inch inside diameter) which would be discretely screened (0.010 inch diameter screen) over the identified water-bearing zone. No. 2/12 sand would be placed within the annular space around the well casing to approximately one to one-half foot above the screened zone. Approximately one foot of bentonite would be placed above the sand pack, followed by a well seal constructed of neat cement grout to the surface. A monitoring well box would be placed at the surface. The elevation of the top of the well casing would be determined by a licensed surveyor.

Also, selected soil samples are proposed to be collected from the borings and analyzed for hydrologic parameters, to aid in determining the fate and transport of contaminants.

Should you have any questions about this work plan addendum, please contact me at (510) 593-5392.

Sincerely,

PIERS Environmental Services, Inc.



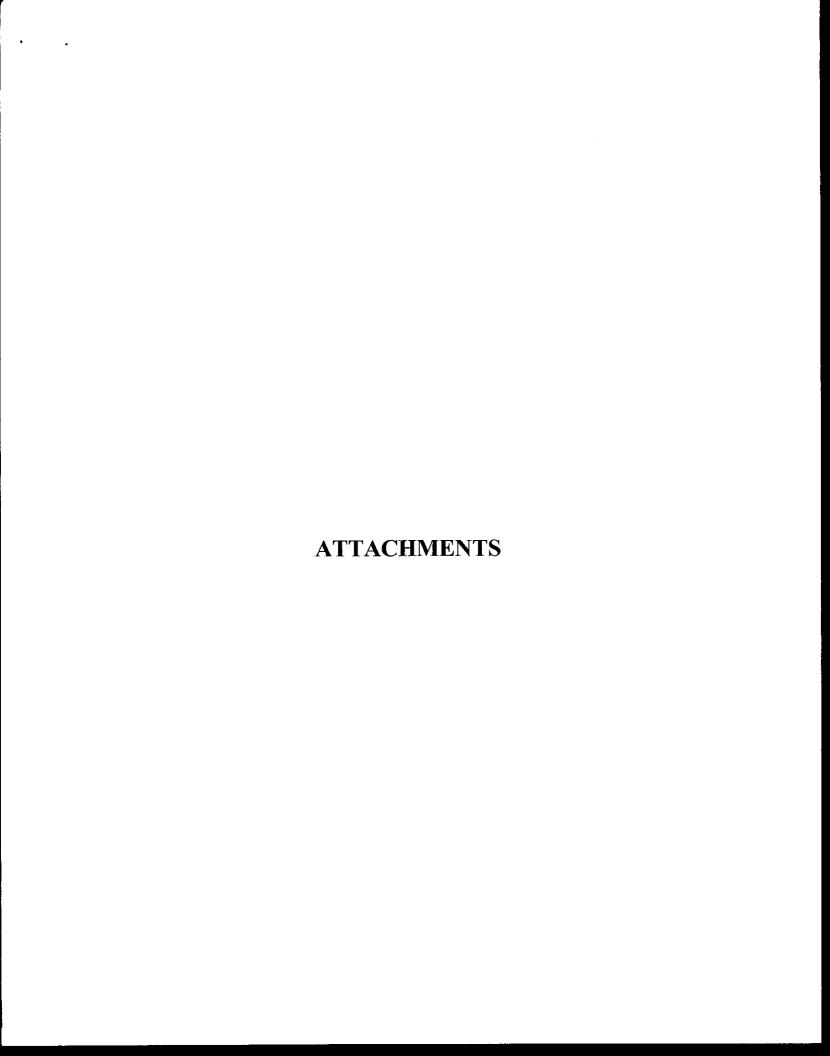
Joel G. Greger CEG # EG1633, REA # 07079

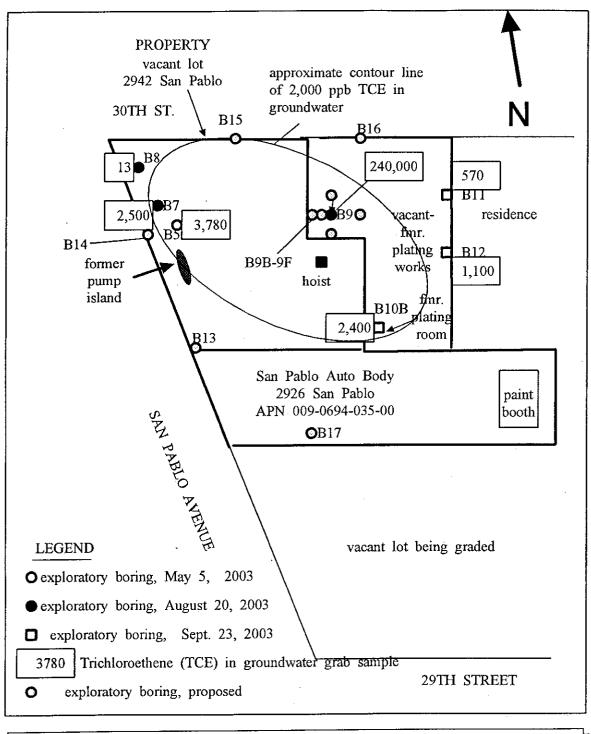
Attachments:

Revised Figure 5 and Table 1C

cc: Mr. James Chung

Mr. Mark Gomez, City of Oakland





## FIGURE 5 PROPOSED BORINGS – ON SITE 2942 SAN PABLO AVENUE OAKLAND, CALIFORNIA SCALE: 1" = 50' MARCH 2004

## TABLE 1C - SOIL ANALYTICAL RESULTS -METALS, pH, CYANIDE 2942 San Pablo Avenue Oakland, California

Samples collected on 8/20/2003.

Sample (depth)	Arsenic (ppm)	Barium (ppm)	Cadmium (ppm)	Chromium (ppm)	Cobalt (ppm)	Copper (ppm)	Lead (ppm)	Molybdenum (ppm)	Nickel (ppm)	Vanadium (ppm)	Zinc (ppm)	Chrome 6 (ppm)	Cyanide (ppm)	pН
(1F == 3	W 1 /	**												
B9 (1.5')	4.2	130	2.3	63.6	10.4	17.6	50.6	1.0	54.6	26.8	71.8	0.130	<0.40	9.56
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B10 (1.5')	5.4	188	5.4	55.6	6.8	72.2	27.2	1.4	346	40.2	650	0.0046	0.44	8.05
												<del>}</del>	100/200	
ESL	5.5/5.5	750/1500	1.7/7.4	58/58	40/80	230/230	200/750	40/40	150/150	110/200	600/600	1.8/1.8	100/500	
Res./Comm.											<u> </u>	<u> </u>		
Background*	0.6-11	133 - 1,400	0.05 - 1.7	23 - 1,579	2.7 - 46.9	9.1 - 96.4	12.4 - 97.1	0.1-9.6	9 - 509	39 - 288	88 - 236			
Dackground.	0.0-11	133 - 1,400	0.03 - 1.7	23 2,373	2., 70.									

## EXPLANATION:

ppm = parts per million

All other CAM 17 metals were non-detectable.

<sup>\*</sup> Range of background concentrations from Bradford et al, 1996.

<sup>\*\*</sup> non-cancer endpoint/cancer endpoint