SEMCO/HK2, INC.
1751 LESLIE STREET • SAN MATEO, CA 94402 • (415) 572-8033 • (415) 572-9734 FAX
GENERAL ENGINEERING & ENVIRONMENTAL CONTRACTORS LICENSE NO. 719103 (A, B, C57, C61-D40, HAZ, ASB

97 APR 10 PM 3:50

April 8, 1997

Ms. Juliet Shin
Senior Hazardous Materials Specialist
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Subject: Addendum to Work Plan for Residence at 845 Pacific Avenue, Alameda, California (SEMCO Project 97-0154)

Dear Ms. Shin:

This is an addendum to the March 21, 1997, work plan for the residence at 845 Pacific Avenue in Alameda, California. The work plan was approved in your letter dated March 27, 1997. However, SEMCO plans the following modifications because power lines are 20 to 25 feet above the location of the proposed borings.

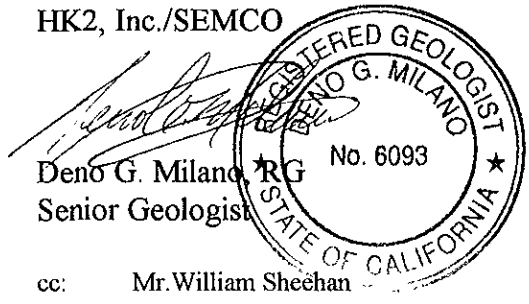
PLANNED MODIFICATIONS

- Use a SIMCO EarthProbe to drill the five borings instead of a hollow-stem auger drilling rig (less mast height).
- Substitute grain size distribution for bulk density and porosity testing because the integrity of samples collected by the EarthProbe is not sufficient to accurately measure soil bulk density and porosity.

All other work will be as outlined in the work plan. Please call if you have any questions.

Sincerely,

HK2, Inc./SEMCO



Deno G. Milano, RG
Senior Geologist

cc: Mr. William Sheehan

97-0154.WP2

SEMCO/HK2, INC.
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GENERAL ENGINEERING & ENVIRONMENTAL CONTRACTORS LICENSE NO. 719103 (A, B, C57, C61-D40, HAZ, ASB

March 21, 1997

Ms. Juliet Shin
Senior Hazardous Materials Specialist
Alameda County Health Care Services Agency (ACHCSA)
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Subject: Work Plan for Site Characterization at 845 Pacific Avenue, Alameda, California (SEMCO Project 97-0154)

Dear Ms. Shin:

This is a work plan to assess the hydrocarbons encountered at 845 Pacific Avenue in Alameda, California. The site location is shown in Figure 1. Figure 2 is a site plan. This work plan was requested in your letter dated October 1, 1996 (copy attached).

BACKGROUND

In September 1996 SEMCO removed one 120 gallon underground gasoline tank and one 750 gallon underground heating oil tank at 845 Pacific Avenue, Alameda, California. The concentration of total petroleum hydrocarbons (TPH) as gasoline (TPH-G) and benzene, toluene, ethylbenzene, and total xylenes (BTEX) in the soil sample collected beneath the former gasoline tank was below the laboratory reporting limit (0.5 mg/kg for TPH-G and 0.005 to 0.010 mg/kg for BTEX). However, soil samples collected beneath the former heating oil tank contained up to 800 mg/kg TPH as diesel (TPH-D), 3.6 mg/kg benzene, 2.5 mg/kg toluene, 2.0 mg/kg ethylbenzene, and 13 mg/kg total xylenes.

Based on the BTEX concentrations measured in the soil samples collected beneath the former heating oil tank, ACHCSA was concerned the tank may have been previously used to store gasoline. Therefore, ACHCSA requested assessment of the hydrocarbons encountered during tank removal. These requests were summarized in the ACHCSA letter dated October 1, 1996.

PLANNED WORK

To assess the extent of hydrocarbons encountered during the removal of the heating oil tank, SEMCO plans to collect and analyze soil and groundwater samples from five borings drilled up to

approximately 15 fbg. The location of each boring is shown in Figure 2 (Proposed Borings PB-2 through PB-5 are approximately 10 feet from the edge of the tank cavity). The borings will be drilled with a hollow-stem auger drilling rig. Soil samples will be continuously collected in PB-1 between approximately 5 and 15 fbg and collected at least every five feet in PB-2 through PB-5. The soil samples will be collected by driving a split-spoon sampler lined with brass tubes. The samples will be described using the Unified Soil Classification System and submitted to a state-certified laboratory. Up to two soil samples from each boring will be analyzed for TPH-G (Modified EPA Method 8015) and TPH-D (Modified EPA Method 8015). The sample from each boring containing the highest TPH-G concentration will also be analyzed for BTEX (EPA Method 8020). Up to two soil samples will be analyzed for bulk density, porosity, vadose zone water content, and total organic carbon to provide site specific data should a future risk assessment become necessary.

Slotted casing will be temporarily installed in each boring to facilitate the collection of fluid level monitoring data and groundwater samples. Depth to groundwater will be measured with an electronic probe. A peristaltic pump connected to polyethylene tubing will be used to collect groundwater samples from each boring. The groundwater samples will be submitted to a state-certified laboratory for analysis of TPH-G, TPH-D, BTEX, and methyl tertiary butyl ether (EPA Method 8020). The sample collected from PB-1 will also be analyzed for total dissolved solids.

Permitting, Decontamination, Waste Disposal, and Reporting

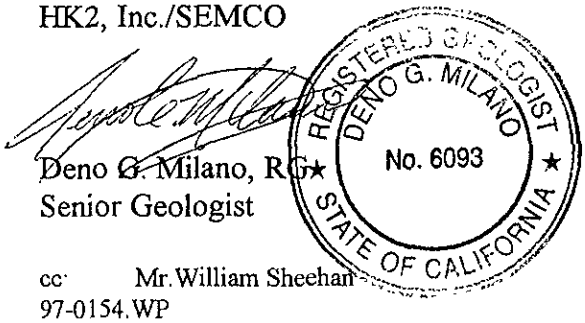
Boring locations will be permitted and cleared by utility markout before they are drilled. Drilling augers will be steamed cleaned and soil and groundwater sampling equipment will be cleaned with a phosphate free TSP solution and rinsed with water before each boring is drilled or sample collected. New factory sealed casing will be used for the temporary casing.

The borings will be backfilled with neat cement after the temporary casing is removed. Soil cuttings and equipment wash and rinse water will placed in separate 55 gallon drums which will be stored onsite for less than 60 days. The drummed wastes will be transported to an appropriate disposal facility based on the laboratory results of the soil and groundwater samples. The soil borings will be drilled within 30 days of ACHCSA approval of the work plan. A report summarizing the activities will be submitted to ACHCSA within 45 days of the date the borings are drilled.

Please call if you have any questions.

Sincerely,

HK2, Inc./SEMCO



Deno G. Milano, RG
Senior Geologist

cc: Mr. William Sheehan
97-0154.WP

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION (LOP)
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
FAX (510) 337-9335

October 1, 1996

William & Ed Sheehan
1236 Bay St.
Alameda, CA 94501

STID 6063

Re: Investigations at 845 Pacific Avenue, Alameda, California 94501

Dear William & Ed Sheehan,

In September 1996, two underground storage tanks (USTs) were removed from the above site: one 750-gallon heating oil UST and one 120-gallon gasoline UST. The one soil sample collected from beneath the gasoline UST was analyzed for Total Petroleum Hydrocarbons as gasoline (TPHg), total lead, and benzene, toluene, ethylbenzene, and total xylenes (BTEX). The two soil samples collected from beneath the heating oil UST were analyzed for TPH as diesel (TPHd), BTEX, and heavy metals. Analysis of the soil sample collected from beneath the gasoline UST only identified lead at 25 parts per million (ppm) which is below human health protective threshold levels. Analysis of soil samples collected from beneath the heating oil UST identified up to 800 ppm TPHd, 3.6ppm benzene, 2.5ppm toluene, 2.0ppm ethylbenzene, and 13ppm total xylenes. The metal concentrations identified in these samples were all below human health protective threshold levels.

The elevated levels of BTEX identified in the soil samples collected from the 750-gallon heating oil UST pit are generally not associated with heating oil, and raises some questions as to whether the 750-gallon UST may have been used for other purposes, such as the storage of gasoline. Additionally, the levels of benzene identified in the soil samples collected from the 750-gallon UST pit exceed the human health protective levels listed in the Tier 1 table of the American Society for Testing and Materials' Risk-Based Corrective Action guidelines (ASTM RBCA; Designation: E 1739-95).

Based on the above information, additional soil and groundwater investigations will be required at this site, per Article 11, Title 23 California Code of Regulations, and the attached Regional Water Quality Control Board (RWQCB) interim guidelines. This office is requesting that you submit a workplan addressing the delineation of the extent and severity of the observed soil contamination, and investigations to determine whether groundwater beneath the site has been impacted. Based on the results of further characterization of soil and groundwater contamination at the site, and on any potential remediation employed at the site, this office may be requesting that a risk assessment be conducted to determine whether any remaining soil or groundwater contaminant concentrations may pose a risk to human health. The workplan should

be submitted to this office **within 60 days of the date of this letter (i.e., by November 27, 1996)**.

This Department will oversee the assessment and remediation of your site. Our oversight will include the review of and comment on work proposals and technical guidance on appropriate investigative approaches and monitoring schedules. The issuance of well drilling permits, however, will be through the Alameda County Flood Control and Water Conservation District, Zone 7, in Pleasanton. The RWQCB may choose to take over as lead agency if it is determined, following the completion of the initial assessment, that there has been a substantial impact to ground water.

In order to properly conduct a site investigation, you are required to obtain professional services of a reputable environmental consultant. All reports and proposals must be submitted under seal of a California-Registered Geologist, -Certified Engineering Geologist, or -Registered Civil Engineer.

Per our earlier conversations, the State Water Resources Control Board has a Petroleum Underground Storage Tank Cleanup Fund available to sites to assist in investigations and cleanup. This office encourages you to look into applying to this fund. The address and phone number of the trust fund is:

State Water Resources Control Board
Division of Clean Water Programs
UST Cleanup Fund Program
2014 T Street, Ste 130
P.O. Box 944212
Sacramento, CA 94244-2120
(916) 227-4307

Any questions regarding the State Trust Fund should be directed to Cheryl Gordon at (916) 227-4539. You can contact me with any other questions at (510) 567-6763.

Sincerely,

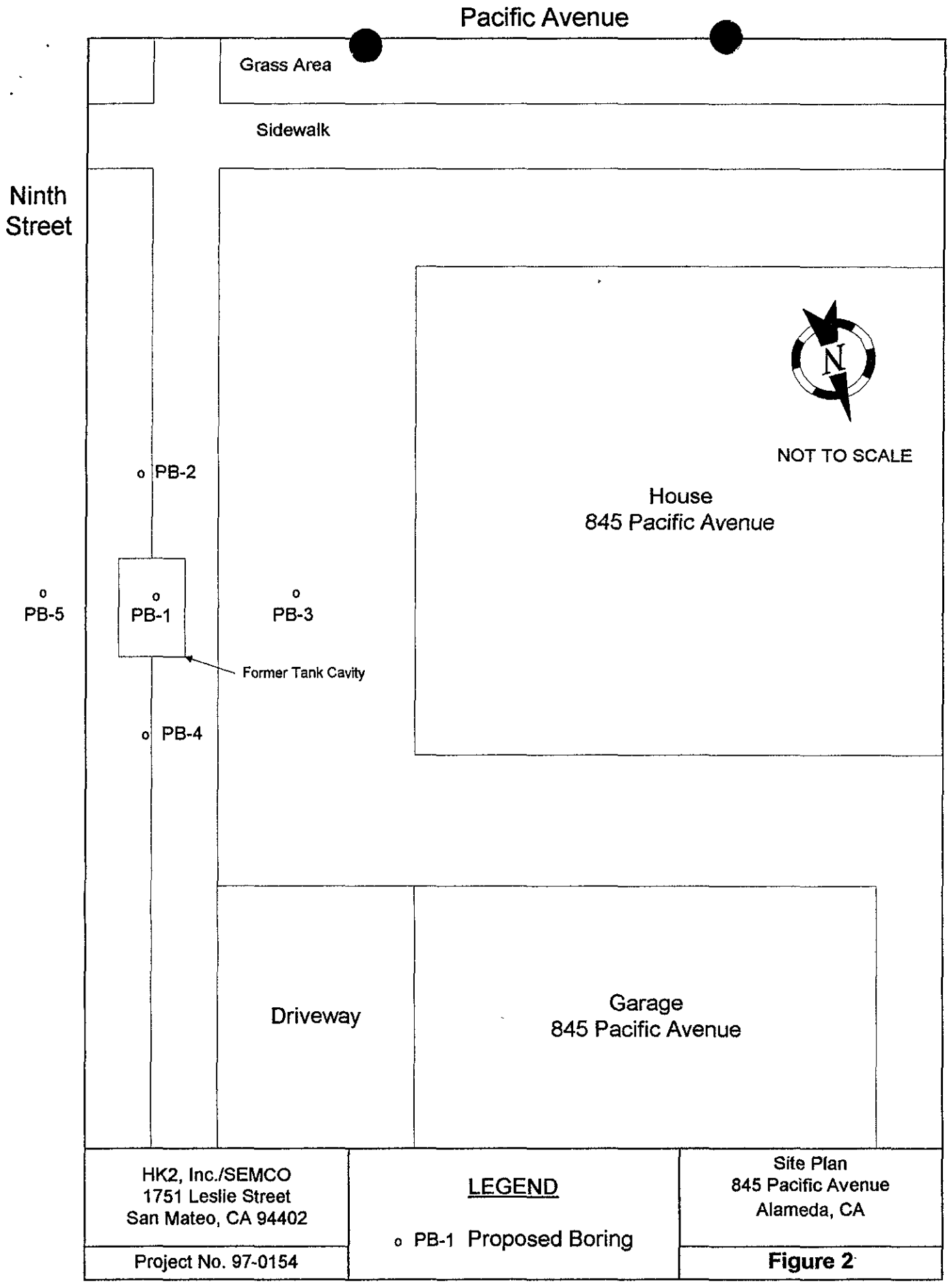
Juliet Shin
Senior Hazardous Materials Specialist

ATTACHMENT

cc: Mark Dysert
HK2, Inc./SEMCO
1751 Leslie St.
San Mateo, CA 94402

Acting Chief

Figure 1. Site Location Map


Pacific Avenue
Grass Area
Sidewalk
Ninth Street
N
NOT TO SCALE
PB-2
House
845 Pacific Avenue
PB-5
PB-1
PB-3
Former Tank Cavity
PB-4
Driveway
Garage
845 Pacific Avenue
HK2, Inc./SEMCO
1751 Leslie Street
San Mateo, CA 94402
LEGEND
PB-1 Proposed Boring
Site Plan
845 Pacific Avenue
Alameda, CA
Project No. 97-0154
Figure 2