ALL ENVIRONMENTAL, INC.
Environmental Engineering & Construction

SUB-SURFACE INVESTIGATION WORK PLAN
67 King Avenue
Piedmont, CA 94611

NOT implemented

Apr 1994

Prepared For

Bob Leefeldt
9 Upper Road West
Ross, CA 94957

Prepared By

All Environmental, Inc.
2641 Crow Canyon Road, Suite 5
San Ramon, CA 94583

4/26/94

April 12, 1994

Corporate Headquarters:
2641 Crow Canyon Rd., #5
San Ramon, CA 94583
(510) 820-3224

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5031 Pacific Coast Hwy., #178
Torrance, CA 90505
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1.0 INTRODUCTION

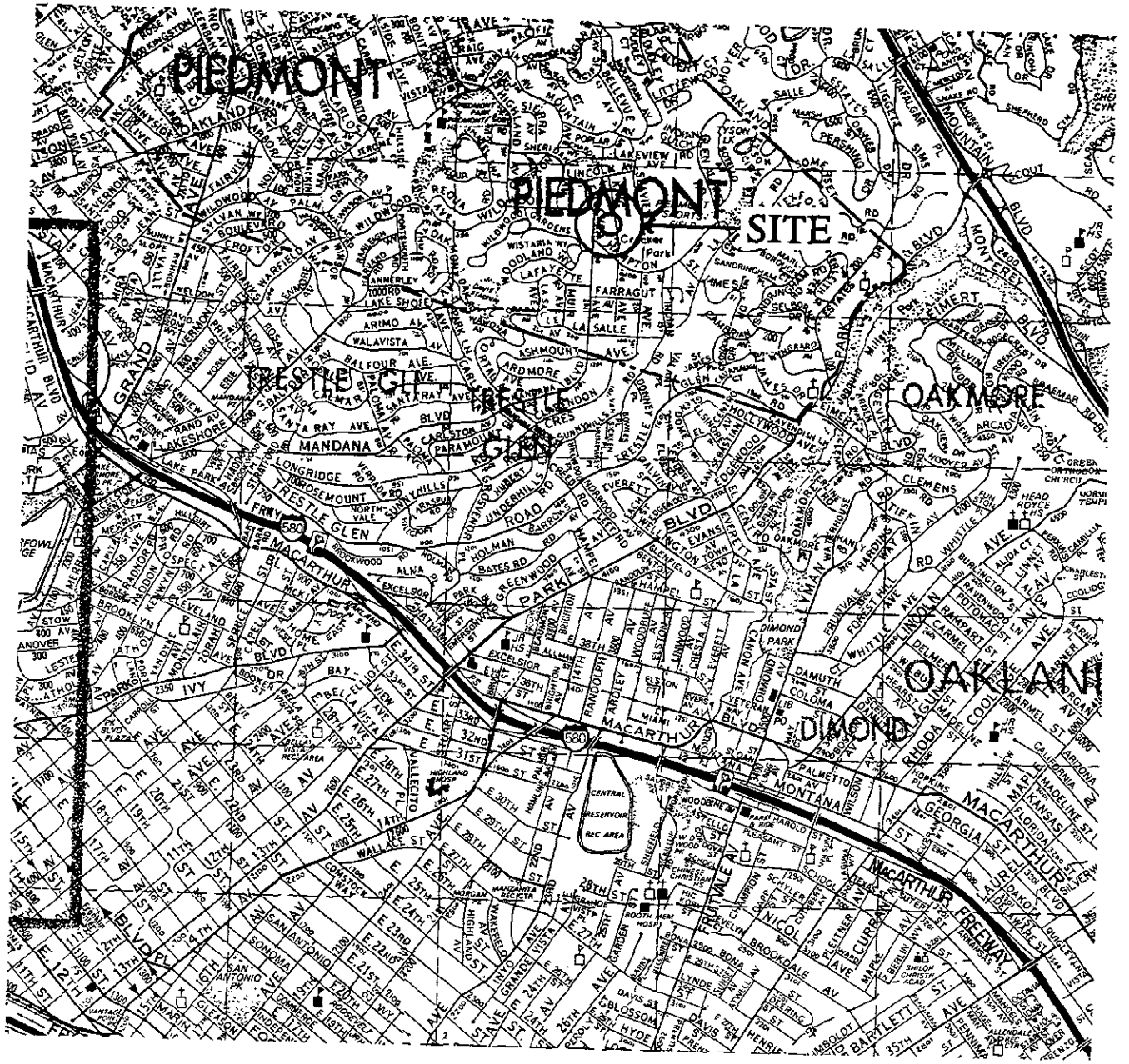
All Environmental, Inc. (AEI) has prepared this workplan on behalf of Bob Leefeldt, in response to his request for a soil investigation at 67 King Avenue in Piedmont, California. The proposed site assessment activities have been initiated by the property owner in accordance with the Regional Water Quality Control Board's requirements. AEI proposes three soil borings to adequately define the extent of the soil contamination.

This subsurface investigation would include borehole "logging", soil sampling and laboratory analyses. Prior to the commencement of field activities, this work plan will be approved by the Alameda County Health Care Services Agency, and the property owners will be notified verbally.

2.0 SITE DESCRIPTION AND BACKGROUND

The site is located in a residential neighborhood on the west side of King Avenue less than one mile southwest of Highway 13 and more than six miles northeast of the Alameda Estuary (Figure 1: Site Location Map).

The property under investigation is adjacent to the Crocker Community Park on the south side of the property. A 1,500 gallon underground storage tank is located on the southeast corner of the property, beneath a large old oak tree. The underground storage tank was used for home heating purposes in the early 1900's and stored diesel fuel. (Figure 2: Site & Soil Boring Location Map) The tank was filled with concrete slurry and closed in place at the residential property located at 67 King Avenue in Piedmont, California. The native soil below the diesel fuel tank appeared to be stained and had a diesel odor. The native soil was sampled and results of laboratory analysis yielded concentrations up to 8200 ppm of diesel. See Tank Removal Final Report in Appendix A.



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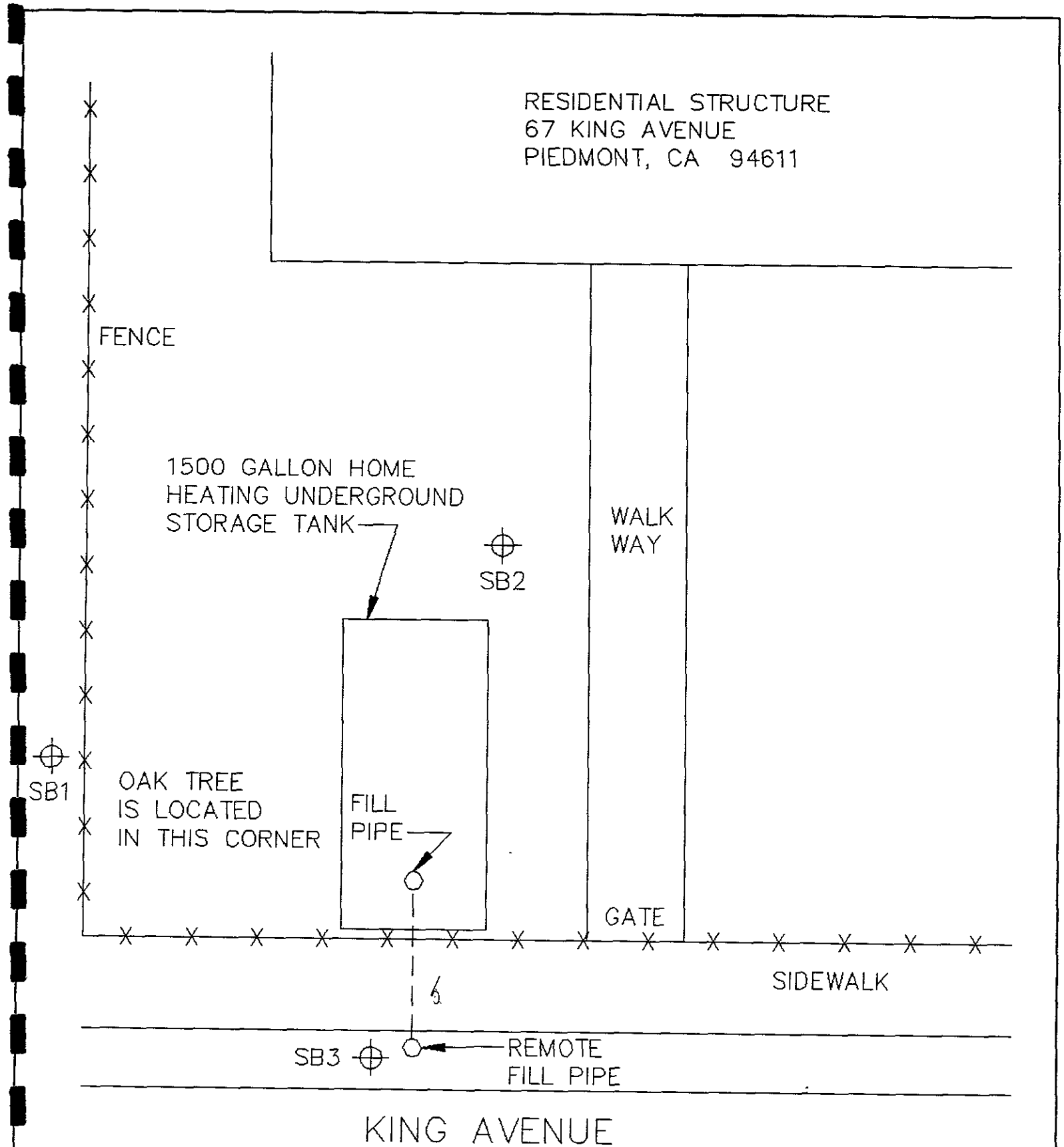
From Thomas Bros. Map – 1993

ALL ENVIRONMENTAL, INC. 2641 CROW CANYON RD, SAN RAMON		
SCALE: 1 INCH = 2,200 FT	APPROVED BY:	DRAWN BY: S.P.
DATE: 2/18/94		REVISED: S.P.
SITE LOCATION MAP		
67 KING AVENUE		DRAWING NUMBER: FIGURE 1



ALL ENVIRONMENTAL, INC. 2641 CROW CANYON RD, SAN RAMON		
SCALE: NTS	APPROVED BY:	DRAWN BY: C.H.
DATE: 4/20/94		REVISED: C.H.
SITE & SOIL BORING LOCATION MAP		
67 KING AVENUE		DRAWING NUMBER: FIGURE 2

3.0 SOIL BORING INVESTIGATION

The plan for site investigation includes hand augering, soil sampling and laboratory analyses. TPH-Diesel and BTEX contaminated soils were identified from below the underground storage tank.

The focus of this investigation is to determine the possible migration of hydrocarbon contamination in the soil with variation of depth. One soil boring will be advanced at or near an assumed down gradient location within 10 feet of the perimeter of the underground storage tank. A soil boring will be placed in the park on the south side of the concrete wall. The third soil boring will be placed on the east side of the concrete wall in between the sidewalk and the street. The specific locations of these soil borings are shown on the Soil Boring Location Map (Figure 2).

Hand augering will be performed using an AMS Multi-Stage Core Soil Sampler. Soil samples, taken every 4 feet, will be obtained using the hammer attachment to drive the core tip and brass tube into the soil at the bottom of the boring. Soil borings will extend to a depth of 12 feet or until refusal.

The soil boring will be continuously logged onsite using the Unified Soil Classification System. The samples will be collected for visual classification and chemical analysis in two inch brass tubes. A total of three soil samples from each boring will be analyzed at a state certified laboratory.

Samples designated for laboratory analysis will be sealed on the ends with aluminum foil, plastic caps, and tape. The samples will be placed in an ice chest with dry ice and delivered to a state certified laboratory with chain of custody documents. All soil samples will be analyzed for TPH-diesel (EPA 3550/8015) and BTEX (EPA 8020).

A detailed description of sample collection and handling procedures by Priority Labs is appended to this work plan (Appendix C: Quality Assurance and Quality Control Plan).

Cuttings generated during drilling will be stored onsite in 55 gallon drums. Onsite treatment or offsite 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.

4.0 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 which conforms to Part 1910.120 (i) (2) of 29 CFR will be on site at all times during the performance of this project. (Appendix D: Health & Safety Plan)

A working area will be established with barricades and warning tape to delineate the zone where hard hats and steel-toe 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 onsite.

5.0 ESTIMATED SCHEDULE

Upon acceptance of this workplan by the Alameda County Health Services Department, work will commence within a two week period. The Alameda County Health Services Department will be given adequate notification of the scheduled day of drilling. Laboratory analytical results will be obtained within two weeks of collection. The final report will be prepared and copies will be delivered to the Alameda County Health Services Department and the Regional Water Quality Control Board. A table describing the project schedule is as follows:

Week 1:	Workplan Preparation
Week 2 & 3:	Review of Workplan by the ACHCSD
Week 4:	Drilling and Laboratory Analysis
Week 5:	Preparation of Final Report

6.0 FINAL REPORT

A complete and final report of methods, findings, and conclusions from work proposed herein will be submitted to the client for forwarding to the appropriate agencies. The report will be submitted under the seal of a State Registered Geologist and a State Registered Chemical Engineer, Mr. Guy Roy (#3187). Mr. Roy and the staff of All Environmental, Inc. have implemented hundreds of tank removal, site investigation, and remediation projects throughout California.

7.0 REPORT LIMITATIONS

This report presents a summary of work completed by All Environmental, Inc., including observations and descriptions of site conditions encountered. Where appropriate, it includes analytical results for samples taken during the course of the work. The number and location of samples are chosen to provide required information, but it cannot be assumed that they are representative of areas not sampled. All conclusions and/or recommendations are based on these analyses and observations, and the governing regulations. Conclusions beyond those stated and reported herein should not be inferred from this document.

All Environmental, Inc. warrants that all services were performed in accordance with generally accepted practices, in the environmental engineering and construction field, which existed at the time and location of the work.

APPENDIX A

TANK CLOSURE FINAL REPORT

ALL ENVIRONMENTAL, INC.
Environmental Engineering & Construction
2641 Crow Canyon Rd., Ste. 5 • San Ramon, CA 94583 • (510) 820-3224

UNDERGROUND STORAGE TANK CLOSURE
FINAL REPORT
67 King Avenue
Piedmont, CA 94611

Prepared for:

Bob Leefeldt
9 Upper Road West
Ross, CA 94957

Prepared by:

All Environmental, Inc.
2641 Crow Canyon Road, Suite 5
San Ramon, CA 94583

February 11, 1994

FAX: (510) 838-2687

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1.0 INTRODUCTION

All Environmental Inc. (AEI) has prepared this final report to document the recent underground storage tank (UST) closure performed at 67 King Avenue in Piedmont, California. (Figure 1: Site Location Map). There was one UST on the property, a single 1,500 gallon home heating diesel fuel tank, which was closed on this site. The tank was located underground on the southeastern corner of the property, beneath a large old oak tree. (Figure 2: Site and Sample Location Map)

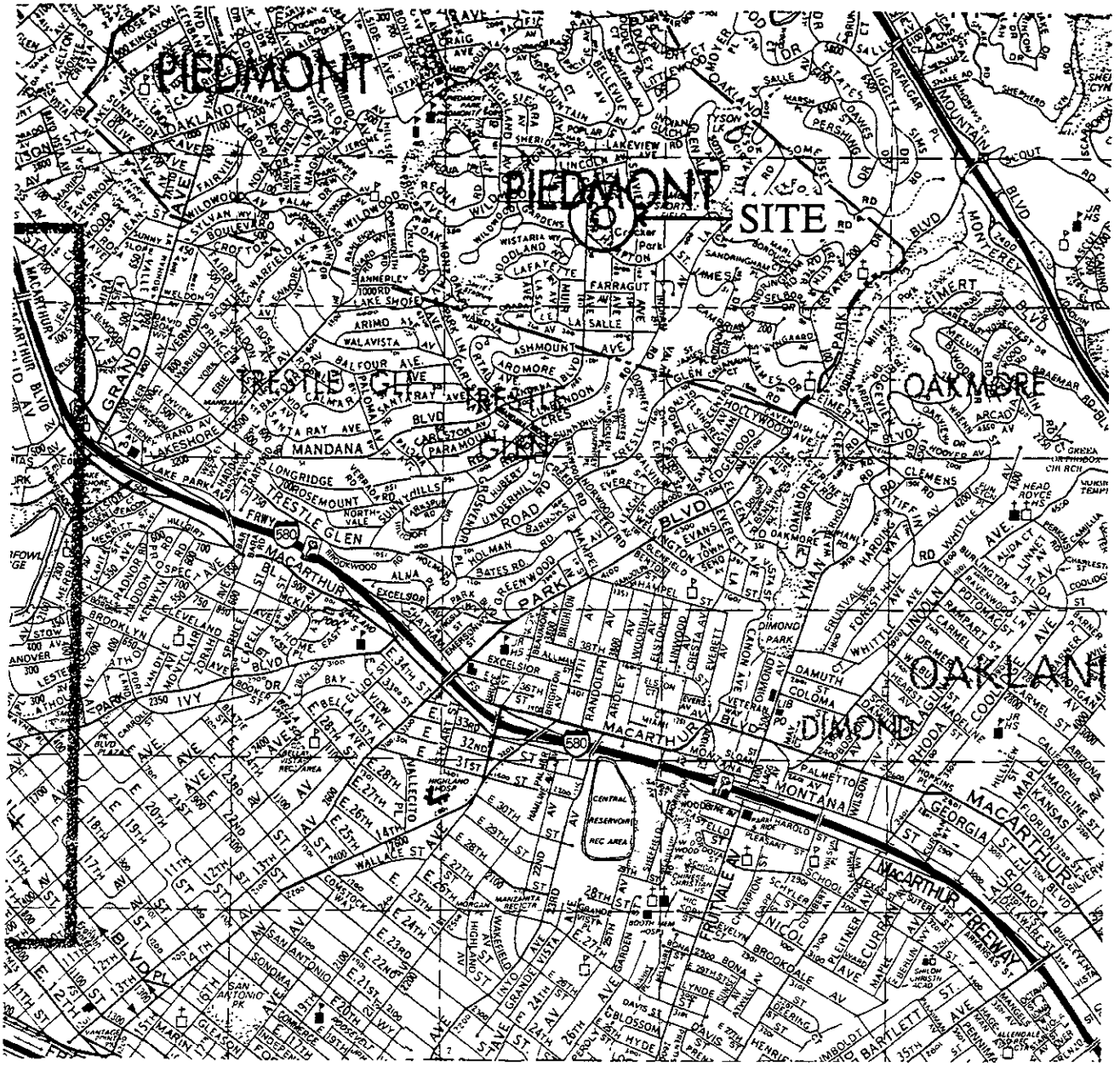
AEI was contracted, by the previous property owner (Bob Leefeldt), to obtain all necessary permits, remove residual liquids from the UST, sample the native soil below the UST, triple rinse the UST, and fill the tank with a portland slurry.

2.0 PERMITS AND NOTIFICATIONS

An Alameda County Health Care Services Agency Underground Tank Closure Permit was completed and approved by Brian Oliva, an inspector initially assigned to this case. A Copy of the permit is contained in Appendix A: Permits and Notifications.

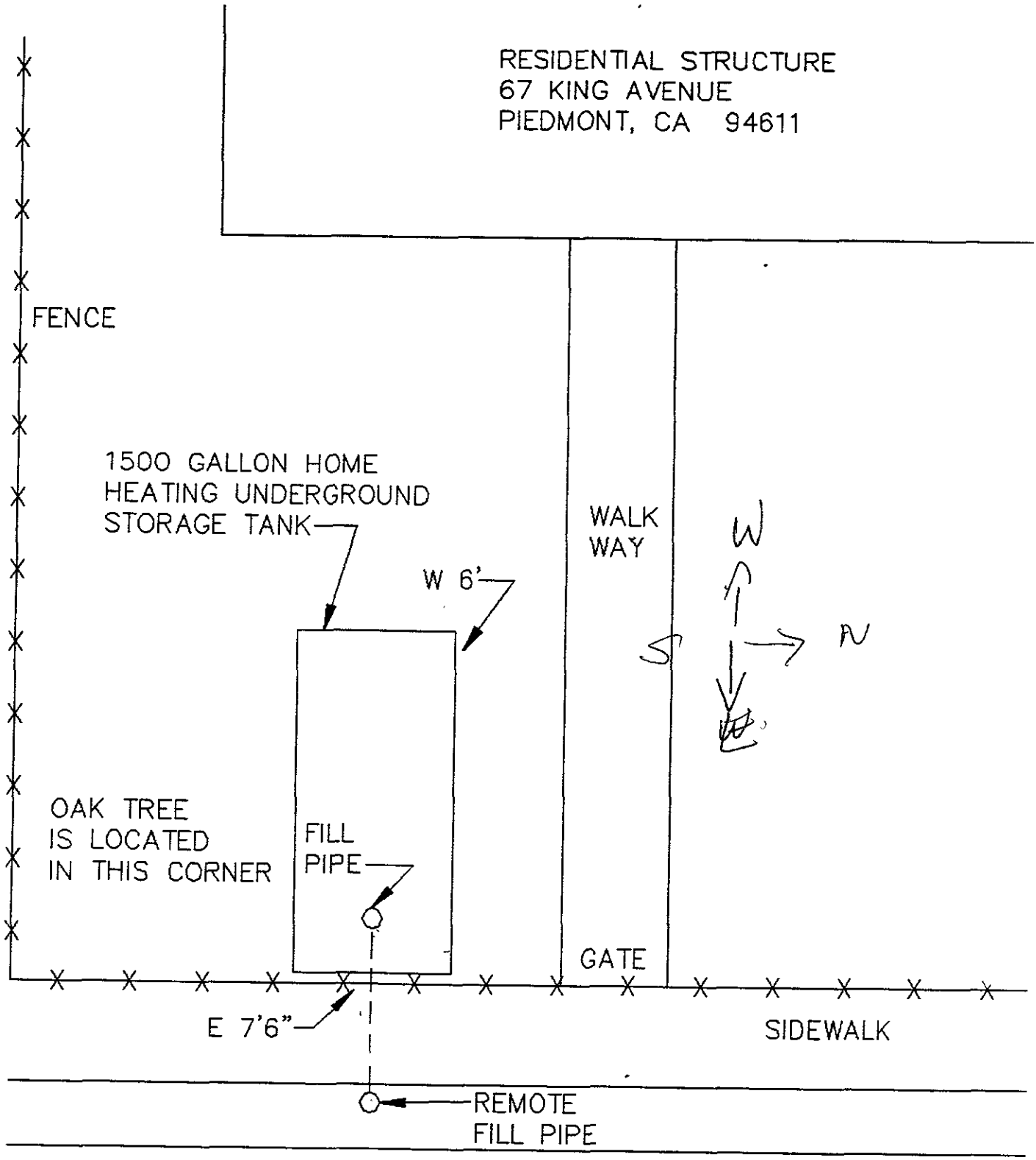
3.0 SOIL SAMPLING AND ANALYSES

Soil samples (E 7'6" & W 6') were collected from below the tank to confirm that there was not a release of home heating diesel fuel into the soil or groundwater. All Environmental performed two soil borings using a hand auger that was directed from each end of the tank, at an angel to below the tank bottom. Hand augering was performed using an AMS Multi-stage Core Soil Sampler. The soil samples were obtained using the hammer attachment to



From Thomas Bros. Map – 1993

ALL ENVIRONMENTAL, INC. 2641 CROW CANYON RD, SAN RAMON		
SCALE: 1 INCH = 2,200 FT	APPROVED BY:	DRAWN BY: S.P.
DATE: 2/18/94		REVISED: S.P.
SITE LOCATION MAP		
67 KING AVENUE		DRAWING NUMBER: FIGURE 1



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ALL ENVIRONMENTAL, INC. 2641 CROW CANYON RD, SAN RAMON		
SCALE: NTS	APPROVED BY:	DRAWN BY: G.H.
DATE: 2/10/94		REVISED: G.H.
SITE AND SAMPLE LOCATION MAP		
67 KING AVENUE		DRAWING NUMBER: FIGURE 2

drive the core tip and the brass tubes into the soil at the bottom of the borings. The location of the soil samples are illustrated on the Site and Sample Location Map.

The soil samples were secured using aluminum foil, teflon caps and sealed with duct tape. The samples were put on ice and transported, under chain of custody procedures to the All Environmental office. The samples were placed in a refrigerator, until the samples were picked up by Priority Environmental Labs personnel.

The samples were taken to Priority Environmental Labs (State Certification # 1708) for chemical analysis. All soil samples were analyzed for Total Petroleum Hydrocarbons (TPH) as diesel (EPA method 3550/8015) with Benzene, Toluene, Ethylbenzene, Xylenes (BTEX) distinction (EPA method 8020). The results of soil sample analyses are tabulated below.

Table 1: Soil Sample Analyses

Sample I.D.	Diesel (mg/kg)	Benzene (ug/kg)	Toluene (ug/kg)	Ethyl Benzene (ug/kg)	Total Xylenes (ug/kg)
E 7'6"	1300	9.8	18	23	92
W 6'	8200	13	30	38	180

(mg/kg) = ppm or parts per million

(ug/kg) = ppb or parts per billion

Copies of the analytical results and chain of custody are located in Appendix C: Sample Analytical Documentation.

4.0 PRODUCT REMOVAL AND TRIPLE RINSING

On the morning of November 10, 1993, the tank was emptied and approximately 1400 gallons of diesel fuel were removed from the tank with a Waste Oil Recovery Systems, Inc. vacuum truck.

On January 29, 1994, All Environmental triple rinsed the tank with 750 gallons of high pressure and high temperature water and detergent. This cleaning liquid was removed from the tank with a Waste Oil Recovery Systems, Inc. vacuum truck.

On both days the vacuum truck transported the liquid to the Demenno-Kerdoon facility located at 2000 N. Alameda in Compton, California, for disposal.

5.0 RINSATE SAMPLING AND ANALYSES

Following the triple rinsing of the interior of the tank, a sample of the rinsate material was secured in a 40 ml vile. The sample was put on ice and transported, under chain of custody procedures, to Priority Environmental Labs in Milpitas, California. The water sample was analyzed for TPH-diesel (EPA 3550/8015) and BTEX (EPA 8020). The results of the rinsate sample analyses are illustrated in the following table.

Table 2: Rinsate Sample Analyses

Sample I.D.	Diesel (ug/kg)	Benzene (ug/kg)	Toluene (ug/kg)	Ethyl Benzene (ug/kg)	Total Xylenes (ug/kg)
TRW	450	77	60	35	210

(ug/kg) = ppb or parts per billion

Copies of the analytical results and chain of custody are located in Appendix C: Sample Analytical Documentation.

6.0 FILLING TANK WITH CONCRETE

On February 4, 1994, the tank was filled with a 4SK sand concrete slurry. The tank was filled through the fill pipe, located directly above the tank.

7.0 DISCUSSION & CONCLUSIONS

One 1,500 gallon home heating diesel underground storage tank was filled with concrete slurry and closed in place at the residential property located at 67 King Avenue in Piedmont, California. The native soil below the diesel fuel tank appeared to be stained and had a diesel odor. The native soil was sampled and results of laboratory analysis yielded concentrations up to 8200 ppm of diesel. An Underground Storage Tank Unauthorized Release (Leak)/ Contamination Site Report was filled out and filed with the Alameda County Health Care Services Agency. A copy of this form is in Appendix D.

Madhulla Logan of the Alameda County Health Care Services Agency has requested the development of a workplan that includes a sampling plan and a remediation plan. The sampling plan will be used to determine the vertical and horizontal extent of soil contamination on the property due to the fuel oil tank. The remediation plan will be used to mitigate any discovered contamination.

8.0 REPORT LIMITATIONS

This report presents a summary of work completed by All Environmental, Inc., including observations and descriptions of site conditions encountered. Where appropriate, it includes analytical results for samples taken during the course of the work. The number and location of samples are chosen to provide required information, but it cannot be assumed that they are representative of areas not sampled. All conclusions and/or recommendations are based on these analyses and observations, and the governing regulations. Conclusions beyond those stated and reported herein should not be inferred from this document.

All Environmental, Inc. warrants that all services were performed in accordance with generally accepted practices, in the environmental engineering and construction field, which existed at the time and location of the work.

APPENDIX A

PERMITS AND NOTIFICATIONS

ALAMEDA COUNTY HEALTH CARE SERVICES AGENCY
DEPARTMENT OF ENVIRONMENTAL HEALTH
HAZARDOUS MATERIALS DIVISION
80 SWAN WAY, ROOM 200
OAKLAND, CA 94621
PHONE NO. 510/271-4320

ACCEPTED

Underground Storage Tank Closure Permit Application
Alameda County Division of Hazardous Materials
80 Swan Way, Suite 200
Oakland, CA 94621
Telephone: (510) 271-4320

These closure/removal plans have been received and found to be acceptable and essentially meet the requirements of State and local Health laws. Changes to your closure plans indicated by this department are to assure compliance with State and local laws. The project proponent is not released for liability of any required building permits for construction/demolition.

One copy of the accepted plans must be on the job site at all times available to all contractors and craftsmen involved with the removal.

Any change in or alterations of these plans and specifications must be submitted to this Department and to the Fire and Building Inspections Department to determine if such changes meet the requirements of State and local laws.

Notify this Department at least 72 hours prior to the following required inspections: *

Clean
Removal of Tank(s) and Piping
Sampling
Final Inspection

Issuance of a permit to operate, b) permanent site closure, is dependant on compliance with accepted plans and all applicable laws and regulations.

*THERE IS A FINANCIAL PENALTY FOR NOT OBTAINING THESE INSPECTIONS

Contact Specialists

(1) Alameda Fire Dept
(2) Alameda Building Dept
(3) Alameda Planning Dept
(4) Alameda Public Works Dept
(5) Alameda Health & Safety Dept

UNDERGROUND TANK CLOSURE PLAN

*** * * Complete according to attached instructions * * ***

1. Business Name _____

   Business Owner Bob Leefeldt

2. Site Address 67 King Avenue

   City Piedmont Zip 94611 Phone 658-6767

3. Mailing Address 67 King Avenue

   City Piedmont Zip 94611 Phone 658-6767

4. Land Owner Bob Leefeldt

   Address 67 King Avenue City, State Piedmont, CA Zip 94611

5. Generator name under which tank will be manifested Bob Leefeldt

   _____

   EPA I.D. No. under which tank will be manifested N/A

6. Contractor All Environmental, Inc.

Address 2641 Crow Canyon Road, Suite 5

City San Ramon, CA 94583 Phone (510) 820-3224

License Type* A ID# 654919

*Effective January 1, 1992, Business and Professional Code Section 7058.7 requires prime contractors to also hold Hazardous Waste Certification issued by the State Contractors License Board. Indicate that the certificate has been received, in addition, to holding the appropriate contractors license type.

7. Consultant All Environmental, Inc.

Address 2641 Crow Canyon Road, Suite 5

City San Ramon, CA Phone (510) 820-3224

8. Contact Person for Investigation

Name Craig Hertz Title Vice President

Phone (510) 820-3224

9. Number of tanks being closed under this plan 1

Length of piping being removed under this plan 0

Total number of tanks at facility 1

10. State Registered Hazardous Waste Transporters/Facilities (see instructions).

** Underground tanks are hazardous waste and must be handled ** as hazardous waste

a) Product/Residual Sludge/Rinsate Transporter

Name Waste Oil Recovery EPA I.D. No. CAD000626515

Hauler License No. 309033 License Exp. Date 10/94

Address 6401 Leona Street

City Oakland, State CA Zip 94605

b) Product/Residual Sludge/Rinsate Disposal Site

Name Demenno-Kerdoon EPA I.D. No. CAT080013352

Address 2000 N. Alameda

City Compton State CA Zip

c) Tank and Piping Transporter

Name N/A EPA I.D. No. _____

Hauler License No. _____ License Exp. Date _____

Address _____

City _____ State _____ Zip _____

d) Tank and Piping Disposal Site

Name N/A EPA I.D. No. _____

Address _____

City _____ State _____ Zip _____

11. Experienced Sample Collector

Name Steve DeHope

Company All Environmental, Inc.

Address 2641 Crow Canyon Road, Suite 5

City San Ramon State CA Zip 94583 Phone 820-3224

12. Laboratory

Name Priority Environmental Labs

Address 1764 Houret Ct.

City Milpitas State CA Zip 95035

State Certification No. 1708

13. Have tanks or pipes leaked in the past? Yes [ ] No [X]

If yes, describe. Not yet known.

14. Describe methods to be used for rendering tank inert

N/A Tank will be closed in place

Before tanks are pumped out and inerted, all associated piping must be flushed out into the tanks. All accessible associated piping must then be removed. Inaccessible piping must be plugged.

The Bay Area Air Quality Management District (771-6000), along with local Fire and Building Departments, must also be contacted for tank removal permits. Fire departments typically require the use of explosion proof combustible gas meters to verify tank inertness. **It is the contractor's responsibility to bring a working combustible gas meter on site to verify tank inertness.**

15. Tank History and Sampling Information

Tank		Material to be sampled (tank contents, soil, ground-water, etc.)	Location and Depth of Samples
Capacity	Use History (see instructions)		
1500 gal	Home heating fuel	soil water, if encountered	Native soil at 8 feet in depth

One soil sample must be collected for every 20 feet of piping that is removed. A ground water sample must be collected should any ground water be present in the excavation.

Excavated/Stockpiled Soil	
Stockpiled Soil Volume (Estimated) N/A	Sampling Plan

Stockpiled soil must be placed on bermed plastic and must be completely covered by plastic sheeting.

16. Chemical methods and associated detection limits to be used for analyzing samples

The Tri-Regional Board recommended minimum verification analyses and practical quantitation reporting limits should be followed. See attached Table 2.

Contaminant Sought	EPA, DHS, or Other Sample Preparation Method Number	EPA, DHS, or Other Analysis Method Number	Method Detection Limit
TPH diesel	3550	8015	1 ppm
BTEX		8020	5 ppb

17. Submit Site Health and Safety Plan (See Instructions)

18. Submit Worker's Compensation Certificate copy

Name of Insurer State Fund

19. Submit Plot Plan (See Instructions)

20. Enclose Deposit (See Instructions)

21. **Report any leaks or contamination to this office within 5 days of discovery.** The report shall be made on an Underground Storage Tank Unauthorized Leak/Contamination Site Report form. (see Instructions)

22. Submit a closure report to this office within 60 days of the tank removal. This report must contain all the information listed in item 22 of the instructions.

I declare that to the best of my knowledge and belief the statements and information provided above are correct and true.

I understand that information in addition to that provided above may be needed in order to obtain an approval from the Department of Environmental Health and that no work is to begin on this project until this plan is approved.

I understand that any changes in design, materials or equipment will void this plan if prior approval is not obtained.

I understand that all work performed during this project will be done in compliance with all applicable OSHA (Occupational Safety and Health Administration) requirements concerning personnel health and safety. I understand that site and worker safety are solely the responsibility of the property owner or his agent and that this responsibility is not shared nor assumed by the County of Alameda.

Once I have received my stamped, accepted closure plan, I will contact the project Hazardous Materials Specialist at least three working days in advance of site work to schedule the required inspections.

Signature of Contractor

Name (please type) All Environmental, Inc. Craig Hertz

Signature Craig Hertz

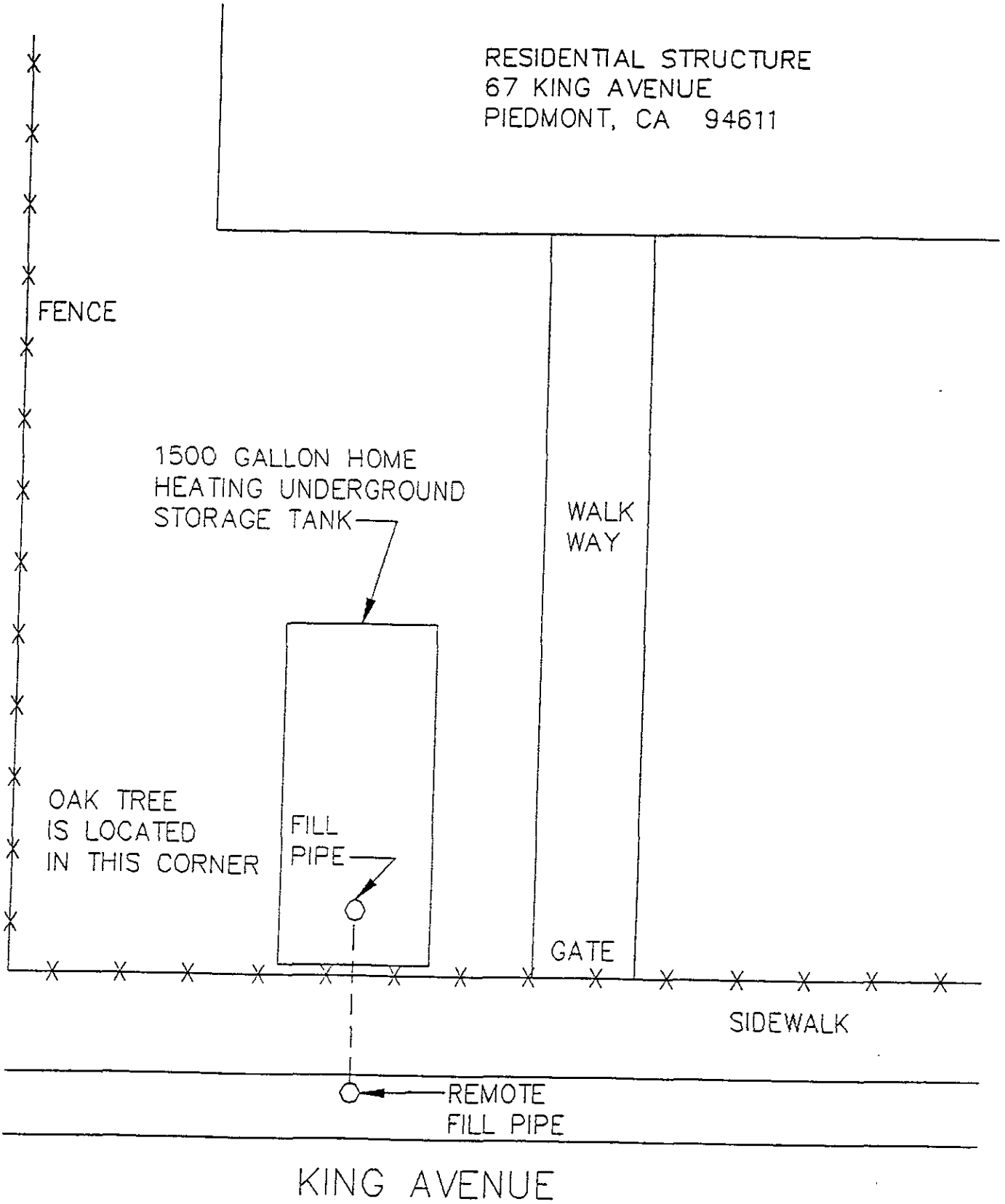
Date 11/29/93

Signature of Site Owner or Operator

Name (please type) Craig Hertz Agent for Owner

Signature Craig Hertz

Date 11/29/93



ALL ENVIRONMENTAL, INC.
2641 CROW CANYON RD, SAN RAMON

SCALE: NTS	APPROVED BY:	DRAWN BY: C.H.
DATE: 11/29/93		REVISED: C.H.

SITE MAP

APPENDIX B

SITE HEALTH AND SAFETY PLAN

ALL ENVIRONMENTAL, INC.
Environmental Engineering & Construction
2641 Crow Canyon Rd., Ste. 5 • San Ramon, CA 94583 • (510) 820-3224

HEALTH AND SAFETY PLAN

Prepared for:

Bob Leefeldt
67 King Avenue
Piedmont, CA 94611

FAX: (510) 838-2687

A. INTRODUCTION

This Site Specific Health and Safety Plan is written for the tank removal project located at the residential property, owned by Bob Leefeldt. All job site personnel will follow CAL OSHA safe operating practices as outlined in 29 CFR 1910 and 1926, as well as established guidelines set forth by All Environmental, Inc. or their respective companies.

B. WORK DESCRIPTION

Prepared by: Craig Hertz (Vice President)

Site Manager: Steve DeHope

Start Date: December 7, 1993

Address: 67 King Avenue
Piedmont, CA 94611

Scope of Work: All Environmental, Inc. (AEI) will close in place a 1500 gallon home heating fuel tank at the residential property located at the above address. Soil samples will be taken from the native material, two feet below the center of the tank by use of a hand auger. All Environmental will excavate to the top of the tank, cut an 18 inch diameter hole in the top of the tank, triple rinse the tank, and sample the rinsate material inside the tank. Upon confirmation that the laboratory results yield less than 100 ppm of TPH-diesel and BTEX, the tank will be filled with a portland slurry and the excavation will be backfilled to match the surrounding conditions.

C. SITE/WASTE CHARACTERISTICS

Hazard Level:	Serious:		Low: XXX	
	Moderate: XXX		Unknown:	
Waste Type:	Solid:	Underground Storage Tank		
	Sludge:	None		
	Liquid:	Remaining Product inside Tank		
	Gas:	None		

Hazard Characteristics: Combustible, Toxic

There will be a three feet boundary surrounding the excavation pit and the stockpiled material. The area within this boundary is considered an exclusion zone and only qualified personnel will be allowed to enter. All personnel arriving or departing the site should log in before entering the exclusion zone. All activities on site must be cleared through the Project Manager.

D. HAZARD EVALUATION

Potential chemical hazards include skin and eye contact or inhalation exposure to potentially toxic concentrations of hydrocarbon vapors. The potential toxic compounds that may exist at the site are listed below with descriptions of specific health effects of each. The list includes the primary potential toxic constituents that may be found in home heating diesel fuel.

1. Benzene
   a. Colorless to light yellow, flammable liquid with an aromatic odor.
   b. Exposure may irritate eyes, nose and respiratory system and may cause acute restlessness, convulsions, nausea, or depression
   c. Permissible exposure level (PEL) for a time weighted average (TWA) over an eight hour period is 1.0 ppm.

2. Toluene
   a. Colorless liquid with a sweet pungent, benzene like odor.
   b. Exposure may cause fatigue, weakness, confusion, euphoria, dizziness, headaches, dilated pupils, lacrimation, nervousness, insomnia, paresthesia, and dermatitis.
   c. Permissible exposure level for a time weighted average over an ten hour period is 100 ppm.

3. Xylene
   a. Colorless liquid with an aromatic odor.
   b. Exposure may irritate eyes nose and throat and may cause dizziness, excitement, drowsiness, incoordination, corneal vacuolization, anorexia, nausea, vomiting, and dermatitis.
   c. Permissible exposure level for a time weighted average over an ten hour period is 100 ppm.

4. Ethylbenzene
   a. Colorless liquid with an aromatic odor.
   b. Exposure may irritate eyes and mucous membrane and may cause headaches, dermatitis, narcosis and loss of consciousness.
   c. Permissible exposure level for a time weighted average over an ten hour period is 100 ppm.

5. Lead
   a. A heavy ductile soft grey metal.
   b. Exposure may cause weakness, nausea, lassitude, diarrhea, insomnia, anorexia, inflamed mucous membranes and abdominal pains. Lead is carcinogenic.
   c. Permissible exposure level for a time weighted average over an eight hour period is .05 ppb.

Steve DeHope has been designated to coordinate access control and security on site. All work will strictly follow OSHA guidelines. A safe perimeter has been established at a three feet radius surrounding the site. These boundaries are identified by yellow caution tape and orange safety cones. Personnel shall maintain the maximum distance from the pit while performing their duties. No one shall enter an excavation pit that is greater than five feet in depth and no one shall climb on the stockpiled material. If the excavation exceeds 5 feet in depth, then adequate shoring will be installed to ensure the safety of the personnel. Additional hazards on site include heavy equipment and overhead lifting equipment. Heavy equipment used for performing the tank removal project may include a backhoe, an excavator, or a crane for lifting the tank out of the excavation. Only 40 hour trained personnel will operate equipment or perform any duty associated with this project. A hard hat and steel toed boots are mandatory for all personnel associated with the tank removal. The excavation will be properly sloped for stability, safety, and personnel entry in needed. The site will inspected on a daily basis for safety and potential cave-ins.

A FIRST AID KIT AND AT A 40 POUND BC FIRE EXTINGUISHER WILL BE AVAILABLE ON SITE.

EMERGENCY SERVICES ARE AVAILABLE BY DIALING **911** ON THE TELEPHONE LOCATED IN THE PROJECT MANAGER'S VEHICLE. THIS VEHICLE WILL BE ON SITE AT ALL TIMES.

E. PERSONAL PROTECTIVE CLOTHING

Based on evaluation of potential hazards, level 'D' protective clothing has been designated as the appropriate protection for this project. The level of protective clothing will be upgraded if the organic vapor levels in the operator's breathing zone exceeds 5 ppm above background levels continuously for more then five minutes. If this occurs then level C protection will be used. If the organic concentration in the operator's breathing zone exceed's 200 ppm for 5 minutes and/or the organic vapor concentration two feet above the excavation exceeds 2,000 ppm or 25% of the lower explosive limit, then the equipment will be shut down and the site evacuated. If organic vapor concentrations exceed 200 ppm and work continues then level A or B protection will be required.

"EPA Standard Operating Safety Guidelines" defines the levels of protective clothing as follows:

LEVEL A:
Fully encapsulating suit / SCRA / Hard hat / Steel toe boots / Safety gloves.

LEVEL B:
Splash resistant suit / SCBA / Hard Hat / Steel toe boots / Safety gloves.

LEVEL C:

Half face respirator / Hard hat / Safety glasses / Steel toe boots Coveralls / Gloves.

LEVEL D:
Coveralls / Hard hat / Safety Glasses / Steel toe boots / Gloves.

If air purifying respirators are authorized, Organic vapor/ w- filter is the appropriate canister for use with the involved substances and concentrations. A competent individual has determined that all criteria for using this type of respiratory protection have been met.

NO CHANGES TO THE SPECIFIED LEVELS OF PROTECTION SHALL BE MADE WITHOUT THE APPROVAL OF THE SITE SAFETY OFFICER.

F. MONITORING INSTRUMENTS

The following environmental monitoring instruments shall be used on site at specified intervals.

Lower Explosive Limit (LEL) Meter that will also check the tank for Oxygen levels will be used to check the tank for transportation.

G. EMERGENCY HOSPITAL

The closest hospital with an emergency room is:

HIGHLAND HOSPITAL (510) 534-8055

DIRECTIONS FROM THE JOB SITE:

EXIT JOBSITE AND GO:

SOUTH ON KING
LEFT DOWN HAMPTON
RIGHT ON INVERLEITH
RIGHT ON ESTATES
RIGHT ON PARK BLVD.
LEFT ON EAST 31ST
RIGHT INTO HOSPITAL

APPENDIX C

SAMPLE ANALYTICAL DOCUMENTATION

PRIORITY ENVIRONMENTAL LABS

Precision Environmental Analytical Laboratory

December 18, 1993

PEL # 9312053

ALL ENVIRONMENTAL, INC.

Attn: Steve DeHope
Re: Two soil samples for BTEX and Diesel analyses.

Project name: Leefeldt
Project number: 1050

Date sampled: Dec 16, 1993
Date extracted: Dec 17-18, 1993

Date submitted: Dec 17, 1993
Date analyzed: Dec 17-18,1993

RESULTS:

SAMPLE I.D.	Diesel (mg/Kg)	Benzene (ug/Kg)	Toluene (ug/Kg)	Ethyl Benzene (ug/Kg)	Total Xylenes (ug/Kg)
E 7'6"	1300	9.8	18	23	92
W 6'	8200	13	30	38	180
Blank	N.D.	N.D.	N.D.	N.D.	N.D.
Spiked Recovery	91.7%	86.5%	90.2%	84.9%	93.7%
Detection limit	1.0	5.0	5.0	5.0	5.0
Method of Analysis	3550 / 8015	8020	8020	8020	8020

David Duong
Laboratory Director

1764 Houret Court Milpitas, CA. 95035 Tel: 408-946-9636 Fax: 408-946-9663

Pri[illegible] Environmental Labs
1764 Houret Court
Milpitas, CA 95035
(408) 946-9636

1764 Houret Ct. Milpitas,CA.95035 Tel:408-946-9636 Fax:408-946-9663

PEL # 9312053

INV # 24304

Chain of Custody

DATE: 12/16/93 PAGE: ___ OF: ___

PROJECT MGR: Steve Dellorz
COMPANY: All Environmental
ADDRESS: 2641 Crow Canyon Rd.
San Ramon CA 94583
PHONE: 510-820-3624 FAX: 510-838-2687
SIGNATURE: _____

ANALYSIS REPORT

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	TPH-Gasoline (EPA 5030,8015)	TPH-Gasoline(5030,8015) w/BTEX(EPA 602,8020)	TPH-Diesel (EPA 3510/3550,8015)	PURGEABLE AROMATICS BTEX (EPA 602,8020)	TOTAL OIL & GREASE (EPA 5520 E&F)	PESTICIDES/PCB (EPA 608,8080)	TOTAL RECOVERABLE HYDROCARBONS EPA 418.1	NUMBER OF CONTAINERS
W6'	12/16/93		S				X	X				1
E7'6"	12/16/93		S				X	X				1

PROJECT INFORMATION
PROJECT NAME:: Leefeldt
PROJECT NUMBER: 1050

SAMPLE RECEIPT
TOTAL # OF CONTAINERS: 2
RECD. GOOD COND./COLD:

INSTRUCTIONS & COMMENTS: _____

RELINQUISHED BY: 1
SIGNATURE: Steve Dellorz
NAME: AEI. Date: 12-17
COMPANY: Time: 10:00

RECEIVED BY: 1
SIGNATURE: Date: 12/17/93
NAME: Time: 11:25
COMPANY: AEI

RELINQUISHED BY: 2
SIGNATURE: Date:
NAME: Time:
COMPANY:

RECEIVED BY: 2
SIGNATURE: Date:
NAME: Time:
COMPANY:

PRIORITY ENVIRONMENTAL LABS

Precision Environmental Analytical Laboratory

February 01, 1994 PEL # 9401097

ALL ENVIRONMENTAL , INC.

Attn: Steve DeHope
Re: One water sample for BTEX and Diesel analyses.

Project name: Leefeldt
Project number: 1050

Date sampled: Jan 31, 1994
Date extracted: Jan 31, 1994

Date submitted: Jan 31, 1994
Date analyzed: Jan 31, 1994

RESULTS:

SAMPLE I.D.	Diesel (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl Benzene (ug/L)	Total Xylenes (ug/L)
TRW	450	77	60	35	210
Blank	N.D.	N.D.	N.D.	N.D.	N.D.
Spiked Recovery	94.4%	94.6%	99.3%	88.4%	105.1%
Detection limit	50	0.5	0.5	0.5	0.5
Method of Analysis	3510 / 8015	602	602	602	602

David Duong
Laboratory Director

1764 Houret Court Milpitas, CA. 95035 Tel: 408-946-9636 Fax: 408-946-9663

Priority Environmental Labs
1764 Houret Court
Milpitas, CA 95035
(408) 946-9636

1764 Houret Ct. Milpitas,CA.95035 Tel:408-946-9636 Fax:408-946-9663

PEL # 9401097

INV # 24441

DATE: 1/27/94 PAGE: 1 OF: 1

PROJECT MGR: Steve DeHope
COMPANY: A.E.T.
ADDRESS: 2641 CROW CANYON RD. SAN RAMON
PHONE: 510 820-2224 FAX: 510-838-2627
SIGNATURE: SD DeHope

ANALYSIS REPORT

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	TPH-Gasoline (EPA 5030.8015)	TPH-Gasoline(5030.8015) w/BTEX(EPA 602.8020)	TPH-Diesel (EPA 3510/3550.8015)	PURGEABLE AROMATICS BTEX (EPA 602.8020)	TOTAL OIL & GREASE (EPA 5520 E&F)	PESTICIDES/PCB (EPA 608.8080)	TOTAL RECOVERABLE HYDROCARBONS EPA 418.1	NUMBER OF CONTAINERS
TRW	1-31		W				X	X				1

PROJECT INFORMATION
PROJECT NAME: Leefeldt
PROJECT NUMBER: 1050

SAMPLE RECEIPT
TOTAL # OF CONTAINERS: 1
RECD. GOOD COND./COLD: ✓

INSTRUCTIONS & COMMENTS:

RELINQUISHED BY: 1	RECEIVED BY: 1	RELINQUISHED BY: 2	RECEIVED BY: 2
Steve DeHope			
SIGNATURE: SD DeHope Date: 1-31-94	SIGNATURE: Date:	SIGNATURE: Date:	SIGNATURE: Date:
NAME: Steve DeHope Time: 9:00	NAME: DAVID DUONG Time: 9:00 am	NAME: Time:	NAME: Time:
COMPANY: A.E.T.	COMPANY: PEL	COMPANY:	COMPANY:

APPENDIX D

UNDERGROUND STORAGE TANK
UNAUTHORIZED RELEASE FORM

UNDERGROUND STORAGE TANK UNAUTHORIZED RELEASE (LEAK) / CONTAMINATION SITE REPORT

EMERGENCY ☐ YES ☒ NO

HAS STATE OFFICE OF EMERGENCY SERVICES REPORT BEEN FILED? ☐ YES ☒ NO

REPORT DATE: 01 21 19 94

CASE #:

FOR LOCAL AGENCY USE ONLY
I HEREBY CERTIFY THAT I HAVE DISTRIBUTED THIS INFORMATION ACCORDING TO THE DISTRIBUTION SHOWN ON THE INSTRUCTION SHEET ON THE BACK PAGE OF THIS FORM.

SIGNED _____ DATE _____

REPORTED BY

NAME OF INDIVIDUAL FILING REPORT: Craig Hertz
PHONE: (510) 820-3224
SIGNATURE: Craig Hertz
REPRESENTING: ☒ OWNER/OPERATOR ☐ REGIONAL BOARD ☐ LOCAL AGENCY ☐ OTHER _____
COMPANY OR AGENCY NAME: All Environmental Inc.
ADDRESS: 2641 Crow Canyon Rd. #5 (STREET) San Ramon (CITY) CA (STATE) 94583 (ZIP)

RESPONSIBLE PARTY

NAME: Bob Leefeldt ☐ UNKNOWN
CONTACT PERSON: Bob Leefeldt
PHONE: (415) 258-9595
ADDRESS: 9 Upper Road West (STREET) Ross (CITY) CA (STATE) 94957 (ZIP)

SITE LOCATION

FACILITY NAME (IF APPLICABLE): N/A
OPERATOR: N/A
PHONE: (510) 658-5151
ADDRESS: 67 King Ave. (STREET) Piedmont (CITY) CA (COUNTY) Alameda (ZIP) 94611
CROSS STREET: Hampton

IMPLEMENTING AGENCIES

LOCAL AGENCY: Alameda County Health Care Services — CONTACT PERSON: Madhulla Logan — PHONE: (510) 271-4530
REGIONAL BOARD: Regional Water Quality Control Board — CONTACT PERSON: Eddy Soo — PHONE: (510) 286-1255

SUBSTANCES INVOLVED

(1) NAME: Diesel — QUANTITY LOST (GALLONS): _____ ☒ UNKNOWN
(2) BTEX — _____ ☒ UNKNOWN

DISCOVERY/ABATEMENT

DATE DISCOVERED: 12 18 93
HOW DISCOVERED: ☐ INVENTORY CONTROL ☒ SUBSURFACE MONITORING ☐ NUISANCE CONDITIONS ☐ TANK TEST ☐ TANK REMOVAL ☐ OTHER _____
DATE DISCHARGE BEGAN: 01 13 91 94 ☒ UNKNOWN
HAS DISCHARGE BEEN STOPPED? ☒ YES ☐ NO IF YES, DATE _____
METHOD USED TO STOP DISCHARGE (CHECK ALL THAT APPLY)
☐ REMOVE CONTENTS ☐ CLOSE TANK & REMOVE ☐ REPAIR PIPING
☐ REPAIR TANK ☒ CLOSE TANK & FILL IN PLACE ☐ CHANGE PROCEDURE
☐ REPLACE TANK ☐ OTHER _____

SOURCE/CAUSE

SOURCE OF DISCHARGE: ☐ TANK LEAK ☒ UNKNOWN ☐ PIPING LEAK ☐ OTHER
CAUSE(S): ☐ OVERFILL ☐ RUPTURE/FAILURE ☐ SPILL ☐ CORROSION ☒ UNKNOWN ☐ OTHER _____

CASE TYPE

CHECK ONE ONLY
☒ UNDETERMINED ☐ SOIL ONLY ☐ GROUNDWATER ☐ DRINKING WATER - (CHECK ONLY IF WATER WELLS HAVE ACTUALLY BEEN AFFECTED)

CURRENT STATUS

CHECK ONE ONLY
☐ NO ACTION TAKEN ☐ PRELIMINARY SITE ASSESSMENT WORKPLAN SUBMITTED ☐ POLLUTION CHARACTERIZATION
☐ LEAK BEING CONFIRMED ☒ PRELIMINARY SITE ASSESSMENT UNDERWAY ☐ POST CLEANUP MONITORING IN PROGRESS
☐ REMEDIATION PLAN ☐ CASE CLOSED (CLEANUP COMPLETED OR UNNECESSARY) ☐ CLEANUP UNDERWAY

REMEDIAL ACTION

CHECK APPROPRIATE ACTION(S) (SEE BACK FOR DETAILS)
☐ CAP SITE (CD) ☐ EXCAVATE & DISPOSE (ED) ☐ REMOVE FREE PRODUCT (FP) ☐ ENHANCED BIO DEGRADATION (IT)
☐ CONTAINMENT BARRIER (CB) ☐ EXCAVATE & TREAT (ET) ☐ PUMP & TREAT GROUNDWATER (GT) ☐ REPLACE SUPPLY (RS)
☐ VACUUM EXTRACT (VE) ☐ NO ACTION REQUIRED (NA) ☐ TREATMENT AT HOOKUP (HU) ☐ VENT SOIL (VS)
☒ OTHER (OT) Workplan for Remediation underway

COMMENTS

HSC 05 (8/90)

APPENDIX B

SAMPLING QA/QC PROCEDURES

I. QA OBJECTIVES:

We, at Priority Environmental Labs (PEL), commit to a quality assurance program designed to guarantee our analytical results are valid and properly documented.

II. SAMPLING PROCEDURES:

Sampling should be done according to EPA guidelines. Precautions are taken to avoid sample contamination and to maintain sample integrity. Proper containers and preservation techniques are used if necessary (See Table 1 of this manual). For examples, with water samples requiring volatile organic analysis, 40 ml vials with teflon-lined septa are used. For water samples requiring semi-volatile organic analysis, 1-liter glass bottles with teflon-lined septa are used.

In cases we provide these containers for our clients, we buy only EPA - approved containers. Once they arrive, they are washed in detergent and rinsed first with tap water then with deionized water.

III. SAMPLE CUSTODY:

The sampler is required to secure his samples upon arrival at the laboratory. Next, samples are inspected by our receiver to assure that proper containers, their conditions, and needed preservatives are used. Our receiver also inspects all necessary information such as sample identification, time of collection, sampling techniques, analysis required, etc. are submitted. If needed, we can provide clients with our chain of custody (See Table 2 of this manual). A PEL file number is assigned to each batch of samples to identify it.

Finally, samples are ready to be stored in refrigerators which are daily monitored to make sure their temperatures are less than 4 degrees centigrade (See Table 3,4, and 5 of this manual).

IV. CALIBRATION PROCEDURES AND FREQUENCY:

For routine analyses, a five - point calibration curve is used. Then, a mid - point standard is run every day. If the response factor of this mid - point standard is less than 20% of the calibration curve, the average response factor from the calibration will be used for calculation. Otherwise, a new calibration curve will be established after needed correction measures are performed.

For non - routine analyses, a three - point calibration curve will be established and its average response factor is used for calculation. (See Table 6 for a list of suppliers of standards and reagents that we used).

V. ANALYTICAL PROCEDURES:

Analyses are performed according to methods in Test Methods for Evaluating Solid Waste, SW-846, Third Edition, LUFT, Methods for Organic Chemical Analysis of Municipal and Industrial Waste Water, EPA - 600 / 4-82-057, and other methods approved by either EPA or DHS.

In general, before analyzing samples, we run a reagent water blank to make sure that our instrument, glassware, and reagents are free of contamination.

For each batch of samples, we analyze a sample blank by running a reagent water blank or a clean sample of similar matrix to that of real sample through all steps of preparation and measurement.

Next, a mid - point standard is run to check the validity of our existing calibration curve. Now, we are ready to analyze samples. A duplicate sample and a spiked sample are to be run for anybatch of samples or for every ten samples to check the precision of the result and the percentage of recovery of compounds spiked.

VI. DATA REDUCTION, VALIDATION, AND REPORTING:

Analyst who is responsible for the analysis will perform data reduction and validation by strictly following guideline set by appropriate approved methods.

Later, his data interpretation and calculation will be checked by a supervisor for validity before a typed report is issued. Both the analyst and his supervisor will proofread the report for any error before sending it to the client.

A copy of the report along with a copy of chain of custody, chromatograms if any, calculation sheets, and other information related to the analysis will be kept on file.

VII. INTERNAL QUALITY CONTROL CHECKS:

For every batch of sample, a quality control check sample will be run. This check sample will have all analytes needed to be determined in real samples. If any problem occurs, the correspond supervisor will dertermine the appropriate corrective action.

VIII. PERFORMANCE AND SYSTEM AUDITS:

Several times a month, the supervisor will test the measurement systems with samples of known compositions or behavior to evaluate precision and accuracy without the knowledge of the analyst to determine whether the measurement systems are being used appropriately.

IX. PREVENTIVE MAINTENANCE:

All instruments in the laboratory are regularly checked and maintained following manufacturer's suggestions. Any replacement, modification is timely recorded in an instrument record logbook.

X. PROCEDURES FOR DATA PRECISION AND ACCURACY:

We follow the quality assurance criteria set by California Department of Health Services (See Table 7 of this manual).

XI. CORRECTIVE ACTION:

Whenever a problem occurs, we will apply the following procedires:

- Identifying and defining the problem.
- Assigning responsibility for investigating the problem.
- Investigating the cause of the problem.
- Determining a corrective action to eliminate the problem which may be a combination of :
  * A thourough check of instruments.
  * A thourough check of standards, reagents, deionized water.
- Accepting responsibility for the corrective action.
- Evaluating its effectiveness.
- Verifying that the corrective action has eliminate the problem.

XII. QUALITY ASSURANCE REPORT:

Our quality assurance program are maintained periodically. Q/C data are recorded in different logbooks for different methods of analyses. These logbooks are weekly reviewed by our laboratory director.

The final report sent to our clients also includes all quality control data obtained while running samples.

APPENDIX C

HEALTH AND SAFETY PLAN

HEALTH AND SAFETY PLAN

Prepared for:

Bob Leefeldt
67 King Avenue
Piedmont, CA 94611

A. INTRODUCTION

This Site Specific Health and Safety Plan is written for the tank removal project located at the residential property, owned by Bob Leefeldt. All job site personnel will follow CAL OSHA safe operating practices as outlined in 29 CFR 1910 and 1926, as well as established guidelines set forth by All Environmental, Inc. or their respective companies.

B. WORK DESCRIPTION

Prepared by: Craig Hertz (Vice President)

Site Manager: Steve DeHope

Start Date: May 9, 1994

Address: 67 King Avenue
Piedmont, CA 94611

Scope of Work: All Environmental, Inc. (AEI) will perform three soil borings near a closed in place 1500 gallon home heating fuel tank at the residential property located at the above address. Soil samples will be taken from the native material, at four foot intervals to a depth of 12 feet, by use of a hand auger.

C. SITE/WASTE CHARACTERISTICS

Hazard Level:	Serious:		Low: XXX
	Moderate:	XXX	Unknown:
Waste Type:	Solid:	Underground Storage Tank	
	Sludge:	None	
	Liquid:	Remaining Product inside Tank	
	Gas:	None	

Hazard Characteristics: Combustible, Toxic

There will be a three feet boundary surrounding the excavation pit and the stockpiled material. The area within this boundary is considered an exclusion zone and only qualified personnel will be allowed to enter. All personnel arriving or departing the site should log in before entering the exclusion zone. All activities on site must be cleared through the Project Manager.

D. HAZARD EVALUATION

Potential chemical hazards include skin and eye contact or inhalation exposure to potentially toxic concentrations of hydrocarbon vapors. The potential toxic compounds that may exist at the site are listed below with descriptions of specific health effects of each. The list includes the primary potential toxic constituents that may be found in home heating diesel fuel.

1. Benzene
   a. Colorless to light yellow, flammable liquid with an aromatic odor.
   b. Exposure may irritate eyes, nose and respiratory system and may cause acute restlessness, convulsions, nausea, or depression
   c. Permissible exposure level (PEL) for a time weighted average (TWA) over an eight hour period is 1.0 ppm.

2. Toluene
   a. Colorless liquid with a sweet pungent, benzene like odor.
   b. Exposure may cause fatigue, weakness, confusion, euphoria, dizziness, headaches, dilated pupils, lacrimation, nervousness, insomnia, paresthesia, and dermatitis.
   c. Permissible exposure level for a time weighted average over an ten hour period is 100 ppm.

3. Xylene
   a. Colorless liquid with an aromatic odor.
   b. Exposure may irritate eyes nose and throat and may cause dizziness, excitement, drowsiness, incoordination, corneal vacuolization, anorexia, nausea, vomiting, and dermatitis.
   c. Permissible exposure level for a time weighted average over an ten hour period is 100 ppm.

4. Ethylbenzene
   a. Colorless liquid with an aromatic odor.
   b. Exposure may irritate eyes and mucous membrane and may cause headaches, dermatitis, narcosis and loss of consciousness.
   c. Permissible exposure level for a time weighted average over an ten hour period is 100 ppm.

5. Lead
   a. A heavy ductile soft grey metal.
   b. Exposure may cause weakness, nausea, lassitude, diarrhea, insomnia, anorexia, inflamed mucous membranes and abdominal pains. Lead is carcinogenic.
   c. Permissible exposure level for a time weighted average over an eight hour period is .05 ppb.

Steve DeHope has been designated to coordinate access control and security on site. All work will strictly follow OSHA guidelines. A safe perimeter has been established at a three feet radius surrounding the site. These boundaries are identified by yellow caution tape and orange safety cones. Personnel shall maintain the maximum distance from the soil borings while performing their duties. Only 40 hour trained personnel will operate equipment or perform any duty associated with this project.

A FIRST AID KIT AND AT A 40 POUND BC FIRE EXTINGUISHER WILL BE AVAILABLE ON SITE.

EMERGENCY SERVICES ARE AVAILABLE BY DIALING **911** ON THE TELEPHONE LOCATED IN THE PROJECT MANAGER'S VEHICLE. THIS VEHICLE WILL BE ON SITE AT ALL TIMES.

E. PERSONAL PROTECTIVE CLOTHING

Based on evaluation of potential hazards, level 'D' protective clothing has been designated as the appropriate protection for this project. The level of protective clothing will be upgraded if the organic vapor levels in the operator's breathing zone exceeds 5 ppm above background levels continuously for more then five minutes. If this occurs then level C protection will be used. If the organic concentration in the operator's breathing zone exceed's 200 ppm for 5 minutes and/or the organic vapor concentration two feet above the excavation exceeds 2,000 ppm or 25% of the lower explosive limit, then the equipment will be shut down and the site evacuated. If organic vapor concentrations exceed 200 ppm and work continues then level A or B protection will be required.

"EPA Standard Operating Safety Guidelines" defines the levels of protective clothing as follows:

LEVEL A:
Fully encapsulating suit / SCRA / Hard hat / Steel toe boots / Safety gloves.

LEVEL B:
Splash resistant suit / SCBA / Hard Hat / Steel toe boots / Safety gloves.

LEVEL C:

Half face respirator / Hard hat / Safety glasses / Steel toe boots Coveralls / Gloves.

LEVEL D:
Coveralls / Hard hat / Safety Glasses / Steel toe boots / Gloves.

If air purifying respirators are authorized, Organic vapor/ w-filter is the appropriate canister for use with the involved substances and concentrations. A competent individual has determined that all criteria for using this type of respiratory protection have been met.

NO CHANGES TO THE SPECIFIED LEVELS OF PROTECTION SHALL BE MADE WITHOUT THE APPROVAL OF THE SITE SAFETY OFFICER.

F. MONITORING INSTRUMENTS

The following environmental monitoring instruments shall be used on site at specified intervals.

Lower Explosive Limit (LEL) Meter that will also check the tank for Oxygen levels will be used to check the tank for transportation.

G. EMERGENCY HOSPITAL

The closest hospital with an emergency room is:

HIGHLAND HOSPITAL (510) 534-8055

DIRECTIONS FROM THE JOB SITE:

EXIT JOBSITE AND GO:

SOUTH ON KING
LEFT DOWN HAMPTON
RIGHT ON INVERLEITH
RIGHT ON ESTATES
RIGHT ON PARK BLVD.
LEFT ON EAST 31ST
RIGHT INTO HOSPITAL

G. READ AND SIGN

The work party was briefed on the contents of this plan on _____ _____ at 8:00 AM. All site personnel have read the above plan and are familiar with its provisions.

NAME:	SIGNATURE:	COMPANY NAME: