



January 17, 1991

Ms. Pamela Evans  
Department of Environmental Health  
Hazardous Materials Program  
80 Swan Way, Room 200  
Oakland, CA 94621

Dear Ms. Evans:

Attached is a 'Site Investigation Work Plan' as per your request in your letter to Cal Anderson of Anderson Lift Truck Transport.

The report follows the outline introduced in a memorandum from the California Regional Water Quality Control Board; Central Valley Region dated March 30, 1990. The subject of the report is 'A Suggested Method for Review of Work Plans and Reports Submitted to Comply with Regional Board Staff Requests.'

DECON's and Engeo's intent is to work in a timely and economical manner to remediate this site to compliance standards.

Please let me know if there are any problems or questions pertaining to this project.

Sincerely,

Sean T. Delaney  
Group Manager

STD/emt

Enclosures

Spoke w/ Sean Delaney 1/24/91  
Told him this proposal is  
OK, but limited in scope.  
MWS will probably have  
to go in.  
He called 1/30/91 - Sampling  
2-5-91 - 1:00

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## 1.0 INTRODUCTION OF PROBLEM AND PURPOSE

DECON Environmental Services, Inc. (DECON) in conjunction with Engeo, Inc. has contracted with Mr. Robert Falconer, owner of Anderson Lift Truck Transport to conduct site investigation and remediation activities at 310 Bartlett Avenue (site of Anderson Lift Truck Transport).

An underground tank, approximated 500 gallon capacity, was removed from the site on April 26, 1989. Samples of soil from the excavation indicated that soil contamination was present and that further remediation activities would be required.

## 2.0 SUMMARY OF PREVIOUS FINDINGS AND RECOMMENDATIONS

The 500 gallon Underground Storage Tank (UST) was removed by Geo-Environmental Technology (G.E.T.) on April 26, 1989. James Ferdinand, Fire Inspector for Eden Consolidated Fire Department, and Thomas Peacock, Alameda County Environmental Health Department, were present to witness the tank removal.

Visual inspection of the tank and associated piping revealed no obvious holes. The tank was loaded onto a licenced hazardous waste hauler and transported a licenced Treatment, Storage and Disposal facility.

Two samples were taken from the tank excavation. AL-1 was taken at a depth of one foot below the tank-soil interface at the northern end of the excavation. AL-2 was taken at a depth of three feet below the tank-soil interface. Please see plate 1 for site map and sample locations.

The samples were transported to Trace Analytical Laboratory, Inc. in Hayward for analysis. Samples were analyzed for the presence of total petroleum hydrocarbons (TPH-gasoline range) and for benzene, toluene, ethyl-benzene and xylene (BTEX). Sample results and Chain of Custody are attached in Appendix A.

The laboratory analysis from Sample 1, designated AL-1, taken at a depth of one foot below the tank had 2,400 parts per million (ppm) of TPH in the gasoline range. Within the BTEX parameter, sample AL-1 had 21 ppm of benzene, 120 ppm of toluene, 260 ppm of xylenes and 39 ppm of ethyl benzene.

The laboratory analysis from Sample 2, designated AL-2, taken at a depth of three feet below the tank had 140 ppm of TPH in the gasoline range. Within the BTEX parameter Sample AL-2 registered 12 ppm of toluene, 24 ppm xylenes, and 5 ppm of ethyl benzene. There was no detection of benzene.

Anderson-Falconer Lift Truck received two letter notifications from Alameda Health Care Services. The letter notification, dated September 22, 1989 informed Robert Falconer (owner) that he must file an unauthorized release report and that there should be an assessment conducted to determine the extent of groundwater contamination that has resulted from the leaking tank. It was also requested that a cleanup work plan be submitted.

A second letter notification was sent out on November 28, 1990. This letter signed by Pamela Evans (Hazardous Waste Specialist) of the Alameda County Health Care Services requested that a site contamination report that addresses the horizontal and lateral extent of contamination.

### 3.0 SITE DESCRIPTION

Anderson Lift Truck Transport is located at 310 Bartlett Avenue in Hayward. This site is the Company Headquarters. On site is the company dispatch office, a minor repair shop and company offices. Please see plate 1 for site map.

### 4.0 GEOLOGY AND HYDROGEOLOGY (ENGE0)

The subject property is relatively level at approximately 55 feet above mean sea level. The geologic deposits at the project site have been mapped as Quaternary age alluvium. No indication of the depth to groundwater beneath the subject property was found in the documents reviewed.

### 5.0 PROPOSED WORK

DECON, in conjunction with Engeo, proposes to excavate contaminated soil beneath the tank excavation. Engeo's field geologist will use a photoinization detector (PID) to screen excavated soil in order to determine the extent of excavation.

DECON will excavate soil until field instruments indicate that the concentrations of gasoline compounds in the remaining soil appear to have been reduced to acceptable levels or until the excavation approaches the depth at which first groundwater is encountered, whichever comes first.

Engeo will collect confirmation samples of the side walls and bottom of the excavated area and analyze for Total Petroleum Hydrocarbons (TPH gasoline) and benzene, toluene, ethyl-benzene and xylenes (BTEX).

DECON will prepare a report summarizing the analytical results and other data pertinent to the excavation of contaminated soil.

DECON then proposes to treat contaminated soil on-site. DECON's representatives will collect representative samples from stock piled soils at the rate of one sample for every 20 cubic yards and analyze for TPH-gasoline.

DECON will then notify the Bay Area Air Quality Management District of our intent to perform open aeration at this site in accordance with their Regulation 8, Rule 40. DECON will spread out the contaminated soil on the existing asphalt pad at the allowable rate listed in 8-40-301, Table 1, based on the average concentration of TPH-gasoline present. Berms will be constructed around the outside of the aeration pile to prevent contaminated rainwater from running off. Soil will be roto-tilled at the rate of once per week to promote aeration of gasoline compounds.

Aerated soil will then be sampled after four weeks to determine the concentration of TPH-gasoline. Results will be submitted to Alameda County. After aeration, the soil will be hauled for a Class III landfill. The excavated area will be backfilled with imported fill. DECON will prepare a project summary containing all documentation relevant to this project.

#### 6.0 DISPOSAL

It is DECON's plan to dispose of aerated soil at a Class III Landfill.

#### 7.0 SELECTION OF SOIL SAMPLES

The excavation samples will be logged in the field by Engeo Environmental Geologist using the United Soil Classification System. Soil samples and excavated soil will be screened in the field using a Thermo Electron 580A photoionization detector (PID) to measure detectable volatile compounds. Soil samples will be recovered from the bottom and sidewalls of the excavation when PID readings indicate that the levels will be significantly lowered or below the detection limit of the instrument.

#### 8.0 SAMPLING PROCEDURE

Soil samples will be retrieved using a 3-inch diameter hand auger and a 2 1/2-inch diameter slide hammer. The samples will be recovered in clean 6-inch long brass liners and will be immediately sealed with aluminum foil and polyethylene and caps. Sampling equipment is cleaned with trisodium phosphate (TSP) and triple rinsed with distilled water prior to each sample recovery. Samples will be then preserved on ice and transported to the analytical laboratory under documented chain of custody procedures.

The samples will be transported to NET Pacific, Inc. for analyses. Samples will be analyzed for total petroleum hydrocarbons (TPH) in the gasoline range and for benzene, toluene, xylene and ethyl-benzene.

NET Pacific, Inc. is located at:

435 Tesconi Circle  
Santa Rosa, CA 95401

There state certification number is # 178  
Phone number is (707) 526-7200

#### 9.0 REPORT PREPARATION

Engeo, Incorporated will prepare a closure report summarizing their sampling procedures and analytical results that will include documentation on their Quality Assurance and Quality Certification. The report will be reviewed and signed by one of Engeo's State Registered Geologist.

#### 10.0 QUALIFICATIONS

DECON Environmental Services, Inc. (DECON) is a specialty environmental cleanup contractor focusing on decontamination, hazardous waste treatment, and site remediation. We are dedicated to providing quality services that follow stringent health and safety guidelines and thereby minimize our client's liability. Our strategy is to implement cost-effective solutions to the complex environmental problems facing industry, consultants and governmental agencies.

Engeo Environmental is a mid-sized company staffed by hydrogeologists, geotechnical engineers, professional engineers, health and safety personnel and a technical support staff. Our goal is to provide our clients with supportive environmental consultant services. We are committed to perform thorough, competent environmental investigations; provide a clear, concise assessment of our client's position with the regulatory agencies; and offer state-of-the-art solutions to mitigate undesirable environmental problems.

#### 11.0 ATTACHED SITE SAFETY PLAN

11.0

Site Safety Plan

Background Info:

Project Name: Falconer Lift Truck

Job Number: 453

Project Manager: Sean Delaney

Client Contact: Robert Falconer (retired)

Site Name: Anderson Lift Truck Transport

Site Address: 310 Bartlett Avenue, Hayward, CA

Overall Objective of Site Work: Excavation of contaminated soil for stockpiling

Proposed Date of Site Work: January 14, 1991

Source of Site Info: Site visit

Will Site Officials

Accompany Work Personnel: As much as possible

Work Time Limitations:

Warning for Site Evacuation: Verbal

Site Description:

Current status: Trucking Company Headquarters

Prior status:

Materials Handled, Disposed, or Stored:

Potential Degradation Products: Benzene, Toluene, Xylene, Ethyl Benzene-degraded gasoline

Industrial Processes/Procedures: Formerly was the site of an underground storage tank

HAZARDS: DESCRIPTION, PROTECTION AND MONITORING

The following substances are known or suspected to be currently or historically onsite:

Exposure Substance	Physical	TLV	Characteristics
	State	(ppm)	
Gasoline Vapors	Vapor	0 300 ppm	

Potential Environmental Hazards: Potential for contamination of groundwater

Potential Worker Hazards: Vapors from gasoline can cause dizziness, headaches and nausea

Potential Physical Hazards Onsite: Working with and around heavy equipment  
Working around open excavation

Overall Hazard Estimation:

Required Personal Protective Equipment (optional as noted) Hard hat, steel toed boots, safety glasses and gloves. ½ face respirator available on site.

The following levels of personal protection have been designated:  
No eating, drinking or smoking is allowed in work areas)

(NOTE:

Level of Protection:

Location(s) to be used: Level D during all phases of excavation and aeration

When to use:

Level of Protection:

Location to be used:

When to use:

Required Decontamination Equipment:

Disposal of Contaminated Materials or Equipment:

Backhoe will be scraped and washed of all contaminated soil

Monitoring

1. Direct Reading Monitoring Equipment (e.g., Draeger tubes, HNu):

Equipment: photoionization detector

Location to be used:

When to use:

2. Action Levels for Monitoring Results:

Equipment:

Action Level:

Action (type and duration):

3. Medical Monitoring:



## ONSITE ORGANIZATION AND COORDINATION

### General

The following personnel are designed to carry out the stated job functions onsite:

Project Team Leader: Sean Delaney

Site Safety Officer: Sean Delaney

Contractors onsite (state function): Engeo, Inc. Field Geologist  
conducting on site soil screening and sample collection

Government Agency Reps: Alameda County Department of Environmental  
Health

### Site Access Control

Access to the site will be controlled such that no unauthorized person enters within the following boundaries: Within barricades or 25 feet of excavation.

## EMERGENCY MEDICAL CARE AND PROCEDURES

Nearest emergency medical facility:  
(see attached map)

Facility Name: Saint Rose Hospital

Address: 27200 Calaroga Avenue

Telephone: 782-6200

### Emergency Telephone Numbers:

Fire: 911

Police: 911

Ambulance: 911

Hotline (e.g., Poison Control Center): (415) 666-2845

Emergency First Aid for Substances Present:

<u>Substance</u>	<u>Exposure Symptoms</u>	<u>First Aid</u>
Gasoline Vapor	Dizziness, Headache or Nausea	Move to area with fresh air and rest

First Aid Equipment Onsite:

<u>Equipment</u>	<u>Location</u>
First Aid Kit	Adjacent to Excavation
Fire Extinguisher	Adjacent to Excavation
Emergency Eye Wash	Adjacent to Excavation

Onsite Emergency Procedures:

1. Personal injury or illness: Administer first aid; call ambulance if necessary; transport to
2. Fire or Explosion: Turn off all motorized equipment; evacuate working area; meet at designated upwind location.
3. Earthquake: Turn off all motorized equipment; evacuate working area; meet at designated upwind location.
4. Hazardous Material Spill or Release: Turn off all motorized equipment; evacuate work area in an upwind direction of the spill or release; meet at designated upwind location.
5. Personal Protective Equipment Failure: If any site worker experiences a failure or alteration of protective equipment that affects the protection factor, that person and his/her buddy shall immediately leave the Exclusion Zone. Reentry shall not be permitted until the equipment has been repaired or replaced.
6. Other Equipment Failure: If any other equipment onsite fails to operate properly, the project team leader and site safety officer shall be notified and then shall determine the effect of this failure on continuing operations onsite. If the failure affects the safety of personnel or prevents completion of the work plan tasks, all personnel shall leave the Exclusion Zone until the situation is evaluated and appropriate actions taken.

Prepared By: Sean Delaney

January 14, 1991

Date

Reviewed By: *Sean T. Delaney*

Jan 11, 1991

Date

Approved By: \_\_\_\_\_

\_\_\_\_\_

Date

Onsite Personnel

I have read and reviewed this Site Safety Plan and will comply with the requirements stated herein and directions from the site safety officers.

Name

Signature

Sean Delaney

*Sean T. Delaney*

Mike Lyon

Eric Herrell (Engeo)

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60

FOR CONTINUATION SEE MAP 58

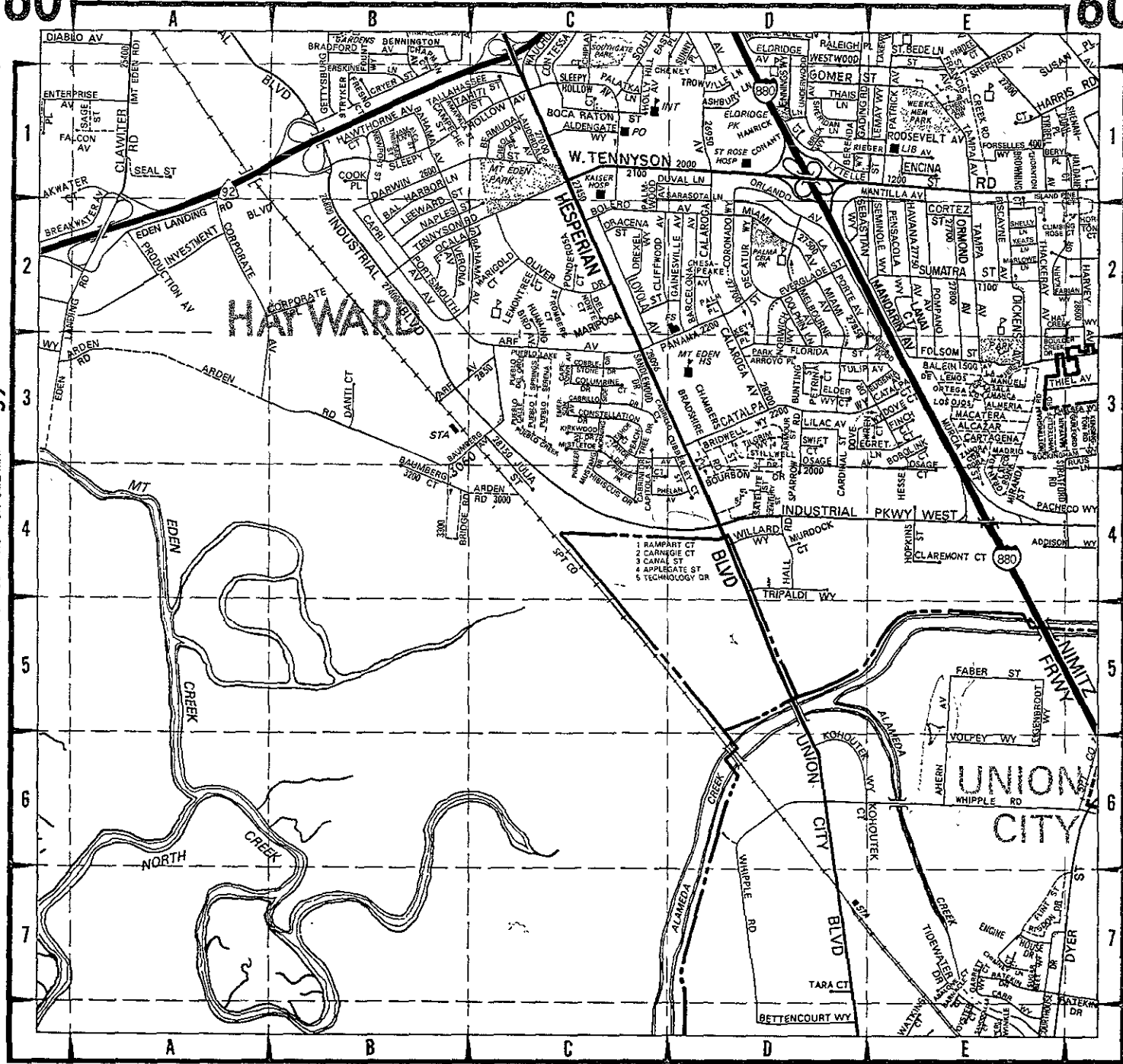
60

18  
16  
14  
59  
FOR CONTINUATION SEE MAP

ALAMEDA CO

FOR CONTINUATION SEE MAP

DETAIL



1,530,

1,533,

FOR CONTINUATION SEE MAP 82

1,542,

1,545,

BARTLETT AVE.



concrete pad

Bldg.

AL-1

AL-2

product line  
fill  
vent

Dirt lot

Bldg.

\* - Designates soil sample

# Environmental Technology

SCALE: None

Site sketch for  
Anderson Lift

DRAWN BY TM

DATE: 24 APR 89

REVISED

310 Bartlett Ave.  
Hayward, CA 94541

260 Cristich Lane  
Campbell, CA 95008 (408) 559-1220

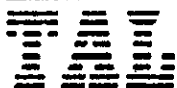
Plate 1

# CHAIN OF CUSTODY RECORD

TAT Reg.

PROJECT NO.		SITE NAME & ADDRESS <i>Andersen Lift 310 Bartlett Ave, Hayward, CA 94541</i>					ANALYSES REQUESTED					REMARKS
WITNESSING AGENCY / INSPECTOR NAME / DATE <i>Alameda County Dept. of Env. Health / Thomas Peacock / 4/26/89</i>												
ID NO.	DATE	TIME	SOIL	WATER	SAMPLING LOCATION	TPH (Gasoline) & B, T, X, & E	TPH (Diesel) & B, T, X, & E	Total Oil & Grease	Halogenated HC's	B, T, X & E	Heavy Metals	
<i>AL-1</i>	<i>4/26/89</i>	<i>11 AM</i>	<input checked="" type="checkbox"/>		<i>middle of tank</i>	<input checked="" type="checkbox"/>						<i>1' below bottom of tank</i>
<i>AL-2</i>	<i>4/26/89</i>	<i>11:15 AM</i>	<input checked="" type="checkbox"/>		<i>middle of tank</i>	<input checked="" type="checkbox"/>						<i>3' below bottom of tank</i>
Relinquished by: (Signature) <i>Bob B. Myers</i>			Date/Time <i>4/26/89 2:50 p.m.</i>		Received by: (Signature)							The following MUST BE completed by the laboratory accepting samples for analysis: 1. Have all samples received for analysis been stored in ice? <u>Yes</u> 2. Will samples remain refrigerated until analyzed? <u>Yes</u> 3. Did any samples received for analysis have head space? <u>N/A</u> 4. Were samples in appropriate containers and properly packaged? <u>Yes</u>
Relinquished by: (Signature)			Date/Time		Received by: (Signature)							
Relinquished by: (Signature)			Date/Time		Received by: (Signature)							
Relinquished by: (Signature)			Date/Time <i>4/26/89 2:50</i>		Rec'd for Laboratory by: (Signature) <i>Joseph D. ...</i>							
TRACE ANALYSIS LAB 525 SIGNATURE BLVD., SUITE 100 HAYWARD, CA 94545 (415) 783-6960												

Rev: 12-88



DATE: 5/11/89

LOG NO.: 7301

DATE SAMPLED: 4/26/89

DATE RECEIVED: 4/26/89

CUSTOMER: GeoEnvironmental Technology

REQUESTER: Mark Youngkin

PROJECT: Anderson Lift, 310 Bartlett Avenue, Hayward, CA 94541

Sample Type: Soil

<u>Method and Constituent</u>	<u>Units</u>	<u>AL-1</u>		<u>AL-2</u>	
		<u>Concen- tration</u>	<u>Detection Limit</u>	<u>Concen- tration</u>	<u>Detection Limit</u>
DHS Method:					
Total Petroleum Hydro- carbons as Gasoline	ug/kg	2,400,000	80,000	140,000	80,000
Modified EPA Method 8020:					
Benzene	ug/kg	21,000	2,000	< 2,000	2,000
Toluene	ug/kg	120,000	2,000	12,000	2,000
Xylenes	ug/kg	260,000	9,000	24,000	9,000
Ethyl Benzene	ug/kg	39,000	3,000	5,000	3,000

Dan Farah

Dan Farah, Ph.D.  
Supervisory Chemist

DF:vs