



City of Alameda • California

ENVIRONMENTAL
PROTECTION

96 DEC 17 PM 4:07

December 16, 1996

Alameda County Health Care Services Agency
Department of Environmental Health
1131 Harbor Bay Parkway
Alameda, California 94502-6577

Attention: Ms. Juliet Shin

Re: 2263 Santa Clara Ave., Alameda, CA

Dear Ms. Shin:

The City of Alameda has received the Well Destruction Report for the above referenced project and has attached a copy for your review. Please notify me whether these action concludes the City of Alameda obligations regarding the site closure of 2263 Santa Clara Avenue.

If you have any questions or comments, please contact me at (510) 748-4512.

Sincerely,

A handwritten signature in cursive script, appearing to read "Wesley Adams".

Wesley Adams
Assistant Engineer

\\projects\ustank\itr\1296.ltr



November 26, 1996

Mr. Wesley Adams
City of Alameda
2250 Central Avenue, Rm. 250
Alameda, CA 94501

Re: Well Destruction, City of Alameda, 2263 Santa Clara Street, Alameda, CA 94501

Dear Mr. Adams:

Tank Protect Engineering of Northern California, Inc. (TPE) is pleased to submit this letter report concerning the destruction of groundwater monitoring wells at City of Alameda (CITY) on October 30, 1996. Monitoring well construction is summarized and the well destruction is discussed in detail.

Well Construction

The boring for the groundwater monitoring wells, CH-MW1 and CH-MW2 were drilled to a depth of about 22 feet, and converted to monitoring wells by installing a 2-inch diameter polyvinyl chloride (PVC) casing and screen. Screens were placed from a depth of about 5 feet and extended to a depth of about 18 feet. Groundwater samples from these well have been nondetectable for total petroleum hydrocarbons as gasoline and benzene, toluene, ethylbenzene, and xylenes.

Well Destruction

Site closure was granted in a June 18, 1996 letter (see attached) from the Alameda Health Care Services Agency (ACHCSA) with the condition that the monitoring wells, CH-MW1 and CH-MW2 be decommissioned upon case closure.

Before commencing destruction activities, TPE obtained a well destruction permit [(number 96770) see attached] from Water Resources Management Zone 7.

On October 30, 1996 TPE and PC Exploration (C 57 #265556) destroyed monitoring wells CH-MW1, and CH-MW2, by pressure grouting to 100 pounds per square inch (psi) with a tremie pipe. The wells were grouted from the total well depth of 18 feet to the surface using a neat portland cement grout.

Vault Box Destruction

On October 30, 1996 the vault boxes were destroyed by removing the vault box and filling the void to grade with concrete.

An additional copy of this letter report is included for your delivery to:

Ms. Juliet Shin
Alameda County Health Care Services Agency
Department of Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502-6577

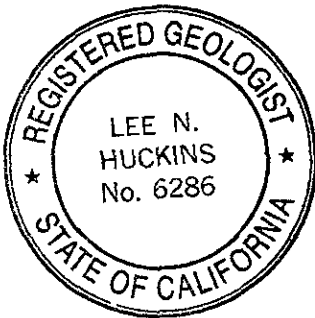
TPE recommends that this quarterly letter report be submitted with a cover letter from the CITY, signed by an authorized representative.

If you have any questions, please call TPE at (510) 429-8088.

Sincerely,

Lee Huckins

Lee N. Huckins
Registered Geologist



cc: File
Attachment



ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

5997 PARKSIDE DRIVE

PLEASANTON, CALIFORNIA 94588-5127

PHONE (510) 484-2600 FAX (510) 462-3914

October 25, 1996

Mr. Lee Huckins
Tank Protect Engineering
2821 Whipple Road
Union City, CA 94587

Dear Mr. Huckins:

Enclosed is drilling permit 96770 for a contamination investigation and the destruction of well 2S/3W 7N80 at 2263 Santa Clara Avenue in and for the City of Alameda.

Please note that permit condition A-2 requires that a well destruction report be submitted after completion of the work. The report should include a description of methods and materials used to destroy the well, location sketch, date of destruction, and permit number. Please submit the original of your completion report. We will forward your submittal to the California Department of Water Resources.

If you have any questions, please contact Wyman Hong at extension 235 or me at extension 240.

Very truly yours,

Craig A. Mayfield

Craig A. Mayfield
Water Resources Engineer III

CM:ab
Enc.



ZONE 7 WATER AGENCY

5997 PARKSIDE DRIVE PLEASANTON, CALIFORNIA 94588

VOICE (510) 484-2600
FAX (510) 462-3914

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

FOR OFFICE USE

LOCATION OF PROJECT 2263 Santa Clara Ave
Alameda, CA 94501

PERMIT NUMBER 96770
LOCATION NUMBER 2S/3W 7N80

CLIENT
Name City of Alameda
Address 2263 Santa Clara Voice (510) 748-4510
City Alameda Zip 94501

PERMIT CONDITIONS

Circled Permit Requirements Apply

APPLICANT
Name Tank Protect Engineering Fax 510-429-8089
Address 2821 Whipple Road Voice 510-429-8088
City Union City Zip 94587

TYPE OF PROJECT
Well Construction _____ Geotechnical Investigation _____
Cathodic Protection _____ General _____
Water Supply _____ Contamination _____
Monitoring _____ Well Destruction X

PROPOSED WATER SUPPLY WELL USE
Domestic _____ Industrial _____ Other _____
Municipal _____ Irrigation _____

DRILLING METHOD:
Mud Rotary _____ Air Rotary _____ Auger _____
Cable _____ Other _____

DRILLER'S LICENSE NO. C57-2655256

WELL PROJECTS
Drill Hole Diameter 8 in. Maximum _____
Casing Diameter 2 in. Depth 13 ft.
Surface Seal Depth 5 ft. Number 2

GEOTECHNICAL PROJECTS
Number of Borings _____ Maximum _____
Hole Diameter _____ in. Depth _____ ft.

ESTIMATED STARTING DATE 10-30-96
ESTIMATED COMPLETION DATE 12-30-96

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68.

APPLICANT'S SIGNATURE Lee Perkins Date _____

- A. GENERAL
 1. A permit application should be submitted so as to arrive at the Zone 7 office five days prior to proposed starting date.
 2. Submit to Zone 7 within 60 days after completion of permitted work the original Department of Water Resources Water Well Drillers Report or equivalent for well Projects, or drilling logs and location sketch for geotechnical projects.
 3. Permit is void if project not begun within 90 days of approval date.
- B. WATER WELLS, INCLUDING PIEZOMETERS
 1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
 2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.
- C. GEOTECHNICAL. Backfill bore hole with compacted cuttings or heavy bentonite and upper two feet with compacted material. In areas of known or suspected contamination, tremied cement grout shall be used in place of compacted cuttings.
- D. CATHODIC. Fill hole above anode zone with concrete placed by tremie.
- E. WELL DESTRUCTION. See attached.

Approved Wyman Hong Date 24 Oct 96
Wyman Hong

24 October 1996

ZONE 7
WATER RESOURCES ENGINEERING
GROUNDWATER PROTECTION ORDINANCE

CITY OF ALAMEDA
2263 SANTA CLARA AVENUE
ALAMEDA
WELLS 2S/3W 7N80
PERMIT 96770

Destruction Requirements:

1. Clean out all bridged or poorly compacted materials to the bottom of the well.
2. Pressure grout the casing to 2 feet below finished grade or original ground, whichever is the lower elevation.
3. Remove casing, seal and gravel pack to 2 feet below finished grade or original ground, whichever is the lower elevation.
4. After the seal has set, backfill the remaining hole with compacted material.

~~These destruction requirements as proposed by Lee Huckins of Tank Protect Engineering meet or exceed Zone 7 minimum requirements.~~

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD
UNDERGROUND STORAGE TANK PERMIT APPLICATION - FORM A



COMPLETE THIS FORM FOR EACH FACILITY/SITE

MARK ONLY ONE ITEM	<input checked="" type="checkbox"/> 1 NEW PERMIT	<input type="checkbox"/> 3 RENEWAL PERMIT	<input type="checkbox"/> 5 CHANGE OF INFORMATION	<input checked="" type="checkbox"/> 7 PERMANENTLY CLOSED SITE
	<input type="checkbox"/> 2 INTERIM PERMIT	<input type="checkbox"/> 4 AMENDED PERMIT	<input type="checkbox"/> 6 TEMPORARY SITE CLOSURE	

I. FACILITY/SITE INFORMATION & ADDRESS - (MUST BE COMPLETED)

DRA OR FACILITY NAME CITY OF ALAMEDA		NAME OF OPERATOR WILLIAM E. MARY/STEVE DAVIS		
ADDRESS 2263 SANTA CLARA AVENUE		NEAREST CROSS STREET OAKS STREET	PARCEL # (OPTIONAL)	
CITY NAME ALAMEDA	STATE CA	ZIP CODE 94501-4455	SITE PHONE # WITH AREA CODE 510-748-4518	
<input checked="" type="checkbox"/> BOX TO INDICATE <input type="checkbox"/> CORPORATION <input type="checkbox"/> INDIVIDUAL <input type="checkbox"/> PARTNERSHIP <input checked="" type="checkbox"/> LOCAL AGENCY DISTRICTS* <input type="checkbox"/> COUNTY AGENCY* <input type="checkbox"/> STATE AGENCY* <input type="checkbox"/> FEDERAL AGENCY*				
* If owner of UST is a public agency, complete the following: name of Supervisor of division, section, or office which operates the UST <u>WILLIAM E. MARY</u>				
TYPE OF BUSINESS		<input type="checkbox"/> 1 GAS STATION <input type="checkbox"/> 2 DISTRIBUTOR	<input type="checkbox"/> 3 FARM <input type="checkbox"/> 4 PROCESSOR	<input checked="" type="checkbox"/> 5 OTHER
		<input type="checkbox"/> IF INDIAN RESERVATION OR TRUST LANDS	# OF TANKS AT SITE 3	E.P.A. I.D.# (optional) CAC000960768

EMERGENCY CONTACT PERSON (PRIMARY)

EMERGENCY CONTACT PERSON (SECONDARY) - optional

DAYS: NAME (LAST, FIRST) WILLIAM E. MARY	PHONE # WITH AREA CODE 510-748-4518	DAYS: NAME (LAST, FIRST) STEVEN DAVIS	PHONE # WITH AREA CODE 510-748-4625
NIGHTS: NAME (LAST, FIRST)	PHONE # WITH AREA CODE	NIGHTS: NAME (LAST, FIRST)	PHONE # WITH AREA CODE

II. PROPERTY OWNER INFORMATION - (MUST BE COMPLETED)

NAME CITY OF ALAMEDA		CARE OF ADDRESS INFORMATION		
MAILING OR STREET ADDRESS 2263 SANTA CLARA AVENUE, ROOM 207		<input checked="" type="checkbox"/> box to indicate <input type="checkbox"/> INDIVIDUAL <input checked="" type="checkbox"/> LOCAL AGENCY <input type="checkbox"/> STATE AGENCY <input type="checkbox"/> CORPORATION <input type="checkbox"/> PARTNERSHIP <input type="checkbox"/> COUNTY AGENCY <input type="checkbox"/> FEDERAL AGENCY		
CITY NAME ALAMEDA	STATE CA.	ZIP CODE 94501-4455	PHONE # WITH AREA CODE 510-748-4625	

III. TANK OWNER INFORMATION - (MUST BE COMPLETED)

NAME OF OWNER CITY OF ALAMEDA		CARE OF ADDRESS INFORMATION		
MAILING OR STREET ADDRESS 2263 SANTA CLARA AVENUE, ROOM 207		<input checked="" type="checkbox"/> box to indicate <input type="checkbox"/> INDIVIDUAL <input checked="" type="checkbox"/> LOCAL AGENCY <input type="checkbox"/> STATE AGENCY <input type="checkbox"/> CORPORATION <input type="checkbox"/> PARTNERSHIP <input type="checkbox"/> COUNTY AGENCY <input type="checkbox"/> FEDERAL AGENCY		
CITY NAME ALAMEDA	STATE CA.	ZIP CODE 94501-4455	PHONE # WITH AREA CODE 510-748-4625	

IV. BOARD OF EQUALIZATION UST STORAGE FEE ACCOUNT NUMBER - Call (916) 322-9669 if questions arise.

TY (TK) HQ 44-000704

V. PETROLEUM UST FINANCIAL RESPONSIBILITY - (MUST BE COMPLETED) - IDENTIFY THE METHOD(S) USED

<input checked="" type="checkbox"/> box to indicate	<input checked="" type="checkbox"/> 1 SELF-INSURED	<input type="checkbox"/> 2 GUARANTEE	<input type="checkbox"/> 3 INSURANCE	<input type="checkbox"/> 4 SURETY BOND
	<input type="checkbox"/> 5 LETTER OF CREDIT	<input type="checkbox"/> 6 EXEMPTION	<input type="checkbox"/> 99 OTHER	

VI. LEGAL NOTIFICATION AND BILLING ADDRESS Legal notification and billing will be sent to the tank owner unless box I or II is checked.

CHECK ONE BOX INDICATING WHICH ABOVE ADDRESS SHOULD BE USED FOR LEGAL NOTIFICATIONS AND BILLING:	I. <input type="checkbox"/>	II. <input checked="" type="checkbox"/>	III. <input type="checkbox"/>
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THIS FORM HAS BEEN COMPLETED UNDER PENALTY OF PERJURY, AND TO THE BEST OF MY KNOWLEDGE, IS TRUE AND CORRECT

OWNER'S NAME (PRINTED & SIGNED) V.C.I. OF CALIFORNIA	APPLICANT: CONTRACTOR <i>(Signature)</i>	OWNER'S TITLE (SECRETARY) CATHERINE MAYER	DATE MONTH/DAY/YEAR 6/7/94
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LOCAL AGENCY USE ONLY

COUNTY # <input type="text"/>	JURISDICTION # <input type="text"/>	FACILITY # <input type="text"/>
LOCATION CODE - OPTIONAL	CENSUS TRACT # - OPTIONAL	SUPVISOR - DISTRICT CODE - OPTIONAL

THIS FORM MUST BE ACCOMPANIED BY AT LEAST (1) OR MORE PERMIT APPLICATION - FORM B, UNLESS THIS IS A CHANGE OF SITE INFORMATION ONLY.

OWNER MUST FILE THIS FORM WITH THE LOCAL AGENCY IMPLEMENTING THE UNDERGROUND STORAGE TANK REGULATIONS

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD
UNDERGROUND STORAGE TANK PERMIT APPLICATION - FORM B



COMPLETE A SEPARATE FORM FOR EACH TANK SYSTEM.

MARK ONLY ONE ITEM	<input checked="" type="checkbox"/> 1 NEW PERMIT	<input type="checkbox"/> 3 RENEWAL PERMIT	<input type="checkbox"/> 5 CHANGE OF INFORMATION	<input type="checkbox"/> 7 PERMANENTLY CLOSED ON SITE
	<input type="checkbox"/> 2 INTERIM PERMIT	<input type="checkbox"/> 4 AMENDED PERMIT	<input type="checkbox"/> 6 TEMPORARY TANK CLOSURE	<input checked="" type="checkbox"/> 8 TANK REMOVED

DBA OR FACILITY NAME WHERE TANK IS INSTALLED: CITY OF ALAMEDA

I. TANK DESCRIPTION COMPLETE ALL ITEMS - SPECIFY IF UNKNOWN

A. OWNER'S TANK I.D. # <u>UNKNOWN</u>	B. MANUFACTURED BY: <u>UNKNOWN</u>
C. DATE INSTALLED (MO/DAY/YEAR) <u>1948</u>	D. TANK CAPACITY IN GALLONS: <u>280 GALLON</u>

II. TANK CONTENTS IF A-1 IS MARKED, COMPLETE ITEM C.

A. <input checked="" type="checkbox"/> 1 MOTOR VEHICLE FUEL <input type="checkbox"/> 2 PETROLEUM <input type="checkbox"/> 3 CHEMICAL PRODUCT	<input type="checkbox"/> 4 OIL <input type="checkbox"/> 80 EMPTY <input type="checkbox"/> 95 UNKNOWN	B. <input checked="" type="checkbox"/> 1 PRODUCT <input type="checkbox"/> 2 WASTE	C. <input checked="" type="checkbox"/> 1a REGULAR UNLEADED <input type="checkbox"/> 1b PREMIUM UNLEADED <input type="checkbox"/> 2 LEADED <input type="checkbox"/> 3 DIESEL <input type="checkbox"/> 4 GASAHOL <input type="checkbox"/> 5 JET FUEL <input type="checkbox"/> 6 AVIATION GAS <input type="checkbox"/> 7 METHANOL <input type="checkbox"/> 99 OTHER (DESCRIBE IN ITEM D. BELOW)
D. IF (A.1) IS NOT MARKED, ENTER NAME OF SUBSTANCE STORED _____		C. A. S. #: _____	

III. TANK CONSTRUCTION MARK ONE ITEM ONLY IN BOXES A, B, AND C, AND ALL THAT APPLIES IN BOX D AND E

A. TYPE OF SYSTEM <input type="checkbox"/> 1 DOUBLE WALL <input type="checkbox"/> 2 SINGLE WALL	<input checked="" type="checkbox"/> 3 SINGLE WALL WITH EXTERIOR LINER <input type="checkbox"/> 4 SECONDARY CONTAINMENT (VAULTED TANK)	<input type="checkbox"/> 95 UNKNOWN <input type="checkbox"/> 99 OTHER
B. TANK MATERIAL (Primary Tank) <input checked="" type="checkbox"/> 1 BARE STEEL <input type="checkbox"/> 5 CONCRETE <input type="checkbox"/> 9 BRONZE	<input type="checkbox"/> 2 STAINLESS STEEL <input type="checkbox"/> 6 POLYVINYL CHLORIDE <input type="checkbox"/> 10 GALVANIZED STEEL	<input type="checkbox"/> 3 FIBERGLASS <input type="checkbox"/> 7 ALUMINUM <input type="checkbox"/> 95 UNKNOWN <input type="checkbox"/> 4 STEEL CLAD W/ FIBERGLASS REINFORCED PLASTIC <input type="checkbox"/> 8 100% METHANOL COMPATIBLE W/FRP <input type="checkbox"/> 99 OTHER
C. INTERIOR LINING <input type="checkbox"/> 1 RUBBER LINED <input type="checkbox"/> 5 GLASS LINING	<input type="checkbox"/> 2 ALKYD LINING <input type="checkbox"/> 6 UNLINED	<input type="checkbox"/> 3 EPOXY LINING <input checked="" type="checkbox"/> 95 UNKNOWN <input type="checkbox"/> 4 PHENOLIC LINING <input type="checkbox"/> 99 OTHER
IS LINING MATERIAL COMPATIBLE WITH 100% METHANOL? YES ___ NO ___		
D. CORROSION PROTECTION <input type="checkbox"/> 1 POLYETHYLENE WRAP <input type="checkbox"/> 5 CATHODIC PROTECTION	<input type="checkbox"/> 2 COATING <input type="checkbox"/> 91 NONE	<input type="checkbox"/> 3 VINYL WRAP <input checked="" type="checkbox"/> 95 UNKNOWN <input type="checkbox"/> 4 FIBERGLASS REINFORCED PLASTIC <input type="checkbox"/> 99 OTHER
E. SPILL AND OVERFILL SPILL CONTAINMENT INSTALLED (YEAR) _____ OVERFILL PREVENTION EQUIPMENT INSTALLED (YEAR) _____		

IV. PIPING INFORMATION CIRCLE A IF ABOVE GROUND OR U IF UNDERGROUND, BOTH IF APPLICABLE

A. SYSTEM TYPE	A <u>U</u> 1 SUCTION	A <u>U</u> 2 PRESSURE	A <u>U</u> 3 GRAVITY	A <u>U</u> 99 OTHER
B. CONSTRUCTION	A <u>U</u> 1 SINGLE WALL	A <u>U</u> 2 DOUBLE WALL	A <u>U</u> 3 LINED TRENCH	A <u>U</u> 95 UNKNOWN A <u>U</u> 99 OTHER
C. MATERIAL AND CORROSION PROTECTION	A <u>U</u> 1 BARE STEEL	A <u>U</u> 2 STAINLESS STEEL	A <u>U</u> 3 POLYVINYL CHLORIDE (PVC)	A <u>U</u> 4 FIBERGLASS PIPE
	A <u>U</u> 5 ALUMINUM	A <u>U</u> 6 CONCRETE	A <u>U</u> 7 STEEL W/ COATING	A <u>U</u> 8 100% METHANOL COMPATIBLE W/FRP
	A <u>U</u> 9 GALVANIZED STEEL	A <u>U</u> 10 CATHODIC PROTECTION	A <u>U</u> 95 UNKNOWN	A <u>U</u> 99 OTHER
D. LEAK DETECTION	<input type="checkbox"/> 1 AUTOMATIC LINE LEAK DETECTOR	<input type="checkbox"/> 2 LINE TIGHTNESS TESTING	<input type="checkbox"/> 3 INTERSTITIAL MONITORING	<input type="checkbox"/> 99 OTHER <u>N/A</u>

V. TANK LEAK DETECTION

<input type="checkbox"/> 1 VISUAL CHECK	<input type="checkbox"/> 2 INVENTORY RECONCILIATION	<input type="checkbox"/> 3 VADGZE MONITORING	<input type="checkbox"/> 4 AUTOMATIC TANK GAUGING	<input type="checkbox"/> 5 GROUND WATER MONITORING
<input type="checkbox"/> 6 TANK TESTING	<input type="checkbox"/> 7 INTERSTITIAL MONITORING	<input type="checkbox"/> 91 NONE	<input type="checkbox"/> 95 UNKNOWN	<input checked="" type="checkbox"/> 99 OTHER

VI. TANK CLOSURE INFORMATION

1. ESTIMATED DATE LAST USED (MO/DAY/YR) <u>UNKNOWN</u>	2. ESTIMATED QUANTITY OF SUBSTANCE REMAINING <u>UNKNOWN</u> GALLONS	3. WAS TANK FILLED WITH INERT MATERIAL? YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>
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THIS FORM HAS BEEN COMPLETED UNDER PENALTY OF PERJURY, AND TO THE BEST OF MY KNOWLEDGE, IS TRUE AND CORRECT

APPLICANT'S NAME (PRINTED & SIGNATURE) <u>V.C.I. OF CALIFORNIA</u> by: <u>CATHERINE R. MAYER (SECT.)</u>	DATE <u>6/7/94</u>
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LOCAL AGENCY USE ONLY THE STATE I.D. NUMBER IS COMPOSED OF THE FOUR NUMBERS BELOW

STATE I.D.#	COUNTY #	JURISDICTION #	FACILITY #	TANK #
PERMIT NUMBER	PERMIT APPROVED BY/DATE		PERMIT EXPIRATION DATE	

THIS FORM MUST BE ACCOMPANIED BY A PERMIT APPLICATION - FORM A, UNLESS A CURRENT FORM A HAS BEEN FILED.
FILE THIS FORM WITH THE LOCAL AGENCY IMPLEMENTING THE UNDERGROUND STORAGE TANK REGULATIONS

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD
UNDERGROUND STORAGE TANK PERMIT APPLICATION - FORM B



COMPLETE A SEPARATE FORM FOR EACH TANK SYSTEM.

MARK ONLY ONE ITEM	<input checked="" type="checkbox"/> 1 NEW PERMIT	<input type="checkbox"/> 3 RENEWAL PERMIT	<input type="checkbox"/> 5 CHANGE OF INFORMATION	<input type="checkbox"/> 7 PERMANENTLY CLOSED ON SITE
	<input type="checkbox"/> 2 INTERIM PERMIT	<input type="checkbox"/> 4 AMENDED PERMIT	<input type="checkbox"/> 6 TEMPORARY TANK CLOSURE	<input checked="" type="checkbox"/> 8 TANK REMOVED

DBA OR FACILITY NAME WHERE TANK IS INSTALLED: CITY OF ALAMEDA

I. TANK DESCRIPTION COMPLETE ALL ITEMS - SPECIFY IF UNKNOWN

A. OWNER'S TANK I.D.# <u>UNKNOWN</u>	B. MANUFACTURED BY: <u>UNKNWON</u>
C. DATE INSTALLED (MO/DAY/YEAR) <u>UNKNOWN</u>	D. TANK CAPACITY IN GALLONS: <u>estimated 3,000 GALLON</u>

II. TANK CONTENTS IF A-1 IS MARKED, COMPLETE ITEM C.

A. <input type="checkbox"/> 1 MOTOR VEHICLE FUEL	4 OIL	B. <input checked="" type="checkbox"/> 1 PRODUCT
<input checked="" type="checkbox"/> 2 PETROLEUM	80 EMPTY	<input type="checkbox"/> 2 WASTE
<input type="checkbox"/> 3 CHEMICAL PRODUCT	95 UNKNOWN	

C. 1a REGULAR UNLEADED 3 DIESEL 6 AVIATION GAS
 1b PREMIUM UNLEADED 4 GASAHOL 7 METHANOL
 2 LEADED 5 JET FUEL 99 OTHER (DESCRIBE IN ITEM D. BELOW)

D. IF (A 1) IS NOT MARKED, ENTER NAME OF SUBSTANCE STORED HEATING OIL C. A. S. #: _____

III. TANK CONSTRUCTION MARK ONE ITEM ONLY IN BOXES A, B, AND C, AND ALL THAT APPLIES IN BOX D AND E

A. TYPE OF SYSTEM	1 DOUBLE WALL	3 SINGLE WALL WITH EXTERIOR LINER	95 UNKNOWN
	2 SINGLE WALL	4 SECONDARY CONTAINMENT (VAULTED TANK)	99 OTHER
B. TANK MATERIAL (Primary Tank)	<input checked="" type="checkbox"/> 1 BARE STEEL	2 STAINLESS STEEL	3 FIBERGLASS
	5 CONCRETE	6 POLYVINYL CHLORIDE	7 ALUMINUM
	9 BRONZE	10 GALVANIZED STEEL	95 UNKNOWN
			99 OTHER
C. INTERIOR LINING	1 RUBBER LINED	2 ALKYD LINING	3 EPOXY LINING
	5 GLASS LINING	6 UNLINED	4 PHENOLIC LINING
			<input checked="" type="checkbox"/> 95 UNKNOWN
			99 OTHER
	IS LINING MATERIAL COMPATIBLE WITH 100% METHANOL? YES ___ NO ___		
D. CORROSION PROTECTION	1 POLYETHYLENE WRAP	2 COATING	3 VINYL WRAP
	5 CATHODIC PROTECTION	91 NONE	4 FIBERGLASS REINFORCED PLASTIC
			<input checked="" type="checkbox"/> 95 UNKNOWN
			99 OTHER
E. SPILL AND OVERFILL	SPILL CONTAINMENT INSTALLED (YEAR) _____		OVERFILL PREVENTION EQUIPMENT INSTALLED (YEAR) _____

IV. PIPING INFORMATION CIRCLE A IF ABOVE GROUND OR U IF UNDERGROUND, BOTH IF APPLICABLE

A. SYSTEM TYPE	A U 1 SUCTION	A U 2 PRESSURE	A U 3 GRAVITY	A U 99 OTHER
B. CONSTRUCTION	A U 1 SINGLE WALL	A U 2 DOUBLE WALL	A U 3 LINED TRENCH	A U 95 UNKNOWN
				A U 99 OTHER
C. MATERIAL AND CORROSION PROTECTION	A U 1 BARE STEEL	A U 2 STAINLESS STEEL	A U 3 POLYVINYL CHLORIDE (PVC)	A U 4 FIBERGLASS PIPE
	A U 5 ALUMINUM	A U 6 CONCRETE	A U 7 STEEL W/COATING	A U 8 100% METHANOL COMPATIBLE W/FRP
	A U 9 GALVANIZED STEEL	A U 10 CATHODIC PROTECTION	A U 95 UNKNOWN	A U 99 OTHER
D. LEAK DETECTION	<input type="checkbox"/> 1 AUTOMATIC LINE LEAK DETECTOR	<input type="checkbox"/> 2 LINE TIGHTNESS TESTING	<input type="checkbox"/> 3 INTERSTITIAL MONITORING	<input checked="" type="checkbox"/> 99 OTHER <u>N/A</u>

V. TANK LEAK DETECTION

<input type="checkbox"/> 1 VISUAL CHECK	<input type="checkbox"/> 2 INVENTORY RECONCILIATION	<input type="checkbox"/> 3 VADOZE MONITORING	<input type="checkbox"/> 4 AUTOMATIC TANK GAUGING	<input type="checkbox"/> 5 GROUND WATER MONITORING
<input type="checkbox"/> 6 TANK TESTING	<input type="checkbox"/> 7 INTERSTITIAL MONITORING	<input type="checkbox"/> 91 NONE	<input type="checkbox"/> 95 UNKNOWN	<input checked="" type="checkbox"/> 99 OTHER

VI. TANK CLOSURE INFORMATION

1. ESTIMATED DATE LAST USED (MO/DAY/YR) <u>UNKWON</u>	2. ESTIMATED QUANTITY OF SUBSTANCE REMAINING <u>UNKWON</u> GALLONS	3. WAS TANK FILLED WITH INERT MATERIAL? YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>
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THIS FORM HAS BEEN COMPLETED UNDER PENALTY OF PERJURY, AND TO THE BEST OF MY KNOWLEDGE, IS TRUE AND CORRECT

APPLICANT'S NAME (PRINTED & SIGNATURE) <u>V.C.I. OF CALIFORNIA</u> BY: <u>CATHERINE R. MAYER (SECRETARY)</u>	DATE <u>6/7/94</u>
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LOCAL AGENCY USE ONLY THE STATE I.D. NUMBER IS COMPOSED OF THE FOUR NUMBERS BELOW

STATE I.D.#	COUNTY #	JURISDICTION #	FACILITY #	TANK #
	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
PERMIT NUMBER	PERMIT APPROVED BY/DATE		PERMIT EXPIRATION DATE	

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD
UNDERGROUND STORAGE TANK PERMIT APPLICATION - FORM B



COMPLETE A SEPARATE FORM FOR EACH TANK SYSTEM.

MARK ONLY ONE ITEM	<input checked="" type="checkbox"/> 1 NEW PERMIT	<input type="checkbox"/> 3 RENEWAL PERMIT	<input type="checkbox"/> 5 CHANGE OF INFORMATION	<input type="checkbox"/> 7 PERMANENTLY CLOSED ON SITE
	<input type="checkbox"/> 2 INTERIM PERMIT	<input type="checkbox"/> 4 AMENDED PERMIT	<input type="checkbox"/> 6 TEMPORARY TANK CLOSURE	<input checked="" type="checkbox"/> 8 TANK REMOVED

DBA OR FACILITY NAME WHERE TANK IS INSTALLED: CITY OF ALAMEDA

I. TANK DESCRIPTION COMPLETE ALL ITEMS - SPECIFY IF UNKNOWN

A. OWNER'S TANK I.D.# UNKNOWN	B. MANUFACTURED BY: UNKNOWN
C. DATE INSTALLED (MO/DAY/YEAR) UNKNOWN	D. TANK CAPACITY IN GALLONS: 1,000 GALLON

II. TANK CONTENTS IF A-1 IS MARKED, COMPLETE ITEM C.

A. <input checked="" type="checkbox"/> 1 MOTOR VEHICLE FUEL <input type="checkbox"/> 2 PETROLEUM <input type="checkbox"/> 3 CHEMICAL PRODUCT	<input type="checkbox"/> 4 OIL <input type="checkbox"/> 80 EMPTY <input type="checkbox"/> 95 UNKNOWN	B. <input checked="" type="checkbox"/> 1 PRODUCT <input type="checkbox"/> 2 WASTE
		C. <input type="checkbox"/> 1a REGULAR UNLEADED <input type="checkbox"/> 1b PREMIUM UNLEADED <input checked="" type="checkbox"/> 2 LEADED
		<input type="checkbox"/> 3 DIESEL <input type="checkbox"/> 4 GASAHOL <input type="checkbox"/> 5 JET FUEL <input type="checkbox"/> 6 AVIATION GAS <input type="checkbox"/> 7 METHANOL <input type="checkbox"/> 99 OTHER (DESCRIBE IN ITEM D. BELOW)

D. IF (A.1) IS NOT MARKED, ENTER NAME OF SUBSTANCE STORED _____ C. A. S. #: _____

III. TANK CONSTRUCTION MARK ONE ITEM ONLY IN BOXES A, B, AND C, AND ALL THAT APPLIES IN BOX D AND E

A. TYPE OF SYSTEM <input type="checkbox"/> 1 DOUBLE WALL <input type="checkbox"/> 2 SINGLE WALL	<input checked="" type="checkbox"/> 3 SINGLE WALL WITH EXTERIOR LINER <input type="checkbox"/> 4 SECONDARY CONTAINMENT (VAULTED TANK)	<input type="checkbox"/> 95 UNKNOWN <input type="checkbox"/> 99 OTHER
B. TANK MATERIAL (Primary Tank) <input checked="" type="checkbox"/> 1 BARE STEEL <input type="checkbox"/> 5 CONCRETE <input type="checkbox"/> 9 BRONZE	<input type="checkbox"/> 2 STAINLESS STEEL <input type="checkbox"/> 6 POLYVINYL CHLORIDE <input type="checkbox"/> 10 GALVANIZED STEEL	<input type="checkbox"/> 3 FIBERGLASS <input type="checkbox"/> 7 ALUMINUM <input type="checkbox"/> 95 UNKNOWN <input type="checkbox"/> 99 OTHER
C. INTERIOR LINING <input type="checkbox"/> 1 RUBBER LINED <input type="checkbox"/> 5 GLASS LINING	<input type="checkbox"/> 2 ALKYD LINING <input type="checkbox"/> 6 UNLINED	<input type="checkbox"/> 3 EPOXY LINING <input type="checkbox"/> 4 PHENOLIC LINING <input checked="" type="checkbox"/> 95 UNKNOWN <input type="checkbox"/> 99 OTHER
IS LINING MATERIAL COMPATIBLE WITH 100% METHANOL? YES ___ NO ___		
D. CORROSION PROTECTION <input type="checkbox"/> 1 POLYETHYLENE WRAP <input type="checkbox"/> 5 CATHODIC PROTECTION	<input type="checkbox"/> 2 COATING <input type="checkbox"/> 91 NONE	<input type="checkbox"/> 3 VINYL WRAP <input checked="" type="checkbox"/> 95 UNKNOWN <input type="checkbox"/> 4 FIBERGLASS REINFORCED PLASTIC <input type="checkbox"/> 99 OTHER
E. SPILL AND OVERFILL SPILL CONTAINMENT INSTALLED (YEAR) _____ OVERFILL PREVENTION EQUIPMENT INSTALLED (YEAR) _____		

IV. PIPING INFORMATION CIRCLE A IF ABOVE GROUND OR U IF UNDERGROUND, BOTH IF APPLICABLE

A. SYSTEM TYPE	A U 1 SUCTION	A U 2 PRESSURE	A U 3 GRAVITY	A U 99 OTHER
B. CONSTRUCTION	A U 1 SINGLE WALL	A U 2 DOUBLE WALL	A U 3 LINED TRENCH	A U 95 UNKNOWN A U 99 OTHER
C. MATERIAL AND CORROSION PROTECTION	A U 1 BARE STEEL	A U 2 STAINLESS STEEL	A U 3 POLYVINYL CHLORIDE (PVC)	A U 4 FIBERGLASS PIPE
	A U 5 ALUMINUM	A U 6 CONCRETE	A U 7 STEEL W/ COATING	A U 8 100% METHANOL COMPATIBLE W/FRP
	A U 9 GALVANIZED STEEL	A U 10 CATHODIC PROTECTION	A U 95 UNKNOWN	A U 99 OTHER
D. LEAK DETECTION	<input type="checkbox"/> 1 AUTOMATIC LINE LEAK DETECTOR	<input type="checkbox"/> 2 LINE TIGHTNESS TESTING	<input type="checkbox"/> 3 INTERSTITIAL MONITORING	<input type="checkbox"/> 99 OTHER N/A

V. TANK LEAK DETECTION

<input type="checkbox"/> 1 VISUAL CHECK	<input type="checkbox"/> 2 INVENTORY RECONCILIATION	<input type="checkbox"/> 3 VADOZE MONITORING	<input type="checkbox"/> 4 AUTOMATIC TANK GAUGING	<input type="checkbox"/> 5 GROUND WATER MONITORING
<input type="checkbox"/> 6 TANK TESTING	<input type="checkbox"/> 7 INTERSTITIAL MONITORING	<input type="checkbox"/> 91 NONE	<input type="checkbox"/> 95 UNKNOWN	<input checked="" type="checkbox"/> 99 OTHER

VI. TANK CLOSURE INFORMATION

1. ESTIMATED DATE LAST USED (MO/DAY/YR) UNKNOWN	2. ESTIMATED QUANTITY OF SUBSTANCE REMAINING UNKNOWN GALLONS	3. WAS TANK FILLED WITH INERT MATERIAL? YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>
--	---	---

THIS FORM HAS BEEN COMPLETED UNDER PENALTY OF PERJURY, AND TO THE BEST OF MY KNOWLEDGE, IS TRUE AND CORRECT

APPLICANT'S NAME (PRINTED & SIGNATURE) V.C.I. OF CALIFORNIA BY: CATHERINE R. MAYER (SECRETARY <i>Catherine R. Mayer</i>)	DATE 6/7/94
---	-------------

LOCAL AGENCY USE ONLY THE STATE I.D. NUMBER IS COMPOSED OF THE FOUR NUMBERS BELOW

STATE I.D.#	COUNTY #	JURISDICTION #	FACILITY #	TANK #
PERMIT NUMBER	PERMIT APPROVED BY/DATE		PERMIT EXPIRATION DATE	

THIS FORM MUST BE ACCOMPANIED BY A PERMIT APPLICATION - FORM A, UNLESS A CURRENT FORM A HAS BEEN FILED.
FILE THIS FORM WITH THE LOCAL AGENCY IMPLEMENTING THE UNDERGROUND STORAGE TANK REGULATIONS



City of Alameda • California

May 7, 1996

Alameda County Health Care Services Agency
Department of Environmental Health
1131 Harbor Bay Parkway
Alameda, California 94502-6577

96 MAY 10 PM 12:44
ENVIRONMENTAL
PROTECTION

Attention: Ms. Juliet Shin

Re: 2263 Santa Clara Ave., Alameda, CA

Dear Ms. Shin:

The City of Alameda submit for your review the report of Potential Human Health Threat for the above referenced project and has attached a copy for your review. This report was prepared by ACC Environmental Consultants, Inc., in conjunction with the City of Alameda.

The City has complied with all requests forwarded from your department. It is our hope that this project may now be evaluated for "no further action".

If you have any questions or comments, please contact me at (510) 748-4512.

Sincerely,

A handwritten signature in cursive script, appearing to read "Wesley Adams".

Wesley Adams
Assistant Engineer

\\projects\ustank\ltr2196.ltr

RECEIVED
MARCH 11 1996
CITY OF ALAMEDA

LETTER OF TRANSMITTAL

Date: March 5, 1996

To: ACHCSA
Juliet Shinn
1131 Harbor Bay Parkway
Room 250
Alameda, CA. 94502-6577


From: Wesley Adams
Public Works Department
City of Alameda, Room 250
2250 Central Avenue
Alameda, CA. 94501
Phone: (510) 748-4512
Fax: (510) 748-4697

Subject: 2263 Santa Clara Avenue, Alameda, CA.

Message: Attached is the current Ground water sampling and analysis report for the above referenced project. It is the City's understanding that additional water samplings and analysis will no longer be needed for the 2 wells at this location.

If you have any questions, please contact me at (510) 748-4512.

Thank you.

Signed: 

Reply:

Signed:

ALAMEDA COUNTY
HEALTH CARE SERVICES

AGENCY
DAVID J. KEARS, Agency Director



RAFAT A. SHAHID, DIRECTOR

March 5, 1996

Mr. Wesley Adams
City of Alameda
2263 Santa Clara Ave.
Alameda, CA 94501-4455

DEPARTMENT OF ENVIRONMENTAL HEALTH
1131 Harbor Bay Parkway
Alameda, CA 94502-6577
(510) 567-6777

STID 3837

Re: Potential human health threat at 2263 Santa Clara Ave., Alameda, California

Dear Mr. Adams,

Based on information recently made available to this office, it appears that the residual concentrations of benzene identified in former tank pit T-1, adjacent to the actively used garage building, may potentially pose a threat to human health through the intrusion of vapors into the building. Per Tier 1 of the American Society for Testing and Materials' Risk-Based Corrective Action (ASTM RBCA) guidelines, the human health protective threshold level for potential soil vapor intrusion into buildings in a commercial/residential scenario is 0.005 parts per million (ppm) for a 10^{-6} risk and 0.49ppm for a 10^{-4} risk scenario. The remaining levels of benzene at the site, 0.63ppm, exceed both these given threshold values. Therefore, before closure can be considered for this site, this office needs more data assuring that the residual levels of benzene will not pose a threat to occupants of the on-site building. This can possibly be accomplished through various options which may include, but not be limited to, the following: 1) Inputting more site-specific data into the Tier 2 level of ASTM RBCA; 2) collecting real air/vapor data from the vadose zone beneath the building or possibly from within the existing building; or 3) inputting site-specific data into other established risk assessment equations.

Please submit this information to this office **within 60 days of the date of this letter**. If you have any questions or comments, please feel free to contact me at (510) 567-6763.

Sincerely,

Juliet Shin
Senior Hazardous Materials Specialist

cc: Misty Kaltreider
ACC Environmental Consultants
7977 Capwell Drive, Ste 100
Oakland, CA 94621

Acting Chief-File

ENVIRONMENTAL TECHNOLOGIES CORPORATION
FIELD OFFICE
SMITH - 9714 1-27

29 February 1996

Mr. Lance Bryant
City of Alameda
Maintenance Service Center
1616 Fortman Way
Alameda, CA 94501

**Subject: Ground Water Sampling and Analysis
Alameda City Hall, Alameda, California**

Dear Mr. Bryant:

Smith Environmental Technologies Corporation has completed the second of two quarterly ground water monitoring events of the wells located at City of Alameda facilities (Figures 1 and 2). Continued ground water monitoring was required by the Alameda County Health Care Services Agency, as detailed in Juliet Shin's 25 July 1995 letter to Wesley Adams. Ground water sampling of the two wells (wells CH-MW1 and CH-MW2) located at the Alameda City Hall was conducted on 14 February 1996. Water levels in these two wells and the well located on the Police Station (well PS-MW1) were measured prior to sampling. In addition to the quarterly ground water sampling, monthly odor and sheen monitoring has been conducted at the City Hall and Police Station wells and three additional wells located at Fire Stations No. 2 and No. 3 (Wells FS2-MW1, FS3-MW1, and FS3-MW2). No sheen or odor were observed in any of the monitoring wells during the last six months.

Ground water samples were obtained in accordance with ground water sampling protocol (Attachment A). Prior to sampling, wells CH-MW1 and CH-MW2 were checked for the presence of free-floating product with a clear bailer: no free-floating product was observed. The wells were then purged of approximately four well-casing volumes of water before sampling. Ground water samples were collected in dedicated polyethylene bailers, preserved in laboratory-supplied bottles, and stored in a chilled ice chest for shipment to a state-certified laboratory following proper Chain of Custody procedures.

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY

DAVID J. KEARS, Agency Director



RAFAT A. SHAHID, Director

Alameda County
Environmental Protection Division
1131 Harbor Bay Parkway, Room 250
Alameda CA 94502-6577

CC4586

July 25, 1995

Mr. Wesley Adams
City of Alameda
2263 Santa Clara Ave.
Alameda, CA 94501-4455

STID 3837

Re: Work plan for 2263 Santa Clara Ave., Alameda, CA

Dear Mr. Adams,

This office has reviewed ACC's work plan, dated May 1995, for the above site. All future work plans and reports need to include a signed cover letter from the City of Alameda acknowledging their review and concurrence with the report(s). The work plan is acceptable to this office with the following comments:

- o This office has insufficient information to confirm that former tank T-3 was in fact a heating oil tank. Based on the assumption that T-3 was a heating oil tank, tank pit soil samples were only analyzed for TPHd and BTEX at the time of the tank removal. Please submit additional information indicating that T-3 was used to store heating oil. If there is any indication that this tank was used to store waste oil, additional samples may need to be collected from this area and analyzed for all waste oil constituents.
- o If, after two quarters of monitoring, the groundwater gradient is determined to be flowing to the north/northeast, an additional well will be required within 10 feet north of former Tank T-1.

Field work should commence within 45 days of the date of this letter. A report documenting the work shall be submitted to this office within 45 days after completing field activities.

If you have any questions or comments, please contact me at (510) 567-6763.

Sincerely,

A handwritten signature in cursive script, appearing to read "Juliet Shin".

Juliet Shin
Senior Hazardous Materials Specialist

Mr. Wesley Adams
Re: 2263 Santa Clara Ave.
July 25, 1995
Page 2 of 2

cc: Misty Kaltreider
ACC Environmental Consultants
1000 Atlantic Ave., Ste 110
Alameda, CA 94501

Acting Chief-File

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY

DAVID J. KEARS, Agency Director



RAFAT A. SHAHID, ASST. AGENCY DIRECTOR

June 29, 1995

Mr. Wesley Adams
City of Alameda
2263 Santa Clara Ave.
Alameda, CA 94501-4455

DEPARTMENT OF ENVIRONMENTAL HEALTH
State Water Resources Control Board
Division of Clean Water Programs
UST Local Oversight Program
80 Swan Way Rm 200
Oakland, CA 94621
(510) 271-4530

STID 3837

Re: Required investigations at 2263 Santa Clara Ave., Alameda,
California

Dear Mr. Adams,

Three underground storage tanks (USTs), one 280-gallon unleaded gasoline UST (T-1), one 1,000-gallon leaded gasoline UST (T-2), and one 1,500-gallon heating oil UST (T-3), were removed from the site on June 15 and 17, 1994. Up to 4,700 parts per million (ppm) Total Petroleum Hydrocarbons as gasoline (TPHg) and 8.4ppm benzene was identified in soil samples collected from the tank pits.

On February 28, 1995, this office sent you a letter requiring you to prepare and submit a Preliminary Site Assessment (PSA) work plan addressing soil and groundwater investigations at the above site (refer to attached copy). This work plan was due to this office by April 25, 1995. On April 28, 1995, ACC Environmental Consultants submitted a letter to this office requesting a 45-day extension for the submittal of the work plan. This extension was verbally granted by this office and the work plan submittal date was extended to June 6, 1995.

To this date, this office has not received the required workplan. Per Article 11, Title 23 California Code of Regulations, you are required to submitted this work plan, addressing the concerns outlined in the February 28, 1995 letter. **This work plan is due to this office within 30 days of the date of this letter.** Any requests for extensions, or modifications of the required tasks, should be submitted in writing.

If you have any questions or comments, please contact me at (510) 567-6763.

Sincerely,

A handwritten signature in cursive script that reads "Juliet Shin".

Juliet Shin
Senior Hazardous Materials Specialist

Mr. Wesley Adams
Re: 2263 Santa Clara Ave.
June 29, 1995
Page 2 of 2

ATTACHMENT

cc: Misty Kaltreider
ACC Environmental Consultants
1000 Atlantic Ave., Ste 110
Alameda, CA 94501

Acting Chief-File

95 MAY -2 PM 1:32

April 28, 1995

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

RE: Required Investigation at 2263 Santa Clara Avenue,
Alameda, CA
STID #3837

Dear Juliet:

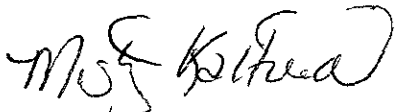
ACC Environmental Consultants, Inc. (ACC) has been retained by the City of Alameda to assist them with a Preliminary Site Assessment (PSA) at the above referenced site in response to your letter dated February 28, 1995.

ACC's initial scope of work will be to review all work performed to date and prepare a Preliminary Site Assessment (Work Plan) proposal for your review and approval. Per your letter, the Work Plan will be submitted under seal of a California Registered Geologist.

As ACC was just recently retained by the City of Alameda to perform this work, we are requesting a 45 day extension for the submission of the Work Plan.

If you have any questions, please do not hesitate to call me.

Sincerely,



Misty Kaltreider
Project Manager

cc: Mr. Wesley Adams, Engineer - City of Alameda

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

EMERGENCY <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		HAS STATE OFFICE OF EMERGENCY SERVICES REPORT BEEN FILED? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		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.	
REPORT DATE 03/30/95		CASE # _____			
REPORTED BY	NAME OF INDIVIDUAL FILING REPORT Jim Sanderson		PHONE (510)748-4510		SIGNATURE <i>Jim Sanderson</i>
	REPRESENTING <input checked="" type="checkbox"/> LOCAL AGENCY <input type="checkbox"/> OWNER/OPERATOR <input type="checkbox"/> REGIONAL BOARD <input type="checkbox"/> OTHER		COMPANY OR AGENCY NAME City of Alameda		
	ADDRESS 2263 Santa Clara Avenue, Room 207, Alameda, CA 94501-4455				
RESPONSIBLE PARTY	NAME Same as above		CONTACT PERSON <input type="checkbox"/> UNKNOWN		PHONE ()
	ADDRESS _____				
SITE LOCATION	FACILITY NAME (IF APPLICABLE) City Hall		OPERATOR N/A		PHONE ()
	ADDRESS 2263 Santa Clara Avenue, Room 207, Alameda, CA 94501-4455				
	CROSS STREET Oak Street				
IMPLEMENTING AGENCIES	LOCAL AGENCY Alameda County Health Care Services		AGENCY NAME Alameda County Health Care Services		CONTACT PERSON Juliet Shinn
	REGIONAL BOARD		REGIONAL BOARD		PHONE 510 567-6763
SUBSTANCES INVOLVED	(1) <i>4.700ppm</i> NAME Less than <i>100</i> ppm TPH-G Petroleum Hydrocarbon + <i>8.4ppm benzene in soil sample</i>				QUANTITY LOST (GALLONS) <input checked="" type="checkbox"/> UNKNOWN
	(2) _____ <input type="checkbox"/> UNKNOWN				
DISCOVERY/ABATEMENT	DATE DISCOVERED 06/17/94		HOW DISCOVERED <input type="checkbox"/> TANK TEST <input type="checkbox"/> INVENTORY CONTROL <input type="checkbox"/> SUBSURFACE MONITORING <input type="checkbox"/> NUISANCE CONDITIONS		<input checked="" type="checkbox"/> OTHER <i>During tank removal</i>
	DATE DISCHARGE BEGAN <input checked="" type="checkbox"/> UNKNOWN		METHOD USED TO STOP DISCHARGE (CHECK ALL THAT APPLY) <input type="checkbox"/> REMOVE CONTENTS <input type="checkbox"/> CLOSE TANK & REMOVE <input type="checkbox"/> REPAIR PIPING		
	HAS DISCHARGE BEEN STOPPED? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO IF YES, DATE 06/15/94		<input type="checkbox"/> REPAIR TANK <input type="checkbox"/> CLOSE TANK & FILL IN PLACE <input type="checkbox"/> CHANGE PROCEDURE		
SOURCE/ CAUSE	SOURCE OF DISCHARGE <input type="checkbox"/> TANK LEAK <input checked="" type="checkbox"/> UNKNOWN		CAUSE(S) <input type="checkbox"/> OVERFILL <input type="checkbox"/> RUPTURE/FAILURE <input type="checkbox"/> SPILL		
	<input type="checkbox"/> PIPING LEAK <input type="checkbox"/> OTHER		<input type="checkbox"/> CORROSION <input checked="" type="checkbox"/> UNKNOWN <input type="checkbox"/> OTHER		
CASE TYPE	CHECK ONE ONLY <input checked="" type="checkbox"/> UNDETERMINED <input type="checkbox"/> SOIL ONLY <input type="checkbox"/> GROUNDWATER <input type="checkbox"/> DRINKING WATER - (CHECK ONLY IF WATER WELLS HAVE ACTUALLY BEEN AFFECTED)				
	CHECK ONE ONLY <input type="checkbox"/> NO ACTION TAKEN <input type="checkbox"/> PRELIMINARY SITE ASSESSMENT WORKPLAN SUBMITTED <input type="checkbox"/> POLLUTION CHARACTERIZATION				
CURRENT STATUS	<input type="checkbox"/> LEAK BEING CONFIRMED <input checked="" type="checkbox"/> PRELIMINARY SITE ASSESSMENT UNDERWAY <input type="checkbox"/> POST CLEANUP MONITORING IN PROGRESS				
	<input type="checkbox"/> REMEDIATION PLAN <input type="checkbox"/> CASE CLOSED (CLEANUP COMPLETED OR UNNECESSARY) <input type="checkbox"/> CLEANUP UNDERWAY				
REMEDIAL ACTION	CHECK APPROPRIATE ACTION(S) <input type="checkbox"/> CAP SITE (CD) <input type="checkbox"/> EXCAVATE & DISPOSE (ED) <input type="checkbox"/> REMOVE FREE PRODUCT (FP) <input type="checkbox"/> ENHANCED BIO DEGRADATION (IT)				
	<input type="checkbox"/> CONTAINMENT BARRIER (CB) <input type="checkbox"/> EXCAVATE & TREAT (ET) <input type="checkbox"/> PUMP & TREAT GROUNDWATER (GT) <input type="checkbox"/> REPLACE SUPPLY (RS)				
COMMENTS	<input type="checkbox"/> VACUUM EXTRACT (VE) <input checked="" type="checkbox"/> OTHER (OT) <i>Developing Workplan</i>				
	<i>potential overexcavation of contaminated soil conducted but groundwater impact has not been assessed.</i>				

ALAMEDA COUNTY
HEALTH CARE SERVICES

AGENCY

DAVID J. KEARS, Agency Director



RAFAT A. SHAHID, Assistant Agency Director

February 28, 1995

Mr. Wesley Adams, Engineer
City of Alameda
2263 Santa Clara Ave.
Alameda, CA 94501-4455

ALAMEDA COUNTY CC4580
DEPT. OF ENVIRONMENTAL HEALTH
ENVIRONMENTAL PROTECTION DIVISION
1131 HARBOR BAY PKWY., #250
ALAMEDA CA 94502-6577

STID 3837

Re: Required investigations at 2263 Santa Clara Ave., Alameda

Dear Mr. Adams,

This office has reviewed RGA Environmental's (RGA) Underground Storage Tank Removal Report, dated October 1994, for the above site. Three underground storage tanks (USTs), one 280-gallon unleaded gasoline tank (T-1), one 1,000-gallon leaded gasoline tank (T-2), and one 1,500-gallon heating oil tank (T-3), were removed from the site on June 15 and 17, 1994. Soil samples were collected from each of the tank pits and one "grab" ground water sample was collected from tank pit T-2. Analysis of the soil samples identified up to 4,700 parts per million (ppm) Total Petroleum Hydrocarbons as gasoline (TPHg) and 8.4 ppm benzene in the T-1 tank pit. Overexcavation of tank pit T-1 was subsequently conducted. Analysis of confirmatory soil samples collected from this excavation identified up to 100 ppm TPHg and 0.63 ppm benzene from the north sidewall.

Although it appears that the extent of soil contamination has roughly been defined and that the bulk of soil contamination was overexcavated from tank pit T-1, the initial soil contaminant concentrations identified in T-1 indicate that ground water may have been impacted at the site. Guidelines established by the California Regional Water Quality Control Board (RWQCB) require that ground water investigations be conducted when there is evidence to indicate that a release from an UST may have impacted ground water.

You are required to conduct a **Preliminary Site Assessment (PSA)** to determine the lateral and vertical extent and severity of any potential ground water contamination resulting from the release at the site. The information gathered by the PSA will be used to determine an appropriate course of action to remediate the site, if deemed necessary. The PSA must be conducted in accordance with the RWQCB's Staff Recommendations for the Initial Evaluation and Investigation of Underground Tanks, and be consistent with requirements set forth in Article 11 of Title 23, California Code of Regulations. The major elements of such an investigation are

Mr. Wesley Adams
Re: 2263 Santa Clara Ave.
February 28, 1995
Page 2 of 4

summarized in the attached **Appendix A**. The major elements of the guidelines include, but are not limited to, the following:

- o At least one permanent ground water monitoring well must be installed within 10 feet of the observed soil contamination, oriented in the confirmed downgradient direction relative to groundwater flow. In the absence of neighboring monitoring wells located within 100 feet of the site, or any other data identifying the confirmed downgradient direction, a minimum of three wells will be required to verify gradient direction. Although two monitoring wells already exist at the site, adjacent to T-1 and T-2, these wells will only be acceptable for monitoring purposes if detailed well construction data for these wells are provided to and reviewed by this office and it is determined that these wells are screened and constructed properly for monitoring. Additionally, information must be provided on the current condition of these wells for our review.

During the installation of any wells, soil samples are to be collected at five-foot-depth intervals and any significant changes in lithology.

- o Subsequent to the installation of the monitoring wells, these wells must be **surveyed to an established benchmark**, (i.e., Mean Sea Level) with an accuracy of 0.01 foot. Ground water samples are to be collected and analyzed quarterly, and water level measurements are to be collected **monthly for the first six months**, and then quarterly thereafter. If the initial ground water elevation contours indicate that ground water flow directions vary greatly than you will be required to continue monthly water level measurements until the ground water gradient behavior is known. Both soil and ground water samples shall be analyzed for TPHg and BTEX.

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.

Mr. Wesley Adams
Re: 2263 Santa Clara Ave.
February 28, 1995
Page 3 of 4

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.**

The PSA proposal is due within 60 days of the date of this letter. Once the proposal is approved, field work should commence within 60 days. A report must be submitted within 45 days after the completion of this phase of work at the site. Subsequent reports are to be submitted quarterly until this site qualifies for final RWQCB "sign-off". Such quarterly reports are due the first day of the second month of each subsequent quarter.

The referenced initial and quarterly reports must describe the status of the investigation and must include, among others, the following elements:

- o Details and results of all work performed during the designated period of time: records of field observations and data, boring and well construction logs, water level data, chain-of-custody forms, laboratory results for all samples collected and analyzed, tabulations of free product thicknesses and dissolved fractions, etc.
- o Status of ground water contamination characterization.
- o Interpretations of results: water level contour maps showing gradients, free and dissolved product plume definition maps for each target component, geologic cross sections, etc.
- o Recommendations or plans for additional investigative work or remediation.

Please be advised that this is a formal request for a work plan pursuant to **Section 2722 (c) (d) of Title 23 California Code of Regulations**. Any extensions of the stated deadlines, or modifications of the required tasks, must be confirmed in writing by either this agency or RWQCB.

Additionally, please provide some clarification as to the fate of the contents for all three tanks.

Mr. Wesley Adams
Re: 2263 Santa Clara Ave.
February 28, 1995
Page 4 of 4

Lastly, please complete the attached Unauthorized Leak Report Form and submit it to this office within 30 days of the date of this letter.

If you have any questions or comments, please contact me at (510) 567-6763.

Sincerely,



Juliet Shin
Senior Hazardous Materials Specialist

ATTACHMENT

cc: Edgar Howell

ALAMEDA COUNTY
HEALTH CARE SERVICES

AGENCY

DAVID J. KEAPS, Agency Director



RAFAT A. SHAHID, Assistant Agency Director

February 16, 1995

ALAMEDA COUNTY HEALTH CARE SERVICES
DEPARTMENT OF ENVIRONMENTAL HEALTH
ENVIRONMENTAL PROTECTION DIVISION
1131 HARBOR BAY PKWY STE 250
ALAMEDA CA 94502-6577 cc: 453

Mr. Wesley Adams, Engineer
City of Alameda
2263 Santa Clara Avenue
Alameda, CA 94501-4455

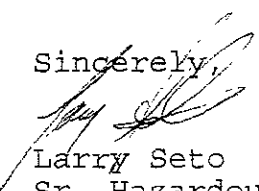
RE: 2263 Santa Clara Avenue, Alameda, CA

Dear Mr. Adams:

I have reviewed The Underground Storage Tank Removal and Soil Excavation Report dated October 1994, that was prepared by RGA Environmental Inc. The file for this site has been transferred to our Local Oversight Program (LOP) for review to determine if further investigation/remediation is necessary. Please contact Tom Peacock, Supervisor of LOP at 567-6782 to determine the new case worker.

If you have any further questions, please contact me at 567-6700.

Sincerely,


Larry Seto
Sr. Hazardous Materials Specialist

cc: Tom Peacock, Environmental Protection
Files

#3837

DATE: 1-20-95
TO : Local Oversight Program
FROM: Larry Seto
SUBJ: Transfer of Eligible Local Oversight Case

Site name: City of Alameda City Hall
Address: 2263 Santa Clara Ave. City Alameda Zip 94501

TO BE ELLIGIBLE FOR LOP A CASE MUST MEET 3 QUALIFICATIONS:

- 1. Number of Tanks: 3 removed? Y N date of removal 6/15 and 6/21/94
- 2. Samples received? (Y) N Contamination level: 4,700 PPM TPH-G
(ppm and type of test)

Contamination should be over 100 ppm TPH to qualify for LOP

- 3. Petroleum (Y) N Types: Avgas Jet leaded (unleaded) Diesel
fuel oil waste oil kerosene solvents

DepRef remaining \$ _____ Closed with Candace/Leslie? (Y) N
(If no explain why?)

IF YOUR SITE MEETS ALL OF THE ABOVE QUALIFICATIONS YOU SHOULD DO THE FOLLOWING TO TRANSFER THE SITE:

- 1. YOU MUST CLOSE THE DEPOSIT REFUND CASE AT THIS TIME. YOU MUST ACCOUNT FOR ALL TIME YOU HAVE SPENT ON THE CASE AND TURN IN THE ACCOUNT SHEET TO LESLIE. IF THERE ARE FUNDS STILL REMAINING IT IS STILL BETTER TO TRANSFER THE CASE TO LOP AS THE RATE FOR LOP ALLOWS THE ADDITION OF MANAGEMENT AND CLERICAL TIME. DO NOT ATTEMPT TO CONTINUE TO OVERSEE THE SITE SIMPLY BECAUSE THERE ARE FUNDS REMAINING!
- 2. COMPLETE THE A AND B PERMIT APPLICATION FORMS AND GIVE TO CONNIE/ELAINE
- 3. GIVE THE ENTIRE CASE TO THE PROPER LOP STAFF UPSTAIRS FOR THEM TO DO THE REST OF THE TRANSFER AND YOU ARE DONE!

Note: Sample from tank #3 that most likely contained fuel oil should of been tested for TOG. It was an oversight that I did not require this test. Forms A+B were submitted in 6/94.

August 3, 1994

HAZMAT



CTYA-1417/E-20-12-109

94 AUG -8 PM 6:45

HC:RGA:AlamedaUST/Seto1

Mr. Larry Seto
Senior Hazardous Materials Specialist
Alameda County Health Agency
Division of Hazardous Materials
1131 Harbor Bay Parkway, 2nd floor
Alameda, California 94502

RE: COPIES OF FIELD NOTES
UST REMOVALS - ALAMEDA CITY HALL
ALAMEDA, CALIFORNIA

Dear Mr Seto:

The purpose of this letter is to request your assistance in *supplying a copy of your field notes* of the UST removals at the City of Alameda City Hall, 2263 Santa Clara Avenue, Alameda, California. It is our intention to include your notes in our tank closure report, which is currently being prepared. The tanks were removed under your observation in June, 1994. Please send the copies to:

David Hoexter
RGA/HC
734 Torreya Court
Palo Alto, CA 94303

By way of a quick summary for your information, the confirmation sample analytical test results for UST #2 and UST #3 were non-detect; the levels for UST #1 were elevated. Additional excavation at UST #1 was conducted, with non-detect or very-low (less than 12 ppm TPH-G) in all samples excepting one, which contained 100 ppm TPH-G. Further excavation was not possible due to the presence of the immediately adjacent structure. The adjacent monitoring well is non-detect.

A complete reporting of all observations, analytical test results, and our conclusions and recommendations will be provided to your office in September, 1994, when we have collected all of the documentation and I have returned from my imminent vacation.

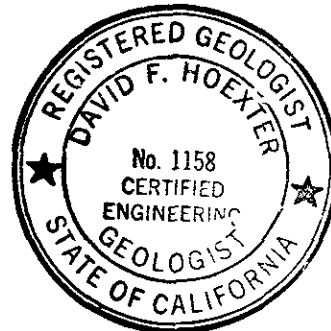
Thank you in advance for supplying the requested copies. If you have any questions, my direct phone number is (415) 494-2505.

Very truly yours,

RGA Environmental, Inc.

David F. Hoexter
Senior Consulting Geologist

Copy: City of Alameda, Mr. Wesley Adams



ENVIRONMENTAL
CONSULTANTS
GEOLOGISTS
ENGINEERS
INDUSTRIAL
HYGIENISTS

1260 45TH STREET
EMERYVILLE, CA
94608-2907
510 547 7771
FAX 510 547 1983

LOS ANGELES
213 930 1197

**STATE
COMPENSATION
INSURANCE
FUND**

P.O. BOX 420807, SAN FRANCISCO, CA 94142-0807

CERTIFICATE OF WORKERS' COMPENSATION INSURANCE

MAY 15, 1994

POLICY NUMBER: 1340531-94
CERTIFICATE EXPIRES: 4-01-95

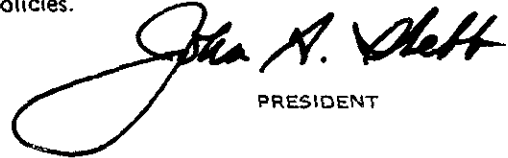
FLORIDA COUNTY DEPT. OF HEALTH
DIVISION OF HAZARDOUS MATERIALS
80 SWAN WAY - PM-110
OAKLAND, CA 94621

This is to certify that we have issued a valid Workers' Compensation insurance policy in a form approved by the California Insurance Commissioner to the employer named below for the policy period indicated.

This policy is not subject to cancellation by the Fund except upon ten days' advance written notice to the employer.

We will also give you TEN days' advance notice should this policy be cancelled prior to its normal expiration.

This certificate of insurance is not an insurance policy and does not amend, extend or alter the coverage afforded by the policies listed herein. Notwithstanding any requirement, term, or condition of any contract or other document with respect to which this certificate of insurance may be issued or may pertain, the insurance afforded by the policies described herein is subject to all the terms, exclusions and conditions of such policies.


PRESIDENT

EMPLOYER

VESEL'S CONSTRUCTION INC.
DBA: VCI OF CALIFORNIA
753 PERALTA AVE.
SAN LEANDRO, CA 94577



State of California
CONTRACTORS STATE LICENSE BOARD
ACTIVE LICENSE



License Number **487537** Entity **CORP**

License For **VERL'S CONSTRUCTION INC
DBA V C I OF CALIFORNIA**

Classification **A B HAZ C21**

Issue Date **02/29/96**



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 this and Local Health Laws. Changes to your closure plans indicated by this Department are to ensure compliance with State and local laws. The project proposed herein is new removal or destruction of any required building permits for construction/demolition. One copy of the accepted plans must be on the job and available to all contractors and craftsmen involved with the removal. Any changes or alterations of these plans and drawings must be submitted to this Department and to the Local 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:

- _____ Removal of Tank(s) and Piping
- _____ Sampling
- _____ Final Inspection

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

***THERE IS A FINANCIAL PENALTY FOR NOT OBTAINING THESE INSPECTIONS**

Contact Specialist:

UNDERGROUND TANK CLOSURE PLAN

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

1. Business Name CITY OF ALAMEDA

Business Owner CITY OF ALAMEDA

2. Site Address 2263 SANTA CLARA AVENUE

City ALAMEDA Zip 94501 Phone 510-748-4518

3. Mailing Address CITY OF ALAMEDA
2263 SANTA CLARA AVENUE

City ALAMEDA Zip 94501 phone 510-748-4625

4. Land Owner CITY OF ALAMEDA

Address 2263 SANTA CLARA AVE City, State CALIFORNIA Zip 94501

5. Generator name under which tank will be manifested CITY OF ALAMEDA

EPA I.D. No. under which tank will be manifested CAC000960768

Contact: Wesley Adams: 748-4512

Copy Set

Note: Additional requirement for item # 15, C-21

6. Contractor V.C.I. OF CALIFORNIA
Address 753 PERALTA AVENUE
City SAN LEANDRO, CA. 94577 Phone 510-568-1234
License Type* A,B,C-21, HAZ. ID# 487537

*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 RGA ENVIRONMENTAL
Address 1260 45TH STREET
City EMERYVILLE, CA. 94608 Phone 415-494-2505

8. Contact Person for Investigation
Name DAVID HOEXTER Title SENIOR CONSULTING GEOLOGIST
Phone 415-494-2505

9. Number of tanks being closed under this plan 3
Length of piping being removed under this plan 30'
Total number of tanks at facility 3

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 ALLIED OIL EPA I.D. No. CAT080014277
Hauler License No. 2477 License Exp. Date 7/31/94
Address P.O. BOX 32128
City SAN JOSE State CA. Zip 95152

b) Product/Residual Sludge/Rinsate Disposal Site

Name ALLIED OIL EPA I.D. No. CAT080014277
Address P.O. BOX 32128
City SAN JOSE State CA. Zip 95152

c) Tank and Piping Transporter

Name DEXANNA, LTD. EPA I.D. No. CAD982438566
Hauler License No. 2883 License Exp. Date 6/30/94
Address 3104 ATHENE COURT
City CONCORD State CA. Zip 94519

d) Tank and Piping Disposal Site

Name ERICKSON DISPOSAL EPA I.D. No. CAD009466392
Address 255 PARR BLVD.
City RICHMOND State CA. Zip 94801

11. Experienced Sample Collector

Name DAVID HOEXTER
Company RGA ENVIRONMENTAL
Address 1260 45TH STREET
City EMERYVILLE State CA. Zip 94608 Phone 415-494-2505

12. Laboratory

Name SUPERIOR PRECISION ANALYTICAL (415)-647-2081
Address 1555 BURKE STREET, UNIT I
City SAN FRANCISCO State CA. Zip 94124
State Certification No. 1332

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

If yes, describe. NOT KNOWN

14. Describe methods to be used for rendering tank inert

TANKS WILL BE RINSED, RINSATE WILL BE DISPOSED AT THE DISPOAL FACILITY;

TANKS WILL INERTED WITH CARBON DIOXIDE SUPLIMENTED FROM DRY-ICE

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)		
280 GALLON	UNLEADED	SOIL <i>and groundwater if present</i>	2' BELOW TANK SOIL BACKFILL INTERFACE INTO 2' OF THE NATIVE SOIL.
1,000 GAL.	LEADED	SOIL <i>and groundwater if present</i>	
estimated 3,000 GAL.	HEATING OIL	SOIL <i>and groundwater if present</i>	

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)	Sampling Plan
100 CU. YD.	ONE SAMPLE PER 50 CU. YD. TO BE TESTED FOR TPHG, BTEX, TPHD.

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
GASOLINE	5030	5030	1.0 PPM.
DIESEL	8015	3550	1.0 PPM.
PB Pb	DHS-LUFT	DHS-LUFT	5.0 PPM.
BTEX	5030	8020	5.0 PPM.

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

18. Submit worker -

Name of Insurer STATE FUND INSURANCE

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, C.I. OF CALIFORNIA

Name (please type) by: CATHERINE R. MAYER (SECRETARY)

Signature Catherine R. Mayer

Date 6/7/94

Signature of Site Owner or Operator
CITY OF ALAMEDA

Name (please type) by: STEVEN DAVIS (OPERATOR)

Signature Steven Davis

Date 6/7/94

INSTRUCTIONS

General Instructions

- * Three (3) copies of this plan plus attachments and deposit must be submitted to this Department.
- * Any cutting into tanks requires local fire department approval.
- * One complete copy of your approved plan must be at the construction site at all times; a copy of your approved plan must also be sent to the landowner.

Item Specific Instructions

2. SITE ADDRESS
Address at which closure is taking place.
5. EPA I.D. NO. under which the tanks will be manifested
EPA I.D. numbers may be obtained from the State Department of Health Services, 916/324-1781.
6. CONTRACTOR
Prime contractor for the project.
10. STATE REGISTERED HAZARDOUS WASTE TRANSPORTERS/FACILITIES
 - a) All residual liquids and sludges are to be removed from tanks before tanks are inerted.
 - c) Tanks must be hauled as hazardous waste.
 - d) This is the place where tanks will be taken for cleaning.
15. TANK HISTORY AND SAMPLING INFORMATION
Use History - This information is essential and must be accurate. Include tank installation date, products stored in the tank, and the date when the tank was last used.

Material to be sampled - e.g. water, oil, sludge, soil, etc.

Location and depth of samples - e.g. beneath the tank a maximum of two feet below the native soil/backfill interface, side wall at the high water mark, etc.

16. CHEMICAL METHODS AND ASSOCIATED DETECTION LIMITS
See attached Table 2.

17. SITE HEALTH AND SAFETY PLAN

A site specific Health and Safety plan must be submitted. We advocate the site health and safety plan include the following items, at a minimum:

- a) The name and responsibilities of the site health and safety officer;
- b) An outline of briefings to be held before work each day to appraise employees of site health and safety hazards;
- c) Identification of health and safety hazards of each work task. Include potential fire, explosion, physical, and chemical hazards;
- d) For each hazard, identify the action levels (contaminant concentrations in air) or physical conditions which will trigger changes in work habits to ensure workers are not exposed to unsafe chemical levels or physical conditions;
- e) Description of the work habit changes triggered by the above action levels or physical conditions;
- f) Frequency and types of air and personnel monitoring - along with the environmental sampling techniques and instrumentation - to be used to detect the above action levels. Include instrumentation maintenance and calibration methods and frequencies;
- g) Confined space entry procedures (if applicable);
- h) Decontamination procedures;
- i) Measures to be taken to secure the site, excavation and stockpiled soil during and after work hours (e.g. barricades, caution tape, fencing, trench plates, plastic sheeting, security guards, etc.);
- j) Spill containment/emergency/contingency plan. Be sure to include emergency phone numbers, the location of the phone nearest the site, and directions to the hospital nearest the site;
- k) Documentation that all site workers have received the appropriate OSHA approved trainings and participate in appropriate medical surveillance per 29 CFR 1910.120; and
- l) Page for employees to sign indicating they have read and will comply with the site health and safety plan.

The safety plan must be distributed to all employees and contractors working in hazardous waste operations on site. A complete copy of the site health and safety plan along with any standard operating procedures shall be on site and accessible at all times.

NOTE: These requirements are excerpts from 29 CFR Part 1910.120(b)(4), Hazardous Waste Operations and Emergency Response; Final Rule, March 6, 1989. Safety plans of certain underground tank sites may need to meet the complete requirements of this Rule.

19. PLOT PLAN

The plan should consist of a scaled view of the facility at which the tank(s) are located and should include the following information:

- a) Scale;
- b) North Arrow;
- c) Property Lines;
- d) Location of all Structures;
- e) Location of all relevant existing equipment including tanks and piping to be removed and dispensers;
- f) Streets;
- g) Underground conduits, sewers, water lines, utilities;
- h) Existing wells (drinking, monitoring, etc.);
- i) Depth to ground water; and
- j) All existing tanks and piping in addition to the ones being pulled.

20. DEPOSIT

A deposit, payable to Alameda County for the amount indicated on the Alameda County Underground Storage Tank Fee Schedule, must accompany the plans.

21. Blank Unauthorized Leak/Contamination Site Report forms may be obtained in limited quantities from our office and from the San Francisco Bay Regional Water Quality Control Board (415/464-1255). Larger quantities may be obtained directly from the State Water Resources Control Board at (916) 739-2421.

22. TANK CLOSURE REPORT

The tank closure report should contain the following information:

- a) General description of the closure activities;
- b) Description of tank, fittings and piping conditions. Indicate tank size and former contents; note any corrosion, pitting, holes, etc.;

- c) Description of the excavation itself. Include the tank and excavation depth, a log of the stratigraphic units encountered within the excavation, a description of root holes or other potential contaminant pathways, the depth to any observed ground water, descriptions and locations of stained or odor-bearing soil, and descriptions of any observed free product or sheen;
- d) Description of sampling methods;
- e) Description of any remedial measures conducted at the time of tank removal;
- f) To-scale figures showing the excavation size and depth, nearby buildings, sample locations and depths, and tank and piping locations. Include a copy of the plot plan prepared for the Tank Closure Plan under item 19;
- g) Chain of custody records;
- h) Copies of signed laboratory reports;
- i) Copies of "TSDF to Generator" Manifests for all hazardous wastes hauled offsite (sludge, rinsate, tanks and piping, contaminated soil, etc.); and
- j) Tabulation of the volume and final destination of all non-manifested contaminated soil hauled offsite.

TABLE #2
RECOMMENDED MINIMUM VERIFICATION ANALYSES FOR
UNDERGROUND TANK LEAKS

<u>HYDROCARBON LEAK</u>	<u>SOIL ANALYSIS</u>	<u>WATER ANALYSIS</u>
Unknown Fuel	TPH G GCFID(5030) TPH D GCFID(3550) BTX&E 8020 or 8240 TPH AND BTX&E 8260	TPH G GCFID(5030) TPH D GCFID(3510) BTX&E 602, 624 or 8260
Leaded Gas	TPH G GCFID(5030) BTX&E 8020 OR 8240 TPH AND BTX&E 8260 TOTAL LEAD AA -----Optional----- TEL DHS-LUFT EDB DHS-AB1803	TPH G GCFID(5030) BTX&E 602 or 624 TOTAL LEAD AA TEL DHS-LUFT EDB DHS-AB1803
Unleaded Gas	TPH G GCFID(5030) BTX&E 8020 or 8240 TPH AND BTX&E 8260	TPH G GCFID(5030) BTX&E 602, 624 or 8260
Diesel, Jet Fuel and Kerosene	TPH D GCFID(3550) BTX&E 8020 or 8240 TPH AND BTX&E 8260	TPH D GCFID(3510) BTX&E 602, 624 or 8260
Fuel/Heating Oil	TPH D GCFID(3550) BTX&E 8020 or 8240 TPH AND BTX&E 8260	TPH D GCFID(3510) BTX&E 602, 624 or 8260
Chlorinated Solvents	CL HC 8010 or 8240 BTX&E 8020 or 8240 CL HC AND BTX&E 8260	CL HC 601 or 624 BTX&E 602 or 624 CL HC AND BTX&E 8260
Non-chlorinated Solvents	TPH D GCFID(3550) BTX&E 8020 or 8240 TPH AND BTX&E 8260	TPH D GCFID(3510) BTX&E 602 or 624 TPH and BTX&E 8260
Waste and Used Oil or Unknown (All analyses must be completed and submitted)	TPH G GCFID(5030) TPH D GCFID(3550) TPH AND BTX&E 8260 O & G 5520 D & F BTX&E 8020 or 8240	TPH G GCFID(5030) TPH D GCFID(3510) O & G 5520 C & F BTX&E 602, 624 or 8260
	CL HC 8010 or 8240	CL HC 601 or 624

ICAP or AA TO DETECT METALS: Cd, Cr, Pb, Zn, Ni
METHOD 8270 FOR SOIL OR WATER TO DETECT:
PCB* PCB
PCP* PCP
PNA PNA
CREOSOTE CREOSOTE

* If found, analyze for dibenzofurans (PCBs) or dioxins (PCP)

Reference: Tri-Regional Board Staff Recommendations for Preliminary Evaluation and Investigation of Underground Tank Sites, 10 August 1990

EXPLANATION FOR TABLE #2: MINIMUM VERIFICATION ANALYSIS

1. OTHER METHODOLOGIES are continually being developed and as methods are accepted by EPA or DHS, they also can be used.
2. For DRINKING WATER SOURCES, EPA recommends that the 500 series for volatile organics be used in preference to the 600 series because the detection limits are lower and the QA/QC is better.
3. APPROPRIATE STANDARDS for the materials stored in the tank are to be used for all analyses on Table #2. For instance, seasonally, there may be five different jet fuel mixtures to be considered.
4. To AVOID FALSE POSITIVE detection of benzene, benzene-free solvents are to be used.
5. TOTAL PETROLEUM HYDROCARBONS (TPH) as gasoline (G) and diesel (D) ranges (volatile and extractible, respectively) are to be analyzed and characterized by GCFID with a fused capillary column and prepared by EPA method 5030 (purge and trap) for volatile hydrocarbons, or extracted by sonication using 3550 methodology for extractable hydrocarbons. Fused capillary columns are preferred to packed columns; a packed column may be used as a "first cut" with "dirty" samples or once the hydrocarbons have been characterized and proper QA/QC is followed.
6. TETRAETHYL LEAD (TEL) analysis may be required if total lead is detected unless the determination is made that the total lead concentration is geogenic (naturally occurring).
7. CHLORINATED HYDROCARBONS (CL HC) AND BENZENE, TOLUENE, XYLENE AND ETHYLBENZENE (BTX&E) are analyzed in soil by EPA methods 8010 and 8020 respectively, (or 8240) and in water, 601 and 602, respectively (or 624).
8. OIL AND GREASE (O & G) may be used when heavy, straight chain hydrocarbons may be present. Infrared analysis by method 418.1 may also be acceptable for O & G if proper standards are used. Standard Methods" 17th Edition, 1989, has changed the 503 series to 5520.
9. PRACTICAL QUANTITATION REPORTING LIMITS are influenced by matrix problems and laboratory QA/QC procedures. Following are the Practical Quantitation Reporting Limits:

	<u>SOIL PPM</u>	<u>WATER PPB</u>
TPH G	1.0	50.0
TPH D	1.0	50.0
BTX&E	0.005	0.5
O & G	50.0	5,000.0

Based upon a Regional Board survey of Department of Health Services Certified Laboratories, the Practical Quantitation Reporting Limits are attainable by a majority of laboratories with the exception of diesel fuel in soils. The Diesel Practical Quantitation Reporting Limits, shown by the survey, are:

ROUTINE	MODIFIED PROTOCOL
≤ 10 ppm (42%)	≤ 10 ppm (10%)
≤ 5 ppm (19%)	≤ 5 ppm (21%)
≤ 1 ppm (35%)	≤ 1 ppm (60%)

When the Practical Quantitation Reporting Limits are not achievable, an explanation of the problem is to be submitted on the laboratory data sheets.

10. LABORATORY DATA SHEETS are to be signed and submitted and include the laboratory's assessment of the condition of the samples on receipt including temperature, suitable container type, air bubbles present/absent in VOA bottles, proper preservation, etc. The sheets are to include the dates sampled, submitted, prepared for analysis, and analyzed.

11. IF PEAKS ARE FOUND, when running samples, that do not conform to the standard, laboratories are to report the peaks, including any unknown complex mixtures that elute at times varying from the standards. Recognizing that these mixtures may be contrary to the standard, they may not be readily identified; however, they are to be reported. At the discretion of the LIA or Regional Board the following information is to be contained in the laboratory report:

The relative retention time for the unknown peak(s) relative to the reference peak in the standard, copies of the chromatogram(s), the type of column used, initial temperature, temperature program is C/minute, and the final temperature.

12. REPORTING LIMITS FOR TPH are: gasoline standard ≤ 20 carbon atoms, diesel and jet fuel (kerosene) standard ≤ 50 carbon atoms. It is not necessary to continue the chromatography beyond the limit, standard, or EPA/DHS method protocol (whichever time is greater).

EPILOGUE

ADDITIVES: Major oil companies are being encouraged or required by the federal government to reformulate gasoline as cleaner burning fuels to reduce air emissions. MTBE (Methyl-tertiary butyl ether), ETHANOL (ethyl alcohol), and other chemicals may be added to reformulate gasolines to increase the oxygen content in the fuel and thereby decrease undesirable emissions (about four percent with MTBE). MTBE and ethanol are, for practical purposes, soluble in water. The removal from the water column will be difficult. Other compounds are being added by the oil companies for various purposes. The refinements for detection and analysis for all of these additives are still being worked out. If you have any questions about the methodology, please call your Regional Board representative.

SITE HEALTH AND SAFETY PLAN

Introduction

This health and safety plan prescribes the work-place procedures which will be followed during the removal of three underground storage tanks and subsequent excavations of tank soils of the site located at 2263 Santa Clara Avenue, Alameda California. The provisions of this plan are mandatory for all V.C.I. personnel and subcontractors assigned to this project. All authorized visitors to the site will be required to abide by the procedures. The requirements in this plan may change due to changes in the work conditions, however, no changes will be made without prior written approval of the Health and Safety Consultant and the Project Manager.

VERL CONSTRUCTION, INC. is committed to providing a safe and healthful working environment for all its employees and subcontractors.

ASSIGNMENT OF RESPONSIBILITY

Project manager

VCI's Project Manager will be Mr. Verl K. Rothlisberger, who will be responsible for oversight and management of the project. Mr. Merlin N. Bowen will be responsible for the implementation and management of the Health and Safety plan.

Health and Safety Consultant

Mr. _____ or his designee will visit the site periodically and during critical phases of the project. The Health and Safety Consultant is responsible for preparation of this plan.

VCI Site Representative/Safety and Health officer

During most of this project there will be an VCI representative on site. That representative will be responsible for day to day implementation of the health and safety plan and overall direction of subcontractor personnel. The VCI representative is empowered to stop all site work in the case of violation of the requirements of the health and safety plan.

Other Project Personnel/Subcontractor

All project and subcontractor personnel will be responsible for understanding and complying with the project health and safety requirements.

HAZARD CHARACTERIZATION AND RISK ANALYSIS

Petroleum Contaminated Water and Soils

Gasoline and its constituents pose health hazards in two major classifications: explosivity and toxicity, the extreme flammability of gasoline is commonly known. The lower explosion limit (LEL) of gasoline vapor is 1.3 percent in air. If the Concentration of gasoline vapor in air exceeds 1.3. percent (13,000 parts per million) and sufficient quantities of oxygen are present, then the introduction of sufficient heat, spark, or flame will result in an explosion.

Prior to conducting any subsurface excavation in the vicinity of a fuel tank, the tank should be emptied of all liquid product and receive sufficient quantities of dry ice (frozen carbon dioxide) so that available oxygen is displaced from the tank atmosphere.

A lesser known health hazard resulting from exposure to gasoline is toxicity. Over exposure to petroleum hydrocarbon vapor can cause depression of the central nervous system. Inhalation of high concentrations of gasoline can cause chemical pneumonia and/ or pulmonary edema. Repeated or prolonged skin exposure to gasoline or gasoline contaminated materials can cause dermatitis or even blistering of the skin.

Several common constituents of gasoline have been shown to cause serious health problems resulting from relatively minor exposures include benzene, toluene, meta, para, and ortho xylenes, ethyl benzene and tetraethyl lead.

Typical percentages (by weight) of these constituents in gasoline are: benzene - 0.12-3.50%, toluene - 2.73-21.80%, meta xylene -1.77-3.87%, para xylene -0.77-1.58%, ortho xylene - 0.68-2.66%, and ethyl benzene -0.36-2.36%. Typical percentage of tetraethyl lead is not available.

Units used to describe occupational exposures to hazardous substances include: exposure limit, also known as the "threshold limit value" (TLV), ceiling limit, and the concentration level that is "Immediately dangerous to life and health" (IDLH). the exposure limit defines the maximum concentration of a substance to which one can be exposed During an 8 hour period without suffering significant health effects. The ceiling limit is the concentration level that cannot be exceeded at any time; i.e., a suitable respirator must be worn if concentration values reach the ceiling limit.

The IDLH level represents a maximum concentration from which one could escape within 30 minutes of respirator failure without experiencing escape-impairment or irreversible health damage. IDLH values are not listed for substances that are potential human carcinogens.

EXPOSURE TABLE

<u>Substance</u>	<u>Exposure Limit</u>	<u>Ceiling Limit</u>	<u>IDLH</u>
Benzene	0.1 ppm (8 hrs)	1 ppm (15 min)	Carcinogen
Toluene	100 ppm (10 hrs)	200 ppm (10 min)	2000 ppm
Xylene	100 ppm (8 hrs)	200 ppm (10 min)	1000 ppm
Ethyl Benzene	100 ppm (8 hrs)	N/A	2000 ppm
Tetraethyl lead	0.0067 ppm	N/A	3.6 ppm

Prolonged exposures to concentrations above the limits noted may affect the central nervous system, cardiovascular system, respiratory system, eyes, skin, kidneys, bones and bone marrow. Research has shown that benzene is a carcinogen.

Immediate symptoms of over-exposure include: eye irritation, nose irritation, throat irritation, headache, nausea, dizziness, weakness, confusion, euphoria, excitement, staggered gait, abnormal pain, respiratory difficulties, muscle fatigue, and coma.

In order to protect against over-exposure to these compounds, the ambient air will be monitored with a "lower explosion limit/oxygen content meter and/or handheld photo ionizing detector (PID). As soon as vapor concentrations approach 75% of the exposure limit value, work will cease until all on-site personnel have donned protective clothing and suitable respiratory devices.

Personnel exposures to excessive job-related hazards are expected to be minimal using these safeguards.

It should be noted that summertime heat may initiate weather stress-related problems and decrease productivity on the job site.

Based upon VCI's experience with investigations of potentially gasoline contaminated soil and water, overexposure of personnel to gasoline vapor is unlikely.

Personnel however may be exposed to short term vapor concentrations approaching 100 ppm. Respiratory protection plans will be directed to protecting personnel from the transient exposures.

Drilling Activities

Various hazards are present during excavating procedures.

- electrical hazards due to overhead and underground utility line
- excessive noise
- confined space
- moving portions of the drilling
- falling of heavy overhead objects
- fall hazards due to working at heights

SITE CONTROL

A site map has been attached to this plan. The areas where work will occur, will be on the site, and may be barricade to prevent unauthorized access. Only authorized personnel shall be allowed in the work areas and any unauthorized visitors must remain outside any barricade area.

The site is small enough that normal voice communication can be used. In the vicinity of the excavation, common hand signals will be used.

TRAINING

VCI Personnel

All VCI project personnel shall have completed 40 hours of off-site health and safety training, related to hazardous waste operations. In general, the VCI personnel will have completed a combination of paid training courses which meet the requirements of both the interim and final Occupational Safety and Health Administration (OSHA) rule for Hazardous Waste and Emergency Response Operations (29 CFR 1910.120). All VCI supervisory personnel on site will have completed an additional 8 hours of relevant health and safety training.

VCI personnel who may visit the site occasionally, and are unlikely to be exposed to chemical hazards will have completed at least 24 hours of relevant health and safety training.

Any VCI or contractor personnel operating specialized industrial equipment such as forklifts, heavy equipment, drilling equipment, etc. shall be able to demonstrate their competency in the safe operation of such items.

Personnel

All subcontractor personnel who are likely to be exposed to hazardous materials either by inhalation or dermal contact shall have completed 40 hours of off-site health and safety training, in accordance with the OSHA interim and final Hazardous Waste and Emergency Operations rule. Subcontractor personnel who are required to work on the site for short periods of time (1-day or less), and who will not be required to wear any protective equipment, shall have completed at least 24 hours of off-site health and safety training.

All Site Personnel

Prior to starting off the project, a kick-off safety will be on the site. During this meeting all personnel will be briefed on the requirements contained within the health and safety plan, and will be told the site safety rules. The kick-off safety meeting will be conducted jointly by the project manager and the HSO.

At the beginning of each work shift, or whenever new personnel arrive on the site, a tailgate safety meeting will be held. The purpose of such meetings is to highlight health and safety concerns and to ensure that employees are fully briefed on the site work procedures to be followed during the shift. The tailgate safety meetings will be conducted by the first line supervisors. The project manager will review records of all tailgate safety meetings.

MEDICAL SURVEILLANCE

All VCI subcontractor personnel shall provide proof of having successfully completed a preplacement or annual update physical examination. This examination shall have been designed to comply with regulatory requirements for hazardous waste operations and shall include the following:

- . medical and occupational history form
- . physical examination
- . blood analysis
- . urinalysis
- . chest x-ray
- . pulmonary function test
- . audiogram
- . electrocardiogram (if indicated during the physical exam)
- . alcohol and illegal drug screening

GOVERNMENT AND VCI STANDARDS

Currently the health and safety of workers performing hazardous waste activities regulated by OSHA (29 CFR 1910.120).

The OSHA PEL for gasoline vapor is 300 ppm average over an eight-hour period. The 15-minute short term exposure limit is 500 ppm. To ensure that no project workers monitored several times each day using either a photoionization detector (PID) or colorimetric indicator tubes.

If the PID or colorimetric indicator tube samples indicate that hydrocarbon vapor levels are 50 ppm or greater, then daily air samples will be collected from representative project personnel using charcoal tube sampling methods (OSHA-Method 1M1S1340). Personnel will be notified in writing of the results of any personal air samples and their significance. A copy of this report will be maintained in the employee's medical surveillance file.

ACCESS AND DECONTAMINATION

Access

Access to the project work area zones shall be regulated and limited to authorized persons. a daily log shall be kept all persons entering such areas. The work area itself shall be cordoned off using barrier tape or other suitable barriers.

Decontamination

Due to the low toxicity of the material involved (gasoline), the anticipated low levels of contamination, and the minimal hazard posed of spread of contaminated soil, formal decontamination procedures will not be required. The following site requirements will be enforced:

- . Eating, drinking and smoking within the work area are prohibited.
- . project personnel may eat, drink or smoke outside the work area, only if they have washed their hands and face.
- . An emergency eye wash station shall be located on the job site adjacent to the work area.

Any potentially contaminated equipment will either be disposed of, or washed off with soap and water.

Any equipment used in the contaminated zone should be washed with soap and water before it is removed from the site.

SAFE USE OF FLAMMABLE AND COMBUSTIBLE MATERIALS
(29CFR 1926.152)

Employees shall make sure that combustible scrap, debris and waste materials (oily rags, etc.) are stored in covered metal receptacles and removed from the worksite promptly. Be sure that proper storage is practiced to minimize the risk of fire including spontaneous combustible liquids and that approved containers and tanks are used for the storage and handling of flammable and combustible liquids.

Employees shall make sure that all connections on drums and combustible liquid piping, vapor and liquid are tight, that all bulk drums of flammable liquids are grounded and bonded to containers during dispensing.

Be certain that storage rooms for flammable and combustible liquids have explosion-proof lights and that storage rooms for flammable and combustible liquids have mechanical or gravity ventilation.

Make sure that liquefied petroleum gas is stored, handled and used in accordance with safe practices and standards, pay particular attention in that no smoking signs are posted on liquified petroleum gas tanks. All solvent wastes, and flammable liquids will be kept in fire-resistant, covered containers until they are removed from the worksite.

Vacuuming shall be used whenever possible, rather than blowing or sweeping combustible dust. Be certain that firm separators are placed between containers of combustibles or flammables, when stacked one upon another, to assure their support and stability.

All fire extinguishers will be selected and provided for the particular types of materials in areas where they are to be used.

Class A: Ordinary combustible material fires.

Class B: Flammable liquid, gas or grease fires.

Class C: Energized-electrical equipment fires.

All appropriate fire extinguishers shall be mounted within 75 feet of outside areas containing flammable liquids, and within 10 feet of any inside storage area for such materials. Said fire extinguishers shall be free from obstructions or blockage and that all extinguishers are serviced, maintained and tagged at intervals not to exceed one year.

Be certain that "NO SMOKING" signs are posted where appropriate in areas where flammable or combustible materials are used or stored and that safety cans are used for dispensing flammable or combustible liquids at a point of use. Spills of flammable or combustible liquids are to be cleaned up promptly.

Make sure that storage tanks are adequately vented to prevent the development of excessive vacuum or pressure as a result of filling, emptying, or atmosphere temperature changes. Be certain that storage tanks are equipped with emergency venting that will relieve excessive internal pressure caused by fire exposure and that "NO SMOKING" rules are enforced in areas involving storage and use of hazardous materials.

EMPLOYEE AND WORK RULES AROUND EXCAVATIONS

(29 CFR 1926.651, and 29 CFR 1926.652)

When excavation is necessary at a job site, before work commences and during the performance of work the site shall be adequately protected to prevent sloughing of earth by shoring or sloping. The site shall be fenced in or boarded over to prevent personnel from slipping or falling in the area when moving about.

No employee shall enter or perform work in an excavation which requires the person's head be below the surface of the ground until all confined space procedures are followed.

Employees are not permitted to work in or adjacent to any excavation until an inspection is conducted to determine that they will not be exposed to injuries resulting from moving ground and that necessary permits have been obtained.

SLIPS, TRIPS AND FALLS

Inattentiveness is one of the major factors contributing to injuries caused by slips, trips and falls. An employee who is not fully aware of his or hers working conditions, allows himself or herself to be put in a potentially dangerous position.

Another contributing factor is practicing GOOD HOUSEKEEPING ! Working conditions are made hazardous by the spillage of liquids, petroleum products and or residual material unto working areas around machinery and walkways. If spills, unused material, and construction debris are left in walkways, work areas and near construction site, such hazardous shall be immediately cleaned up.

TOOL AND EQUIPMENT HANDLING (29 CFR 1926.301)

SAFETY DEVICES- Employees must never remove, displace, damage, destroy, or carry away any safety device, safeguard, notice, or warning used at the Company facilities, Company property, or customer job locations.

Never, in any way, interfere with the use of another employee's safety device or safeguard. Verify that all guards and other protective devices are in their proper place, in good repair, and properly adjusted for safe operation. Any deficiency or malfunction must be reported immediately to the supervisor or Safety Representative.

DAMAGED/UNSAFE EQUIPMENT- REPAIR WORK

Employees must not repair operating equipment or machinery, oil moving parts, except when the equipment or machinery is designed or fitted with safeguards to protect the employee while performing the work.

Equipment that is worn, damaged, or otherwise defective to the extent that it is unsafe must be reported immediately to the supervisor or Safety Representative.

CRANE/HOISTING EQUIPMENT

Unauthorized persons are not to be permitted in a crane cab or on a crane at any time. All unattended equipment shall be guarded against operation by unauthorized persons, signals to the operator of the equipment shall be given by a designated person.

Cranes, derricks, hoists or other equipment shall not be used for side pulls or lifts that would affect the stability or overstress the equipment.

Hoisting equipment shall be loaded so that the load is in a stable position and does not exceed the designated safe load. Loads shall be test lifted, brakes checked, and slings readjusted when required, to check the stability and safety of the lift.

Outriggers, when provided, shall be used for the stability and safe operation of the equipment. The operator shall personally check that the outriggers have been properly placed and blocked in position.

A mobile or overhead traveling crane, hoist, or shovel shall not be operated unless the gong or other effective warning device is in suitable operating condition. Equipment surfaces

and walkways shall be maintained free of oil, grease, or debris, and, where necessary, non-slip material shall be used.

Wire rope, under tension, shall not be guided by the hands or feet. Employees shall avoid standing or passing under suspended loads. Extreme care shall be exercised in the selection, inspection, and use of chains.

Precautions in dealing with wire rope slings:

Do not use knots to make slings.

Pad or block sharp corners.

Do not jerk loads. lift and lower loads slowly.

Use slings of adequate capacity. Consult the charts.

Know how much weight you are lifting.

EMERGENCY RESPONSE (29 CFR 1910.151)

In the event of an emergency such as a sickness, injury or fire, the following procedures will be followed:

- . Emergency procedures will be initiated by the first person recognizing the emergency situation. This person shall immediately notify the VCI site representative.
- . The designated VCI First Aid/CPR provider and a project member shall provide assistance to any injured or sick employee. In the case of suspected release of toxic material, these personnel shall first don protective suites and self-contained breathing apparatus. The injured employee will first be moved to a safe location, before any attempt at treatment is made.
- . A project member or other responsible person will notify appropriate government agencies or individuals.

- | | |
|--|----------------|
| 1. Police, Fire, or Ambulance emergency: | 911 |
| 2. Nearest Emergency Hospital: | (510) 522-3700 |
| Alameda Hospital | |
| 2070 Clinton Avenue | |
| Alameda, California | |
| 3. Alameda County/Dept. of Public Health | |
| Hazardous Materials Division | |
| 80 Swan Way, Room 200 | |
| Oakland, Ca. 94621 | |
| 4. Poison Control | (209) 445-1222 |
| 5. Office of Emergency Service | (800) 852-7550 |

- | | |
|------------------|---------------|
| 6. Chemtrec | (800)424-9300 |
| 7. EPA Region 9 | (415)974-8153 |
| 8. HHS Region 9 | (415)556-7260 |
| 9. OSHA Region 9 | (415)556-3782 |

Any injuries or incidents which have the potential to result in an injury will be recorded by the VCI site representative on the supervisor's employee injury report form. This form, when completed by the site representative, shall be forwarded to the VCI project manager, and to the VCI Corporate Health and Safety Department.

PERSONAL PROTECTIVE EQUIPMENT OSHA 29 CFR 1910

The following items represent some common health and safety issues that may need to be addressed prior to initiating hazardous work activities. In particular, included in this " Site and Safety Plan " are excerpts from Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities in reference to PPE (Personal Protective Equipment).

Eye and Face Protection (29 CFR 1910.133). Eye and face protection is required when there is the potential for on-site injury. Particular information on goggles, spectacles; and face protection is provided to all employees and covered in the initial 40 hour training and reviewed in the annual re-training program for all employees of VCI of California. All sub-contractors must meet the minimum safety requirements and training as accepted by VCI of California Health Safety Coordinator (HSC).

~~All employees are to wear protective eye wear and or face shields when entering the work site area, eye protection is provided to all employees by the health and safety coordinator for each particular work site.~~

Occupation Head Protection (29 CFR 1910.135)

On-site situations requiring head protection include: presence of overhead objects, on-site operations of heavy equipment, potential for flying objects in the work area, and possible electrical shock hazards. All employees and site personal are required to wear head gear protection that affords limited protection from electric shock and burn and meets ANSI Z89.1-1969 specifications.

Occupational Foot Protection (29 CFR 1910.136)

All employees and or site personal shall be required to wear safety toe footwear meeting ANSI Z41.1-1967 for Men's Safety-Toe Footwear. In, general workers at hazardous waste sites must wear leather or rubber boots with steel toes and steel shanks.

Personal Protective Equipment (PPE), (29 CFR 1910) Selection of Respiratory Equipment

As previously discussed, air purification respirators will be used when ambient levels of fuel constituents reach levels over 300 parts per million on a eight hour basis, and or exceed 500 parts per million in a 15 minute period. Air-purifying respirators consist of a facepiece and an air-purifying device, which is either a removable component of the facepiece or an air-purifying apparatus worn on a body harness and attached to the facepiece by a corrugated breathing hose. Air-purifying respirators selectively remove specific airborne contaminants from ambient air by filtration, absorption, adsorption, or chemical reactions.

They are approved for use in atmospheres containing specific chemicals up to designated concentrations, and not for IDLH atmospheres. Air-purifying respirators have limited use at hazardous waste sites and can be used only when the ambient atmosphere contains sufficient oxygen (19.5%). Selection of the proper chemical absorbant cartridge for constituents encountered at the work site is necessary for proper protection of the wearer. Additionally most chemical sorbent canisters are imprinted with an expiration date. They may be used up to that date as long as they were not opened previously. Once opened, they begin to sorb humidity and air contaminants whether or not they are in use. Their efficiency and service life decreases and therefore they should be used immediately.

Selection of Protective Clothing and Accessories

The individual components of clothing and equipment will be assembled into a full protective ensemble that both protects the worker from the site-specific hazards and minimizes the hazards and drawbacks of the PPE ensemble itself. Following are the levels of protection with recommended equipment, protection provided, when level should be used and limiting criteria. Level D and Level C are most common levels of protection required in the scope of work anticipated, Level B is not anticipated but is included in following Table

SAMPLE PROTECTIVE ENSEMBLES

LEVEL OF PROTECTION	EQUIPMENT	PROTECTION PROVIDED	SHOULD BE USED WHEN:	LIMITING CRITERIA
B	<p>RECOMMENDED:</p> <ul style="list-style-type: none"> • Pressure-demand, full-facepiece SCBA or pressure-demand supplied-air respirator with escape SCBA. • Chemical-resistant clothing (coveralls and long-sleeved jacket; hooded, one- or two-piece chemical splash suit; disposable chemical-resistant one-piece suit). • Inner and outer chemical-resistant gloves. • Chemical-resistant safety boots/shoes. • Hard hat. • Two-way radio communications. <p>OPTIONAL:</p> <ul style="list-style-type: none"> • Coveralls. • Disposable boot covers. • Face shield. • Long cotton underwear. 	<p>The same level of respiratory protection but less skin protection than Level A.</p> <p>It is the minimum level recommended for initial site entries until the hazards have been further identified.</p>	<ul style="list-style-type: none"> • The type and atmospheric concentration of substances have been identified and require a high level of respiratory protection, but less skin protection. This involves atmospheres. <ul style="list-style-type: none"> – with IDLH concentrations of specific substances that do not represent a severe skin hazard; or – that do not meet the criteria for use of air-purifying respirators. • Atmosphere contains less than 19.5 percent oxygen. • Presence of incompletely identified vapors or gases is indicated by direct-reading organic vapor detection instrument, but vapors and gases are not suspected of containing high levels of chemicals harmful to skin or capable of being absorbed through the intact skin. 	<ul style="list-style-type: none"> • Use only when the vapor or gases present are not suspected of containing high concentrations of chemicals that are harmful to skin or capable of being absorbed through the intact skin. • Use only when it is highly unlikely that the work being done will generate either high concentrations of vapors, gases, or particulates or splashes of material that will affect exposed skin.
C	<p>RECOMMENDED:</p> <ul style="list-style-type: none"> • Full-facepiece, air-purifying, canister-equipped respirator. • Chemical-resistant clothing (coveralls and long-sleeved jacket; hooded, one- or two-piece chemical splash suit; disposable chemical-resistant one-piece suit). • Inner and outer chemical-resistant gloves. • Chemical-resistant safety boots/shoes. • Hard hat. • Two-way radio communications. <p>OPTIONAL:</p> <ul style="list-style-type: none"> • Coveralls. • Disposable boot covers. • Face shield. • Escape mask. • Long cotton underwear. 	<p>The same level of skin protection as Level B, but a lower level of respiratory protection.</p>	<ul style="list-style-type: none"> • The atmospheric contaminants, liquid splashes, or other direct contact will not adversely affect any exposed skin. • The types of air contaminants have been identified, concentrations measured, and a canister is available that can remove the contaminant. • All criteria for the use of air-purifying respirators are met. 	<ul style="list-style-type: none"> • Atmospheric concentration of chemicals must not exceed IDLH levels. • The atmosphere must contain at least 19.5 percent oxygen.
D	<p>RECOMMENDED:</p> <ul style="list-style-type: none"> • Coveralls. • Safety boots/shoes. • Safety glasses or chemical splash goggles. • Hard hat. <p>OPTIONAL:</p> <ul style="list-style-type: none"> • Gloves. • Escape mask. • Face shield. 	<p>No respiratory protection. Minimal skin protection.</p>	<ul style="list-style-type: none"> • The atmosphere contains no known hazard. • Work functions preclude splashes, immersion, or the potential for unexpected inhalation of or contact with hazardous levels of any chemicals. 	<ul style="list-style-type: none"> • This level should not be worn in the Exclusion Zone. • The atmosphere must contain at least 19.5 percent oxygen.