

Roller (Closed Site)

TO: MR. BARNEY CHAN

FROM: EMAD ABDALLAH  
1083 95<sup>th</sup> AVE  
OAKLAND 94603  
(510) 568-6531

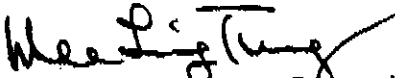
This letter confirms the completion of site investigation and remedial action for the former underground storage tank (1-550 gallon gasoline tank) removed from the above site on August 21, 1991. Enclosed is the Case Closure Summary for the referenced site for your records.

Based upon the available information, including the current land use, and with the provision that the information provided to this agency was accurate and representative of site conditions, no further action related to the underground tank release is required.

This notice is issued pursuant to a regulation contained in Title 23, Division 3, Chapter 16, Section 2721(e) of the California Code of Regulations. If changes in land use, structural configuration, or site activities are proposed such that more conservative exposure scenarios should be evaluated, the owner must promptly notify this agency.

Please contact Ms. Eva Chu at (510) 567-6700 if you have any questions regarding this matter.

Very truly yours,



Mee Ling Tung, Director

cc: Chief, Division of Environmental Protection  
Kevin Graves, RWQCB  
Lori Casias, SWRCB (with attachment)  
files (person11)

ENVIRONMENTAL SERVICES

AGENCY

DAVID J. KEARS, Agency Director



Alameda County Environmental Health  
1131 Harbor Bay Parkway  
Alameda, CA 94502-6577  
(510)567-6700 FAX (510)567-0225

**REMEDIATION ACTION COMPLETION CERTIFICATION**

827D 882 - 1083 98th Ave, Oakland, CA

July 3, 1996

Mr. Walter Peterson  
2350 SW 93rd Terrace  
Tualatin, OR 97062

Dear Mr. Peterson:

This letter confirms the completion of site investigation and remedial action for the former underground storage tank (1-550 gallon gasoline tank) removed from the above site on August 21, 1991. Enclosed is the Case Closure Summary for the referenced site for your records.

Based upon the available information, including the current land use, and with the provision that the information provided to this agency was accurate and representative of site conditions, no further action related to the underground tank release is required.

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Very truly yours,

Handwritten signature of Mee Ling Tung in cursive.

Mee Ling Tung, Director

cc: Chief, Division of Environmental Protection  
Kevin Graves, RWQCB  
Lori Casias, SWRCB (with attachment)  
files (person1)

**Treatment and Disposal of Affected Material:**

<u>Material</u>	<u>Amount (include units)</u>	<u>Action (Treatment or Disposal w/destination)</u>	<u>Date</u>
Tank Soil	1 UST 7 cy	Disposed by Erickson, in Richmond Unknown	6/21/91 1991

**Maximum Documented Contaminant Concentrations - - Before and After Cleanup**

<u>Contaminant</u>	<u>Soil (ppm)</u>		<u>Water (ppb)</u>	
	<u>Before</u>	<u>After<sup>1</sup></u>	<u>Before</u>	<u>After</u>
TPH (Gas)	1,760	1,100	<300,000 <sup>4</sup>	14,400
TPH (Diesel)	290	560	150	1,400
Benzene	<1.5	1.2	19	ND
Toluene	34	2.3	ND	1
Ethylbenzene	40	18	ND	3
Xylenes	220	75	ND	7
Oil & Grease	1,335 <sup>6</sup>	1,335 <sup>6</sup>	60,000	NA
Heavy metals	Total Pb 160 <sup>2</sup>		ND <sup>3</sup>	
Other	SVOCs see NOTE 5		see NOTE 5	

**NOTE:**

- 1 from soil boring SB-2 at 11.5' bgs
- 2 from boring B-4 at 1.5' beneath fuel pump area
- 3 from boring SB-3 at 1.5' bgs with CA Modified WET method
- 4 elevated reporting limit due to hydrocarbon interference in the diesel/kerosene range
- 5 0.04 ppm naphthalene and 0.01 ppm phenanthrene in soil; 11 ppb bis(2-ethylhexyl)phthalate in groundwater
- 6 from tank pit after overexcavation to 12.5' bgs

**Comments (Depth of Remediation, etc.):**

See Section VII, Additional Comments, etc...

**IV. CLOSURE**

Does completed corrective action protect existing beneficial uses per the Regional Board Basin Plan? **Undetermined**

Does completed corrective action protect potential beneficial uses per the Regional Board Basin Plan? **Undetermined**

Does corrective action protect public health for current land use? **YES**

Site management requirements: **None**

Should corrective action be reviewed if land use changes? **YES**

Monitoring wells Decommissioned: **None, pending site closure**

Number Decommissioned: **0** Number Retained: **1**

List enforcement actions taken: **Nov 19, 1993 pre-enforcement review panel**

List enforcement actions rescinded: **Above, in compliance**

**REPRESENTATIVE DATA**

Name: **Chu**

*[Signature]*

Title: **Haz Mat Specialist**

Date: **5/6/96**

Name: **Rayney Chan**

*[Signature]*

Title: **Haz Mat Specialist**

Date: **5/6/96**

Name: **Madhulla Logan**

*[Signature]*

Title: **Haz Mat Specialist**

Date: **5/6/96**

**EMOOCB NOTIFICATION**

Date Submitted to RB: **5/7/96**

EMOOCB Staff Name: **Kevin Graves**

Signature: *[Signature]*

RB Response: **Approved**

Title: **AWRCE**

Date: **5/23/96**

**III. ADDITIONAL COMMENTS, DATA, ETC.**

When a 550 gallon UST, which had stored gasoline and fuel oil, was removed in August 21, 1991 holes were observed in the underside of the tank. A soil sample collected from the pit bottom exhibited up to 1,760 ppm TPH-G, 390 ppm TPH-D, 510 ppm TOG, and ND, 34, 40, and 220 ppm BTEX, respectively. The pit bottom was excavated vertically to 12' bgs, where a soil sample collected exhibited 490 ppm TPH-G, 32 ppm TPH-D, and 1,335 ppm TOG. Analysis for BTEX was not requested this time. (See Table 1.)

In January 1994 four soil samples (B-1 through B-4) were collected beneath the remaining piping (which was capped and closed in-place) and pump facility associated with the former UST. Only sample B-4, from the vicinity of the pump apparatus, exhibited elevated levels of petroleum hydrocarbons (520 ppm TOG) and total lead at 160 ppm. (See Fig 2, Table 1.)

A shallow groundwater monitoring well was installed approximately 10' west of the former tank pit (in the assumed downgradient direction). Groundwater was first encountered at 12.5' bgs. Soil from 14' bgs contained 380 ppm TPH-D, 340 ppm TOG, and ND for TPH-G and BTEX. Initial groundwater exhibited up to 150,000 ppb TPH-D, 60 ppm TOG, and 19 ppb benzene.

To further delineate the lateral extent of soil and groundwater contamination, four borings (HP-2 through HP-5) were advanced approximately

**CASE CLOSURE SUMMARY**  
**Leaking Underground Fuel Storage Tank Summary**

**CONTACT INFORMATION**

Date: May 3, 1996

Agency name: Alameda County-HazMat  
 Agency/Zip: Alameda, CA 94502  
 Responsible staff person: Eva Chu

Address: 1131 Harbor Bay Blvd  
 Phone: (510) 867-6700  
 Title: Hazardous Materials Manager

**II. CASE INFORMATION**

Site facility name: Walter Peterson  
 Site facility address: 1083 98th Ave, Oakland, CA 94603  
 LUSTIS Case No: N/A Local Case No./LOP Case No.: 202  
 Filing date: 3/9/92 SWEEPS No: N/A

<u>Responsible Parties:</u>	<u>Addresses:</u>	<u>Phone Numbers:</u>
Walter Peterson	2617 Buena Vista, Alameda, CA	510/769-8885

<u>Tank No:</u>	<u>Size in gal.:</u>	<u>Contents:</u>	<u>Closed in-place or removed?:</u>	<u>Date:</u>
1	550	Gasoline/Fuel Oil	Removed	8/21/91

**III. RELEASE AND SITE CHARACTERIZATION INFORMATION**

Cause and type of release: Leaking UST  
 Site characterization complete? YES  
 Date approved by oversight agency: 2/21/96  
 Monitoring Wells installed? Yes Number: 1  
 Proper screened interval? Yes, 8 to 18.5' bgs  
 Highest GW depth below ground surface: 9.90 Lowest depth: 12.05'  
 Flow direction: Southwest, as measured from 1031 98th Ave, which is 200' southwest of site.  
 Most sensitive current use: Residential  
 Are drinking water wells affected? No Aquifer name: Unknown  
 Is surface water affected? No Nearest affected SW name: NA  
 Off-site beneficial use impacts (addresses/locations): None

Report(s) on file? YES Where is report(s) filed? Alameda County  
 1131 Harbor Bay Blvd  
 Alameda, CA 94502

upgradient of the former tank pit, and one boring (SB-1) located further upgradient of the former tank pit to collect groundwater samples. None of the "grab" groundwater samples detected TPH-D, or PNAs. TPH-D concentrations ranged from 550 ppm. Groundwater contamination is limited to within 50' of the former WET location. (See Fig 3, Table 2.)

Soil borings (SB-1 and SB-2) were also advanced within 5' of the north ends of the former tank pit, and one boring (SB-3) advanced near the former fuel pump area. The CA modified WET method for lead was used. A soil sample collected from 1.5' bgs near the former pump area revealed up to 550 ppm TOG, 560 ppm TPH-D, 1,100 ppm TPH-G, and 1.2, 0.2, 0.1, and 75 ppm BTEX, respectively, and 0.04 ppm naphthalene and 0.01 ppm phenanthrene. (See Fig 2, Table 1.)

Additional investigations were conducted to assess the potential for further petroleum hydrocarbon migration and groundwater degradation at the site. A soil sample SB-4 was collected within 0.5' of the previous boring SB-2 where relatively high concentrations of petroleum hydrocarbons were detected. The soil sample from 11.5' bgs was analyzed for extractable petroleum hydrocarbons using the CA Modified Waste Extraction Test (WET) procedure. Results of the WET analysis indicated extractable diesel was not detected above the detection limit of 0.2 ppm. Therefore, residual petroleum hydrocarbons remaining in soil is not expected to further impact groundwater quality at the site.

A hydraulic (slug) test was also conducted to assess the potential for further petroleum hydrocarbon migration at the site. The estimated hydraulic conductivity (K) of the shallow groundwater zone at well LW-1 is approximately  $1.2 \times 10^{-3}$  cm/s (3.3 ft/day), which is typical of silty sand or clay sediments. The calculated groundwater flow velocity is 0.026 ft/day. These results indicate the relatively low permeability of the shallow zone sediments at the site.

Groundwater has been sampled for five non-consecutive quarters. TPH-D levels have decreased from 150,000 to 14,000 ppb between February 1994 and November 1995. Analysis for PNAs in November 1995 detected only 11 ppb Bis(2-ethylhexyl)Phthalate. Up to 1,400 ppb TPH-G, and non-detectable to trace levels of BTEX have been detected. It appears biodegradation and/or other attenuation processes (eg. sorption) are actively reducing petroleum hydrocarbon concentrations in groundwater. (See Table 2.)

Shallow groundwater at the site is not a potential source for drinking water. Residual levels of the chemicals of concern (namely BTEX and PNAs) in groundwater are extremely low. Residual soil contamination is also limited to depths below the groundwater surface (at approximately 11 to 14' bgs). Therefore, potential exposure to human health appears to be minimal. Continued monitoring at this site is not warranted.

Code Area No. 17-001

4979 ASSESSOR'S MAP 44

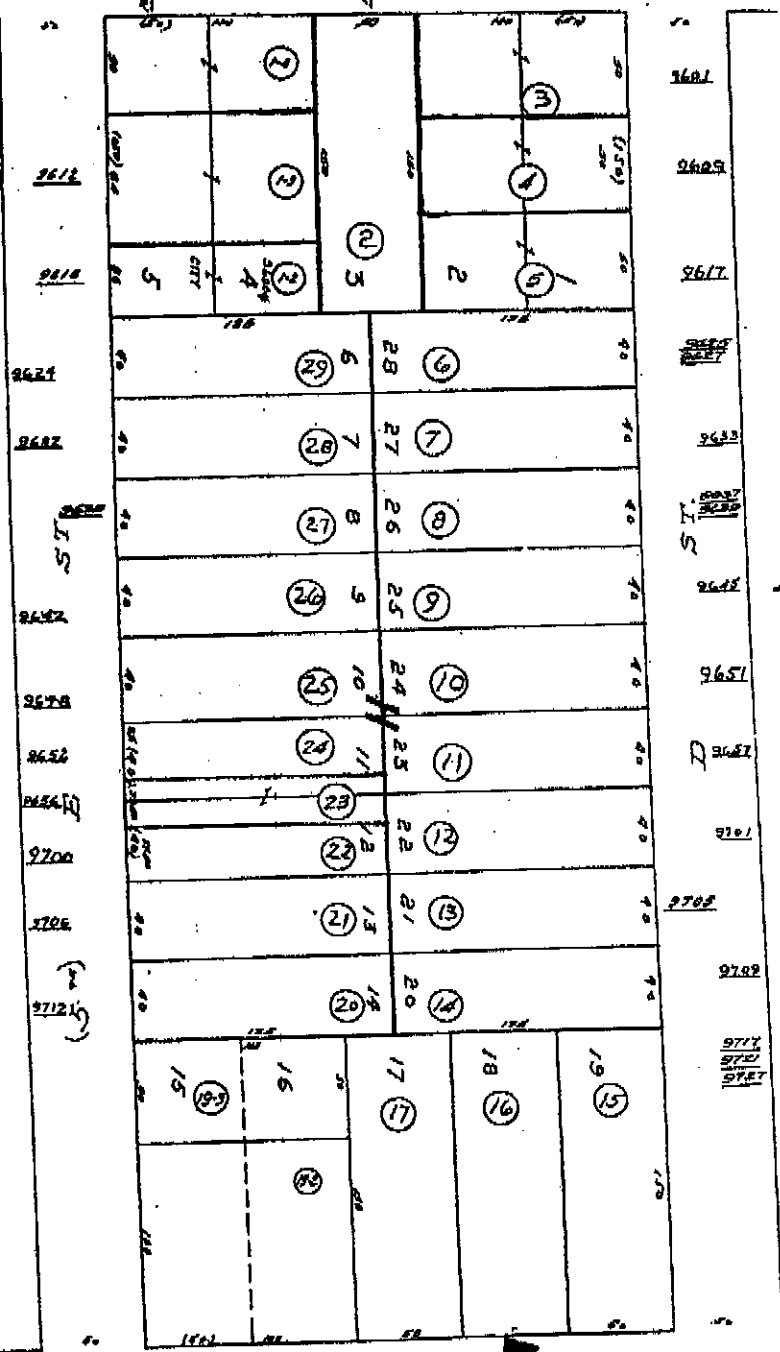
MAP OF THE  
ANDREW JONES SUBDIVISION  
(Bk. 14 Pg. 1)

SCALE: 1"=50'

APPROXIMATE  
STREET

IMPORTANT: This plan is not a survey.  
It is merely furnished as a convenience  
to locate the land in relation to ad-  
joining streets and other lands and not  
to guarantee any dimensions, distances,  
bearings or acre area.

ELMHURST AVE.



(JONES) ST. AVE.

4979  
E Street

4977

4976

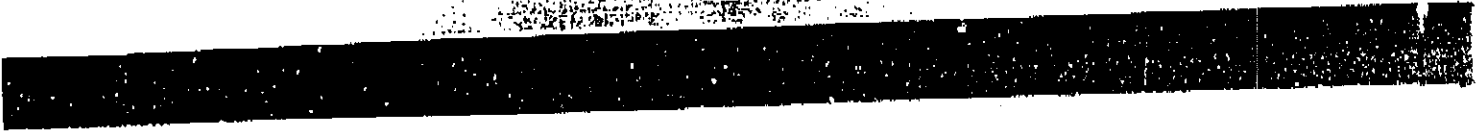




TABLE 1  
SUMMARY OF SOIL SAMPLE ANALYSIS RESULTS (ppm)  
1003 28th Avenue, Oakland, CA

			TOG	TPH <sub>g</sub>	TPH <sub>o</sub>		B	T	E	X		
Tank excavation floor	8	8/27/91	510	1,760	296	NA	<1.5	34	40	220	NA	NA
	12	10/17/91	1,335	490	34	NA	NA	NA	NA	NA	NA	NA
<b>LEVINE-FRICKE</b>												
B-1	1.5	1/21/94	10	<0.2	<1	NA	<0.005	<0.005	<0.005	<0.005	10	NA
B-2	1.5	1/21/94	<10	<0.2	<1	NA	<0.005	<0.005	<0.005	<0.005	9	NA
B-3	1.5	1/21/94	<10	<0.2	<1	NA	<0.005	<0.005	<0.005	<0.005	8	NA
B-4	1.5	1/21/94	190	<0.2	520	NA	<0.005	<0.005	<0.005	<0.005	160	NA
LF-1-14	14	1/21/94	340	<50	380	NA	<0.1	<0.1	<0.1	<0.1	10	NA
<b>AZURE ENVIRONMENTAL</b>												
SB-1	5	4/3/95	<10	<0.2	<1	NA	<0.005	<0.005	<0.005	<0.005	NA	<0.2
	11.5	4/3/95	<10	<0.2	<1	NA	<0.005	<0.005	<0.005	<0.005	NA	<0.2
SB-2	5	4/3/95	<10	<0.2	<1	NA	<0.005	<0.005	<0.005	<0.005	NA	<0.2
	11.5	4/3/95	550	1,100	560	NA	1.2	2.3	18	75	NA	*
SB-3	1.5	4/3/95	0.42	<0.2	0.08	NA	<0.005	<0.005	<0.005	<0.005	<0.1	NA
	5	4/3/95	<10	<0.2	<1	NA	<0.005	<0.005	<0.005	<0.005	NA	NA
SB-4	11.5	4/3/95	<10	<0.2	<1	NA	<0.005	<0.005	<0.005	<0.005	NA	NA
	11.5	11/20/95	20	<0.2	16	<0.2	<0.005	<0.005	<0.005	<0.005	NA	NA

**NOTES:**

TOG

TPH<sub>g</sub>TPH<sub>o</sub>TPH<sub>d</sub>

PNA

- Total Petroleum Hydrocarbons as Oil and Grease

- Total Petroleum Hydrocarbons as Gas

- Total Petroleum Hydrocarbons as Diesel

- Polynuclear Aromatics (EPA Method 8270)

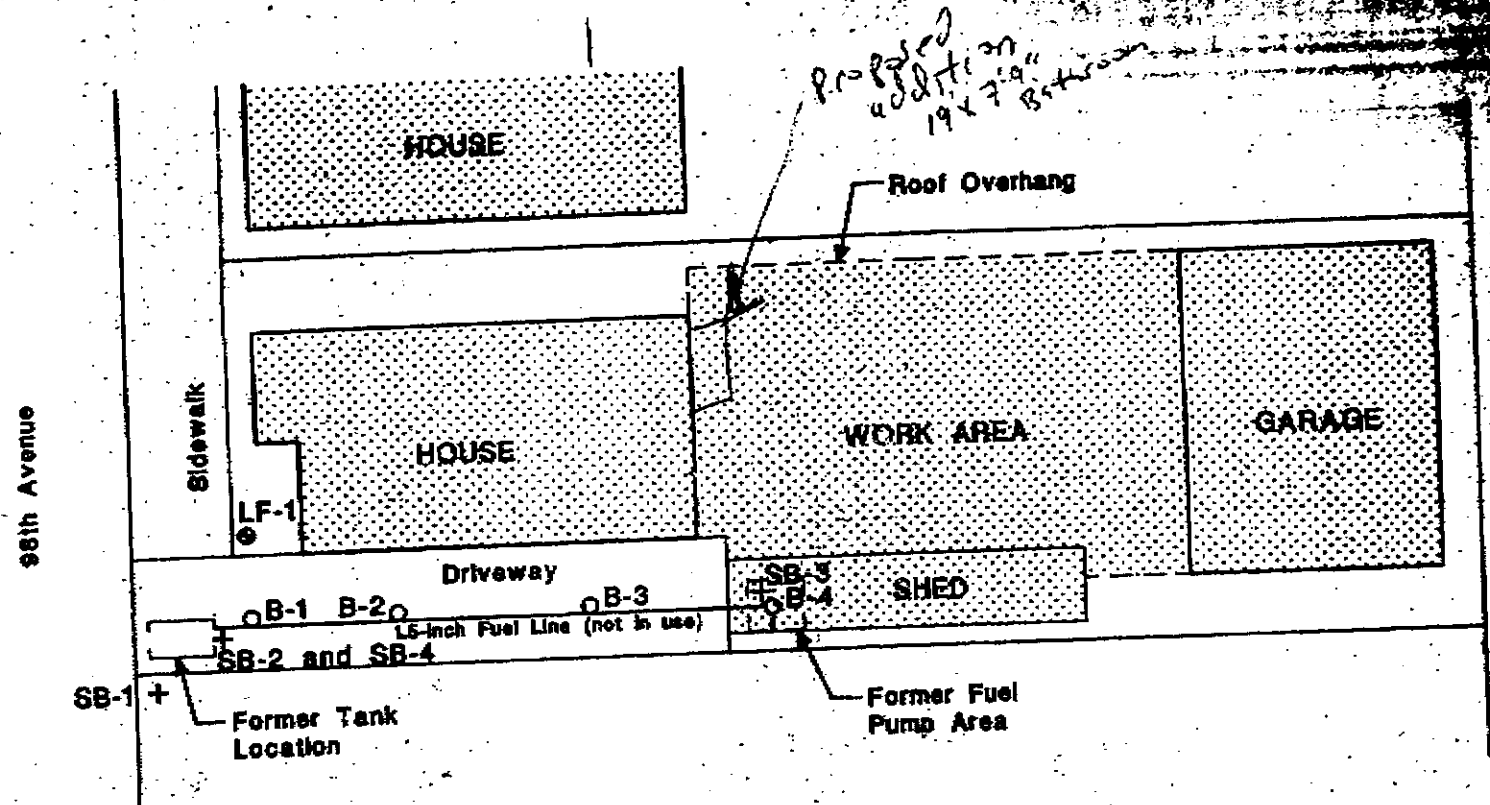
- NA

- NA

- 0.01 ppm Naphthalene and 9.01 ppm Phenanthrene detected

- All analyses using a deionized water Waste Extraction Test (WET) method.

- All analyses using a citric and sulfuric acid WET method (EPA Method 1312).



**EXPLANATION:**

- 15-foot depth boring location
- Shallow monitoring well location
- + Soil boring location

**Figure 2: Site Map Showing Sampling Locations**