



DEPARTMENT OF ENVIRONMENTAL HEALTH
Hazardous Materials Division
80 Swan Way, Rm. 200
Oakland, CA 94621
(510) 271-4320

REMEDIAL ACTION COMPLETION CERTIFICATION

StID 3771 - 1733 Murdell Lane, Livermore, CA 94550

March 27, 1995

Ms. Constance Graver
4008 Dyer Road
Livermore, CA 94550

Dear Ms. Graver:

This letter confirms the completion of site investigation and remedial action for the two former underground storage tanks (500 gallon diesel and 1,000 gallon gasoline tank) removed from the above site on July 12, 1990.

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

Very truly yours,

A handwritten signature in dark ink that reads "Rafat A. Shahid".

Rafat A. Shahid, Director

cc: Edgar B. Howell, Chief, Hazardous Materials Division
Kevin Graves, RWQCB
Mike Harper, SWRCB (with attachment)
files (murde114)

MAR 02 1995

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QUALITY CONTROL BOARD

ENVIRONMENTAL
PROTECTION

95 MAR 16 PM 1:03

CASE CLOSURE SUMMARY

Leaking Underground Fuel Storage Tank Program

I. AGENCY INFORMATION

Date: February 22, 1995

Agency name: Alameda County-HazMat Address: 1131 Harbor Bay Pkwy
 City/State/Zip: Alameda, CA 94502 Phone: (510) 567-6700
 Responsible staff person: Eva Chu Title: Hazardous Materials Spec.

II. CASE INFORMATION

Site facility name: Residential
 Site facility address: 1733 Murdell Ln., Livermore, CA 94550
 RB LUSTIS Case No: N/A Local Case No./LOP Case No.: 3771
 URF filing date: 10/8/90 SWEEPS No: N/A

Responsible Parties: Addresses: Phone Numbers:

1. Betty Jacobs 4008 Dyer Road
 c/o Constance Graver Livermore, CA 94550 (510) 447-2066

<u>Tank No:</u>	<u>Size in gal.:</u>	<u>Contents:</u>	<u>Closed in-place or removed?:</u>	<u>Date:</u>
1.	500	Diesel	Removed	7/12/90
2.	1,000	Gasoline	Removed	7/12/90

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and type of release: Overfilling
 Site characterization complete? YES
 Date approved by oversight agency: May 17, 1994

Monitoring Wells installed? YES Number: 2
 Proper screened interval? NO
 Highest GW depth below ground surface: 30.4' Lowest depth: 37.7'
 Flow direction: Assumed W-SW

Most sensitive current use: Drinking water
 Are drinking water wells affected? NO Aquifer name: Amador Sub-basin
 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 Pkwy
 Alameda, CA 94502

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 Piping Free Product	2 USTs	H & H Environmental	7/12/90
Soil Groundwater Barrels	470 cy	Vasco Rd. L.F.	8/5/91

Maximum Documented Contaminant Concentrations - - Before and After Cleanup

Contaminant	Soil (ppm)		Water (ppb)	
	Before	After	Before	After
TPH (Gas)	400	31	83	ND
TPH (Diesel)	5,000	89	ND	ND
Benzene	9.9	.0091	0.58	ND
Toluene	8.6	.048	2.4	ND
Ethylbenzene	13.0	.068	ND	ND
Xylenes	210.0	.037	0.84	ND
Oil & Grease				
Heavy metals				
Other - Organic Lead		ND		

Comments (Depth of Remediation, etc.):

The final excavation extended the pit walls 5' east, west, and south of former tanks, and 9' north of the tank. The pit was also excavated to a final depth of 36'. Sidewall samples collected at 18-22' depth did not detect TPH-G, TPH-K, or BTEX. The bottom pit sample at 36' exhibited 89 ppm TPH-D, 31 ppm TPH-G and low levels of BTEX.

IV. CLOSURE

Does completed corrective action protect existing beneficial uses per the Regional Board Basin Plan? **YES**
 Does completed corrective action protect potential beneficial uses per the Regional Board Basin Plan? **YES**
 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: **NO, upon case closure**
 Number Decommissioned: **0** Number Retained: **2**
 List enforcement actions taken: **None**
 List enforcement actions rescinded: **NA**

V. LOCAL AGENCY REPRESENTATIVE DATA

Name: Eva Chu

Title: Haz Mat Specialist

Signature: 

Date: 2/28/95

Reviewed by

Name: Scott Seery

Title: Sr. Haz Mat Specialist

Signature: 

Date: 2-22-95

Name: Juliet Shin

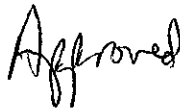
Title: Sr. Haz Mat Specialist

Signature: 

Date: 2/24/95

VI. RWQCB NOTIFICATION

Date Submitted to RB: 3/1/95

RB Response: 

RWQCB Staff Name: Kevin Graves

Title: AWRCE

Signature: 

Date: 3/8/95

VII. ADDITIONAL COMMENTS, DATA, ETC.

When 2 USTs (one 500 gallon diesel, one 1,000 gallon gasoline) were removed in July 1990, soil samples collected from native soil, at 12' depth, exhibited up to 400 ppm TPH-G, 5,000 ppm TPH-D, and 9.9, 8.6, 13.9, and 210 ppm BTEX, respectively. Sediment type at this depth was mostly sandy, clay gravels of low plasticity.

In Dec 1990, the pit walls were extended another 5-9' and the pit excavated to a depth of of 21'. Sidewall samples did not detect petroleum hydrocarbon contaminants. However, the pit bottom sample detected 300 ppm TPH-G, 170 ppm TPH-D, ND, 1.8, 1.6 and 13 ppm BTEX, respectively. At this time, four soil borings were attempted west of the pit. Only two were advanced to any significant depth, SB-1 to 27' and SB-4 to 50'. The only soil samples collected for laboratory analysis were from 25' depth in SB-1, and from 45' and 50' depth in SB-4. None of the samples contained detectable amounts of TPH-G, TPH-D, or BTEX. Soil boring SB-4 was left open for 1/2 hour to allow water to enter the boring. A grab water sample collected from SB-4 exhibited 83 ppb TPH-G, ND for TPH-D, .58 ppb benzene, .24 ppb toluene, ND for ethylbenzene, and .84 ppb xylenes. Boring SB-1 was left open for 15 minutes, but water did not enter the boring.

Final excavation of the pit to 36' depth occurred in January 1991. Bottom pit sample collected exhibited up to 31 ppm TPH-G, 89 ppm TPH-D, and less than .07 ppm BTEX.

In February 1991 two monitoring wells, MW-1 and MW-2, were installed west and southwest, respectively of the tank excavation. Mw-1 is within 2' of the pit excavation. This well encountered groundwater at 48' and is screened from 40-60'. Since its installation, depth to water has risen substantially, where water level has ranged from 30.4 to 37.7' bgs. MW-1 was sampled in May and August 1991, and in January and March 1992. Analyses of sampled groundwater in these four quarters did not detect concentration of target compounds sought. MW-2 was never sampled. The domestic well was sampled in December 1990, and did not detect any petroleum hydrocarbons. Although MW-1 does not appear to be properly screened, it would appear that elevated levels of contaminants, if any, would still be detected in the groundwater samples. Source removal was adequate to remove as much of the contaminated soil as possible. Residual levels of petroleum hydrocarbons in soil do not appear to have impacted groundwater.

Based on Zone 7 well data for Fall 1992, regional groundwater flow direction is toward the northwest. An existing domestic well is located 120' south of the tank pit. Its screen interval is assumed to be from 50'-140'. Site specific groundwater flow direction was measured to the southwest. Continuous pumping from the domestic well may influence groundwater flow direction onsite. Gravel pits located 1,000' west-northwest of the site also undergo continuous pumping. Whether groundwater flows northwest or southwest, MW-1 is less than 10' west of the pit excavation and is therefore downgradient from the former pit.

Approximately 1,500 cy of soil were removed from the excavation. 470 cy were contaminated with petroleum hydrocarbon. The remaining 1,030 cy were clean overburden and were used to backfill the pit. The contaminated soil was allowed to aerate and subsequently taken to Vasco Road Landfill for disposal.

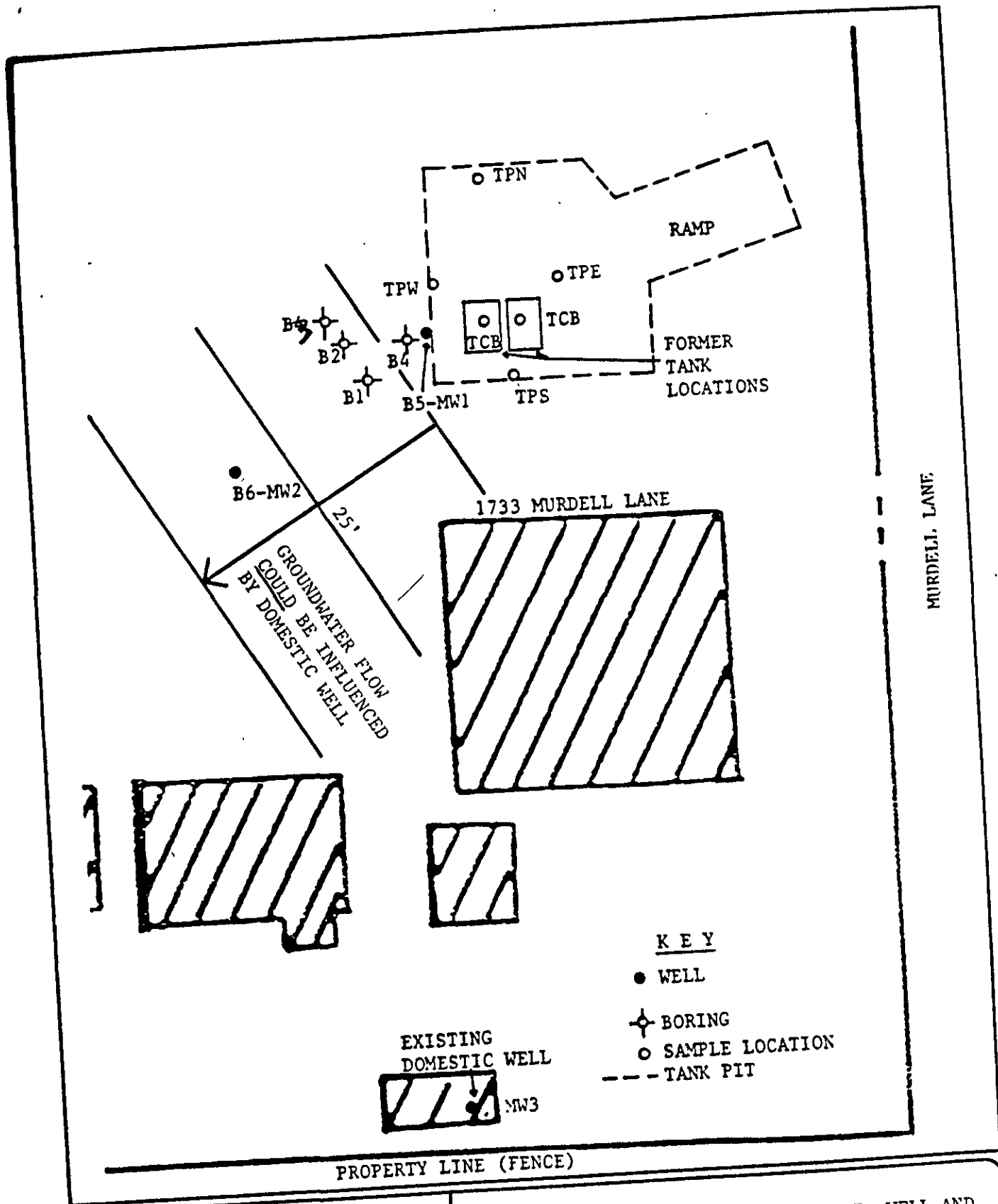


FIGURE 2. SITE PLAN WITH PIT, WELL AND BORING LOCATIONS AND GROUND-WATER DIRECTION

1733 MURDELL LANE, LIVERMORE, CA



SCALE

1" = 22'

SOURCE: EARTHMETRICS, (JULY, 1991)