



ENVIRONMENTAL HEALTH SERVICES  
ENVIRONMENTAL PROTECTION (LOP)  
1131 Harbor Bay Parkway, Suite 250  
Alameda, CA 94502-6577  
(510) 567-6700  
FAX (510) 337-9335

**REMEDIAL ACTION COMPLETION CERTIFICATION**

December 3, 1996

Henry R. and Mary M. Hertlein  
Former owners of 19051 Castro Valley Blvd./  
Current owners of parcel nos. 84B-510-34 and 84B-510-35  
PO Box 824  
West Point CA 95255

Dear Mr. and Mrs. Hertlein:

**UNDERGROUND STORAGE TANK (UST) CASE**

**Hertlein Electric  
19051 Castro Valley Blvd.  
Castro Valley, CA 94546  
(including properties located at or adjacent to parcel numbers 84B-510-32, 84B-510-33, 84B-510-34, 84B-510-35, 84B-510-36, and 84B-510-38)  
SITE NO. 4263**

This letter confirms the completion of site investigation and remedial action for the underground storage tank formerly located at the above-described location. 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 storage tank release is required.

A San Francisco Bay Regional Water Quality Control Board Staff Toxicologist completed a review of the site specific parameters of this case and determined that there is no significant human health risk to the current residential occupants from the reported concentrations of benzene identified during investigations of the groundwater beneath 3249 Hertlein Place.

This notice is issued pursuant to a regulation contained in Title 23, California Code of Regulations, Division 3, Chapter 16, Section 2721 (e). If a change 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.

Hertlein

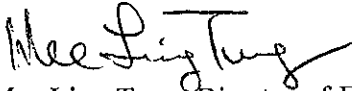
Re: 19051 Lake Chabot Rd.

December 3, 1996

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Please telephone Amy Leech at (510)567-6700 if you have any questions regarding this matter.

Sincerely,



Mee Ling Tung, Director of Environmental Health Services

**ATTACHMENT**

- c: David H. and Kathryn E. Miller, owners of parcel no. 84B-510-32 w/attachment
- Gregory and Rebecca Beaman, owners of parcel no. 84B-510-33 (3249 Hertlein Place) w/attachment
- Helen Millen, owner of parcel no. 84B-510-36 (19125 Lake Chabot Road) w/attachment
- Irmgard Divine, owner of parcel no. 84B-510-38 (3264 Magdalena Place) w/attachment
- Kevin Graves, RWQCB
- Lori Casias, SWRCB w/attachment
- Dave Deaner, SWRCB Cleanup Fund
- Acting Chief of Environmental Protection Division
- ALL/Files

Re: See attached Karen

Did not want to list personal addresses on the letter so here is a list of addresses for those to be copied:

David H. and Kathryn E. Miller, owners of parcel no. 84B-510-32  
3223 Hertlein Place, Castro Valley, CA 94546

Gregory and Rebecca Beaman, owners of parcel no. 84B-510-33 (3249 Hertlein Place)  
3249 Hertlein Place, Castro Valley, CA 94546

Helen Millen, owner of parcel no. 84B-510-36 (19125 Lake Chabot Road)  
19125 Lake Chabot Rd., Castro Valley, CA 94546

Irmgard Divine, owner of parcel no. 84B-510-38 (3264 Magdalena Place)  
8891 Oakmont Dr., Santa Rosa, CA 95409

Kevin Graves, RWQCB  
Gordon Coleman - File(ALL)

Thank You! Amy

01-0759

**CASE CLOSURE SUMMARY**  
**Leaking Underground Fuel Storage Tank Program**  
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**I. AGENCY INFORMATION**

Agency name: Alameda County-Haz-Mat  
Date:City/State/Zip: Alameda, CA 94502  
Responsible staff person: Amy Leech

Date: April 5, 1996  
Address: 1131 Harbor Bay Pkwy  
Phone: (510) 567-6700  
Title: Haz. Mat. Spec.

**II. CASE INFORMATION**

Site facility name: Hertlein Electric  
Site facility address: 19051 Lake Chabot Road, Castro Valley, CA 94546  
RB LUSTIS Case No: N/A Local Case No./LOP Case No.: 4263  
URF filing date: 12/14/88 SWEEPS No: N/A

<u>Responsible Parties:</u>	<u>Addresses:</u>	<u>Phone Numbers:</u>
Henry R. Hertlein and	PO Box 824	(209)293-1305
Mary M. Hertlein	West Point CA 95255	

<u>Tank No:</u>	<u>Size in gal.:</u>	<u>Contents:</u>	<u>Closed in-place or removed?:</u>	<u>Date:</u>
1	550	leaded gasoline	removed	1986

**III. RELEASE AND SITE CHARACTERIZATION INFORMATION**

Cause and type of release: **Hole in UST**

Site characterization complete? **Yes**  
Date approved by oversight agency: **09/11/95**

Monitoring Wells installed? **Yes** Number: **4**

Proper screened interval? **Yes**  
Highest GW depth below ground surface: **13.84**  
Flow direction: **Northeast to Southeast**

Lowest depth: **14.53** (for MW1)

Most sensitive current use: **Residential**

Are drinking water wells affected? **No** Aquifer name: **N/A**

Is surface water affected? **NO** Nearest affected SW name:**N/A**

Off-site beneficial use impacts (addresses/locations): **N/A**

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

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ENVIRONMENTAL PROTECTION

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**III. RELEASE AND SITE CHARACTERIZATION INFORMATION (cont'd)**

**Treatment and Disposal of Affected Material:**

**Material      Amount    Action (Treatment of Disposal w/destination)**

Tank            550 gallon                      Per Mr. Hertlein, the UST is used for water storage for fire control at his residence in Calavaras County.

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

Contaminant	Soil (ppm)		Water(ppb)	
	<u>Before</u> <sup>1</sup>	<u>After</u> <sup>2</sup>	<u>Before</u> <sup>3</sup>	<u>After</u>
TPH (Gasoline)	71,000	84	7,500	300
Benzene	1.2	ND	750	24
Toluene	2.9	ND	520	3.0
Ethylbenzene	3.9	ND	ND	9.1
Xylene	7.2	8.4	3,100	34
Total Lead	NT	NT	NT	NT

<sup>1</sup> Soil sample collected on 8/26/88 from boring B-1 (MW-1) at 8' bgs.

<sup>2</sup> Confirmatory soil sample collected at bottom of pit at ~ 16' bgs (near bedrock) after overexcavation on 2/28/89.

<sup>3</sup> "Grab" water sample collected from location of UST pit after overexcavation on 2/28/89.

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

See Section VII - Additional Comments.

**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: **N/A**

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

Monitoring wells Decommissioned: **No**  
 Number Decommissioned: **0**                      Number Retained: **4**

List enforcement actions taken: **None**

List enforcement actions rescinded: **N/A**

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**V. LOCAL AGENCY REPRESENTATIVE DATA**

Name: Amy Leech Title: Hazardous Materials Spec

Signature: *A. Leech* Date: 05-24-96

Reviewed by

Name: Thomas Peacock Title: Supervising, Hazardous Mat. Spec.

Signature: *Thomas Peacock* Date: 5-24-96

Name: Scott Seery Title: Sr. Hazardous Materials Spec

Signature: *Scott Seery* Date: 5-7-96

**VI. RWQCB NOTIFICATION**

Date Submitted to RB:

RB Response: *Approved*

RWQCB Staff Name: Kevin Graves, P.E.

Title: Assoc. Water Resources Control Engineer

Signature: *K. Graves* Date: 7/1/96

**VII. ADDITIONAL COMMENTS**

During or before 1986, one 550-gallon leaded gasoline underground storage tank (UST) was reportedly removed by the RP without guidance, permit, or oversight from local agencies from property known as Hertlein Electric located at 19051 Lake Chabot Road, Castro Valley, CA. Confirmatory soil and/or groundwater samples were reportedly not collected at the time of the tank removal. This property was apparently subdivided and redeveloped in 1989. The area where the former UST was located is now called 3249 Hertlein Place. See attachment 1 for the site location and layout.

In August and September 1988, three test borings were reportedly advanced and converted into monitoring wells (MW-1, MW-2, and MW-3). This work was completed without oversight of any local agency, including ACDEH. Monitoring well MW-1 was located at 3249 Hertlein Place near the former tank pit. The highest contaminant levels in soil samples were identified at 8 ft bgs from MW-1 (boring B1): 71,000 and 1.2/2.9/3.9/7.2 ppm of TPHg and BTEX, respectively. Monitoring well MW-2 was located in the approximate location where a UST was reportedly removed in 1960. A soil sample collected from MW-2 (boring B2, also identified as B-8) at 10.5 feet bgs was ND for TPHg and BTEX.

Elevated levels of TPHg and BTEX were reportedly identified in groundwater samples collected from the initial samples collected from MW-1: 52,000 and 420/440/610/3,300 ppb TPHG and BTEX, respectively. Low levels of benzene (1.1 ppb) and xylenes (1.9 ppb) were identified in groundwater collected from MW-2. See attachment 2 for boring logs and soil results.

During February 1989, overexcavation of contaminated soil reportedly occurred in the area surrounding the former tank pit in the vicinity of the southeast corner of 3249 Hertlein Place. This work was completed without oversight of ACDEH. The vertical extent of the excavation reportedly went down to bedrock (~16 ft bgs) where a confirmatory soil sample was collected. Reported analytical results for this sample were 84 ppm TPHg and 8.4 ppm xylenes; all other constituents were ND. The results of a "grab" groundwater sample collected from the excavation were 52,000 ppb TPHg and 750/ND/3,100/520 for BTEX, respectively. As a result of redeveloping the property and overexcavation activities, monitoring well MW-1 was reportedly destroyed and the location of MW-2 was obscured. The soil stockpiled during the overexcavation activities was reportedly reused on site after it was aerated and analytical results were non-detect for TPHg and BTEX.

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**VII. ADDITIONAL COMMENTS (cont'd)**

See attachment 3 for results. ACDEH was made aware of both this project and residential redevelopment only after subdivision was completed in mid-1989. It is at this point ACDEH began active oversight of the project.

In February 1990, two additional borings, also designated as B1 and B2, were advanced at the site and converted to monitoring wells MW-2(B1) and MW-1(B2). Boring B2 was converted to "new" MW-1 and replaced the original MW-1. "New" MW-2 was located south of the original MW-2 in the assumed downgradient direction from MW-1. Soil samples collected at approximately 6 - 19.5 ft bgs from B1 and B2 were ND for TPHg and ND to trace levels of BTEX (<1 ppm). During February 1991, the "original" monitoring well MW-2 (located east of MW-1) was discovered, repaired, and renamed MW-4. See attachment 4 for MW locations, soil results, and boring logs.

Groundwater monitoring wells were sampled eight (8) times over a six (6) year period (1988-1994). Groundwater flows generally toward the northeast and southeast. However, an underground concrete drainage ditch runs north to south between monitoring well MW-1 and MW-2, MW-3, and MW-4. Petroleum hydrocarbons have impacted groundwater in the vicinity of monitoring well MW-1, and concentrations have not appreciably attenuated since 1991. Since the reported overexcavation of contaminated soil in 1989, the highest concentration of benzene detected in groundwater is 43 ppb from monitoring well MW-1 in 3/92. TPHg and BTEX have not been detected in the MW-2, MW-3, and MW-4 for at least the last four quarters of sampling. See attachment 5 for a summary of results and current well locations.

A staff toxicologist with the San Francisco Bay Regional Water Quality Control Board (RWQCB) completed a risk analysis of the site using the following site specific parameters: the tank was removed 10 or more years ago; benzene was not detected in the confirmatory soil sample collected at 16 feet bgs after the contaminated soil was excavated and removed in 1989; depth to groundwater at monitoring well MW-1 is more than 10 feet bgs; floating product is not present; the soil column consists of sandy clay; groundwater flow is northeast to southeast (away from the house). The risk analysis assumed that the impacted area exists only under a portion of the southeast corner of the house and that the maximum concentration of benzene in groundwater is 50 ppb.

It was determined by the RWQCB Staff Toxicologist that there is no significant human health risk ( $1 \times 10^{-5}$  cancer risk) to the current residential occupants from the reported concentrations of benzene identified during investigations of the groundwater beneath 3249 Hertlein Place.

No further investigations are recommended since this site appears to meet the San Francisco RWQCB's definition of a low risk groundwater case:

1. The source of contamination was abated by removal of the UST. Overexcavation of the contaminated soil was reportedly completed.
2. The extent of impact to soil and groundwater has been evaluated at this site by analysis of multiple soil and groundwater samples collected within the UST pit and from four soil borings/monitoring wells installed in the vicinity of impacted area.
3. A RWQCB Staff Toxicologist determined that there is no significant human health risk ( $1 \times 10^{-5}$  cancer risk) to the current residential occupants from the reported concentrations of benzene identified during investigations of the groundwater at the southeast corner of 3249 Hertlein Place.

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**VII. ADDITIONAL COMMENTS (cont'd)**

4. Analytical groundwater data collected during eight sampling events over a six year period has shown that the dissolved hydrocarbon plume is not significantly migrating toward monitoring well MW-4 or MW-2. However, an underground storm drain that runs from north to south dividing MW-1 from MW-4, MW-2, and MW-3 could serve as a potential conduit for contaminant migration south of MW-1. In addition, analytical results do not show that TPHg and BTEX compounds are appreciably attenuating *which may indicate that a source of contamination still exists in the vicinity of monitoring well MW-1 (there was reportedly only one confirmatory soil sample collected after overexcavation of contaminated soil at the site).* However, the highest concentration of benzene in groundwater collected from monitoring well MW-1 during the six year monitoring period after overexcavation was 43 ppb; a risk analysis indicates there is no significant risk to human health for plausible residential exposure scenarios at this concentration. It is assumed that the concentration of contaminants that may be found in groundwater south of the source due to migration along the storm sewer easement would attenuate with distance from the source. Hence, such concentrations would be less than the levels found at the source, thus minimizing risk to potential sensitive receptors south of MW-1.
5. A domestic well was located approximately 60 feet south and downgradient from the former tank pit. This well was destroyed in 1989. Groundwater results were non-detect for TPHg and BTEX for a groundwater sample that was reportedly collected from this well and analyzed in 1988.
6. Since it appears that site specific exposure pathways will not affect any currently recognized sensitive ecological receptors, an environmental risk analysis was not performed.