ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

RAFAT A. SHAHID, Assistant Agency Director
ALAMEDA COUNTY CC4580
DEPT. OF ENVIRONMENTAL HEALTH
ENVIRONMENTAL PROTECTION DIVISION
1131 HARBOR BAY PKWY., #250
ALAMEDA CA 94502-6577

REMEDIAL ACTION COMPLETION CERTIFICATION

StID 4361 - 900 S. Livermore Ave, Livermore 94550

November 23, 1994

Mr. Adadu Yemane
Unocal
P.O. Box 5155
San Ramon, CA 94583

Dear Mr. Yemane:

This letter confirms the completion of site investigation and remedial action for the three former underground storage tanks (two 10K gallon gasoline tanks and a 500 gallon waste oil tank) removed from the above site on October 29, 1987 and June 9, 1992.

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,

Rafat A. Shahid, Director

cc: Edgar B. Howell, Chief, Hazardous Materials Division
Kevin Graves, RWQCB
Mike Harper, SWRCB (with attachment)
files (unocal13.6)

CASE CLOSURE SUMMARY
Leaking Underground Fuel Storage Tank Program

I. AGENCY INFORMATION **Date: November 9, 1994**

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: **Unocal Station #4667**
Site facility address: **900 S. Livermore Ave, Livermore 94550**
RB LUSTIS Case No: **N/A** Local Case No./LOP Case No.: **4361**
URF filing date: **1/5/88** SWEEPS No: **N/A**

Responsible Parties:	Addresses:	Phone Numbers:
UNOCAL Corp **Attn. Adadu Yemane**	**P.O.Box 5155, San Ramon 94583**	

Tank No:	Size in gal.:	Contents:	Closed in-place or removed?:	Date:
1	500	Waste Oil	Removed	10/29/87
2	10,000	Gasoline	Removed	6/9/92
3.	10,000	Gasoline	Removed	6/9/92

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and type of release: **Leaking Waste Oil Tank**
Site characterization complete? **YES**
Date approved by oversight agency: **9/19/94**
Monitoring Wells installed? **Yes** Number: **3**
Proper screened interval? **Yes, 32 - 54' bgs**
Highest GW depth below ground surface: **27.12'** Lowest depth: **46.65'**
Flow direction: **NW**
Most sensitive current use: **Municipal water supply**
Are drinking water wells affected? **NO** Aquifer name: NA
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:

Material	Amount (include units)	Action (Treatment or Disposal w/destination)	Date
Tank	3 USTs	Waste Oil tank to Petroleum Waste, Buttonwillow, CA	10/26/87
		2 broken fiberglass tanks taken to Vasco Rd L.F.	June 1992
Piping			
Free Product			
Soil	60 cy	Petroleum Waste, Buttonwillow	2/2-4/88
Groundwater			
Barrels			

Maximum Documented Contaminant Concentrations - - Before and After Cleanup

Contaminant		Soil (ppm) Before	Soil (ppm) After	Water (ppb) Before	Water (ppb) After
TPH (Gas)		ND	ND	ND	ND
TPH (Diesel)		1,100	ND	ND	ND
Benzene		ND	ND	ND	ND
Toluene		ND	.015	.88	ND
Ethylbenzene		ND	.008	ND	ND
Xylenes		ND	.044	.66	ND
Oil & Grease		5,100	ND	ND	ND
Heavy metals	Total Pb	180			
	Organic Pb	16	ND	ND	ND
Other	Cl-HCs	ND			

Comments (Depth of Remediation, etc.):

When the waste oil tank was removed, 470ppm TEH as diesel, and 5,100ppm TOG was detected at 8' depth. The pit was overexcavated, removing approximately 60 cy soil. Another soil sample collected at 9' depth did not detect TEH, or TOG, the only compounds sought.

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: **None, pending site closure**
Number Decommissioned: **0** Number Retained: **3**
List enforcement actions taken: **None**

List enforcement actions rescinded: **NA**

V. LOCAL AGENCY REPRESENTATIVE DATA

Name: Eva Chu Title: Haz Mat Specialist

Signature: [signature] Date: 11/10/94

Reviewed by

Name: Scott Seery Title: Sr. Haz Mat Specialist

Signature: [signature] Date: 11-9-94

Name: Barney Chan Title: Haz Mat Specialist

Signature: [signature] Date: 11/10/94

VI. RWQCB NOTIFICATION

Date Submitted to RB: 11/14/94 RB Response: Approved

RWQCB Staff Name: Kevin Graves Title: AWRCE

Signature: [signature] Date: 11/21/94

VII. ADDITIONAL COMMENTS, DATA, ETC.

A limited site assessment was performed in March 1987 where three soil borings were advanced around the gasoline USTs and one soil boring adjacent to the waste oil UST. Only one sample from each boring was submitted for laboratory analysis. Only fuel hydrocarbons and BTX were sought. Analysis did not detect TPH as fuel or BTX at 11' and 7' depths from the gasoline and waste oil areas, respectively.

The waste oil UST was removed on October 26, 1987. Soil collected at 6' depth exhibited up to 1,100 ppm TPH-D and 181 ppm total lead. Overexcavation ensued in two phases, with samples collected at 8 and 9' depths. The 8' sample still exhibited 5,100 ppm TOG and 470 ppm TPH-D. No VOCs were found at the 8' depth. The 9' depth sample did not detect TPH-D or TOG, the only compounds sought. Lead was not sought in either the 8' or 9' samples.

In April 1992 additional excavation at the site encountered remnants of two fiberglass USTs. Trenches were excavated in the former dispenser islands, where only trace levels of petroleum hydrocarbons were detected. The waste oil tank area was excavated to 10' depth. A soil sample collected from the waste oil pit exhibited up to 880 ppm TOG and 16 ppm organic lead.

Three soil borings and three monitoring wells were advanced and completed at this time. Borings B-1 and B-2 were advanced through the fuel pit to 20-21.5' depth, while boring B-3 was advanced through the waste oil pit to 16' depth, to evaluate the potential or extent of release of hydrocarbons. Soil collected from the soil borings did not detect BTEX in excess of 44 ppb total xylenes. TPH-G and organic lead were not detected.

By June 1992 the remnants of the two fiberglass USTs were removed and taken to Vasco Road Landfill for disposal. The waste oil pit was excavated to 13' bgs. Four soil samples were collected from the gasoline pit at 10-12' depths, and one soil sample from the waste oil pit at 13' depth. Soil from the gasoline pit did not detect TPH-G or BTEX. Soil from the waste oil pit, at 13' depth, did not detect TOG or organic lead, the only compounds sought. Soil was also collected from the dispenser island trenches and at the former hoist pit. These samples did not detect TPH-G, TPH-D, BTEX, TOG, or organic lead.

The wells have been sampled for 5 consecutive quarters, from April 1992 to March 1994. Only trace levels of toluene and xylenes (up to .88 ppb) have been detected from well MW-3, downgradient from the former gasoline tank pit. Other target compounds sought (TPH-G, TPH-D, TOG, organic lead, Cl-HCs and semi-volatile compounds) have not been detected.

It appears that soil removal was effective and residual contaminated soil left in place has not impacted groundwater quality beneath the site.