PACIFIC
ENVIRONMENTAL
GROUP, INC.

AN ET COMPANY

November 9, 1998
Project 912-006.6A

Mr. Hugh Murphy
Hayward Fire Department
25151 Clawiter Road
Hayward, California 94545

Re: Underground Storage Tank Case Review/Closure Request
Various 76 (former UNOCAL) Service Stations
Hayward, California

Dear Mr. Murphy:

On behalf of Tosco Marketing Company (Tosco), Pacific Environmental Group, Inc. (PEG) has prepared this letter requesting case review and closure status for the following three 76 (former UNOCAL) Service Stations:

76 Service Station #5487
28250 Hesperian Blvd., Hayward

76 Service Station #6049
898 A Street, Hayward

76 Service Station #6074
3500 Breakwater Avenue, Hayward

Tables 1 through 3 present brief summaries of the rationale for the closure requests for each station. Completed Underground Storage Tank Cleanup Fund Case Review Forms are presented as Attachment A.

In evaluating sites for their suitability for closure, PEG considered the following criteria:

- Source Removal: Have all primary hydrocarbon sources (piping, underground storage tanks [USTs], etc.) been removed?
- Site Remediation: Has soil or groundwater remediation been performed/completed at the site?
- Assessment of Residual Hydrocarbons in Soil and Groundwater: Has site assessment been completed, and is the extent of hydrocarbons in soil and

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groundwater well understood? Are there residual hydrocarbons in soil and/or groundwater beneath the site? Is the residual dissolved hydrocarbon plume stable? Are separate-phase hydrocarbons (SPH) present in any of the site wells?

- Water Usage: Are there any municipal or other water-supply wells within or in close proximity to the plume?

Based on these factors, PEG believes that the above-referenced sites should be closed and no further regulatory action required. At your convenience, we would like to discuss these sites and any concerns and/or comments that you may have regarding their closure. If you have any questions, please do not hesitate to call.

Sincerely,

Pacific Environmental Group, Inc.

Christine W. Brown
Senior Geologist
CEG 1688

Attachments:

Table 1 - Rationale for Closure Request, 76 Service Station #5487
28250 Hesperian Blvd., Hayward
Table 2 - Rationale for Closure Request, 76 Service Station #6049
898 A Street, Hayward
Table 3 - Rationale for Closure Request, 76 Service Station #6074
3500 Breakwater Avenue, Hayward
Attachment A - Case Review Forms

cc: Ms. Tina Berry, Tosco Marketing Company
Mr. Chuck Headley, RWQCB, San Francisco Bay Region

Table 1
Rationale for Closure Request
76 Service Station #5487
28250 Hesperian Boulevard
Hayward, California

RATIONALE FOR CLOSURE REQUEST	REFERENCE
Source Removal: All hydrocarbon sources (product lines and USTs) were replaced in January 1989.	KEI, 3/1/89 KEI, 3/29/92
Soil Remdiation: Significant overexcavation, predominantly lateral, was performed at the gasoline and waste oil tank pits. The gasoline tank pit was overexcavated 10 feet laterally (7 feet to the north and 3 feet to the south) and the waste oil tank was overexcavated to 29 feet by 29 feet. Approximately 650 cubic yards of soil were removed from the excavations and disposed of off site.	KEI, 3/1/89 KEI, 3/29/89
Groundwater Remediation: Approximately 24,000 gallons of hydrocarbon-impacted groundwater were pumped from the fuel and waste oil tank pits on January 30, February 14, and February 17, 1989.	KEI, 3/1/89
Assessment of Residual Hydrocarbons in Soil: There is no evidence of hydrocarbon-saturated soils beneath the site. Soils were overexcavated during tank removal activities until hydrocarbon concentrations in sidewall samples were near or below detection limits. The only residual soil contamination beneath the site appears to be in the "smear zone" (soil-groundwater interface) downgradient of the gasoline tank complex.	KEI, 3/1/89 KEI, 8/19/96
Assessment of Residual Hydrocarbons in Groundwater: The downgradient extent of hydrocarbons in groundwater has been defined. The residual dissolved hydrocarbon plume is small, and gasoline and BTEX concentrations in groundwater have declined significantly since monitoring began in 1989. Although MtBE is present in MW-5 and MW-6, it has not been detected in downgradient Well MW-7. SPH have never been detected in site monitoring wells.	PEG, 9/20/95 MPDS, 3/7/97
Water Usage: There are no municipal wells within 1/4-mile radius of the site. The nearest documented water-supply well (irrigation) is located over 1,000 feet northwest (crossgradient) of the site.	PEG, 7/26/96

Table 2
Rationale for Closure Request
76 Service Station #6049
898 A Street
Hayward, California

RATIONALE FOR CLOSURE REQUEST	REFERENCE
Source Removal: All hydrocarbon sources (product lines, dispensers, USTs, and hydraulic lift) were replaced in July 1993 (the hydraulic lift was removed in October 1995).	KEI, 9/27/93 KEI, 10/23/95
Site Remediation: The gasoline and waste oil tank pits were overexcavated. Approximately 450 cubic yards of soil were disposed of at a Class III facility.	KEI, 9/27/93
Assessment of Residual Hydrocarbons in Soil: There is no evidence of hydrocarbon-saturated soils beneath the site. The extent of soil contamination has been defined. Gasoline constituents were not detected in any of the soil samples collected from beneath the fuel tanks, dispensers, product lines, or the undocumented tank. Soil samples collected from beneath the waste oil tank contained elevated hydrocarbon concentrations before but not after overexcavation.	KEI, 9/27/93
Assessment of Residual Hydrocarbons in Groundwater: An attempt was made to install monitoring wells, but groundwater was not encountered to the total depth drilled of 51 feet. No significant soil contamination was detected in the boring.	KEI, 3/2/95
Water Usage: There are no municipal wells within 3,000 feet of the site. The nearest water-supply well (domestic) is located approximately 1/4 mile northeast of the site.	PEG, 6/23/96

Table 3
Rationale for Closure Request
76 Service Station #6074
3500 Breakwater Avenue
Hayward, California

RATIONALE FOR CLOSURE REQUEST	REFERENCE
Source Removal: All primary hydrocarbon sources (product lines, dispensers, and USTs) were replaced in October 1993.	KEI, 12/2/93
Soil Remediation: The gasoline and waste oil tank pits were overexcavated during tank replacement. Approximately 800 cubic yards of soil were disposed of at a Class III facility.	KEI, 12/3/93
Assessment of Residual Hydrocarbons in Soil: There is no evidence of hydrocarbon-saturated soils beneath the site. No significant soil contamination was detected during UST removal or drilling for the monitoring wells. All soil samples collected from beneath the fuel tanks and piping contained TPH-g and TPH-d concentrations of 5.1 ppm or less, and a maximum benzene concentration of 0.023 ppm.	KEI, 12/2/93
Assessment of Residual Hydrocarbons in Groundwater: During the most recent sampling event (2/12/97) no dissolved hydrocarbons were detected in any of the site monitoring wells. SPH have never been detected in groundwater monitoring wells.	MPDS, 3/10/97
Water Usage: The nearest documented water-supply well is located approximately 1,000 feet from the site, and is not impacted by site operations.	PEG, 9/4/96

ATTACHMENT A

UNDERGROUND STORAGE TANK CLEANUP FUND
CASE REVIEW FORMS

Attachment 1

State of California
Environmental Protection Agency

State Water Resources Control Board
(New 12/96)

Underground Storage Tank Cleanup Fund
CASE REVIEW FORM

Date: 8-18-98	LUSTIS File No.:	Oversight Agency: City of Hayward Fire Dept.	
Site Name/Address: 76 Station #5487 28250 Hesperian Blvd. Hayward	Responsible Parties: Tosco/Tina Berry	Address: P.O. Box 5155 San Ramon, CA 94583	Telephone No.: 925-277-2321

I. CASE INFORMATION (N/A = Not Applicable)

Tank No.	Size in Gallons	Contents	Closed In-Place/Removed?	Date
1	10,000	gasoline.	replaced	1/89
2	10,000	gasoline.	replaced	1/89
3	280	waste oil	replaced	1/89

II. SITE CHARACTERIZATION INFORMATION (GW = groundwater)

GW Basin: East Bay Plain	Beneficial Uses: All	Depth to Drinking Water Aquifer: unknown	
Distance to Nearest Municipal Supply Well: None within ¼ mile Nearest water-supply well (irr.) 1000' NW		Distance Between Known Shallow GW Contamination & Aquifer: --	
GW Highest Depth: 3.5'	GW Lowest Depth: 7.8'	Well Screen Interval: 4-28'	Flow Direction: S-SW
Soil Type: silt and clay		Maximum Depth Sampled: 28'	

III. MAXIMUM DOCUMENTED CONTAMINANT CONCENTRATIONS - Initial and Latest -- = Not Reported, ND = Non-Detect

Contaminant	Soil (mg/kg)		Water (ug/L)		Contaminant	Soil (mg/kg)		Water (ug/L)	
	Initial (Year) 1989	Latest (Year) 1992	Initial (Year) 1989	Latest (Year) 1997		Initial (Year) 1989	Latest (Year) 1992	Initial (Year) 1989	Latest (Year) 1997
TPH (Gas)	900	410	1300	85	Ethylbenzene	30	15	9.2	2.1
TPH (Diesel)	800	--	500	--	Xylenes	110	89	100	6.6
Benzene	3.6	1.9	52	16	MTBE	--	--	--	450
Toluene	9.2	10	8.6	1.2	Other TOG	1900	--	ND	NA

IV. SOIL REMEDIATION

Method: overexcavation	Duration of Remediation: 1989

V. GROUNDWATER REMEDIATION

Method: None	Duration of Remediation:

VI. FREE PRODUCT

Was Free Product Encountered? YES ☐ NO ☒	Has Free Product Been Totally Recovered? YES ☐ NO ☐
When Was Free Product Recovery Project Completed?	

VII. RECOMMENDED ACTION

Soil Closure Only? YES ☐ NO ☒	Case Closure? YES ☒ NO ☐	Solvent Case? YES ☐ NO ☒
Additional Action Required (i.e., additional site assessment, remediation, monitoring):		

VIII. JUSTIFICATION FOR RECOMMENDED ACTION

Source (tanks, piping, most contam. soil) removed. No hydrocarbon saturated soils. No separate-phase hydrocarbons. Plume delineated, stable. Nearest water-supply well 1000' crossgradient.

Attachment 1

State of California
Environmental Protection Agency

Underground Storage Tank Cleanup Fund
CASE REVIEW FORM

State Water Resources Control Board
(New 12/96)

Date: 8-18-98	LUSTIS File No.:	Oversight Agency: City of Hayward Fire Dept.	
Site Name/Address: 76 Station #6049 898 A Street Hayward, CA	Responsible Parties: Tosco / Tina Berry	Address: P.O. Box 5155 San Ramon, CA 94583	Telephone No.: 925-277-2321

I. CASE INFORMATION (N/A = Not Applicable)

Tank No.	Size in Gallons	Contents	Closed In-Place/Removed?	Date
1	10,000	Regular unleaded gas	Replaced	7/26/93
2	10,000	Super unleaded gas	Replaced	7/26/93
3	550	Waste Oil	Replaced	7/26/93
4	200	Unknown	Removed	8/2/93

II. SITE CHARACTERIZATION INFORMATION (GW = groundwater)

GW Basin: East Bay Plain	Beneficial Uses: all	Depth to Drinking Water Aquifer: unknown	
Distance to Nearest Municipal Supply Well: None within 3000' nearest water-supply well (dom.) - 1500'		Distance Between Known Shallow GW Contamination & Aquifer: NA	
GW Highest Depth: NA	GW Lowest Depth: NA	Well Screen Interval: NA	Flow Direction: unknown
Soil Type: interbedded ML, SM, GW, CL		Maximum Depth Sampled: 51' - soil only	

III. MAXIMUM DOCUMENTED CONTAMINANT CONCENTRATIONS - Initial and Latest - = Not Reported, ND = Non-Detect

Contaminant	Soil (mg/kg)		Water (ug/L)		Contaminant	Soil (mg/kg)		Water (ug/L)	
	Initial (Year) 1993	Latest (Year) 1995	Initial (Year)	Latest (Year)		Initial (Year) 1993	Latest (Year) 1995	Initial (Year)	Latest (Year)
TPH (Gas)	440*	1.2			Ethylbenzene	0.015			
TPH (Diesel)	NA	ND			Xylenes	0.065			
Benzene	0.013	ND			~~MTBE~~ TOG	6700	ND		
Toluene	0.025	0.0097			Other chlorobenz.	7700	ND (1993)		
					PCE	ND	37		

IV. SOIL REMEDIATION

Method: Overexcavation	Duration of Remediation: 1993

V. GROUNDWATER REMEDIATION

Method: NA	Duration of Remediation:

VI. FREE PRODUCT

Was Free Product Encountered? YES ☐ NO ☒	Has Free Product Been Totally Recovered? YES ☐ NO ☐
When Was Free Product Recovery Project Completed?	

VII. RECOMMENDED ACTION

Soil Closure Only? YES ☒ NO ☐	Case Closure? YES ☒ NO ☐	Solvent Case? YES ☐ NO ☒
Additional Action Required (i.e., additional site assessment, remediation, monitoring):		

VIII. JUSTIFICATION FOR RECOMMENDED ACTION

Source removed. No hydrocarbon-saturated soil. No significant soil contamination after overexcavation. Depth to water greater than 51'

* TPPH does not appear to be gasoline

Attachment 1

State of California
Environmental Protection Agency

Underground Storage Tank Cleanup Fund

State Water Resources Control Board
(New 12/96)

CASE REVIEW FORM

Date: 8-18-98	LUSTIS File No.:	Oversight Agency: Hayward Fire Dept.	
Site Name/Address: Station # 6074 3500 Breakwater Ave. Hayward, CA	Responsible Parties: Tosco/ Tina Berry	Address: P.O. Box 5155 San Ramon, CA 94583	Telephone No.: 925-277-2321

I. CASE INFORMATION (N/A = Not Applicable)

Tank No.	Size in Gallons	Contents	Closed In-Place/Removed?	Date
1	10,000	unleaded gasoline	Replaced	10/93
2	10,000	super unleaded gasoline	Replaced	10/93
3	10,000	diesel	Replaced	10/93
4	550	waste oil	Replaced	10/93

II. SITE CHARACTERIZATION INFORMATION (GW = groundwater)

GW Basin: East Bay Plain	Beneficial Uses: All	Depth to Drinking Water Aquifer: unknown	
Distance to Nearest Municipal Supply Well: None known within 4000,' well of unknown use 1000' NW		Distance Between Known Shallow GW Contamination & Aquifer: --	
GW Highest Depth: 11.6'	GW Lowest Depth: 15.1'	Well Screen Interval: 8-22'	Flow Direction: west
Soil Type: clayey silt with sand and clay interbeds		Maximum Depth Sampled: 22'	

III. MAXIMUM DOCUMENTED CONTAMINANT CONCENTRATIONS - Initial and Latest -- = Not Reported, ND = Non-Detect

Contaminant	Soil (mg/kg)		Water (ug/L)		Contaminant	Soil (mg/kg)		Water (ug/L)	
	Initial (Year) 1993	Latest (Year) 1994	Initial (Year) 1988	Latest (Year) 1997		Initial (Year) 1993	Latest (Year) 1994	Initial (Year) 1988	Latest (Year) 1997
TPH (Gas)	5.1	1.9	43,000	160	Ethylbenzene	0.062	ND	1740	ND
TPH (Diesel)	2.8	ND	40,050	ND	Xylenes	0.030	0.29	10,200	ND
Benzene	0.023	ND	440	ND	MTBE	--	--	--	ND
Toluene	0.012	ND	2610	ND	Other				

IV. SOIL REMEDIATION

Method: overexcavation	Duration of Remediation: 1993

V. GROUNDWATER REMEDIATION

Method: None	Duration of Remediation:

VI. FREE PRODUCT

Was Free Product Encountered? YES ☐ NO ☒	Has Free Product Been Totally Recovered? YES ☐ NO ☐
When Was Free Product Recovery Project Completed?	

VII. RECOMMENDED ACTION

Soil Closure Only? YES ☐ NO ☒	Case Closure? YES ☒ NO ☐	Solvent Case? YES ☐ NO ☒
Additional Action Required (i.e., additional site assessment, remediation, monitoring):		

VIII. JUSTIFICATION FOR RECOMMENDED ACTION

Source removed. No hydrocarbon-saturated soils. No separate phase hydrocarbons. Plume small, stable, and delineated. No significant soil contamination. Nearest water-supply well 1000' from site.