



EDMUND G. BROWN JR.
GOVERNOR

MATTHEW RODRIGUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

State Water Resources Control Board

UST CASE CLOSURE SUMMARY

Agency Information

Agency Name: County of Los Angeles Department of Public Works Environmental Programs Division (County of Los Angeles)	Address: 900 South Fremont Avenue Alhambra, CA 91802-1460
Agency Caseworker: Rani Iyer	Case No.: 011034-011026

Case Information

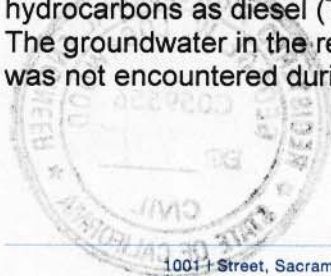
USTCF Claim No.: 18871	Global ID: T0603783472
Site Name: United Oil Company Station #34	Site Address: 3915 East Olympic Boulevard Los Angeles, CA 90022 (Site)
Responsible Party: United El Segundo, Inc.	Address: 17311 South Main Street Gardena, CA 90248
USTCF Expenditures to Date: \$12,233	Number of Years Case Open: 18

URL: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0603783472

Summary

The Low-Threat Underground Storage Tank Case Closure Policy (Policy) contains general and media-specific criteria, and cases that meet those criteria are appropriate for closure pursuant to the Policy. This Case meets all of the required criteria of the Policy. A summary evaluation of compliance with the Low-Threat Policy is shown in **Attachment 1: Compliance with State Water Board Policies and State Law**. The Conceptual Site Model upon which the evaluation of the Case has been made is described in **Attachment 2: Summary of Basic Site Information**. Highlights of the Conceptual Site Model of the Case are as follows:

The release at the Site was discovered when the former underground storage tanks (USTs) were removed from the Site in 1995. No soil was removed from the Site during the UST removal. Petroleum contaminants were not detected in soil samples collected from the UST pit, dispenser, and product line areas, except for one sample detected at a low total petroleum hydrocarbons as gasoline (TPHg) concentration. As part of station upgrade activities in 2001, fuel dispensers and associated product piping were removed and replaced. During the station upgrade activities, approximately 1,802 pounds of impacted soil were removed and transported off-site. Subsequent analytical soil data from the site investigations in 2006 and 2007 showed non-detectable level for TPHg, benzene, toluene, ethyl benzene, xylenes, and methyl tert-butyl ether (MTBE) and only low level of total petroleum hydrocarbons as diesel (TPHd) in some soil samples from 5 to 35 feet below ground surface (bgs). The groundwater in the region is reported at depths ranging from 150 to 200 feet bgs. Groundwater was not encountered during the site assessment activities.



FELICIA MARCUS, CHAIR | THOMAS HOWARD, EXECUTIVE DIRECTOR

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United Oil Company Station #34
3915 East Olympic Boulevard, Los Angeles, County of Los Angeles

The primary source has been removed and the secondary source has been removed to the extent practicable through excavation at the time of station upgrade activities. The petroleum release is limited to the shallow soil well above the water table. It is highly unlikely that the groundwater would be impacted. Remaining petroleum constituents are limited, stable, and declining. Additional assessment/monitoring will not likely change the conceptual model. Remaining petroleum constituents do not pose significant risk to human health, safety, or the environment.

Rationale for Closure under the Policy

- General Criteria – Site meets all eight general criteria under the Policy.
- Groundwater Media-Specific Criteria – Site had releases that have not affected groundwater. Site does not contain sufficient mobile constituents to cause groundwater to exceed the groundwater criteria in the Policy.
- Petroleum Vapor Intrusion to Indoor Air – Site meets the exception for vapor intrusion to indoor air. The Site is operated an active commercial fueling facility and has no release characteristics that can be reasonably believed to pose an unacceptable health risk.
- Direct Contact and Outdoor Air Exposure – Site meets the Policy Class “a.” Maximum concentrations of petroleum constituents in soil are less than or equal to those listed in Table 1 of the Policy. The estimated naphthalene concentrations in soil meet the thresholds in Table 1 for direct contact by a factor of eight. It is highly unlikely that naphthalene concentrations in the soil, if any, exceed the threshold.

Objections to Closure

County of Los Angeles staff did not have any objections to UST case closure. However, County of Los Angeles staff indicated that the case is being referred to the Los Angeles Regional Water Board in the near future.

Recommendation for Closure

The corrective action performed at this Site ensures the protection of human health, safety, the environment and is consistent with Chapter 6.7 of the Health and Safety Code and implementing regulations, applicable state policies for water quality control and the applicable water quality control plan, and case closure is recommended.

Prepared By: Trinh Pham
Trinh Pham
Water Resource Control Engineer

7/9/2013
Date

Reviewed By: George Lockwood
George Lockwood, PE#59556
Senior Water Resource Control Engineer

7/9/2013
Date



ATTACHMENT 1: COMPLIANCE WITH STATE WATER BOARD POLICIES AND STATE LAW

The Site complies with State Water Resources Control Board policies and state law. Section 25296.10 of the Health and Safety Code requires that sites be cleaned up to protect human health, safety, and the environment. Based on available information, any residual petroleum constituents at the Site do not pose significant risk to human health, safety, or the environment.

The Site complies with the requirements of the Low-Threat Underground Storage Tank (UST) Case Closure Policy as described below.¹

<p>Is corrective action consistent with Chapter 6.7 of the Health and Safety Code and implementing regulations? The corrective action provisions contained in Chapter 6.7 of the Health and Safety Code and the implementing regulations govern the entire corrective action process at leaking UST sites. If it is determined, at any stage in the corrective action process, that UST case closure is appropriate, further compliance with corrective action requirements is not necessary. Corrective action at this Site has been consistent with Chapter 6.7 of the Health and Safety Code and implementing regulations and, since this case meets applicable case-closure requirements, further corrective action is not necessary, unless the activity is necessary for case closure.</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>
<p>Have waste discharge requirements or any other orders issued pursuant to Division 7 of the Water Code been issued at this Site?</p>	<p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>
<p>If so, was the corrective action performed consistent with any order?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA</p>
<p><u>General Criteria</u> General criteria that must be satisfied by all candidate sites:</p> <p>Is the unauthorized release located within the service area of a public water system?</p> <p>Does the unauthorized release consist only of petroleum?</p> <p>Has the unauthorized (“primary”) release from the UST system been stopped?</p> <p>Has free product been removed to the maximum extent practicable?</p> <p>Has a conceptual site model that assesses the nature, extent, and mobility of the release been developed?</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA</p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>

¹ Refer to the Low-Threat Underground Storage Tank Case Closure Policy for closure criteria for low-threat petroleum UST sites.

<p>Has secondary source been removed to the extent practicable?</p> <p>Has soil or groundwater been tested for MTBE and results reported in accordance with Health and Safety Code, Section 25296.15?</p> <p>Does nuisance as defined by Water Code, section 13050 exist at the Site?</p> <p>Are there unique Site attributes or site-specific conditions that demonstrably increase the risk associated with residual petroleum constituents?</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>
<p><u>Media-Specific Criteria</u> Candidate sites must satisfy all three of these media-specific criteria:</p> <p>1. Groundwater: To satisfy the media-specific criteria for groundwater, the contaminant plume that exceeds water quality objectives must be stable or decreasing in areal extent, and meet all of the additional characteristics of one of the five classes of sites:</p> <p>Is the contaminant plume that exceeds water quality objectives stable or decreasing in areal extent?</p> <p>Does the contaminant plume that exceeds water quality objectives meet all of the additional characteristics of one of the five classes of sites? If YES, check applicable class: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5</p> <p>For sites with releases that have not affected groundwater, do mobile constituents (leachate, vapors, or light non-aqueous phase liquids) contain sufficient mobile constituents to cause groundwater to exceed the groundwater criteria?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA</p>
<p>2. Petroleum Vapor Intrusion to Indoor Air: The Site is considered low-threat for vapor intrusion to indoor air if site-specific conditions satisfy all of the characteristics of one of the three classes of sites (a through c) or if the exception for active commercial fueling facilities applies.</p> <p>Is the Site an active commercial petroleum fueling facility? Exception: Satisfaction of the media-specific criteria for petroleum vapor intrusion to indoor air is not required at active commercial petroleum fueling facilities, except in cases where release characteristics can be reasonably believed to pose an unacceptable health risk.</p> <p>a. Do site-specific conditions at the release Site satisfy all of the applicable characteristics and criteria of scenarios 1 through 3 or all of the applicable characteristics and criteria of scenario 4? If YES, check applicable scenarios: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA</p>

<p>b. Has a site-specific risk assessment for the vapor intrusion pathway been conducted and demonstrates that human health is protected to the satisfaction of the regulatory agency?</p> <p>c. As a result of controlling exposure through the use of mitigation measures or through the use of institutional or engineering controls, has the regulatory agency determined that petroleum vapors migrating from soil or groundwater will have no significant risk of adversely affecting human health?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA</p>
<p>3. Direct Contact and Outdoor Air Exposure: The Site is considered low-threat for direct contact and outdoor air exposure if site-specific conditions satisfy one of the three classes of sites (a through c).</p> <p>a. Are maximum concentrations of petroleum constituents in soil less than or equal to those listed in Table 1 for the specified depth below ground surface (bgs)?</p> <p>b. Are maximum concentrations of petroleum constituents in soil less than levels that a site-specific risk assessment demonstrates will have no significant risk of adversely affecting human health?</p> <p>c. As a result of controlling exposure through the use of mitigation measures or through the use of institutional or engineering controls, has the regulatory agency determined that the concentrations of petroleum constituents in soil will have no significant risk of adversely affecting human health?</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA</p>

ATTACHMENT 2: SUMMARY OF BASIC INFORMATION (Conceptual Site Model)

Site Location/ History

- Location: The Site is located at the northeastern corner of the intersection of Olympic Boulevard and Indiana Street in Los Angeles, California. The Site is an active commercial petroleum fueling facility.
- Nature of Contaminants of Concern: Petroleum hydrocarbons only.
- Primary Source of Release: UST system.
- Discovery Date: 1995.
- Release Type: Petroleum².
- Free Product: None reported.

Table A. USTs:

Tank No.	Size in Gallon	Contents	Status	Date
1	10,000	Gasoline	Removed	1995
2	10,000	Gasoline	Removed	1995
3	10,000	Gasoline	Removed	1995
4	4,000	Gasoline	Removed	1995
5	1,000	Gasoline	Removed	1995

Receptors

- Groundwater Basin: Coastal Plain of Los Angeles - Central Basin.
- Groundwater Beneficial Uses: Municipal and domestic supply (MUN); agricultural supply (AGR); industrial service supply (IND); and industrial process supply (PRO).
- Designated Land Use: Commercial.
- Public Water System: Metropolitan Water District of Southern California.
- Distance to Nearest Surface Waters: Greater than 1,000 feet from the Site.
- Distance to Nearest Supply Wells: Greater than 1,000 feet from the Site.

Geology/ Hydrogeology

- Average Groundwater Depth: Not reported.
- Minimum Groundwater Depth: Not reported.
- Groundwater Flow Direction: Not reported.
- Geology: Silty sand from the ground surface to approximately 15 to 20 feet bgs; sand to approximately 30 feet bgs; and sandy silt and clayey silty sand to approximately 35 feet bgs.
- Hydrogeology: Groundwater in the region is reported to be unconfined at depths ranging from 150 to 200 feet bgs. Groundwater was not encountered during site assessment activities.

² "Petroleum" means crude oil, or any fraction thereof, which is liquid at standard conditions of temperature and pressure, which means at 60 degrees Fahrenheit and 14.7 pounds per square inch absolute. (Health & Saf. Code, § 25299.2.)

Corrective Actions

- Five USTs were removed and replaced in 1995. No soil was removed from the Site during the UST removal.
- As part of station upgrade activities in 2001, fuel dispensers and associated product piping were removed and replaced. During the station upgrade activities, approximately 1,802 pounds of impacted soil were removed and transported off-site.
- Eight soil borings were advanced at the Site in 2006 and 2007.
- 73 soil samples were collected at the Site from 1995 to 2007.

Table B. Concentrations of Petroleum Constituents in Soil

Constituent	Maximum 0-5 feet bgs (mg/kg)	Maximum 5-10 feet bgs (mg/kg)
Benzene	<0.001	<0.001
Ethylbenzene	<0.001	<0.001
Naphthalene	Not Analyzed	Not Analyzed
PAHs*	Not Analyzed	Not Analyzed

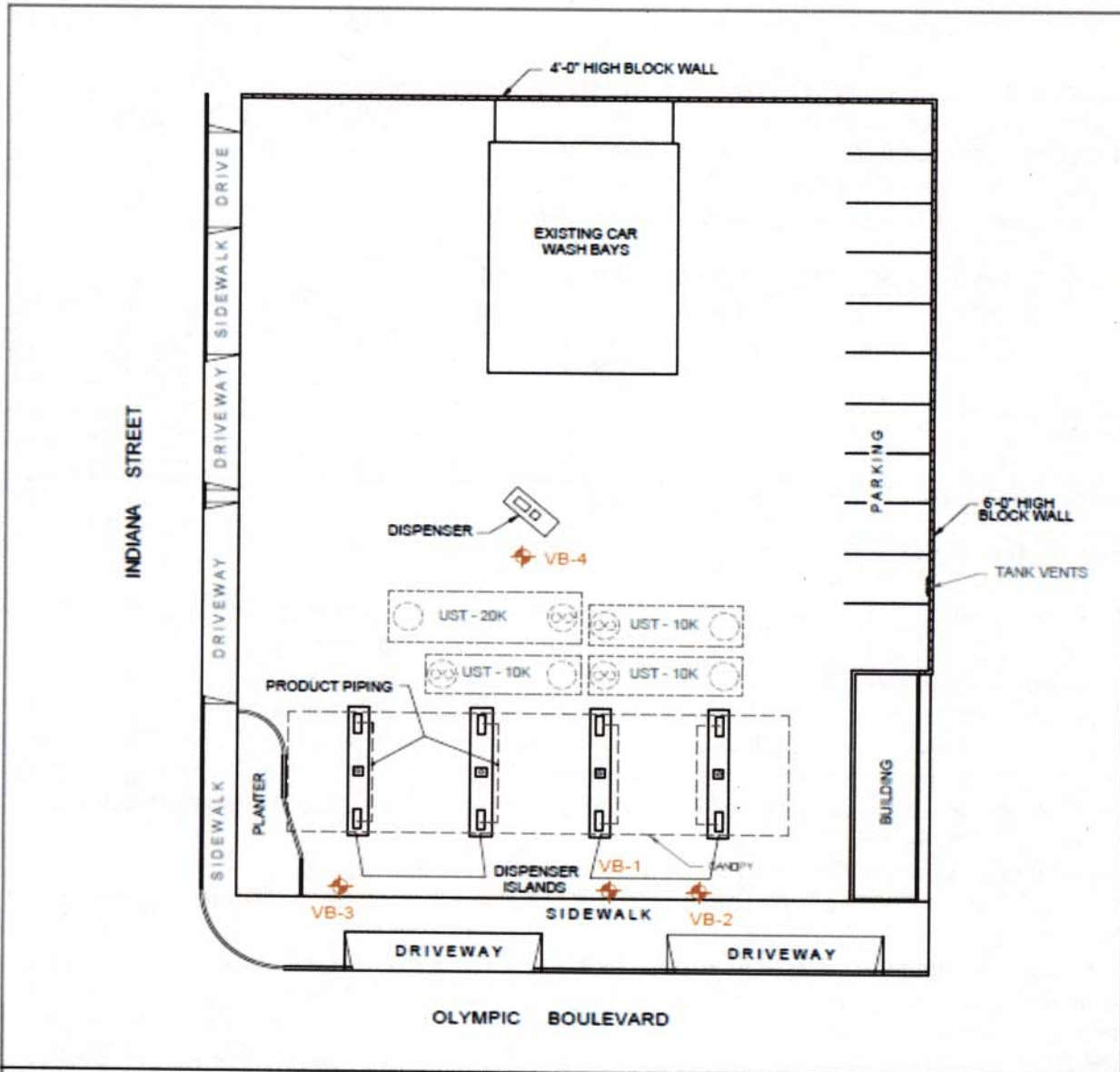
*Poly-aromatic hydrocarbons as benzo(a)pyrene toxicity equivalent

Evaluation of Risk Criteria


- Maximum Petroleum Constituent Plume Length above WQOs: Not reported.
- Petroleum Constituent Plume Determined Stable or Decreasing: Yes.
- Soil/Groundwater Sampled for MTBE: Yes.
- Residual Petroleum Constituents Pose Significant Risk to the Environment: No.
- Residual Petroleum Constituents Pose Significant Vapor Intrusion Risk to Human Health: No. Petroleum constituents most likely to pose a threat for vapor intrusion were removed during soil excavation. Site conditions demonstrate that the residual petroleum constituents in soil are protective of human health.
- Residual Petroleum Constituents Pose a Nuisance³ at the Site: No.
- Residual Petroleum Constituents in Soil Pose Significant Risk of Adversely Affecting Human Health: No.
- Residual Petroleum Constituents Pose Significant Direct Contact and Outdoor Air Exposure to Human Health: No. There are no soil samples results in the case record for naphthalene. However, the relative concentration of naphthalene in soil can be conservatively estimated using the published relative concentrations of naphthalene and benzene in gasoline. Taken from Potter and Simmons (1998), gasoline mixtures contain approximately 2% benzene and 0.25% naphthalene. Therefore, benzene concentrations can be directly substituted for naphthalene concentrations with a safety factor of eight. Benzene concentrations from the Site have not been detected in any soil samples and therefore, are well below the naphthalene thresholds in Table 1 of the Policy. Therefore, estimated naphthalene concentrations meet the thresholds in Table 1 and the Policy criteria for direct contact by a factor of eight. It is highly unlikely that naphthalene concentrations in the soil, if any, exceed the threshold.

³ Nuisance as defined in California Water Code, section 13050, subdivision (m).

SITE MAP



LEGEND:

 — VERIFICATION SOIL BORING, ATLAS, MAY 2007
 VB-4



Design By: Adopted from United Oil map.

Drawn By: EFD

Date: 03/28/2006

SCALE 30'
 (APPROXIMATE DIMENSIONS)

**UNITED OIL COMPANY
 STATION # 34**

**3915 EAST OLYMPIC BOULEVARD
 LOS ANGELES, CALIFORNIA**

SITE PLAN

**VERIFICATION SOIL
 BORING LOCATIONS**

DRAWING NUMBER
 R34SIF2

FIGURE 2

- Environmental Products and Services
- Air/Water/Soil Permitting and Monitoring
- Site Assessment and Remediation
- Hazardous Waste Management

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