

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD

ORDER WQ 2014-0002-UST

**In the Matter of Underground Storage Tank Case Closure
Pursuant to Health and Safety Code Section 25296.10 and the
Low-Threat Underground Storage Tank Case Closure Policy**

BY THE EXECUTIVE DIRECTOR:¹

By this order, the Executive Director directs closure of the underground storage tank (UST) case at the site listed below, pursuant to section 25296.10 of the Health and Safety Code². The name of the responsible party, the site name, the site address, the Underground Storage Tank Cleanup Fund (Fund) claim number if applicable, current and former lead agencies, and case numbers are as follows:

ConocoPhillips Company

ConocoPhillips No. 256228

9093 Imperial Highway, Downey, Los Angeles County

State Water Resources Control Board, Division of Water Quality, Case No. N/A (Current)

Los Angeles County Department of Public Works, Case No. 011061-038342 (Former)

I. STATUTORY AND PROCEDURAL BACKGROUND

Upon review of a UST case, the State Water Resources Control Board (State Water Board) may close or require closure of a UST case where an unauthorized release has occurred, if the State Water Board determines that corrective action at the site is in compliance with all of the requirements of subdivisions (a) and (b) of section 25296.10.

The State Water Board, or in certain cases the State Water Board Executive Director, may close a case or require the closure of a UST case. Closure of a UST case is appropriate where the

¹ State Water Board Resolution No. 2012-0061 delegates to the Executive Director the authority to close or require the closure of any UST case if the case meets the criteria found in the State Water Board's Low-Threat Underground Storage Tank Case Closure Policy adopted by State Water Board Resolution No. 2012-0016.

² Unless otherwise noted, all references are to the California Health and Safety Code.

corrective action ensures the protection of human health, safety, and the environment and where the corrective action is consistent with: 1) Chapter 6.7 of division 20 of the Health and Safety Code and implementing regulations; 2) Any applicable waste discharge requirements or other orders issued pursuant to division 7 of the Water Code; 3) All applicable state policies for water quality control; and 4) All applicable water quality control plans.

State Water Board staff has completed a review of the UST case identified above, and recommends that this case be closed. The recommendation is based upon the facts and circumstances of this particular UST case. A UST Case Closure Summary has been prepared for the case identified above and the bases for determining compliance with the Water Quality Control Policy for Low-Threat Underground Storage Tank Case Closures (Low-Threat Closure Policy or Policy) are explained in the Case Closure Summary.

Low-Threat Closure Policy

In State Water Board Resolution No. 2012-0016, the State Water Board adopted the Low-Threat Closure Policy. The Policy became effective on August 17, 2012. The Policy establishes consistent statewide case closure criteria for certain low-threat petroleum UST sites. In the absence of unique attributes or site-specific conditions that demonstrably increase the risk associated with residual petroleum constituents, cases that meet the general and media-specific criteria in the Low-Threat Closure Policy pose a low-threat to human health, safety, the environment, and are appropriate for closure under Health and Safety Code section 25296.10. The Policy provides that if a regulatory agency determines that a case meets the general and media-specific criteria of the Policy, then the regulatory agency shall notify responsible parties and other specified interested persons that the case is eligible for case closure. Unless the regulatory agency revises its determination based on comments received on the proposed case closure, the Policy provides that the agency shall issue a uniform closure letter as specified in Health and Safety Code section 25296.10. The uniform closure letter may only be issued after the expiration of the 60-day comment period, proper destruction or maintenance of monitoring wells or borings, and removal of waste associated with investigation and remediation of the site.

Health and Safety Code section 25299.57, subdivision (l)(1) provides that claims for reimbursement of corrective action costs that are received by the Fund more than 365 days after the date of a uniform closure letter or a letter of commitment, whichever occurs later, shall not be reimbursed unless specified conditions are satisfied.

II. FINDINGS

Based upon the UST Case Closure Summary prepared for the case attached hereto, the State Water Board finds that corrective action taken to address the unauthorized release of petroleum at the UST release site identified as:

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ensures protection of human health, safety, and the environment and is consistent with Chapter 6.7 of division 20 of the Health and Safety Code and implementing regulations, the Low-Threat Closure Policy and other water quality control policies and applicable water quality control plans.

Pursuant to the Low-Threat Closure Policy, notification has been provided to all entities that are required to receive notice of the proposed case closure, a 60-day comment period has been provided to notified parties, and any comments received have been considered by the State Water Board in determining that the case should be closed.

Pursuant to section 21080.5 of the Public Resources Code, environmental impacts associated with the adoption of this Order were analyzed in the substitute environmental document (SED) the State Water Board approved on May 1, 2012. The SED concludes that all environmental effects of adopting and implementing the Low Threat Closure Policy are less than significant, and environmental impacts as a result of adopting this Order in compliance with the Policy are no different from the impacts that are reasonably foreseen as a result of the Policy itself. A Notice of Decision was filed August 17, 2012. No new environmental impacts or any additional reasonably foreseeable impacts beyond those that were addressed in the SED will result from adopting this Order.

The UST case identified above may be the subject of orders issued by the Regional Water Quality Control Board (Regional Water Board) pursuant to division 7 of the Water Code. Any orders that have been issued by the Regional Water Board pursuant to division 7 of the Water Code, or directives issued by a Local Oversight Program (LOP) agency for this case should be rescinded to the extent they are inconsistent with this Order.

III. ORDER

IT IS THEREFORE ORDERED that:

- A. The UST case identified in Section II of this Order, meeting the general and media-specific criteria established in the Low-Threat Closure Policy, be closed in accordance with the following conditions and after the following actions are complete. Prior to the issuance of a uniform closure letter, the responsible party is ordered to:
1. Properly destroy monitoring wells and borings unless the owner of real property on which the well or boring is located certifies that the wells or borings will be maintained in accordance with local or state requirements;
 2. Properly remove from the site and manage all waste piles, drums, debris, and other investigation and remediation derived materials in accordance with local or state requirements; and
 3. Within six months of the date of this Order, submit documentation to the State Water Board that the tasks in subparagraphs (1) and (2) have been completed.
- B. The tasks in subparagraphs (1) and (2) of Paragraph (A) are ordered pursuant to Health and Safety Code section 25296.10 and failure to comply with these requirements may result in the imposition of civil penalties pursuant to Health and Safety Code section 25299, subdivision (d)(1). Penalties may be imposed administratively by the State Water Board or Regional Water Board.
- C. Within 30 days of notification that the tasks are complete pursuant to Paragraph (A), the Deputy Director of the Division of Water Quality shall issue a uniform closure letter consistent with Health and Safety Code section 25296.10, subdivision (g) and upload the uniform closure letter and UST Case Closure Summary to GeoTracker.
- D. Pursuant to section 25299.57, subdivision (l) (1), and except in specified circumstances, all claims for reimbursement of corrective action costs must be received by the Fund within 365 days of issuance of the uniform closure letter in order for the costs to be considered.

E. Any Regional Water Board or LOP agency directive or order that directs corrective action or other action inconsistent with case closure for the UST case identified in Section II is rescinded, but only to the extent the Regional Water Board order or LOP agency directive is inconsistent with this Order.

Thomas Howard
Executive Director

1/16/14
Date

State Water Resources Control Board

UST CASE CLOSURE SUMMARY (REVISED 12/20/13)

Agency Information

Current Agency Name: State Water Resources Control Board (State Water Board)	Address: 1001 I Street, P.O. Box 2231 Sacramento, CA 95812
Current Agency Caseworker: Mr. Matthew Cohen	Case No.: N/A
Former Agency Name: Los Angeles County Department of Public Works (Prior to 7/1/2013)	Address: 900 South Fremont Avenue, Alhambra, CA 91803
Former Agency Caseworker: Mr. Rani Iyer	Case No.: 011061-038342

Case Information

USTCF Claim No.: None	Global ID: T10000000568
Site Name: ConocoPhillips No. 256228	Site Address: 9093 Imperial Highway Downey, CA 90242
Responsible Parties: ConocoPhillips Company Attention: Ms. Holly Quasem	Address: 3900 Kilroy Airport Way Suite 210 Long Beach, CA 90806
USTCF Expenditures to Date: None	Number of Years Case Open: 5

URL: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T10000000568

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 (CSM) upon which the evaluation of the Case has been made is described in **Attachment 2: Summary of Basic Site Information**. Highlights of the CSM 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 January 1996. During the UST removals, impacted soil was over-excavated to approximately 17 feet bgs beneath the former gasoline UST basin. Approximately 662 tons of impacted soil was over-excavated beneath waste oil and gasoline USTs. Free product was not encountered. Post remediation soil samples indicate that residual petroleum constituent concentrations were low to non-detectable. Soil samples collected down to 35 feet bgs during 2007 indicate that petroleum concentrations were also low to non-detectable. Five soil borings advanced during 2009 encountered groundwater at 55.5 feet bgs, however groundwater grab samples were not collected due to the absence of a groundwater sampling permit.

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All soil samples collected between 35 and 55 feet bgs near the tank area were non-detectable for petroleum constituents. The Site overlies alluvial deposits consisting predominantly of clay mixtures, silty sands, and clayey sands to a depth of approximately 30 feet bgs, predominantly clay with silty sands between 30 and 35 feet bgs, and poorly graded sand, silty sands, clayey sands, clay mixtures between 35 and 55 feet bgs.

The petroleum constituent release is limited to the shallow soil to a depth of approximately 35 feet bgs. The closest surface water body is the Los Angeles River located over 12,000 feet west of the Site. The regional groundwater flow direction is south. The closest supply wells are located crossgradient approximately 350 feet southeast and 400 feet east of the Site. Public supply wells are usually constructed with competent sanitary seals and intake screens that are in deeper more protected aquifers. Remaining petroleum constituents in soil are limited. Remedial actions have been implemented and additional corrective action would be unnecessary. Additional assessment/monitoring will not likely change the CSM. 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 releases **HAVE NOT AFFECTED GROUNDWATER**. Except for low concentrations of benzene and MTBE in soil samples collected between 30 and 35 feet bgs, chemical analyses for over 20 soil samples collected between 30 and 55 feet bgs reported non-detectable concentrations of petroleum constituents. Therefore, the soil does not likely contain sufficient mobile constituents (leachate, vapors, or light non-aqueous-phase liquids) to cause groundwater to exceed the groundwater criteria in the Policy. Site reports provide the degree of certainty needed to determine that this is most likely a soil-only case.
- Petroleum Vapor Intrusion to Indoor Air – Site meets **EXCEPTION**. Exposure to petroleum vapors associated with historical fuel system releases are comparatively insignificant relative to exposures from small surface spills and fugitive vapor releases that typically occur at active fueling facilities and release characteristics cannot be reasonably believed to pose an unacceptable health risk.
- Direct Contact and Outdoor Air Exposure – Site meets **CRITERIA (3) a**. Maximum concentrations of petroleum constituents in soil are less than or equal to those listed in Table 1. The estimated naphthalene concentrations are less than the thresholds in Table 1 of the Policy for direct contact. It is highly unlikely that naphthalene concentrations in the soil, if any, exceed the threshold.

Objections to Closure

Los Angeles County Department of Public Works objected to UST case closure because:

1. Additional assessment is requested near the tank area.
RESPONSE: Based on soil samples collected during 2007 and 2009, concentrations of residual petroleum constituents in soil were low to non-detectable between the surface and approximately 35 feet bgs. All soil samples collected between 35 and 55 feet bgs near the tank area were non-detectable for petroleum constituents. The lateral extent of soil contamination is delineated by

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borings B-4 through B-10.

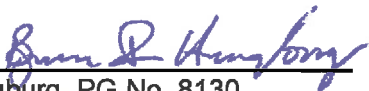
Soil does not contain sufficient mobile constituents to cause groundwater to exceed groundwater criteria in the Policy. It is highly unlikely that groundwater has been affected by the release.

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: 
Charlow Arzadon
Water Resource Control Engineer

12/19/2013
Date

Reviewed By: 
Benjamin Heningburg, PG No. 8130
Senior Engineering Geologist

12/19/2013
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><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA</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?</p> <p>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, does soil contain sufficient mobile constituents (leachate, vapors, or light non-aqueous phase liquids) to cause groundwater to exceed the groundwater criteria?</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><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</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?</p> <p>If YES, check applicable scenarios: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4</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><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA</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>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

- The Site is located at the northwest corner of the intersection of Columbia Way and Imperial Highway in Downey, California.
- The Site is currently operated as an active fueling station.
- The Site is bounded by commercial facilities.
- Nature of Contaminants of Concern: Petroleum hydrocarbons only.
- Primary Source of Release: UST system.
- Discovery Date: 1996.
- Release Type: Petroleum²
- Free Product: None observed.

Table A. USTs:

Tank No.	Size	Contents	Status	Date
1	280 gallon	Waste Oil	Removed	1996
2	10,000 gallon	Gasoline	Removed	1996
3	10,000 gallon	Gasoline	Removed	1996

Receptors

- Groundwater Basin: Coastal Plain Of Los Angeles – Central (4-11.04).
- 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: Park Water Company – Bellflower/Norwalk Water System.
- Distance to Nearest Surface Waters: Los Angeles River is located over 12,000 feet west of the Site.
- Distance to Nearest Supply Wells: Supply wells are located crossgradient approximately 350 feet southwest and 400 feet east of the Site.

Geology/ Hydrogeology

- Average Groundwater Depth: Approximately 55 feet below surface grade (bgs).
- Minimum Groundwater Depth: Approximately 55 feet bgs
- Groundwater Flow Direction: Southerly (Regional)
- Geology: The Site overlies alluvial deposits consisting predominantly of clay mixtures, silty sands, and clayey sands to a depth of approximately 30 feet bgs, predominantly clay with silty sands between 30 and 35 feet bgs, and poorly graded sand, silty sands, clayey sands, clay mixtures between 35 and 55 feet bgs.
- Hydrogeology: Groundwater beneath the Site is unconfined to semi-confined. The estimated depth to groundwater is approximately 90 feet bgs.

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

- Three USTs removed from the Site in 1996.
- During the 1996 UST system removal, approximately 662 tons of impacted soils were removed from the Site.

Table B. Concentrations of Petroleum Constituents in Soil

Constituent	Maximum 0-5 feet bgs (mg/kg)	Maximum 5-10 feet bgs (mg/kg)
Benzene	<0.0058	<0.0046
Ethylbenzene	<0.0058	<0.0046
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: N/A.
- Petroleum Constituent Plume Determined Stable or Decreasing: N/A.
- 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.
- 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 are 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 with a safety 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).

