

STATE OF CALIFORNIA  
STATE WATER RESOURCES CONTROL BOARD

**ORDER WQ 2017-0022 – UST**

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**In the Matter of Underground Storage Tank Case Closure**

**Pursuant to Health and Safety Code Section 25299.39.2 and the Low Threat  
Underground Storage Tank Case Closure Policy**

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**BY THE CHIEF DEPUTY DIRECTOR:<sup>1</sup>**

Pursuant to Health and Safety Code section 25299.39.2, the Manager of the Underground Storage Tank Cleanup Fund (Fund) recommends closure of the underground storage tank (UST) case at the site listed below.<sup>2</sup> By this order, the Chief Deputy Director directs closure of the UST case. The name of the Fund claimant, the Fund claim number, the site name and the applicable site address, and the lead agency are as follows:

**M.J. Castelo  
Humboldt Petroleum, Inc.  
Claim No. 767  
Humboldt Petroleum  
390 South Fortuna Boulevard, Fortuna**

**Humboldt County Division of Environmental Health  
Agency Case Number: 12093**

**I. STATUTORY AND PROCEDURAL BACKGROUND**

Section 25299.39.2 directs the Fund Manager to review the case history of claims that have been active for five years or more (five-year review), unless there is an objection from the UST owner or operator. This section further authorizes the Fund Manager to make recommendations to the State Water Resources Control Board (State Water Board) for closure of a five-year-review case if the UST owner or operator approves. In response to a recommendation by the Fund Manager, the State Water Board, or in certain cases the State

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<sup>1</sup> 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. Pursuant to Resolution No. 2012-0061, the Executive Director has delegated this authority to the Chief Deputy Director.

<sup>2</sup> Unless otherwise noted, all references are to the Health and Safety Code.

Water Board Executive Director, or Chief Deputy Director, may close or require the closure of a UST case. Closure of a UST case is appropriate where the 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.

The Fund Manager has completed a five-year 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 Review Summary Report 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 (Policy) are explained in the Case Closure Review Summary Report.

In State Water Board Resolution No. 2012-0016, the State Water Board adopted the 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 Policy pose a low threat to human health, safety and 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 closure letter as specified in Health and Safety Code section 25296.10. The closure letter may be issued only 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 closure letter or a Letter of Commitment, whichever occurs later, shall not be reimbursed unless specified conditions are satisfied. A Letter of Commitment has already been issued for the claim subject to this order and the respective Fund claimant, so the 365-day

timeframe for the submittal of claims for corrective action costs will start upon the issuance of the closure letter.

## II. FINDINGS

Based upon the UST Case Closure Review Summary Report prepared for the case and 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:

**Claim No. 767  
Humboldt Petroleum**

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 Policy, and other applicable water quality control policies and plans.

The unauthorized release from the UST consisted only of petroleum. This order directs closure for the petroleum UST case at the site.<sup>3</sup>

Pursuant to the 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 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 Policy are less than significant, and environmental impacts as a result of complying 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 not 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 agency for this case should be rescinded to the extent they are inconsistent with this Order.

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<sup>3</sup> This order addresses only the petroleum UST case for the site. This order does not affect any order or directive requiring corrective action for non-petroleum contamination, if non-petroleum contamination is present.

### 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 Policy, be closed in accordance with the following conditions and after the following actions are complete. Prior to the issuance of a closure letter, the Fund claimant 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 regulatory agency overseeing the UST case identified on page 1 of this Order 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 receipt of proper documentation from the Fund claimant that requirements in subparagraphs (1) and (2) of paragraph (A) are complete, the regulatory agency that is responsible for oversight of the UST case identified in Section II of this Order shall notify the State Water Board that the tasks have been satisfactorily completed.

- D. Within 30 days of notification from the regulatory agency that the tasks are complete pursuant to paragraph (C), the Deputy Director of the Division of Financial Assistance shall issue a closure letter consistent with Health and Safety Code section 25296.10, subdivision (g) and upload the closure letter and UST Case Closure Review Summary Report to GeoTracker.
- E. As specified in Health and Safety Code section 25299.39.2, subdivision (a) (2), corrective action costs incurred after a recommendation of closure shall be limited to \$10,000 per year unless the Board or its delegated representative agrees that corrective action in excess of that amount is necessary to meet closure requirements, or additional corrective actions are necessary pursuant to section 25296.10, subdivisions (a) and (b). 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 closure letter in order for the costs to be considered.
- F. Any Regional Water Board or Local Oversight Program 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 Local Oversight Program Agency directive is inconsistent with this Order.



Chief Deputy Director

10/19/17

Date

State Water Resources Control Board

UST CASE CLOSURE REVIEW SUMMARY REPORT

Agency Information

Agency Name: Humboldt County Division of Environmental Health (County)	Address: 1001H Street, Suite 200 Eureka, CA 95501-0461
Agency Caseworker: Mark Verhey	Case No.: 12093

Case Information

Cleanup Fund (Fund) Claim No.: 767	GeoTracker Global ID: T0602300085
Site Name: Humboldt Petroleum	Site Address: 390 South Fortuna Boulevard Fortuna, CA 95540
Responsible Party: M.J. Castelo Humboldt Petroleum, Incorporated	Address: P.O. Box 131 Eureka, CA 95502
Fund Expenditures to Date: \$1,447,562	Number of Years Case Open: 27

To view all public documents for this case available on GeoTracker use the following URL:  
[http://geotracker.waterboards.ca.gov/profile\\_report.asp?global\\_id=T0602300085](http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0602300085)

Summary

The Low-Threat Underground Storage Tank (UST) 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. Highlights of the case follow:

This case is an active commercial petroleum fueling facility. An unauthorized release was reported in March 1989 following the removal of four 4,000-gallon gasoline USTs. Approximately 1,517 gallons of free product were removed by hand bailing and a product skimmer system between 1989 and 2007. Approximately 1,250 cubic yards of impacted soil and 9,500 gallons of impacted groundwater were removed and disposed offsite in 2001. Groundwater extraction was conducted between 2002 and 2007, removing approximately 5,260,000 gallons of impacted groundwater and removing an estimated 403 pounds of petroleum hydrocarbons. A high vacuum dual-phase extraction (HVDPE) pilot test was conducted in February through March 2006, and removed an estimated 240 pounds of petroleum hydrocarbons. HVDPE was conducted from August 2009 through December 2010 and again from August 2011 through November 2011, removing an estimated 6,500 pounds of petroleum hydrocarbons. The recovery rate at shutdown was 2.0 pounds per day. Active remediation has not been conducted at the Site for the past four years. Since 1990, 36 groundwater monitoring wells and 10 groundwater remediation wells have been installed and regularly monitored; 21 wells have been destroyed. According to groundwater data, water quality objectives have been achieved or nearly achieved except in the source area.

The petroleum release is limited to the soil and shallow groundwater. According to data available in GeoTracker, there are no public water supply wells or surface water bodies within 1,000 feet of

the projected plume boundary. There are four confirmed and two unconfirmed domestic water supply wells within 1,000 feet of the projected plume boundary:

Well Location	Presence Confirmed in 2015	Distance from Plume Boundary/ Location Relative to Flow Direction	Notes
485 S. Spring St.	Yes	325 feet south/ Cross gradient	No sampling data. Water meter box* in front of house. A domestic well located 80 feet further south was sampled in May 2001; no detectable petroleum hydrocarbons.
478 Fortuna Blvd.	Yes	380 feet south/ Cross gradient	Owner stated well is inaccessible, no plan for use.
538 S. Spring St.	Yes	725 feet southwest/ Cross gradient	No sampling data. Water meter box* in front of house. A domestic well located between this well and the plume boundary was sampled in May 2001; no detectable petroleum hydrocarbons.
1702 1 <sup>st</sup> St.	Yes	750 feet southwest/ Cross gradient	Irrigation well. Sampled in May 2001; no detectable petroleum hydrocarbons.
1502 Newburg Road	No	800 feet west (estimated)/ Down gradient	Owner did not respond to verification request. Water meter box* in front of house.
470 S. 16 <sup>th</sup> St.	No	900 feet southwest (estimated)/ Down gradient	Owner did not respond to verification request. Water meter box* in front of house.

\*Indicates house is connected to public water supply; does not confirm that public water supply is used.

According to GeoTracker there are no nearby impacted wells. The unauthorized release is located within the service area of a public water system, as defined in the Policy. Other designated beneficial uses of impacted groundwater are not threatened, and it is highly unlikely that they will be, considering these factors in the context of the site setting. Remaining petroleum hydrocarbon constituents are limited and stable, and concentrations are decreasing. Corrective actions have been implemented and additional corrective actions are not necessary. Any remaining petroleum hydrocarbon constituents do not pose a significant risk to human health, safety or the environment.

#### Rationale for Closure under the Policy

- General Criteria: The case meets all eight Policy general criteria.
- Groundwater Specific Criteria: The case meets Policy Criterion 1 by Class 5: There are at least six domestic water supply wells located within 1,000 feet of the projected plume boundary. Groundwater monitoring has been regularly performed since 1990 (25 years) and there is sufficient data to project the boundary of the plume, and to document that the plume has been stable and decreasing in areal extent for several years. The decrease in areal extent indicates that the rate of natural degradation of the petroleum hydrocarbons exceeds the rate at which the plume is migrating down gradient; therefore it is unlikely that the plume will ever reach the unconfirmed down gradient domestic wells. In addition, the confirmed cross gradient wells are not in the path of the plume, further decreasing the threat of contamination for those domestic wells. The domestic well sampling data and the behavior of the plume indicate the plume does not pose a risk to the domestic water supply wells. If not for these domestic water supply wells this case would satisfy Policy Criterion 1 by Class 2. The contaminant plume that

exceeds water quality objectives is less than 250 feet in length. There is no free product. The dissolved benzene concentration is less than 3,000 micrograms per liter ( $\mu\text{g/L}$ ). The dissolved concentration of methyl tertiary butyl ether (MTBE) is less than 1,000  $\mu\text{g/L}$ . The nearest surface water body is greater than 1,000 feet from the projected plume boundary. Furthermore, monitoring wells MW-21B, MW-13B, and MW-5B, located generally downgradient of the plume have shown decreasing concentration trends or nondetectable concentrations of petroleum constituents for more than three years. The State Water Board staff has determined, based on an analysis of site specific conditions under current and reasonably anticipated near-term future scenarios, the contaminant plume poses a low threat to human health and safety and to the environment and water quality objectives will be achieved within a reasonable time frame.

- Vapor Intrusion to Indoor Air: This active fueling facility meets the Active Commercial Petroleum Fueling Facility Exception. Exposure to petroleum vapors associated with historical fuel system releases is comparatively insignificant relative to exposures from small surface spills and fugitive vapor releases that typically occur at active fueling facilities. However, the dissolved plume extends offsite in the downgradient direction. Offsite land use in the downgradient direction is a residence, and a fire station. The off-site properties associated with the case meet Policy Criterion 2a by Scenario 3a. The maximum benzene concentration in offsite groundwater is less than 100 micrograms per liter ( $\mu\text{g/L}$ ). The minimum depth to groundwater is greater than 5 feet, overlain by soil containing less than 100 milligrams per kilogram ( $\text{mg/kg}$ ) of total petroleum hydrocarbons (TPH).
- The maximum benzene concentration in groundwater is less than 1,000 micrograms per liter ( $\mu\text{g/L}$ ). The minimum depth to groundwater is greater than 10 feet, overlain by soil containing less than 100 milligrams per kilogram ( $\text{mg/kg}$ ) of total petroleum hydrocarbons (TPH).
- Direct Contact and Outdoor Air Exposure: The case meets Policy Criterion 3a. Maximum concentrations in soil are less than those in Policy Table 1 for Commercial/Industrial use, and the concentration limits for a Utility Worker are not exceeded. There are no soil sample 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 percent benzene and 0.25 percent naphthalene. Therefore, benzene concentrations can be used as a surrogate 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.



Humboldt Petroleum  
390 South Fortuna Boulevard, Fortuna  
Claim No. 767

**Determination**

Based on the review performed in accordance with Health & Safety Code Section 25299.39.2 subdivision (a), the Fund Manager has determined that closure of the case is appropriate.

**Recommendation for Closure**

Based on available information, residual petroleum hydrocarbons at the Site do not pose a significant risk to human health, safety, or the environment, and the case meets the requirements of the Policy. Accordingly, the Fund Manager recommends that the case be closed. The State Water Board staff is conducting public notification as required by the Policy. Humboldt County has the regulatory responsibility to supervise the abandonment of monitoring wells.

*Lisa Babcock*  
Lisa Babcock, P.G. 3939, C.E.G. 1235

9/14/16  
Date

Prepared by: Caryl Sheehan, P.G.