

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD
ORDER WQ 2020-0029-UST

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

BY THE CHIEF DEPUTY DIRECTOR:¹

By this order, the Chief Deputy Director directs closure of the UST case at the site listed below, pursuant to section 25296.10 of the Health and Safety Code.² 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:

United States Department of the Navy (Responsible Party)

US Marine Corps Air Station El Toro, PCA, UST 398

USMCAS El Toro UST 398, Irvine, Orange County

Santa Ana Regional Water Quality Control Board, Case No. 083001036T

I. STATUTORY AND PROCEDURAL BACKGROUND

Upon review of a UST case, the State Water Resources Control Board (State Water Board) is authorized to close or require closure of a UST case where an unauthorized release has occurred, if the State Water Board determines that corrective

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. Pursuant to Resolution No. 2012-0061, the Executive Director has delegated this authority to the Chief Deputy Director.

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

action at the site is in compliance with all 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 or Chief Deputy Director, may close a case 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.

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. The UST case record that is the basis for determining compliance with the Water Quality Control Policy for Low-Threat Underground Storage Tank Case Closures (Low-Threat Closure Policy or Policy) is available on the State Water Board's GeoTracker database.

[GeoTracker Case Record:](https://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0605900818)

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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 (I)(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 facts in the UST record and the hydrogeologic conditions at the site, as summarized in the attached UST Case Closure Summary, 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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US Marine Corps Air Station El Toro, PCA, UST 398

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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 with 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. This order does not address non-petroleum contamination at the site, if non-petroleum contamination is present.

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 regulatory agency overseeing the UST case identified in Section II 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 responsible party 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 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 to GeoTracker.

- E. Pursuant to section 25299.57, subdivision (I)(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.
- F. 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.



Chief Deputy Director

September 24, 2020

Date

State Water Resources Control Board

UNDERGROUND STORAGE TANK (UST) CASE CLOSURE SUMMARY

Agency Information

Agency Name: Santa Ana Regional Water Quality Control Board (Santa Ana Water Board)	Address: 3737 Main Street, Suite 500 Riverside, CA 92501-3348
Agency Caseworker: Patricia Hannon	Case No.: 083001036T

Case Information

UST Cleanup Fund (Fund) Claim No.: N/A	Global ID: T0605900818
Site Name: US Marine Corps Air Station El Toro, PCA, UST 398	Site Address: USMCAS El Toro UST 398 Irvine, CA 92709 (Site)
Responsible Party Naval Facilities Engineering Command Southwest Base Realignment and Closure Project Management Office West Attention: Guy Chammas	Address: 33000 Nixie Way, Building 50 San Diego, CA 92147
Fund Expenditures to Date: N/A	Number of Years Case Open: 31

[GeoTracker Case Record:](https://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0605900818)

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Summary

This case has been proposed for closure by the State Water Resources Control Board at the request of the Santa Ana Regional Water Quality Control Board, which concurs with closure.

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 because they pose a low threat to human health, safety, and the environment. The Site meets all of the required criteria of the Policy and therefore, is subject to closure.

The Site was an aircraft fueling facility at the former Marine Corps Air Station (MCAS) El Toro, an installation currently undergoing decommissioning and redevelopment. The Site featured a 108,000-gallon underground storage tank (UST) which contained JP-5 jet fuel, four (4) dispenser islands, a 14-inch product pipeline, and an associated dry well used for the disposal of excess jet fuel prior to 1972. A release was reported in 1988 after the product pipeline failed integrity testing. In 1990, the product piping was excavated and repaired, and visual soil staining was observed. Additional leaks in the product pipeline were identified in 1991 and the 108,000-gallon UST was removed in 1993. Periodic groundwater monitoring was conducted from 1996 to 2013 and additional site assessment was conducted in 2001 and 2010.

Free product recovery began with pilot testing in 1992, and an automated skimming system reportedly removed 9,650 gallons of free product and 7,564 gallons of water-product mixture from groundwater between 1995 and 1998. Soil vapor extraction (SVE) operated at the site from 1996 to 1999, 2004 to 2005, and during 2009, removing an estimated total of 127,000 pounds of hydrocarbons. Manual bailing of free product was conducted from 2004 to 2018 and removed a reported total of 1,021 gallons free product and 2,023 gallons of product-water mixture. Historically, free product has been reported at thicknesses up to 7.1-feet; as of the most recent gauging event in May 2018, the measured thickness was 0.04 feet.

Free product does not extend off-site and a land use covenant preventing groundwater extraction has been placed on the property. Concentrations of petroleum constituents have been below site cleanup goals, as well as Policy criteria, in all wells since 2006, and prior to most wells at the Site going dry were consistently at or below detection limits in most wells, with the exception of MW398-04 which showed a slight increasing trend. The vadose zone portion of the Site was granted no further action in 2011 as no significant petroleum impacts remain in shallow soil. Remaining petroleum constituents are limited, stable, and decreasing. Additional assessment would be unnecessary and will not likely change the conceptual model. Any remaining petroleum constituents do not pose significant risk to human health, safety, or the environment under current conditions.

Rationale for Closure Under the Policy

- General Criteria – Site **MEETS ALL EIGHT GENERAL CRITERIA** under the Policy
- Groundwater Media-Specific Criteria – Site **meets the criteria in Class 3**. The contaminant plume that exceeds water quality objectives is less than 250 feet in length. Free product has been removed to the maximum extent practicable, may still be present below the Site where the release originated, but does not extend off-site. The plume has been stable or decreasing for a minimum of five years. The nearest existing water supply well or surface water body is greater than 1,000 feet from the defined plume boundary. The property owner is willing to accept a land use restriction if the regulatory agency requires a land use restriction as a condition of closure.

- Petroleum Vapor Intrusion to Indoor Air – Site **meets Criteria 2 (a), Scenario 1**. There is a bioattenuation zone that provides a separation of at least 30 feet vertically between the Light Non-Aqueous Phase Liquid in groundwater and the foundation of existing or potential buildings. Concentrations of total petroleum hydrocarbons as gasoline and diesel combined in soil are less than 100 milligrams per kilogram throughout the entire depth of the bioattenuation zone.
- Direct Contact and Outdoor Air Exposure – Site **meets Criteria 3 (a)**. Maximum concentrations of petroleum constituents in soil from confirmation soil samples are less than or equal to those listed in Table 1 of the Policy.

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 aromatic compounds in JP-5. Taken from the National Research Council, Subcommittee on Permissible Exposure Levels for Military Fuels, Permissible Exposure Levels for Selected Military Fuel Vapor, (<https://www.ncbi.nlm.nih.gov/books/NBK231234/>), JP-5 mixtures contain approximately 16% aromatics, such as benzene and naphthalene. Therefore, TPH concentrations can be used as a proxy for aromatic concentrations with a safety factor of six (6). TPH as JP-5 concentrations at the Site were consistently below their detection limits of 10 to 12 mg/kg in all shallow soil samples collected to date. This meets the naphthalene thresholds in Table 1 of the Policy for commercial/industrial and utility worker exposure scenarios with a safety factor of at least 6. Furthermore, as naphthalene does not account for the entire aromatic fraction, and the fact that JP-5 was not reported above detection limits in shallow soils, it is unlikely that the residential threshold for Table 1 of the Policy would be exceeded.

Recommendation for Closure

The corrective action performed at this Site ensures the protection of human health, safety, and the environment. The corrective action performed at this Site is consistent with chapter 6.7 of division 20 of the Health and Safety Code, implementing regulations, applicable state policies for water quality control and applicable water quality control plans. Case closure is recommended.

Reviewed By: _____
Matthew Cohen, PG No. 9077
Senior Engineering Geologist



02/03/2020
Date