

State Water Resources Control Board

UST CASE CLOSURE REVIEW SUMMARY REPORT

Agency Information

Agency Name: Alameda County Water District (District)	Address: 43885 South Grimmer Blvd., Freemont, CA 94538
Agency Caseworker: Thomas Berkins	Case No.: 0061

Case Information

USTCF Claim No.: 1251	Global ID: T0600100676
Site Name: Guthmiller Trucking, Inc. (Duncan and Sons)	Site Address: 30700 Dyer Street, Union City, CA 94587
Responsible Party: KPDT, LLC, Attn: Terry Pries	Address: PO Box 5211 San Jose, CA 95150
USTCF Expenditures to Date: \$447,523	Number of Years Case Open: 28

URL: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0600100676

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. A summary evaluation of compliance with the 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 Case Information (Conceptual Site Model)**. Highlights of the case follow:

An unauthorized release was reported in September 1984. In 1986, ten fuel USTs were removed. Approximately 750 cubic yards of soil and 40,000 gallons of impacted groundwater treated were removed in 1986 during UST replacement activities. Two diesel USTs, located approximately 35 feet south of the former fuel tank farm, were removed in 1989. An additional 380 cubic yards of impacted soil were excavated and disposed offsite in 1989. Two applications of oxygen releasing compound have been implemented totaling 640 pounds. Since 1986, ten monitoring wells have been installed and monitored intermittently. According to groundwater data, water quality objectives have been achieved or nearly achieved in all groundwater monitoring wells, with the exception of benzene and possibly MTBE in source area monitoring well MW-8R.

The petroleum release is limited to the shallow soil and groundwater. According to data available in GeoTracker, there are no supply wells regulated by the California Department of Public Health or surface water bodies within 250 feet of the defined plume boundary. No other water supply wells have been identified within 250 feet of the defined plume boundary in files reviewed. Water is provided to water users near the Site by the Alameda County Water District. The affected groundwater is not currently being used as a source of drinking water, and it is highly unlikely that the affected groundwater will be used as a source of drinking water in the foreseeable future. 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

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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 1. The contaminant plume that exceeds water quality objective is less than 100 feet in length. There is no free product. The nearest water supply well or surface water body is greater than 250 feet from the defined plume boundary.
- **Vapor Intrusion to Indoor Air:** The case meets Policy Criterion 2b. Although no document titled "Risk Assessment" was found in the files reviewed, a professional assessment of site-specific risk from potential exposure to petroleum constituents as a result of vapor intrusion found there to be no significant risk of petroleum vapors adversely affecting human health. The onsite building is an active transport, storage and delivery facility with multiple rollup doors that would prevent the accumulation of soil vapors in the building. A soil vapor survey was conducted in April 2011 and samples were found to be below Environmental Screening Levels (ESLs) [Erier & Kalinowski, Inc, 2010].
- **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 can be directly substituted for naphthalene concentrations with a safety factor of eight. Benzene concentrations from the Site are below the naphthalene thresholds in Policy Table 1. Therefore, the 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.

Objections to Closure and Responses

In a February 2013 email, the District writes "By far the biggest impediment to closure at the Site has been the refusal of the responsible parties (mainly the current property owner) to perform the required soil and groundwater investigations. The District believes that the case be referred to the San Francisco Regional Water Control Board or to the Alameda County District Attorney for enforcement, and the case be nominated for the Emergency, Abandoned, and Recalcitrant (EAR) account".

RESPONSE: The Site has been fully investigated and meets all Policy criteria.

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

The case complies with the 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 case 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 site 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 case?</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 checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input 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.
http://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2012/rs2012_0016atta.pdf

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 is conducting public notification as required by the Policy. Alameda County Water District has the regulatory responsibility to supervise the abandonment of monitoring wells.

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

7/3/13
Date

Prepared by: Abdul Karim Yusufzai

<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>Nuisance as defined by Water Code section 13050 does not 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 checked="" type="checkbox"/> Yes <input 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?</p> <p>If YES, check applicable class: <input checked="" 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 checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA</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>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 type="checkbox"/> Yes <input checked="" 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? If YES, check applicable scenarios: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4</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 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>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 CASE INFORMATION (Conceptual Site Model)

Site Location/History

- This Site, known as Guthmiller Trucking (also known as Duncan & Sons) is located at 30700 and 30742 Dyer Street in Union City. The Site and surrounding area are a mixture of commercial and residential development.
- The Site was operated as a fuel distribution center between 1968 and 1975. The Site had ten USTs situated within a tank farm area.
- In 1986, the ten fuel USTs were removed.
- Two diesel USTs, located approximately 35 feet south of the former fuel tank farm, were removed in 1989.
- Since 1986, sixteen groundwater monitoring wells have been installed. During Site construction activities, between 1998 and 2000, a number of wells were damaged and buried. Currently, there are 10 active monitoring wells at the Site.
- A sub-slab soil vapor sampling was conducted by Erier & Kallinowski, Inc., in June 2010. The laboratory results showed that vapor was detected in only two of the five sub-slab samples, and all were below the non-regulatory San Francisco Regional Water Quality Control Boards environmental screening levels (ESLs).
- A Site map showing the locations of the monitoring wells and groundwater level contours is provided at the end of this review [Erier & Kalinowski, Inc, 2010].
- Nature of Contaminants of Concern: Petroleum hydrocarbons only.
- Source: UST system.
- Date reported: September 1984.
- Status of Release: USTs removed.
- Free Product: None reported.

Tank Information

Tank No.	Size in Gallons	Contents	Closed in Place/ Removed/Active	Date
1-10	-	Gasoline	Removed	December 1986
11,12	-	Diesel	Removed	December 1989

Receptors

- GW Basin: Santa Clara Valley - East Bay Plain.
- Beneficial Uses: The San Francisco Bay, Regional Water Quality Control Board (Regional Water Board) Basin Plan lists: Municipal, Domestic, Agricultural, and Industrial Service and Process Supply.
- Land Use Designation: Commercial.
- Public Water System: Alameda County Water District.
- Distance to Nearest Supply Well: According to data available in GeoTracker, there is no public supply well regulated by California Department of Public Health within 250 feet of the defined plume boundary. No other water supply wells were identified within 250 feet of the defined plume boundary in the files reviewed.
- Distance to Nearest Surface Water: There is no identified surface water within 250 feet of the defined plume boundary.

Geology/Hydrogeology

- Stratigraphy: Soil in the vicinity of the Site generally consists of silt and clay with relatively thin interbedded layers of more transmissive sands or gravel.
- Maximum Sample Depth: 25 feet below ground surface (bgs).
- Minimum Groundwater Depth: 4.20 feet bgs at monitoring well MW-6.
- Maximum Groundwater Depth: 9.34 feet bgs at monitoring well MW-10R.
- Current Average Depth to Groundwater: Approximately 7 feet bgs.
- Saturated Zones(s) Studied: Approximately 4 - 25 feet bgs.
- Appropriate Screen Interval: Yes.
- Groundwater Flow Direction: Northwest at a variable gradient of 0.0004 to 0.023 feet/foot.

Monitoring Well Information

Well Designation	Date Installed	Screen Interval (feet bgs)	Depth to Water (feet bgs) (6/10/2008)
MW-1R	04/03/02	10 - 25	6.50
MW-2	11/24/86	6 - 25	7.70
MW-4	11/24/86	6 - 25	6.40
MW-5	11/24/86	6 - 25	6.80
MW-6	10/31/95	6 - 25	5.85
MW-7	10/31/95	6 - 25	6.75
MW-8R	04/05/02	6 - 25	7.10*
MW-9R	11/23/99	6 - 25	7.80
MW-10R	12/30/98	6 - 25	6.70
MW-11	03/05/98	6 - 20	6.05

*Sheen noted

Remediation Summary

- Free Product: Free product was noted in soil borings in 2004. None noted in site wells.
- Soil Excavation: Approximately 750 cubic yards of soil were excavated and removed in 1986. An additional 380 cubic yards of impacted soil were excavated and disposed offsite in 1998.
- In-Situ Soil Remediation: Approximately 400 pounds of ORC were injected into the subsurface via 8 injection wells. Also, 240 pounds of ORC were used at the tank excavation.
- Groundwater Remediation: 40,000 gallons of contaminated water was removed from the tank pit in 1986.

Most Recent Concentrations of Petroleum Constituents in Soil

Constituent	Maximum 0-5 feet bgs [mg/kg and (date)]	Maximum 5-10 feet bgs [mg/kg and (date)]
Benzene	0.026 (08/07)	4.1 (08/07)
Ethylbenzene	<0.01 (08/07)	10 (08/07)
Naphthalene	NA	NA
PAHs	NA	NA

NA: Not Analyzed, Not Applicable or Data Not Available

mg/kg: Milligrams per kilogram, parts per million

<: Not detected at or above stated reporting limit

PAHs: Polycyclic aromatic hydrocarbons

Most Recent Concentrations of Petroleum Constituents in Groundwater

Sample	Sample Date	TPHg (µg/L)	TPHd (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-Benzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)
MW-1R	6/10/08	<50	<47	<0.5	<0.5	<0.5	<1	<2
MW-2	6/10/08	<50	<47	<0.5	<0.5	<0.5	<1	<2
MW-4	6/10/08	<50	150	<0.5	<0.5	<0.5	<1	<2
MW-5	6/10/08	<50	<47	<0.5	<0.5	<0.5	<1	<2
MW-6	6/10/08	<50	<236	<0.5	17	<0.5	<1	<2
MW-7	6/10/08	<50	<47	<0.5	<0.5	<0.5	<1	<2
MW-8R	6/10/08	12,000	750	1,400	110	380	540	<200
MW-9R	6/10/08	54	<47	0.54	<0.5	<0.5	<1	<2
MW-10R	6/10/08	<50	<47	<0.5	<0.5	<0.5	<1	<2
MW-11	6/10/08	<50	<47	<0.5	<0.5	<0.5	<1	<2
WQOs	-	--	--	1	150	700	1,750	5^a

NA: Not Analyzed, Not Applicable or Data Not Available

µg/L: Micrograms per liter, parts per billion

<: Not detected at or above stated reporting limit

TPHg: Total petroleum hydrocarbons as gasoline

TPHd: Total petroleum hydrocarbons as diesel

MTBE: Methyl tert-butyl ether

WQOs: Water Quality Objectives, Regional Water Board, Basin Plan

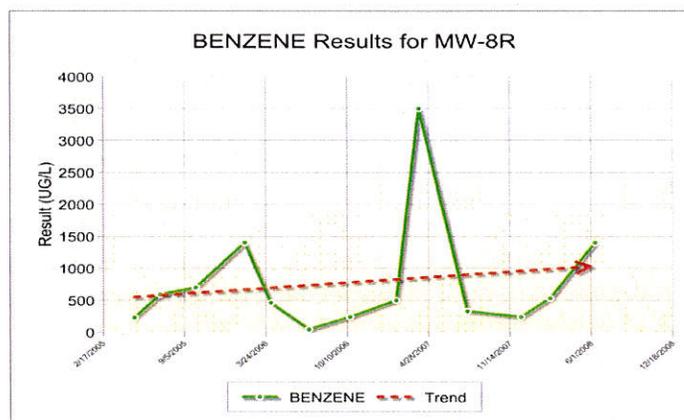
--: Regional Water Board Basin Plan has no numeric WQO for TPHg or TPHd

^a: Secondary maximum contaminant level (MCL)

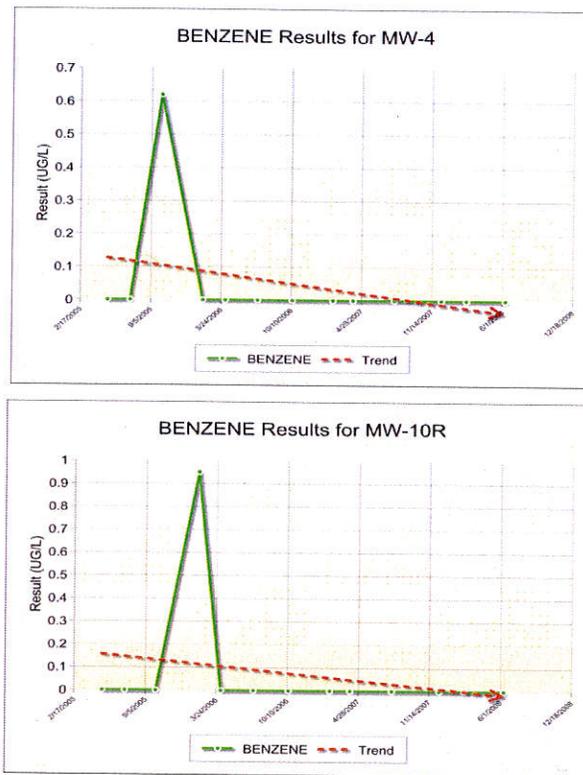
Groundwater Trends

- There are 22 years of groundwater monitoring data for this case, none conducted since 2008. Only one source area well, MW-8R, contained petroleum hydrocarbon constituents of concern above WQOs at that time. Benzene trends are shown below: Source Area (MW-8R) and Downgradient (MW-4 and MW-10R).

Source Area Well



Downgradient Wells



Evaluation of Current Risk

- Estimate of Hydrocarbon Mass in Soil: None reported.
- Soil/Groundwater tested for methyl tert-butyl ether (MTBE): Yes, see table above.
- Oxygen Concentrations in Soil Vapor: None reported.
- Plume Length: <100 feet long.
- Plume Stable or Decreasing: Yes.
- Contaminated Zone(s) Used for Drinking Water: No.
- Groundwater Risk from Residual Petroleum Hydrocarbons: The case meets Policy Criterion 1 by Class 1. The plume that exceeds water quality objectives is less than 100 feet in length. There is no free product. The nearest water supply well or surface water body is greater than 250 feet from the defined plume boundary.
- Indoor Vapor Risk from Residual Petroleum Hydrocarbons: This case meets Policy Criterion 2b. Although no document titled "Risk Assessment" was found in the files reviewed, a professional assessment of site-specific risk from potential exposure to petroleum constituents as a result of vapor intrusion found there to be no significant risk of petroleum vapors adversely affecting human health. The onsite building is an active transport, storage and delivery facility with multiple rollup doors that would prevent the accumulation of soil vapors in the building. A soil vapor survey was conducted in April 2011 and samples were found to be below Environmental Screening Levels (ESLs) [Erier & Kalinowski, Inc, 2010].
- Direct Contact Risk from Residual Petroleum Hydrocarbons: 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 can be directly substituted for naphthalene concentrations with a safety factor of eight. Benzene concentrations from the Site are below the naphthalene thresholds in Policy Table 1. Therefore, the 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.

