

State Water Resources Control Board

UST CASE CLOSURE REVIEW SUMMARY REPORT

Agency Information

Agency Name: Santa Clara County Department of Environmental Health (County)	Address: 1555 Berger Drive, Suite 300 San Jose, CA 95112
Agency Caseworker: Gerald O'Regan	Case No.: 06S1E33H01f

Case Information

USTCF Claim No.: 14296	Global ID: T0608501168
Site Name: San Jose Crane & Rigging	Site Address: 660 Giguere Court San Jose, CA 95133
Responsible Parties: San Jose Crane & Rigging Attn: Gloria Shoji	Addresses: 1307 Dale Ave San Jose, CA 95125
Telewave, Inc. Ms. Roberta Boward	660 Giguere Court San Jose, CA 95133
San Jose Crane & Rigging Attn: Raymond Collins	2035 Jefferson Drive Gilroy, CA 95020
USTCF Expenditures to Date: \$27,848	Number of Years Case Open: 23

URL: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0608501168

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 October 1989 following the removal of three USTs. Impacted soil in the source area was removed and disposed offsite. The total depth of the excavation was 14 feet. No active remediation has been conducted. Since 1984, five monitoring wells have been installed, monitored, and subsequently abandoned in 2000. The extent of groundwater contamination was defined by hydropunch borings installed and sampled in 2009. According to groundwater data, water quality objectives have been achieved or nearly achieved for all constituents.

The petroleum release is limited to the soil and shallow groundwater. According to data available in GeoTracker, there are no California Department of Public Health regulated supply wells or surface water bodies within 1,000 feet of the defined plume boundary. No other water supply wells have been identified within 1,000 feet of the defined plume boundary in files reviewed. Water is provided to water users near the Site by the Santa Clara Valley 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 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 2. The contaminant plume that exceeds water quality objectives is less than 250 feet in length. There is no free product. The nearest water supply well or surface water body is greater than 1,000 feet from the defined plume boundary. The dissolved concentration of benzene is less than 3,000 µg/L and the dissolved concentration of MTBE is less than 1,000 µg/L.
- Vapor Intrusion to Indoor Air: The case meets Policy Criterion 2a by Scenario 3a. The maximum benzene concentration in groundwater is less than 100 µg/L. The minimum depth to groundwater is greater than 5 feet, overlain by soil containing less than 100 mg/kg of TPH. A deed restriction was placed on this Site in 2001 (Well Test, Inc., 2012).
- Direct Contact and Outdoor Air Exposure: The case meets Policy Criterion 3b. Constituents in soil are less than levels that a site-specific risk assessment demonstrates will have no significant risk of adversely affecting human health. Soil has been excavated to a depth of 14 feet. A deed restriction was placed on this Site in 2001 (Well Test, Inc., 2012). In addition, the Site is paved and accidental access to site soils is prevented.

Objections to Closure and Responses

The County, according to a April 15, 2013 email, objects to UST case closure because:

- There is not enough data in the file to satisfy Policy criteria.

RESPONSE: The case meets all Policy criteria.

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. Santa Clara County has the regulatory responsibility to supervise the abandonment of monitoring wells.



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



Date

Prepared by: Dane Kendrick

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 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.
http://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2012/rs2012_0016atta.pdf

<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 type="checkbox"/> 1 <input checked="" 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>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 checked="" type="checkbox"/> 3 <input type="checkbox"/> 4</p>	<p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input 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 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>

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

Site Location/History

- The Site occupies 1.7 acres with one commercial building operated by Telewave, Inc.
- The Site is bounded by residences across a 40 feet wide easement to the north, by commercial properties to the south and west, and by a high school across Educational Park Drive to the east.
- A Site map showing the location of the former pump island/UST area, over-excavation, and monitoring wells is provided at the end of this closure review summary (WellTest, Inc., 2012).
- Nature of Contaminants of Concern: Petroleum hydrocarbons only.
- Source: UST system.
- Date reported: October 1989.
- Status of Release: USTs removed.
- Free Product: None reported.

Tank Information

Tank No.	Size in Gallons	Contents	Closed in Place/Removed/Active	Date
1	7,000	Petroleum hydrocarbons	Removed	August 1989
2	8,200	Petroleum hydrocarbons	Removed	August 1989
3	10,000	Petroleum hydrocarbons	Removed	August 1989

Receptors

- GW Basin: Santa Clara Valley – Santa Clara.
- Beneficial Uses: Groundwater Recharge, Municipal and Domestic Supply.
- Land Use Designation: Commercial.
- Public Water System: Santa Clara Valley Water District.
- Distance to Nearest Supply Well: According to data available in GeoTracker, there are no public supply wells regulated by the California Department of Public Health within 1,000 feet of the defined plume boundary. No other water supply wells were identified within 1,000 feet of the defined plume boundary in the files reviewed.
- Distance to Nearest Surface Water: There is no identified surface water within 1,000 feet of the defined plume boundary.

Geology/Hydrogeology

- Stratigraphy: The Site is underlain by interbedded and intermixed sandy silts, clay and gravels.
- Maximum Sample Depth: 42 feet below ground surface (bgs).
- Minimum Groundwater Depth: 13.99 feet bgs at monitoring well MW-4.
- Maximum Groundwater Depth: 22.17 feet bgs at monitoring well MW-3.
- Current Average Depth to Groundwater: Approximately 19 feet bgs.
- Saturated Zones(s) Studied: Approximately 14 - 37 feet bgs.

- Groundwater Flow Direction: Northwest with an average gradient of 0.0035 feet/foot (ft/ft).

Monitoring Well Information

Well Designation	Date Installed	Screen Interval (feet bgs)	Depth to Water (feet bgs) (09/08/2009)
MW-1	August 1984	17 - 37	Destroyed 2000
MW-3	June 1993	16 - 30	Destroyed 2000
MW-4	June 1993	16 - 30	Destroyed 2000
MW-5	January 1999	10 - 25	Destroyed 2000
MW-6	January 1999	10 - 25	Destroyed 2000
EB-1	August 2009	18 - 28	19.65
EB-2	August 2009	14 - 24	18.10
EB-3	August 2009	14 - 24	19.23
EB-4	August 2009	14 - 24	18.05
EB-5	August 2009	18 - 28	18.77
EB-6	August 2009	18 - 28	18.70
EB-7	August 2009	18 - 28	20.08
EB-8	August 2009	18 - 28	20.02

Remediation Summary

- Free Product: None reported in GeoTracker.
- Soil Excavation: Impacted soil in source area was removed to a total depth of 14 feet, disposed offsite, and replaced with clean fill.
- In-Situ Soil Remediation: None reported.
- Groundwater Remediation: None reported.

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	NA	NA
Ethylbenzene	NA	NA
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
 *Soil removed by excavation (Well Test, Inc., 2012)

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)	TBA (µg/L)
EB-1	10/29/09	<50	<50	<0.5	<0.5	<0.5	<0.5	15	60
EB-2	08/04/09	<50	110	<0.5	<0.5	<0.5	<0.5	6.1	2.1
EB-3	08/04/09	86	250	<0.5	<0.5	<0.5	<0.5	15	2.8
EB-4	08/03/09	<50	600	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0
EB-5	08/03/09	<50	250	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0
EB-6	08/26/09	<50	<50	<0.5	<0.5	<0.5	<0.5	13	<2.0
EB-7	08/26/09	<50	<50	<0.5	<0.5	<0.5	<0.5	1.1	<2.0
EB-8	08/26/09	<50	0	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0
WQOs	-	--	--	1	150	700	1,750	5	1,200 ^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

TBA: Tert-butyl alcohol

WQOs: Water Quality Objectives, San Francisco Bay Regional Water Quality Control Board (Regional Water Board) Basin Plan

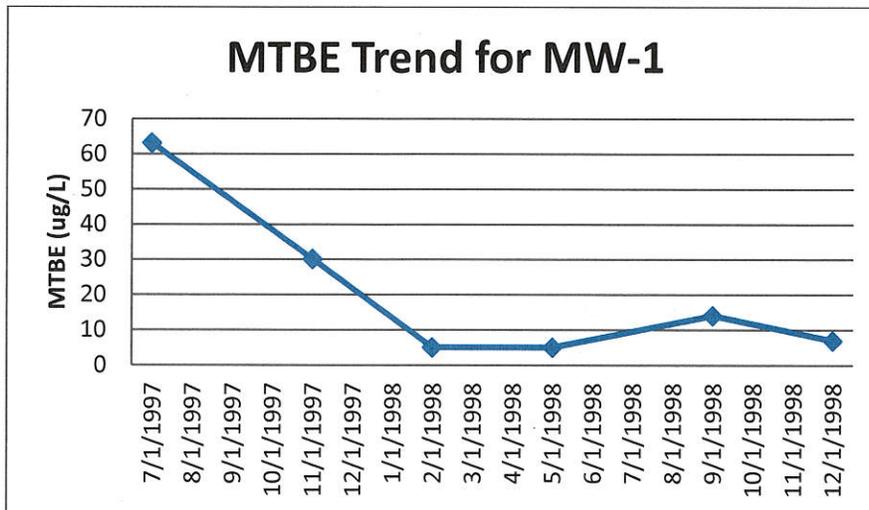
--: Regional Water Board Basin Plan does not have a numeric water quality objective for TPHg or TPHd

^a: California Department of Public Health, Response Level

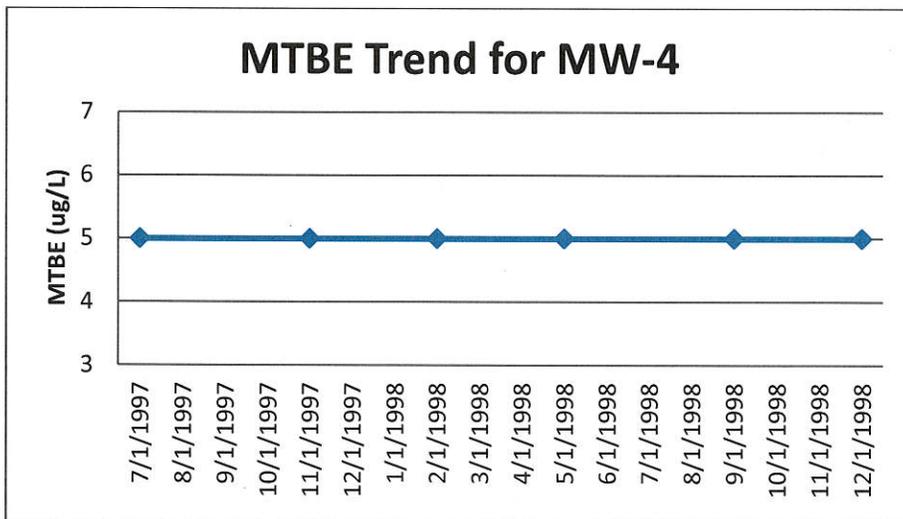
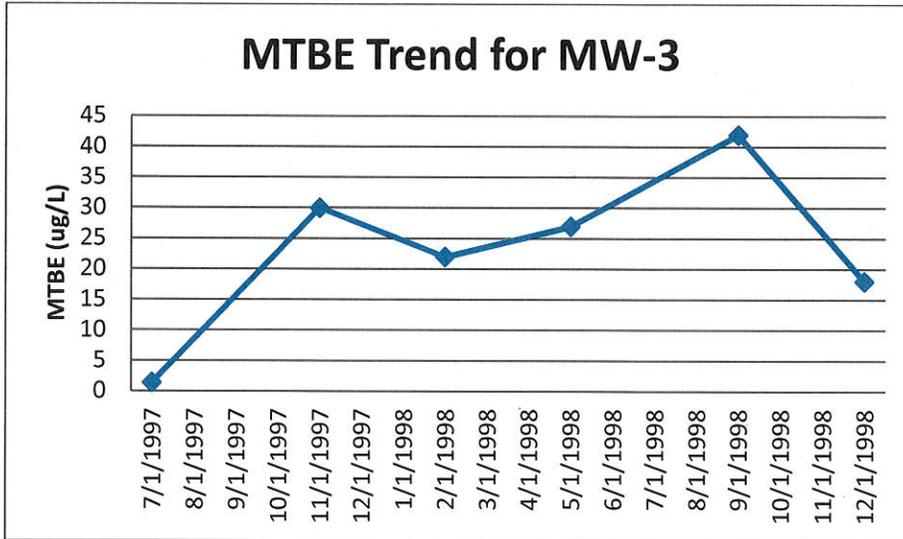
Groundwater Trends

- There are 5 years of regular groundwater monitoring data for this case (1993-1998). MTBE trends are shown below: Near Source Area (MW-1) and Downgradient (MW-3 and MW-4). In August 2009, confirmation borings EB-1 through EB-8 were advanced. Water quality objectives have been achieved or nearly achieved for all constituents.

Near Source Area Well



Downgradient Wells



Evaluation of Current Risk

- Estimate of Hydrocarbon Mass in Soil: None reported.
- Soil/Groundwater tested for 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 2. The contaminant plume that exceeds water quality objectives is less than 250 feet in length. There is no free product. The nearest water supply well or surface water body is greater than 1,000 feet from the defined plume boundary. The dissolved concentration of benzene is less than 3,000 $\mu\text{g/L}$ and the dissolved concentration of MTBE is less than 1,000 $\mu\text{g/L}$.

- Indoor Vapor Risk from Residual Petroleum Hydrocarbons: The case meets Policy Criterion 2a by Scenario 3a. The maximum benzene concentration in groundwater is less than 100 µg/L. The minimum depth to groundwater is greater than 5 feet, overlain by soil containing less than 100 mg/kg of TPH. A deed restriction was placed on this Site in 2001 (Well Test, Inc., 2012).
- Direct Contact Risk from Residual Petroleum Hydrocarbons: The case meets Policy Criterion 3b. Constituents in soil are less than levels that a site-specific risk assessment demonstrates will have no significant risk of adversely affecting human health. Soil has been excavated to a depth of 14 feet. A deed restriction was placed on this Site in 2001 (Well Test, Inc., 2012). In addition, the Site is paved and accidental access to site soils is prevented.

