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 Fremont, CA 94538
Agency Caseworker: Rangarajan Sampath	Case No: 0538

Case Information

USTCF Claim No.: 2454	Global ID: T0600100403
Site Name: Conway Western Express	Site Address: 2200 Claremont Ct Hayward, CA 94545
Responsible Party: Con-Way Freight, Inc.	Address: 2200 Claremont Ct Hayward, CA 94545
USTCF Expenditures to Date: $694,583	Number of Years Case Open: 15

URL: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0600100403

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 and recommendations of the case review follow:

The Site is an active commercial petroleum fueling and truck maintenance facility in Hayward. An unauthorized release from a diesel pipeline was reported in October 1987. Dual phase extraction reportedly removed 5,500 gallons of diesel fuel between July 1985 and December 1989. Seven petroleum USTs were removed in 1994. Since 1993, 23 monitoring wells have been installed and monitored. According to groundwater data, petroleum fuel contaminant concentrations are decreasing and water quality objectives have been achieved or nearly achieved.

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 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 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 4. The contaminant plume that exceeds water quality objectives is less than 1,000 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 concentrations of benzene and methyl tert-butyl ether (MTBE) are each less than 1,000 µg/L.
- Vapor Intrusion to Indoor Air: The case meets the Policy Exclusion for Active Station. Soil vapor evaluation is not required because the Site is an active commercial petroleum fueling facility.
- Direct Contact and Outdoor Air Exposure: This case meets Policy Criterion 3b. Although no document titled "Risk Assessment" was found in the files reviewed, a professional assessment of site-specific risk from potential exposure to residual soil contamination found that maximum concentrations of petroleum constituents remaining in soil will have no significant risk of adversely affecting human health. The Site is paved and accidental exposure to site soils is prevented. As an active petroleum fueling facility, any construction worker working at the Site will be prepared for exposure in their normal daily work.

Objections to Closure and Responses

According to the GeoTracker 09-42 Case Review page, the District objects to UST case closure because:

- Extent of petroleum-related contaminants in groundwater is unknown.
  RESPONSE: The vertical and lateral extent of contamination is adequately defined by the existing monitoring well network.
- Further remediation is proposed.
  RESPONSE: The case meets the Policy criteria.
- Free product remains.
  RESPONSE: Free phase petroleum has been removed to the extent practicable.
- Benzene, total petroleum hydrocarbons as gasoline (TPHg), and total petroleum hydrocarbons as diesel (TPHd) exceed ESLs for drinking water.
  RESPONSE: Water quality objectives have nearly been achieved. The Basin Plan does not have a numeric water quality objective TPHg or TPHd. Data do not show benzene exceeds water quality objectives. The case meets all Policy criteria.

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. The 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

6/27/13
Date

Prepared by: Walter Bahm

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]

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.	☒ Yes ☐ No
Have waste discharge requirements or any other orders issued pursuant to Division 7 of the Water Code been issued at this case?	☐ Yes ☒ No
If so, was the corrective action performed consistent with any order?	☐ Yes ☐ No ☒ NA
General Criteria General criteria that must be satisfied by all candidate sites: **Is the unauthorized release located within the service area of a public water system?** **Does the unauthorized release consist only of petroleum?** **Has the unauthorized ("primary") release from the UST system been stopped?**	☒ Yes ☐ No ☒Yes ☐ No ☒ Yes ☐ No

[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

Has free product been removed to the maximum extent practicable?	☒Yes ☐ No ☐ NA
Has a conceptual site model that assesses the nature, extent, and mobility of the release been developed?	☒ Yes ☐ No
Has secondary source been removed to the extent practicable?	☒ Yes ☐ No
Has soil or groundwater been tested for MTBE and results reported in accordance with Health and Safety Code Section 25296.15?	☒ Yes ☐ No
Nuisance as defined by Water Code section 13050 does not exist at the site?	☒ Yes ☐ No
Are there unique site attributes or site-specific conditions that demonstrably increase the risk associated with residual petroleum constituents?	☐ Yes ☒ No
<u>Media-Specific Criteria</u> Candidate sites must satisfy all three of these media-specific criteria: **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: **Is the contaminant plume that exceeds water quality objectives stable or decreasing in areal extent?**	☒ Yes ☐ No ☐ NA
Does the contaminant plume that exceeds water quality objectives meet all of the additional characteristics of one of the five classes of sites? If YES, check applicable class: ☐ **1** ☐ **2** ☐ **3** ☒ **4** ☐ **5**	☒ Yes ☐ No ☐ NA
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?	☐ Yes ☐ No ☒ NA
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. **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.	☒ Yes ☐ No
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: ☐ **1** ☐ **2** ☐ **3** ☐ **4**	☐ Yes ☐ No ☒ NA
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?	☐Yes ☐ No ☒ NA
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?	☐ Yes ☐ No ☒ NA
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).	
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)?	☐ Yes ☐ No ☒ NA
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?	☒ Yes ☐ No ☐ NA
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?	☐ Yes ☐ No ☒ NA

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

Site Location/History

- The Site is at the intersection of Interstate Highway 880 and Industrial Boulevard in Hayward and is an active commercial fueling facility, trucking/freight distribution, and maintenance facility in Hayward.
- The Site is located within an industrial-zoned area and is relatively flat and covered by asphalt pavement. An office building and loading docks are present within the central portion of the Site. A shop building is present within the northwest corner of the Site.
- Seven USTs along the north and northeast sides of the shop building were removed in 1994. Conway Freight installed five new USTs adjacent to the southwest corner of the shop building in 1992, which are currently in use.
- Site maps showing the location of the current and former USTs, monitoring wells, groundwater level contours, and extent of groundwater plume are provided at the end of this review summary (Burns and McDonnell, 2012).
- Nature of Contaminants of Concern: Petroleum hydrocarbons only.
- Source: Diesel fuel line release.
- Date reported: October 1997.
- Status of Release: USTs removed.
- Free Product: Up to 5 feet of free phase product were reported in monitoring wells W-1 through W-3 in 1985. Free phase petroleum (>0.01 feet) has not been measured since 2010.

Tank Information

Tank No.	Size in Gallons	Contents	Closed in Place/ Removed/Active	Date
1-3	10,000	Diesel	Removed	1994
4	5,000	Diesel	Removed	1994
5	3,000	Gear Oil	Removed	1994
6	2,000	Anti-freeze	Removed	1994
7	10,000	Motor Oil	Removed	1994
8,9	?	Diesel	Active	-
10	?	Motor Oil	Active	-
11	?	Waste Oil	Active	-
12	?	Anti-freeze	Active	-

Receptors

- GW Basin: Santa Clara Valley - East Bay Plain.
- Beneficial Uses According to the San Francisco Regional Water Quality Control Board (Regional Water Board) Basin Plan: Municipal, Industrial Process and Domestic Supply.
- Land Use Designation: Commercial / Industrial.
- Public Water System: Alameda County Water District.
- Distance to Nearest Supply Well: According to data available in GeoTracker, there are no California Department of Public Health water supply wells within 1,000 feet of the defined plume boundary. No other water supply wells were identified within 1,000 feet of the defined plume in the files reviewed.

- Distance to Nearest Surface Water: Ward Creek is 1,000 feet south (upgradient) of the defined plume boundary.

Geology/Hydrogeology

- Stratigraphy: Soils beneath the property consist of brown gravelly sand (fill) and grayish brown silty clay (Bay mud).
- Maximum Sample Depth: 30 feet below ground surface (bgs).
- Minimum Groundwater Depth: 3.43 feet bgs at monitoring well MW-3.
- Maximum Groundwater Depth: 9.15 feet bgs at monitoring well MW-4.
- Current Average Depth to Groundwater: Approximately 7 feet bgs.
- Saturated Zones(s) Studied: Approximately 3 - 25 feet bgs.
- Appropriate Screen Interval: Yes.
- Groundwater Flow Direction: Variable, northeast to southwest. Northwest at approximately 0.003 feet/foot (August 2012).

Monitoring Well Information

Well Designation	Date Installed	Screen Interval (feet bgs)	Depth To Water (feet bgs) (08/16/12)
MW-1	April 1993	4-20	6.92
MW-2	April 1993	3-19	7.74
MW-3	April 1993	4-20	7.37
MW-4	April 1993	4-20	7.08
MW-5	April 1993	4-20	6.84
MW-6	July 1994	3-13	-
MW-7	May 2003	7-19	7.74
DPVE-1	March 2008	6-21	7.39
DPVE-2	March 2008	6-20	7.40
DPVE-3	March 2008	5-20	7.09
DPVE-4	May 2009	5-15	7.37
DPVE-5	May 2009	5-15	7.18
DPVE-6	May 2009	5-15	7.10
DPVE-7	May 2009	5-15	7.42
DPVE-8	May 2009	5-15	7.38
DPVE-9	May 2009	5-15	7.12
DPVE-10	May 2009	5-15	7.60
GT-1	April 1985	5-25	6.80
GT-2	April 1985	5-25	7.23
GT-3	April 1985	5-25	6.65
GT-4	April 1985	5-25	7.08
GT-5	April 1985	5-25	7.13
GT-6	April 1985	5-25	7.19

Remediation Summary

- Free Product: In March 1985, between 4,000 to 15,000 gallons of diesel fuel were released to the subsurface. Reportedly, by June 1986 as much as 200 gallons of free product were recovered from Site wells. Free phase petroleum (>0.01 feet) has not been measured since 2010.
- Soil Excavation: None identified.

- In-Situ Soil/Groundwater Remediation: Air sparging was conducted between December 1994 and January 1997. Reportedly, dual phase extraction was conducted in 2008. Seven additional dual phase extraction wells were installed in May 2009, though reportedly, no further remediation has been conducted to date.

Most Recent Concentrations of Petroleum Constituents in Soil

Constituent	Maximum 0-5 feet bgs [mg/kg (date)]	Maximum 5-10 feet bgs [mg/kg (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

Most Recent Concentrations of Petroleum Constituents in Groundwater

Sample	Sample Date	TPHd (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-Benzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)
MW-1	08/16/12	<94	<1	<1	<1	<2	<1
MW-2	08/16/12	343	<1	<1	<1	<2	0.7
MW-3	03/19/12	<94	<1	<1	<1	<2	<1
MW-4	03/19/12	<94	<1	<1	<1	<2	<1
MW-5	03/19/12	<94	<1	<1	<1	<2	<1
MW-7	08/16/12	47.7	<1	<1	<1	<2	<1
DPVE-1	02/10/09	10,700	<1	<1	<1	<2	0.66
DPVE-2	02/10/09	3,520	<1	<1	<1	<2	2.5
DPVE-3	02/10/09	2,170	<1	<1	<1	<2	<1
DPVE-4	10/23/09	91.8	<1	<1	<1	<2	<1
DPVE-5	10/23/09	<100	<1	<1	<1	<2	<1
DPVE-6	10/23/09	48.6	<1	<1	<1	<2	<1
DPVE-7	10/23/09	3,320	**<2**	<2	<2	<4	<2
DPVE-8	07/15/09	10,400	<1	<1	<1	<2	<1
DPVE-9	10/23/09	1,210	<1	<1	<1	<2	<1
GT-1	07/10/08	19,000	<1	<1	<1	<2	<2
GT-2	02/10/09	5,710	<1	<1	<1	<2	<1
GT-3	03/20/12	<94	<1	<1	<1	<2	<1
GT-4	10/08/08	100,000	<0.5	<0.5	<0.5	<1	<2
GT-5	03/20/12	<94	<1	<1	<1	<2	<1
GT-6	10/08/08	170,000	<0.5	<0.5	<0.5	<1	<2
WQOs	-	--	**1**	**150**	**700**	**1,750**	**5**

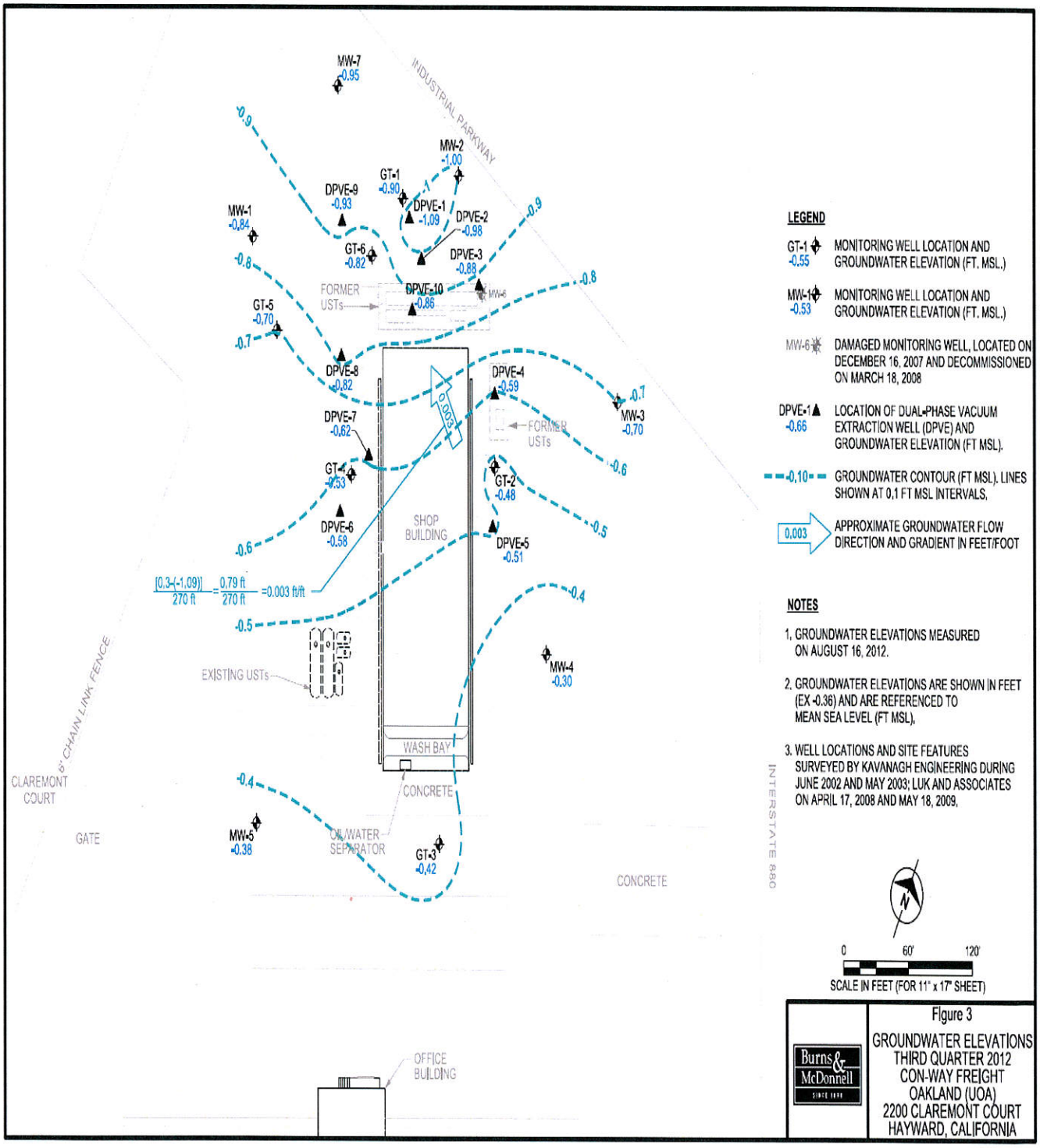
NA: Not Analyzed, Not Applicable or Data Not Available
µg/L: Micrograms per liter, parts per billion
<: Not detected at or above stated reporting limit
TPHd: Total petroleum hydrocarbons as diesel
MTBE: Methyl tert-butyl ether
TBA: Tert-butyl alcohol
WQOs: Water Quality Objectives, Regional Water Board Basin Plan
--: Regional Water Board Basin Plan has no numeric water quality objective for TPHd

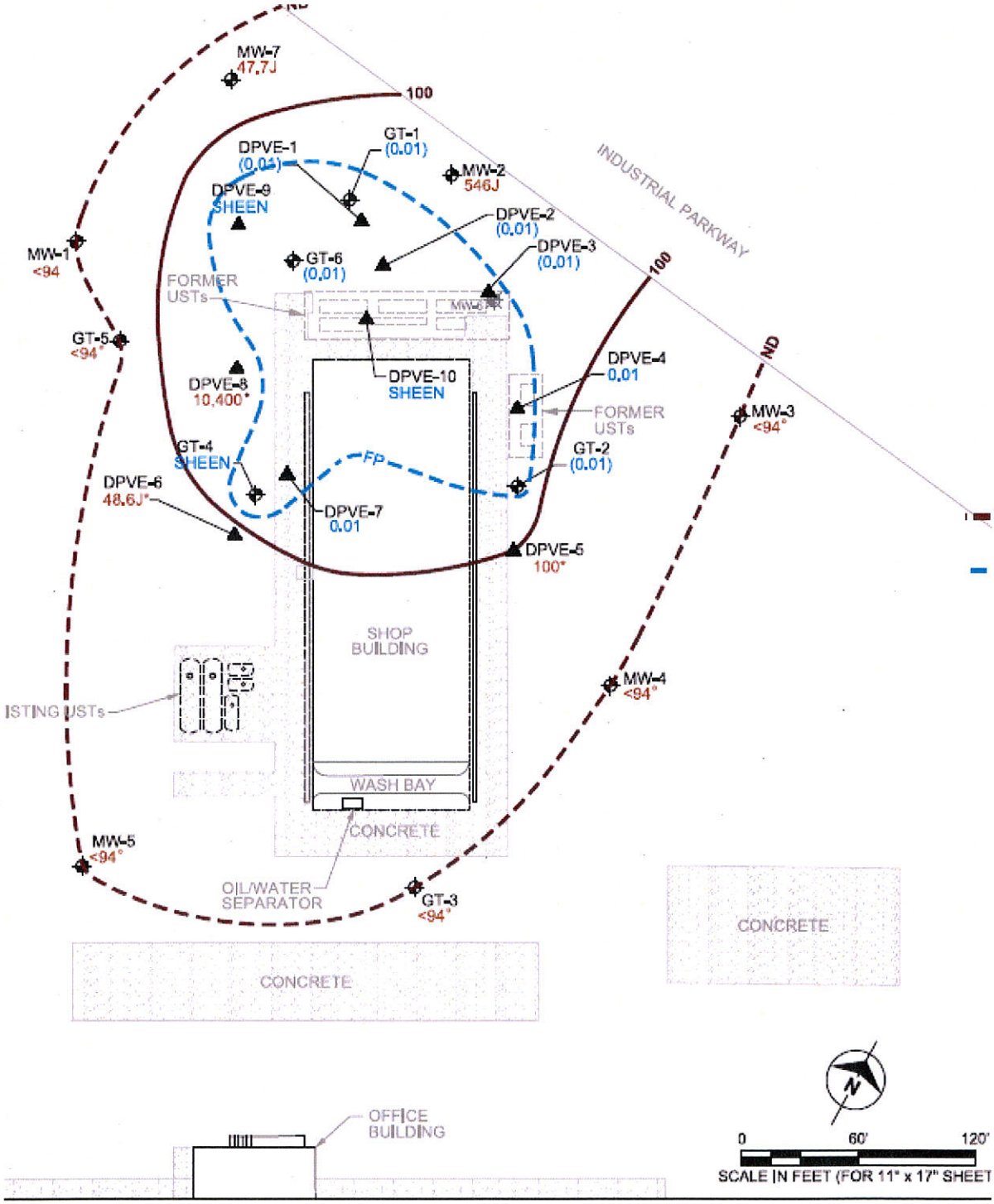
Groundwater Trends

- Silica gel cleanup of multiple groundwater samples was conducted in February 2009 which showed a 29 to 46 percent reduction in total petroleum hydrocarbons (TPHd) concentrations in DPVE-1. The lower organic concentrations measured after silica gel cleanup suggests significant biologic activity or the presence of naturally occurring organic materials. This might lead to false positive analytical results.
- Groundwater monitoring has been conducted intermittently since 1985. Water quality objectives have been achieved or nearly achieved.

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: <1,000 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 4. The contaminant plume that exceeds water quality objectives is less than 1,000 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 concentrations of benzene and MTBE are each less than 1,000 µg/L.
- Indoor Vapor Risk from Residual Petroleum Hydrocarbons: The case meets the Policy Exclusion for Active Station. Soil vapor evaluation is not required because the Site is an active commercial petroleum fueling facility.
- Direct Contact Risk from Residual Petroleum Hydrocarbons: This case meets Policy Criterion 3b. Although no document titled "Risk Assessment" was found in the files reviewed, a professional assessment of site-specific risk from potential exposure to residual soil contamination found that maximum concentrations of petroleum constituents remaining in soil will have no significant risk of adversely affecting human health. The Site is paved and accidental exposure to site soils is prevented. As an active petroleum fueling facility, any construction worker working at the Site will be prepared for exposure in their normal daily work.


MW-7
-0.95
INDUSTRIAL PARKWAY
MW-2
-1.00
GT-1
-0.90
DPVE-9
-0.93
DPVE-1
-1.09
DPVE-2
-0.98
MW-1
-0.84
GT-6
-0.82
DPVE-3
-0.88
FORMER USTs
DPVE-10
-0.86
MW-6
GT-5
-0.70
DPVE-8
-0.82
DPVE-4
-0.59
MW-3
-0.70
DPVE-7
-0.62
FORMER USTs
GT-4
-0.53
GT-2
-0.48
DPVE-6
-0.58
SHOP BUILDING
DPVE-5
-0.51
0.003
[0.3-(-1.09)] / 270 ft = 0.79 ft / 270 ft = 0.003 ft/ft
EXISTING USTs
MW-4
-0.30
WASH BAY
CONCRETE
6' CHAIN LINK FENCE
CLAREMONT COURT
GATE
MW-5
-0.38
OIL/WATER SEPARATOR
GT-3
-0.42
CONCRETE
INTERSTATE 880
OFFICE BUILDING
-0.9
-0.8
-0.7
-0.6
-0.5
-0.4
LEGEND
GT-1 -0.55 MONITORING WELL LOCATION AND GROUNDWATER ELEVATION (FT. MSL.)
MW-1 -0.53 MONITORING WELL LOCATION AND GROUNDWATER ELEVATION (FT. MSL.)
MW-6 DAMAGED MONITORING WELL, LOCATED ON DECEMBER 16, 2007 AND DECOMMISSIONED ON MARCH 18, 2008
DPVE-1 -0.66 LOCATION OF DUAL-PHASE VACUUM EXTRACTION WELL (DPVE) AND GROUNDWATER ELEVATION (FT MSL).
-0.10- GROUNDWATER CONTOUR (FT MSL). LINES SHOWN AT 0.1 FT MSL INTERVALS.
0.003 APPROXIMATE GROUNDWATER FLOW DIRECTION AND GRADIENT IN FEET/FOOT
NOTES
1. GROUNDWATER ELEVATIONS MEASURED ON AUGUST 16, 2012.
2. GROUNDWATER ELEVATIONS ARE SHOWN IN FEET (EX -0.36) AND ARE REFERENCED TO MEAN SEA LEVEL (FT MSL).
3. WELL LOCATIONS AND SITE FEATURES SURVEYED BY KAVANAGH ENGINEERING DURING JUNE 2002 AND MAY 2003; LUK AND ASSOCIATES ON APRIL 17, 2008 AND MAY 18, 2009.
N
0 60' 120'
SCALE IN FEET (FOR 11" x 17" SHEET)
Burns & McDonnell
Figure 3
GROUNDWATER ELEVATIONS
THIRD QUARTER 2012
CON-WAY FREIGHT
OAKLAND (UOA)
2200 CLAREMONT COURT
HAYWARD, CALIFORNIA


MW-7
47.7J
100
DPVE-1
(0.01)
GT-1
(0.01)
MW-2
546J
DPVE-9
SHEEN
DPVE-2
(0.01)
DPVE-3
(0.01)
INDUSTRIAL PARKWAY
MW-1
<94
GT-6
(0.01)
FORMER
USTs
MW-8
GT-5
<94
DPVE-10
SHEEN
DPVE-4
0.01
ND
DPVE-8
10,400
FORMER
USTs
MW-3
<94
GT-4
SHEEN
FP
GT-2
(0.01)
DPVE-6
48.6J
DPVE-7
0.01
DPVE-5
100
SHOP
BUILDING
MW-4
<94
WASH BAY
CONCRETE
MW-5
<94
OIL/WATER
SEPARATOR
GT-3
<94
CONCRETE
CONCRETE
OFFICE
BUILDING
0
60'
120'
SCALE IN FEET (FOR 11" x 17" SHEET