State Water Resources Control Board

Division of Financial Assistance
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Linda S. Adams
Secretary for Environmental Protection

Arnold Schwarzenegger
Governor

EXHIBIT 6
UST Case Closure Summary

This Underground Storage Tank (UST) Case Closure Summary has been prepared in support of a recommendation by the Petroleum Underground Storage Tank Cleanup Fund (Fund) to the State Water Resources Control Board (State Water Board) for closure of the UST case at 6545 Fair Oaks Boulevard in Carmichael, California (Site).

Agency Information

Agency Name: Sacramento County Environmental Management Department (SCEMD)	Address: 10590 Armstrong Avenue Suite A Mather, CA 95655

Case Information

SCEMD Case No: B503	Global ID: T0606700227
Site Name: Gold Rush Recycling	Site Address: 6545 Fair Oaks Boulevard, Carmichael, CA 95608
Responsible Party: John Ralich Attn: Mark Mullaney	Address: 7749 Fair Oaks Boulevard Carmichael, CA 95608
USTCF Claim No.: 10944	Number of Years Open: 22 years
USTCF Expenditures to Date: $157,890	

Tank Information

Tank No.	Size in Gallons	Contents	Closed in Place/ Removed/Active?	Date
T-1	1,000	Gasoline	Removed	Jun 88
T-2	1,000	Gasoline	Removed	Jun 88
T-3	1,000	Gasoline	Removed	Jun 88

Release Information

- Source of Release: UST System
- Date of Release: 6/10/1988 (leak reported)
- Affected Media: Soil and Groundwater

Site Information

- GW Basin: Sacramento Valley.
- Beneficial Uses: Municipal and Domestic Water Supply (MUN), Agricultural Supply (AGR), Industrial Service Supply (IND), and Industrial Process Supply (PRO)
- Land Use Designation: Commercial
- Distance to Nearest Supply Well: According to data available in GeoTracker, there are two Department of Public Health (DPH) public supply wells within ½ mile of the site. The nearest well is located 1338 feet from the Site.
- Minimum Groundwater Depth: 57.91 feet below ground surface (bgs) at monitoring well MW-4.

- Maximum Groundwater Depth: 62.39 feet bgs at monitoring well MW-11.
- Flow Direction: Based on groundwater elevation measurements from the March 2010 sampling event, groundwater at this site is flowing in a westerly direction at a gradient of 0.006 feet per foot.
- Soil Types: The Site is underlain by interbedded and intermixed sand, silt and clay.

Monitoring Well Information

Well Designation	Date Installed	Screen Interval (feet bgs)	Most Recent Depth To Groundwater (March 2010)
MW-1	Oct 99	55-70	59.70
MW-2	Oct 99	55-70	60.33
MW-3	Oct 99	55-70	60.35
MW-4	Oct 99	55-70	59.03
MW-5A	Oct 99	50-65	59.45
MW-6	Dec 06	50-65	NA
MW-7	Aug 09	49–70	59.35
MW-8	Aug 09	48-70	60.26
MW-9	Aug 09	45-70	61.21
MW-10	Aug 09	45-70	59.03
MW-11	Aug 09	45-70	62.45
MW-12	Aug 09	45-70	62.34

NA Not Available

Contaminant Concentration

Contaminant	Soil (mg/kg)		Water (ug/L)		WQOs (ug/L)
	Maximum	Latest	Maximum	Latest (March 2010)	
TPHg	6,000	NA	1,740	1,500*	5
TPHd	NA	NA	NA	NA	56
Benzene	4.0	NA	115	<0.5	0.15
Toluene	85	NA	120	<0.5	42
Ethylbenzene	31.4	NA	65.5	<0.5	29
Xylenes	294	NA	1,100	<1	17
MTBE	<0.050	NA	<0.50	<1	5
TBA	<0.050	NA	86	<10	12
1,2-DCA	0.023	NA	820	51	0.5
Lead	3.8	NA	NA	NA	15
PCE	NA	NA	1,600	510	0.06
TCE	NA	NA	210	98	0.8

NA: Not Analyzed, Not Applicable or Data Not Available
mg/kg: milligrams per kilogram, parts per million
ug/L: micrograms per liter, parts per billion
WQOs: Water Quality Objectives
* Chromatogram is atypical of gasoline, likely PCE.

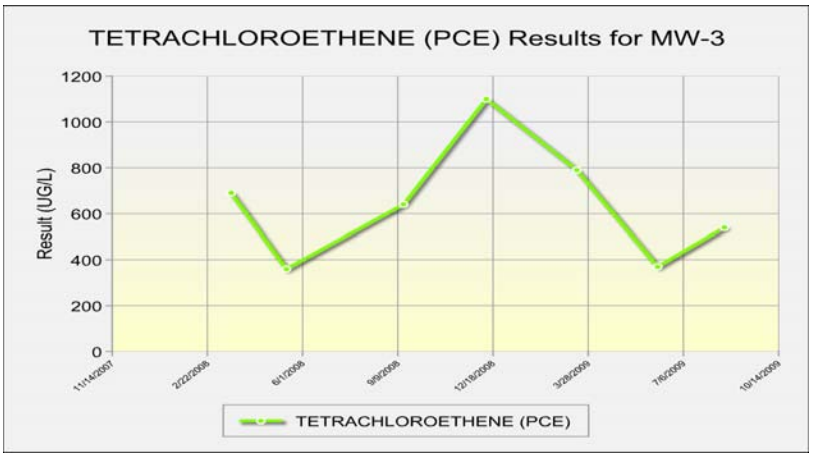
Site Description
The Site is located at 6545 Fair Oaks Boulevard in Carmichael, California, on the southwest corner of the intersection of Fair Oaks Boulevard and Robertson Avenue. A recycling business currently operates on the Site, which is surrounded by commercial properties.

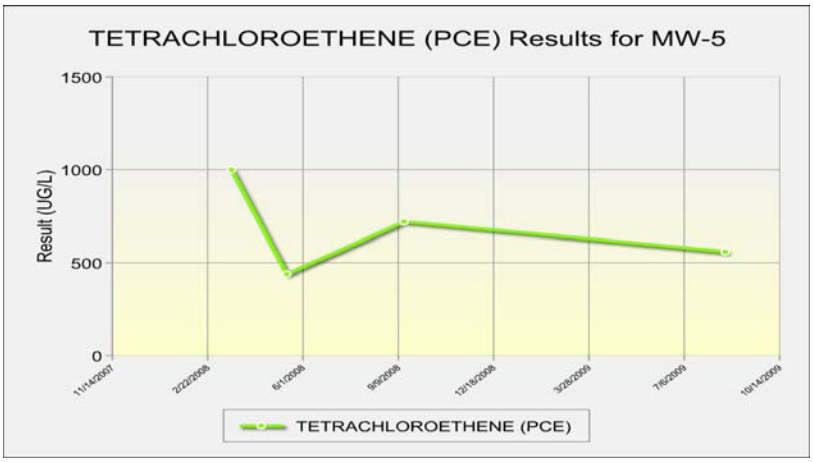
Site History/Assessments
The Site operated as a retail gasoline station until 1975 when the USTs were abandoned in place and the station was closed. In June 1988, the USTs were excavated and removed. A site assessment was conducted in 1994 and petroleum hydrocarbons were detected in soil and groundwater. Since 1999, 12 monitoring wells have been installed and monitored regularly. A site map showing the location of the former USTs and monitoring wells is provided at the end of this case closure summary.

Remediation Summary
- Free Product: No free product was documented throughout the life of this project.
- Soil Excavation: An unknown volume of soil was excavated during the UST removal in June 1988. The excavation was backfilled with previously excavated soil in February 1990.[1]
- In-Situ Soil Remediation: No in-situ soil remediation has been conducted.
- Groundwater Remediation: No groundwater remediation has been conducted.

General Site Conditions
- Hydrogeology: Depth to groundwater varies seasonally between 58 feet and 62 feet bgs. Groundwater direction is typically toward the west, at gradients ranging from 0.001 to 0.006 ft/ft. The American River is more than one mile east of the Site.
- Geology: The Site is underlain by interbedded and intermixed sand and silt to the maximum depth explored of 70 feet. The sediments encountered were reported to be moderately to strongly cemented.
- Groundwater Trends: Monitoring wells have been sampled for eleven years. tetrachloroethene (PCE) is shown for monitoring wells MW-3 and MW-5. According to a June 17, 2010 activity post on GeoTracker by SCEMD staff, “Sunstar Labs had looked at chromatograms and on the first two samples they believed the GRO was really PCE. Requested that all the chromatograms from all the samples that had GRO/TPHg reported be evaluated as to whether the GRO/TPHg was actually PCE/TCE and to have the results of the lab evaluation put in writing. (sic)”

[1] 2005; Lush Geosciences Incorporated; *Work Plan for Additional Subsurface Investigation, Gold Rush Recycling;* August 1





Water Quality Objectives (WQOs): WQOs with respect to petroleum hydrocarbons appear to have been achieved except for 1,2-DCA and the possible exception of benzene. The WQO for 1,2-DCA will be met within 55 years. Benzene was not detected above the laboratory reporting limit of 0.5 ug/L. The WQO for benzene of 0.15 ug/L will be met within a reasonable period of time, if it is not currently met. According to laboratory analysis previously detailed in the groundwater trends section of this summary, compounds identified as total fuel hydrocarbons as gasoline are likely PCE.

Risk Evaluation

As a result of natural attenuation, there is little residual petroleum hydrocarbon in soil at the Site that would pose a threat to groundwater resources, human health, or the environment. Since residual petroleum hydrocarbon constituent concentrations are low, the Site and public areas are paved with thick concrete, and the Site is currently operated by a recycling business, there is little potential for hydrocarbon vapors to migrate or pose a threat to human health or the environment. There are no DPH water supply wells or surface water receptors present within 1,338 feet of the Site. Water in the vicinity of the Site is provided to water users by the Carmichael Water District.

Closure

Does corrective action performed ensure the protection of human health, safety and the environment? Yes.

Is corrective action and UST case closure consistent with State Water Board Resolution 92-49? Yes.

Is achieving background water quality feasible? No.
To remove all traces of residual petroleum constituents at the Site would require significant effort and cost. Removal of all traces of residual petroleum hydrocarbon constituents that contribute to detectable concentrations in shallow groundwater can be accomplished, but would require excavation of additional soil as well as additional remediation of shallow groundwater. The soil excavation could also entail the relocation of existing utilities, demolition an existing building and the temporary closure of the existing business. If complete removal of detectable traces of petroleum constituents becomes the standard for UST corrective actions, the statewide technical and economic implications will be enormous. Because of the high costs involved and minimal benefit of attaining further reductions in concentrations of TPHg and benzene at this Site, and the fact that beneficial uses are not threatened, attaining background water quality at this Site is not feasible.

If achieving background water quality is not feasible:

Is the alternative cleanup level consistent with the maximum benefit to the people of the State? Yes.
It is impossible to determine the precise level of water quality that will be attained given the limited residual petroleum hydrocarbons that remain at the Site. In light of all the factors discussed above, and the fact that the residual petroleum constituents will not unreasonably affect present and anticipated beneficial uses of groundwater, a level of water quality will be attained that is consistent with the maximum benefit to the people of the state.

Will the alternative cleanup level unreasonably affect present and anticipated beneficial uses of water? No.
Impacted groundwater is not used as a source of drinking water or any other beneficial use currently. It is highly unlikely that the impacted groundwater will be used as a source of drinking water or any other beneficial use in the foreseeable future.

Will the alternative level of water quality exceed water quality prescribed in applicable Basin Plan? No.
The final step in determining whether cleanup to a level of water quality less stringent than background is appropriate for this Site requires a determination that the alternative level of water quality will not result in water quality less than that prescribed in the relevant basin plan. Pursuant to State Water Board Resolution 92-49, a Site may be closed if the basin plan requirements will be met within a reasonable time frame.

Have factors contained in Title 23 of the California Code of Regulations, Section 2550.4 been considered? Yes.
In approving an alternative level of water quality less stringent than background, the State Water Board considers the factors contained in California Code of Regulations, title 23, section 2550.4, subdivision (d). As discussed earlier, the adverse effect on shallow groundwater will be minimal and localized, and there will be no adverse effect on the groundwater contained in deeper aquifers, given the physical and chemical characteristics of petroleum constituents, the hydrogeological characteristics of the Site and surrounding land, and the quantity of the groundwater and direction of the groundwater flow. In addition, the potential for adverse effects on beneficial uses of groundwater is low, in light of the proximity of the groundwater supply wells, the current and potential future uses of groundwater in the area, the existing quality of groundwater, the potential for health risks caused by human exposure, the potential damage to wildlife, crops, vegetation, and physical structures, and the persistence and permanence of potential effects.

Finally, a level of water quality less stringent than background is unlikely to have any impact on surface water quality, in light of the volume and physical and chemical characteristics of petroleum constituents; the hydrogeological characteristics of the Site and surrounding land; the quantity and quality of groundwater and direction of groundwater flow, the patterns of precipitation in the region, and the proximity of residual petroleum to surface waters.

Has the requisite level of water quality been met? No.
The WQO with respect to fuel hydrocarbons appear to have been achieved with the exception of 1,2-DCA and the possible exception of benzene. The WQO for 1,2-DCA should be met within 55 years. Benzene was not detected above the reporting limit of 0.5 ug/L. The WQO for benzene of 0.15 ug/L will be met within a reasonable period of time, if it is not currently met. According to laboratory analysis, detailed on page 4 of this summary, compounds identified as total fuel hydrocarbons as gasoline are likely PCE.

Objections to Closure and Response
The SCEMD objects to UST case closure for this case because the county has not received the required certification from the Responsible Party that the fee title holders have been notified of a site closure proposal. The Fund has performed appropriate fee title notification.

The Fund Manager does not believe additional work is necessary at this site with respect to the petroleum hydrocarbons. PCE contamination in the vicinity is unlikely to be from this Site, but rather from a nearby dry cleaner. According to an August 10, 2007 letter, SCEMD staff also believes the PCE contamination is from a local dry cleaner, specifically the former Hyler's Dry Cleaning, located at 6342 Fair Oaks Blvd. The Central Valley Regional Water Quality Control Board is currently overseeing the corrective action at the dry cleaner site. The Fund Manager does not believe that any potential residual petroleum hydrocarbons represent a significant risk to human health and safety, and the environment. As a result of natural attenuation there is little residual petroleum hydrocarbon in soil at the Site. WQOs at this Site have been achieved, with the possible exception of benzene, as explained above. In addition, there are no domestic or public water supply wells within 1,300 feet of the Site. Water in the vicinity of the Site is provided to water users by Carmichael Water District.

The Fund is conducting public notification and the SCEMD has the regulatory responsibility to supervise the abandonment of monitoring wells.

Summary and Conclusion

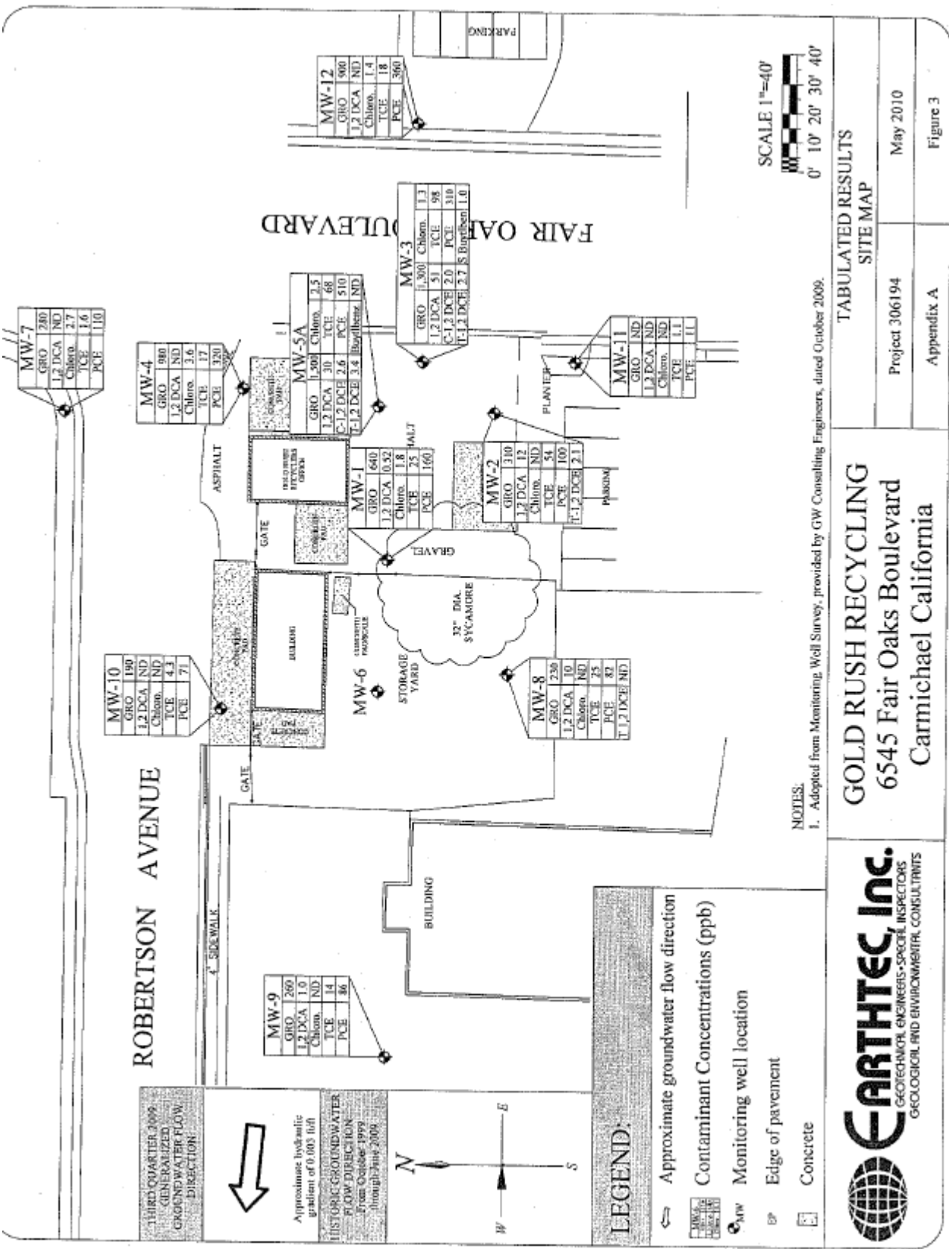
A leak was identified in 1988 during the removal of three USTs. Since 1999, twelve monitoring wells have been installed and an unknown volume of contaminated soil was excavated. WQOs at this Site will be achieved with respect to fuel hydrocarbons within 55 years. To date, $157,890 in corrective action costs have been reimbursed by the Fund. The nearest water supply wells are more than 1,300 feet from the Site. Any impacted groundwater is not currently being used as a source of drinking water or other beneficial uses and water is provided to water users near the Site by the Carmichael Water District. It is unlikely that any impacted groundwater will be used as a source of drinking water or other beneficial use in the foreseeable future. In addition, in the unlikely event that a water supply well is drilled in the future, standard construction practices and requirements would prevent impacts from any residual petroleum contamination. Based on available information, the residual petroleum hydrocarbons at the Site do not pose significant risks to human health, safety, and the environment, and the Fund Manager recommends that the case be closed.

John Russell

John Russell PG No. 8396

December 15, 2010

Date


GOLD RUSH RECYCLING
6545 Fair Oaks Boulevard
Carmichael California
TABULATED RESULTS
SITE MAP
Project 306194
May 2010
Appendix A
Figure 3
EARTHTEC, Inc.
GEOTECHNICAL ENGINEERS • SPECIAL INSPECTIONS
GEOLOGICAL AND ENVIRONMENTAL CONSULTANTS
SCALE 1"=40'
0' 10' 20' 30' 40'
NOTES:
1. Adopted from Monitoring Well Survey, provided by GW Consulting Engineers, dated October 2009.
LEGEND:
Approximate groundwater flow direction
Contaminant Concentrations (ppb)
Monitoring well location
Edge of pavement
Concrete
THIRD QUARTER 2009 GENERALIZED GROUNDWATER FLOW DIRECTION
Approximate hydraulic gradient of 0.003 ft/ft
HISTORIC GROUNDWATER FLOW DIRECTION From October 1999 through June 2009
ROBERTSON AVENUE
FAIR OAKS BOULEVARD
ASPHALT
GRAVEL
BUILDING
STORAGE YARD
4' SIDEWALK
GATE
PARKING
PLANTER
32" DIA. SYCAMORE
MW-1 GRO 640 1,2 DCA 0.52 Chloro. 1.8 TCE 25 PCE 160
MW-2 GRO 310 1,2 DCA 12 Chloro. ND TCE 54 PCE 100 C-1,2 DCE 2.1
MW-3 GRO 1,300 1,2 DCA 51 C-1,2 DCE 2.0 T-1,2 DCE 2.7 Chlorm. 1.3 TCE 98 PCE 310 S Butylbenz 1.0
MW-4 GRO 980 1,2 DCA ND Chloro 3.6 TCE 17 PCE 320
MW-5A GRO 1,500 1,2 DCA 30 C-1,2 DCE 2.6 T-1,2 DCE 3.4 Chlorm. 2.5 TCE 68 PCE 510 Butylbenz ND
MW-6
MW-7 GRO 280 1,2 DCA ND Chloro. 2.7 TCE 1.6 PCE 110
MW-8 GRO 230 1,2 DCA 10 Chloro. ND TCE 25 PCE 82 T-1,2 DCE ND
MW-9 GRO 260 1,2 DCA 1.0 Chloro. ND TCE 14 PCE 86
MW-10 GRO 190 1,2 DCA ND Chloro. ND TCE 4.3 PCE 71
MW-11 GRO ND 1,2 DCA ND Chloro. ND TCE 1.1 PCE 1.1
MW-12 GRO 900 1,2 DCA ND Chloro. 1.4 TCE 18 PCE 360