



Linda S. Adams
Secretary for
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State Water Resources Control Board

Division of Financial Assistance

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Arnold Schwarzenegger
Governor

EXHIBIT 5 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 3503 Broadway in Sacramento, California (Site).

Agency Information

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

SCEMD Case No: A579	Global ID: T0606700551
Site Name: Speedy Tire	Site Address: 3503 Broadway Sacramento CA 95817
Responsible Party: Nazir Ahmed	Address: 3503 Broadway Sacramento CA 95817
USTCF Claim No.: 8705	Number of Years Case Open: 18
USTCF Expenditures to Date: \$161,061	

Tank Information

Tank No.	Size in Gallons	Contents	Closed in Place/ Removed/Active	Date
T-1	?	Gasoline	Removed	Feb 92
T-2	?	Diesel	Removed	Feb 92

Release Information

- Source of Release: UST System
- Date of Release: 2/24/1992 (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 no Department of Public Health (DPH) water supply wells within ½ mile of the Site
- Minimum Groundwater Depth: 23.65 feet below ground surface (bgs) at monitoring well MW-7
- Maximum Groundwater Depth: 28.54 feet bgs at monitoring well MW-3
- Groundwater Flow Direction: The predominate flow direction ranges from northwest to southwest with an average gradient of 0.001 feet per foot (ft/ft).
- Soil Types: The Site is underlain by interbedded and intermixed sand, silt and clay.

California Environmental Protection Agency

Monitoring Well Information

Well Designation	Date Installed	Screen Interval (feet bgs)	Most Recent Depth To Groundwater (March 2010)
MW-1	Aug 98	28-43	27.32
MW-2	Aug 98	27-42	27.24
MW-3	Aug 98	27-42	27.60
MW-4	Aug 98	27-43	26.86
MW-5	Aug 98	25-40	27.49
MW-6	Aug 98	20-40	26.79
MW-7	Aug 98	20-40	26.22
MW-8	Mar 03	20-40	26.97
MW-9	Mar 03	20-40	26.91

Contaminant Concentration

Contaminant	Soil (mg/kg)		Water (ug/L)		WQOs (ug/L)
	Maximum	Latest	Maximum	Latest (March 2010)	
TPHg	NA	NA	54,000	2,400	5
TPH-d	NA	NA	9,200	1,200	56
Benzene	NA	NA	2,400	5.7	0.15
Toluene	NA	NA	1,040	0.88	42
Ethylbenzene	NA	NA	1,800	42	29
Xylenes	NA	NA	9,500	19.5	17
MTBE	NA	NA	2,800	270	5
TBA	NA	NA	310	96	12
1,2-DCA	NA	NA	210	3.5	0.5

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

Site Description

The Site is located at 3503 Broadway in Sacramento, California, and a tire store presently occupies the site. The Site is bounded by Third Avenue to the north, a business to the east and Broadway to the southwest. The surrounding land use near the site is commercial.

Site History/Assessments

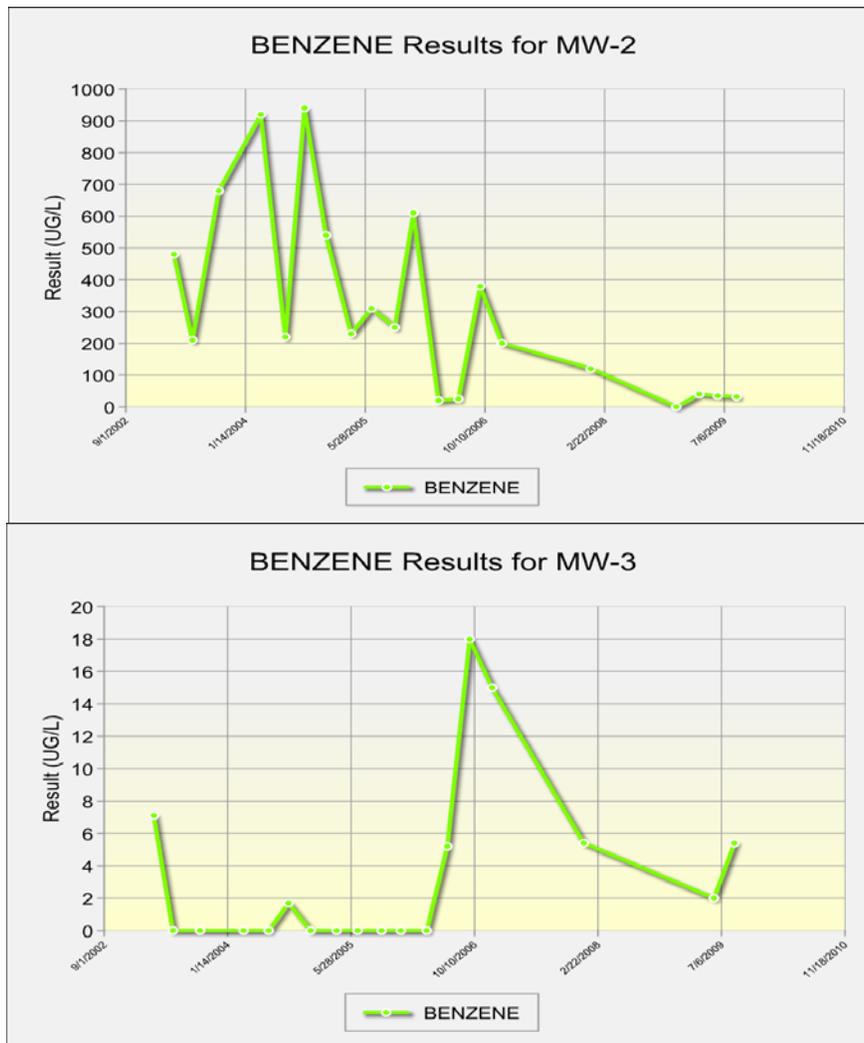
In February 1992, fuel hydrocarbons were identified in soil during removal of the USTs. To date, nine monitoring wells have been installed and monitored regularly. A Sensitive Receptor Survey was conducted in 2000. A Site map showing the location of the former USTs, monitoring wells and groundwater level contours is provided at the end of this case closure summary.

Remediation Summary

- Free Product: No free product was documented throughout the life of this case.
- Soil Excavation: An unknown volume of impacted soil was removed in February 1992.
- In-Situ Soil Remediation: No in-situ soil remediation has been conducted.
- Groundwater Remediation: No groundwater remediation has been conducted.

General Site Conditions

- Geology and Hydrogeology: The Site is underlain by interbedded and intermixed sand, silt, and clay. The depth to groundwater varies seasonally between 23 and 29 feet bgs and the groundwater gradient is northwest at 0.001 ft/ft. No DPH water supply wells have been identified within ½ mile of the Site.
- Groundwater Trends: There are more than 12 years of groundwater monitoring data for this Site. The following graphs show benzene analytical data for the two most impacted groundwater monitoring wells, source area (MW-2) and down gradient (MW-3), respectively.



- Water Quality Objectives (WQOs): The WQOs for all contaminants will be achieved within 25 years.

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 concentrations are low, the Site and public areas are paved with thick concrete, and the

Site is currently a tire store, 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 ½ mile of the Site.

Closure

Will 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 of the existing building and temporary closure of an 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 petroleum constituents 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 WQOs for all contaminants will be achieved within 25 years. This is a reasonable period in which to meet the requisite level of water quality because the impacted groundwater is not currently being used as a source of drinking water and it is highly unlikely that impacted groundwater will be used as a source of drinking water during the period of impairment. Residential and commercial water users are currently connected to the municipal drinking water supply. Other designated beneficial uses of the impacted groundwater are not threatened and it is unlikely they will be. Considering these factors in the context of the Site setting and the concentrations of the residual petroleum constituents at the Site, Site conditions do not represent a threat to human health and safety and the environment and case closure is appropriate.

Objections to Closure and Response

The SCEMD objects to UST case closure for this case because there is residual soil contamination and WQOs have not been achieved.

The Fund Manager does not believe that any residual petroleum hydrocarbons at this Site 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. Residual petroleum hydrocarbons remaining in the groundwater at the Site will likely continue to attenuate to achieve WQOs within 25 years.

In addition, there are no domestic or DPH listed public water supply wells within ½ mile of the Site. Water in the vicinity of the Site is provided to water users by the Sacramento County 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 1992 during the removal of two USTs. Since 1998, nine monitoring wells have been installed and monitored on a regular basis. According to groundwater data, WQOs for all contaminants of concern will be achieved within 25 years. To date, \$162,049 in corrective action costs have been reimbursed by the Fund. The nearest DPH listed water supply wells are more than ½ mile 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 Sacramento County 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 PG No. 8396

December 15, 2010

Date

