



Linda S. Adams
Secretary for
Environmental Protection

State Water Resources Control Board

Division of Financial Assistance

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Arnold Schwarzenegger
Governor

December 7, 2009

Mr. Lawrence H. Payne

NOTIFICATION OF PUBLIC HEARING

UNDERGROUND STORAGE TANK (UST) CLEANUP FUND (FUND), MEETING
NOTIFICATION FOR CASE CLOSURE RECOMMENDATION, PURSUANT TO HEALTH AND
SAFETY CODE SECTION 25299.39.2: CLAIM NUMBER: 8532; SITE ADDRESS: 1449
HIGHWAY 49, AUBURN, CA, 95603

By this letter, as Fund Manager, I am informing you of the Fund's intent to recommend closure of your UST site cleanup case to the State Water Resources Control Board (State Water Board) at its January 19, 2010, Board meeting.

In the interim, any reasonable, necessary, and eligible costs that you incur and submit in a properly documented reimbursement request will continue to be reimbursed by the Fund, as monies are available.

Meeting Notice

The State Water Board is planning to consider closing your UST case at its meeting that will be held on January 19, 2010 commencing at 9:00 AM in the Coastal Hearing Room, Second Floor of the Cal/EPA Building, 1001 I Street, Sacramento, California.

Under separate cover at a later date, you will receive an agenda for this meeting.

Legal Authority

Health & Safety Code Section 25299.39.2(a) requires that the Fund Manager notify UST owners or operators who have a Letter of Commitment (LOC) that has been in active status for five or more years and to review the case history of these sites on an annual basis unless otherwise notified by the UST owner or operator. In addition, the H&SC section further states that the Fund Manager, with approval of the UST owner or operator, may recommend regulatory case closure to the State Water Board. This process is called the "5-Year Review." The State Water Board may close or require the closure of a UST case that is under the jurisdiction of a regional water quality control board (regional water board) or a local agency participating in the State Water Board's local oversight program.

Discussion

Having obtained your approval and pursuant to Health and Safety Code Section 25299.39.2(a) to recommend closure of your UST case to the State Water Board, enclosed is a copy of the UST Case Closure Summary for your UST case. The case closure summary contains information about your UST case and forms the basis for UST Cleanup Fund manager's recommendation to the State Water Board for UST case closure. A copy of the Case Closure Summary is also being provided to your environmental consultant and the regional water board that has been overseeing corrective action at your site. Other interested persons may obtain a copy of the Case Closure Summary by contacting Ms. Dennise Walker, at (916) 341-5789.

Comments

At the meeting, interested persons will be allowed to comment orally on the case closure recommendation (including the case closure summary), subject to the following time limits. The UST Cleanup Fund claimant and the regional water board overseeing corrective action at the site will be allowed five minutes for oral comment, with additional time for questions by the State Water Board members. Other interested persons will be allotted a lesser amount of time to address the State Water Board. At the meeting, the State Water Board may grant UST case closure, deny case closure, or may continue consideration until a later meeting.

Written comments on the case closure summary must be received by the State Water Board by 12:00 p.m. on December 31, 2009. Please provide the following information in the subject line: January 19, 2010 Board Meeting, UST Case Closure, and applicable site address and UST Cleanup Fund claim number. Comments must be addressed to:

Ms. Jeanine Townsend
Clerk to the Board
State Water Resources Control Board
1001 I Street, 24th Floor [95814]
P.O. Box 100
Sacramento, CA 95812-0100
(tel) 916-341-5600
(fax) 916-341-5620
(email) commentletters@waterboards.ca.gov

If you have any questions regarding this matter, please contact Mr. Robert Trommer at (916) 341-5684.

Sincerely,



Ronald M. Duff, P.E., Fund Manager
Underground Storage Tank Cleanup Fund

Enclosure

cc: see next page

cc: Mr. Thomas J. Koch, P.G., Apex Envirotech, Inc., Gold River
Ms. Pamela Creedon, Executive Officer, RWQCB, Rancho Cordova
Mr. Brian Newman, UST Program Manager, RWQCB, Rancho Cordova
Mr. Paul Sanders, UST Case Manager, RWQCB, Rancho Cordova
Mr. Ray S. Thompson, Trustee, Auburn
Mr. Bertram F. Rudolph, Jr., Auburn
AMC Investments, Auburn
Rainbow Trust, Auburn
Auburn Maita, LLC, Auburn
Creekside Center Associates, Auburn
LLD & B Limited Partnership, Auburn



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Draft 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 1449 Highway 49 in Auburn (Site). All record owners of fee title for this site as well as adjacent property owners and other interested parties, as appropriate, are being notified of the recommendation for closure and given an opportunity to provide comments.

Agency Information

Date: November 24, 2009

Agency Name: Central Valley Regional Water Quality Control Board, Sacramento Office (Regional Board)	Address: 11020 Sun Center Drive, Suite 200, Rancho Cordova, CA 95670-6114
Responsible Staff Person: Paul Sanders	Title: Engineering Geologist

Case Information

Regional Board Case No: 310192	Global ID: T0606100158
Site Name: Payne Property	Site Address: 1449 Hwy 49, Auburn, CA 95603
Responsible Party: Lawrence H. Payne	Fund Expenditures to Date: \$546,473
Fund Claim No.: 8532	Number of Years Open: 17

Tank Information

Tank No.	Size in Gallons	Contents	Closed in Place/ Removed/Active?	Date
1	550	Gasoline	Removed	April 14, 1992
2	550	Gasoline	Removed	April 14, 1992

Release Information

- Source of Release: Underground Storage Tank (UST) System
- Date of Release: Unknown. The USTs were discovered in February 1991 and subsequently removed in April 1992. Numerous perforations were noted in both tanks upon removal. An UST Unauthorized Release (Leak) / Contamination Site Report was submitted to the Placer County Environmental Health Department (County) on September 13, 1992
- Affected Media: Soil and Groundwater

Site Information

- GW Basin: Unnamed Basin
- Beneficial Uses: Municipal and Domestic (MUN), Agricultural (AGR), Industrial Service (IND), and Industrial Process (PRO)

- Land Use Designation: Commercial
- Distance to Nearest Supply Well: According to GeoTracker, there are no public water supply wells within a ½ mile radius
- Minimum Groundwater Depth: 3.59 feet below ground surface (bgs) (MW-6, 3/3/2009)
- Maximum Groundwater Depth: 18.60 feet bgs (MW-6, 6/8/2007)
- Flow Direction: Varies from northeast to southeast. Groundwater flow direction during the September 2009 groundwater monitoring event was to the southeast at a gradient of 0.0038 ft/ft
- Soil Types: Shallow crystalline bedrock

Monitoring Well Information

Well Designation	Date Installed	Screen Interval (feet bgs)	Most Recent DTW (9/1/2009)
MW-1	12/1992	8.3-18.3	11.32
MW-2	12/1992	5-13.4	11.04
MW-3	12/1992	5.5-20	11.08
MW-4	12/1992	5.5-22.5	10.94
MW-5	9/1994	5-20	12.68
MW-6	9/1994	5-20	10.63
MW-7	6/1997	3.6-13.6	10.11

DTW Depth to Water in Feet

Maximum Contaminant Concentrations

Contaminant	Soil (mg/kg)		Water (ug/L)		WQOs (ug/L)
	Maximum	Post Remediation Sampling 5/2008	Maximum	Latest ¹ 9/1/2009	
TPH-g	5,300 MW-2-5' 12/19/1992	600 SB-MW-2-10'	95,000 MW-2 12/31/1992	86 MW-1	5
Benzene	13 MW-2-5' 12/19/1992	<0.2	10,000 MW-2 12/31/1992	1.3 MW-1	0.15
Toluene	170 MW-2-5' 12/19/1992	4.6 SB-MW-2-10'	10,000 MW-2 3/24/1993	<0.5	42
Ethylbenzene	89 MW-2-5' 12/19/1992	5.5 SB-MW-2-10'	11,000 MW-1 8/18/1994	<0.5	29
Total Xylenes	560 MW-2-5' 12/19/1992	57 SB-MW-2-10'	20,000 MW-2 12/31/1992	<1.5	17
MTBE	NA	<0.2	<250	NA	5
TBA	NA	<2.5	<2,500	NA	12
Naphthalene	NA	4.2 SB-MW-2-10'	NA	NA	21
1,2-DCA	NA	<0.2	<1	NA	0.4

¹ Only wells MW-1 and MW-6 were sampled.
NA Not Analyzed, Not Applicable, or Data Not Available
WQO Water Quality Objectives

Soil Vapor Results (May 15, 2008)

Contaminant	Maximum Vapor Concentrations (ug/m ³)	CHHSLs for Shallow Soil Gas ¹	
		Residential Land Use (ug/m ³)	Commercial Land Use (ug/m ³)
TPH-g	49,000 SVP-4, 5'	NA	NA
Benzene	<32	36.2	122
Toluene	<240	135,000	378,000
Ethylbenzene	<280	Postponed ²	Postponed ²
Total Xylenes	<560	667,500	1,861,900
MTBE	<230	4,000	13,400
TBA	<190	NA	NA
Naphthalene	<52	31.9	106
1,2-DCA	<26	49.6	167

CHHSL California Human Health Screening Levels

NA Not Applicable.

- 1 Soil Gas: Screening levels based on soil gas data collected <1.5 meters (five feet) below a building foundation or the ground surface. Intended for evaluation of potential vapor intrusion into buildings and subsequent impacts to indoor-air. Soil gas data should be collected and evaluated at all sites with significant areas of VOC-impacted soil. Screening levels also apply to sites that overlie plumes of VOC-impacted groundwater.
- 2 Calculation of a screening number for the chemical has been postponed until the toxicity criterion currently being developed by OEHHA is published as a final document.

Site Description

The Site is currently a used car dealership located on an approximately one acre lot at 1449 Grass Valley Highway (Highway 49) in Auburn. The property is bound to the north and west by the Wise Canal, to the east by Highway 49, and to the south by a commercial property. The two former USTs were located near the northeast corner of the Site.

Site History

According to information provided on the Fund claim application, the claimant's family acquired the property in approximately 1962. At that time, the two tanks were operated by a tenant pursuant to a lease agreement established in 1947. The lease agreement was extended until 1974; however, the fuel pumps were removed in 1972 after a fire destroyed a site building. According to the application, everyone assumed that the USTs were closed at that time.

The tanks were discovered in February 1991 and subsequently removed in April 1992. The UST cavities were over excavated in July 1992. The northern most UST was excavated to a depth of approximately 10 feet bgs and the southern most UST cavity was terminated in unweathered bedrock at a depth of 22 feet bgs. A total of approximately 45 cubic yards of impacted soil were removed.

Groundwater monitoring wells MW-1 through MW-4 were installed in December 1992; wells MW-5 and MW-6 were installed in August 1994; and well MW-7 was installed in June 1997. Groundwater monitoring has been conducted quarterly since December 1996.

Remediation Summary

- **Free Product Removal:** Free product has not been detected at the Site.
- **Soil Excavation:** A total of approximately 45 cubic yards of impacted soil were excavated during UST removal and subsequent over excavation activities.
- **In-Situ Soil and Groundwater Remediation:** Oxygen releasing compound (ORC) was injected in the vicinity of monitoring wells MW-1 and MW-6 in March and May 2000. A 48-hour groundwater pump test, utilizing monitoring well MW-4, was conducted in January 2002. A 5-day mobile dual phase extraction (DPE) event was conducted in April 2002. A fixed DPE system was operated from July 2006 through April 2008. DPE resulted in the removal of a total of 459 pounds of vapor phase TPH-g and 1.01 pounds of vapor phase benzene and a total of 0.34 pound of liquid phase TPH-g and 0.003 pounds liquid phase benzene were extracted using the DPE system.

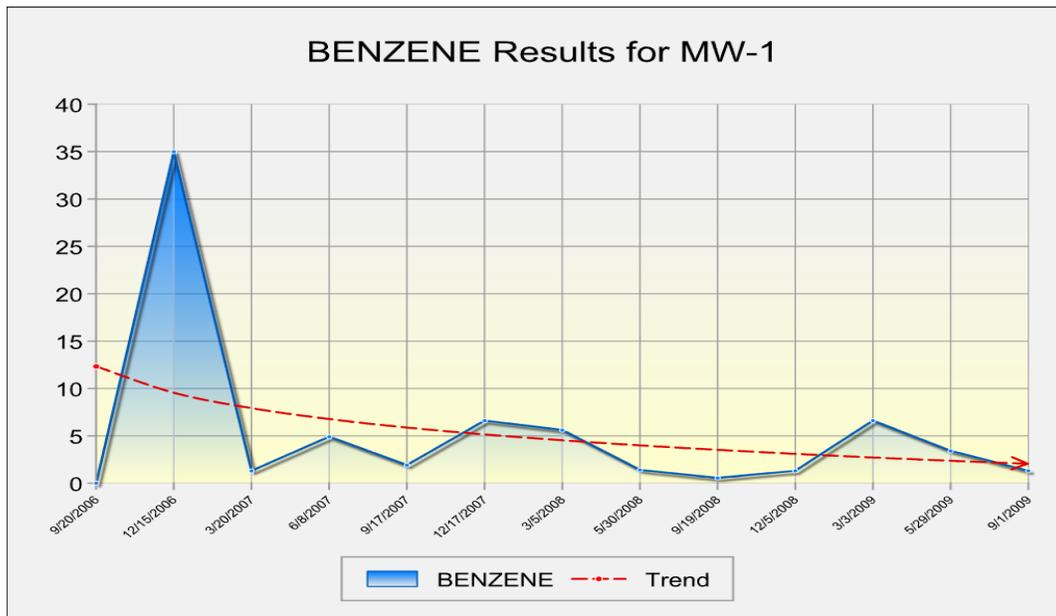
General Site Conditions

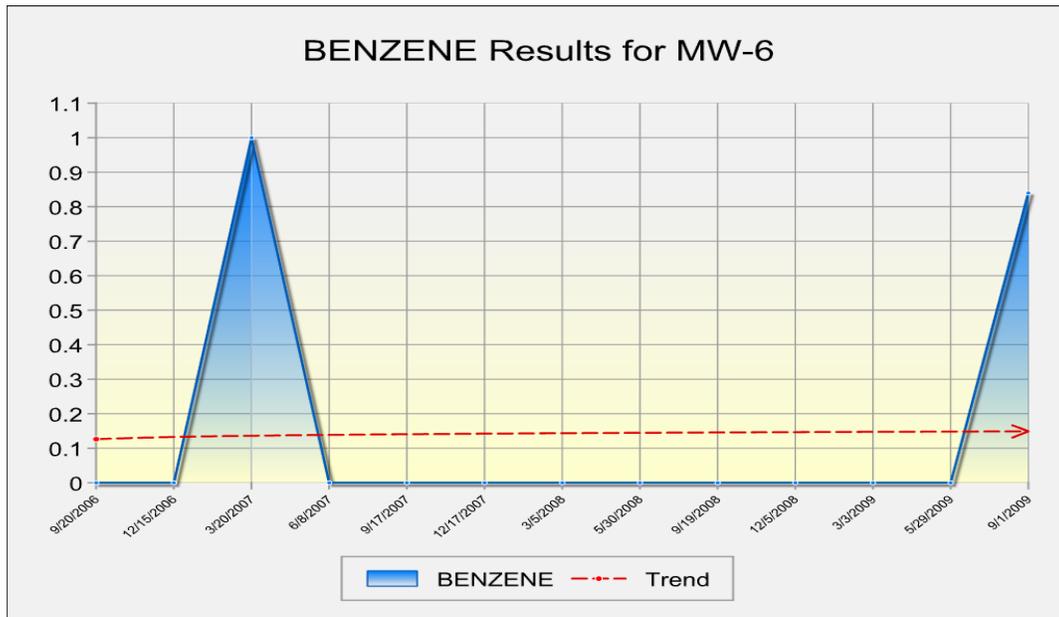
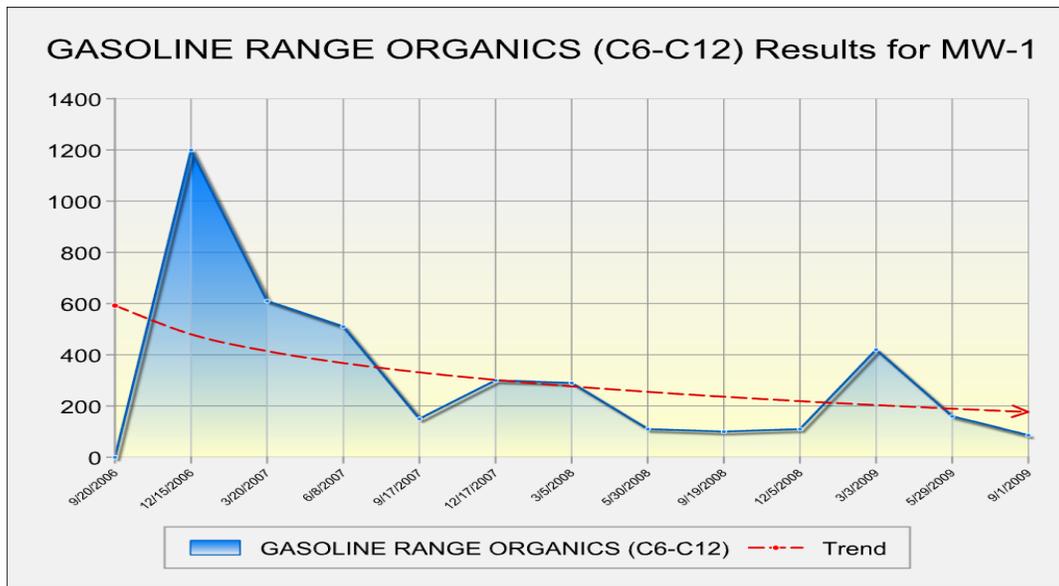
- **Geology and Hydrogeology**

The subsurface consists primarily of weathered and fractured bedrock. According to the November 18, 2005, Remedial Work Plan Addendum prepared by Apex Envirotech, Inc. (Apex), groundwater flow at the Site is primarily through secondary porosity or fractures. Significant volumes of water are found in the fracture and joint sets and weathered bedrock zones at the Site.

- **Groundwater Trends**

Note: Concentrations are in units of ug/l or parts per billion [ppb].





- **Estimate of Remaining Mass**

Apex estimates that approximately 12.3 pounds of residual TPH-g are present in the soil at the Site.

- **Time To Meet Water Quality Objectives**

Based on exponential trend regressions, Apex estimates that the Water Quality Objectives for by TPH-g and benzene in groundwater will be reached by the end of 2015. The Fund manager agrees with their conclusions.

Sensitive Receptor Survey

A sensitive receptor survey (SRS), including a review of information on file with the California Department of Water Resources (DWR) and field reconnaissance activities, was conducted between August and December 2001. The results of the SRS are summarized in the following table provided in the August 28, 2009, No Further Action Request prepared by Apex.

TABLE 5
SENSITIVE RECEPTOR SURVEY DATA
Payne Property
1449 Grass Valley Highway
Auburn, California

Well Plot No.	Well Owner	Date Installed	Section	Type	Total Depth	Screen Interval	Casing	Initial DTW	Static DTW	Well Location
					(feet)	(feet)	(feet)	(feet)		
1	John S. Ceito	7/5/1966	13N8E34	Domestic	140	None	0-60	115	110	1/2 mile from Luther Road on Wesley Lane
2	Bob Cosinero	7/18/1980	12N8E4	Domestic	375	None	0-35	330	---	Edgewood Road Parcel D
3	Bruce R. Macdonald	4/20/1981	12N8E4	Domestic	204	---	0-20	179	170	12746 Manor Drive
4	William Nicholls	5/31/1979	12N8E4	Domestic	154	None	0-40	138	---	Live Oak Lane
5	Phillip Clark	6/14/1988	12N8E4	Domestic	305.0	---	---	---	---	Left of Edgewood Road and left on Blitz Lane at end
6	Neal Snow	10/19/1982	12N8E4	Domestic	300	25-65	0-65	38	25	11600 Edgewood Road
7	V.R. Traynor D.V.M.,	3/1/1977	12N8E4	Domestic	125	40-125	0-125	21	---	1055 Grass Valley Highway
8	Rob Lacayo	4/27/1990	12N8E4	Domestic	250	---	0-55	140	100	Blitz Lane
9	Donald Barnes	6/1/1977	12N8E4	Domestic	305	30-70	0-70	89	70	12135 Holly Vista Way
10	Arnold Lyon	2/20/1970	12N8E4	Domestic	200	None	0-50	60	30	Highway 49 and Luther Road intersection
11	Charles F. Hodges	4/25/1970	12N8E4	Domestic	80	30-60	0-60	35	25	100 feet from Highway 49
12	E.E. Cowperthwaite	6/16/1970	12N8E4	Domestic	78	---	0-15	48	12	200 feet east of Live Oak Lane and 100 feet west of Edgewood Road
13	Bill Merrill	6/19/1966	12N8E4	Municipal	140	None	0-30	50	30	1/2 mile north of Auburn and east of Highway 49 200 feet
14	---	---	---	---	---	---	---	---	---	12025 Holly Vista Way (Located during field reconnaissance)
15	---	---	---	---	---	---	---	---	---	12045 Holly Vista Way (Located during field reconnaissance)
16	Wise Canal	---	---	---	---	---	---	---	---	1449 Highway 49

Notes:
--- - Unknown
DTW - Depth to water

The nearest sensitive receptor is the Wise Canal, which borders the Site to the northwest. Samples collected in March 2004 from up-stream, mid-stream, and down-stream of the Canal did not contain TPH-g, BTEX, or oxygenates above laboratory reporting limits. In a letter dated March 13, 2003, the Regional Board requested that wells identified as 14 and 15 in the above table be sampled. In addition, they requested that a well believed to be located at 5490 Live Oak Lane be sampled. A field reconnaissance conducted in August 2003 determined that the well located at 12045 Holly Vista Way had been properly destroyed and the well identified at 5490 Live Oak Lane did not exist. The well located at 12025 Holly Vista Way was sampled on August 22, 2003. None of the constituents analyzed (TPH-g, TPH-d, BTEX, and MTBE) were detected above laboratory reporting limits.

Risk Evaluation

A Tier 2 Human Health Risk Assessment (HHRA) was conducted using the Risc 4 Model for subsurface vapor intrusion, soil ingestion, and dermal contact. The results were summarized in the December 15, 2008, Apex Human Health Risk Assessment Results Report. Apex concluded that none of the constituents of concern for on-site vapor inhalation exceed the 1-in-1,000,000 risk level or hazard quotient for residential risk levels. The Regional Board issued a letter dated January 8, 2009, stating that, although the results of the completed HHRA indicate that residual hydrocarbons remaining in soil and soil vapor beneath the Site are unlikely to pose a threat to human health, several discrepancies were noted. A modified HHRA was requested. The Regional Board's concerns were addressed in the August 28, 2009, No Further Action Request prepared by Apex. Apex again concluded that none of the constituents of concern for on-site vapor inhalation exceed the 1-in-1,000,000 risk level or hazard quotient for residential risk levels and there is no risk posed to human health from soil ingestion or dermal contact on-site for commercial risk levels and off-site for residential risk levels. The Fund manager concurs with the conclusions of the Apex risk evaluation.

Closure

Does corrective action performed to date 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. If complete removal of detectable traces of petroleum constituents becomes the standard for UST corrective actions, however, the statewide technical and economic implications will be enormous. For example, disposal of soils from comparable areas of excavation throughout the state would greatly impact already limited landfill space. In light of the precedent that would be set by requiring additional excavation 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, but 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 for any other beneficial use currently and it is highly unlikely that the impacted groundwater will be used as a source of drinking water or for any other beneficial use in the foreseeable future.

Will the alternative level of water quality exceed water quality prescribed in applicable Basin Plans? 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 SWRCB 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 has also considered 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

If no, the approximate time period in which the requisite level of water quality will be met:
Expected by the end of 2015.

This is a reasonable period in which to meet the requisite level of water quality because the groundwater plume is stable and degrading, neither current nor anticipated beneficial uses of water are or will be affected, and the remaining petroleum hydrocarbons at the site do not threaten human health, safety or the environment.

Objections to Closure and Response

The Regional Board objects to UST case closure at this time for the following reasons:

- Although petroleum hydrocarbon concentrations in groundwater have dropped, elevated concentrations remain above background levels.
- Public participation and well abandonment have not been conducted.

The Underground Storage Tank (UST) Cleanup Fund manager disagrees that the case cannot be closed at this time. The extent of contamination has been defined, no free phase product has ever been identified, the plume is stable and declining, no current or anticipated beneficial uses are impacted, and finally residual hydrocarbons that remain on the Site do not threaten human health or safety or the environment.

The Fund has conducted public notification and will notify the Placer County Environmental Health Services Department, which has the regulatory responsibility to supervise the abandonment of monitoring wells.

Summary and Conclusion

The Site is currently an active car dealership. The property was acquired by the responsible party's family in 1962. At that time, a tenant operated the two 550-gallon gasoline USTs pursuant to a lease agreement established in 1947. The pumps associated with the USTs were removed in 1972, when a fire destroyed a site building. According to the Fund application, everyone assumed that the USTs were taken out of service at that time. The USTs were discovered in 1991 and removed in April 1992. A total of approximately 45 cubic yards of impacted soil were excavated during UST removal and subsequent over excavation activities.

There are seven groundwater monitoring wells associated with the site. Historically, the highest groundwater concentrations have been detected in monitoring wells MW-1, MW-2, and MW-6. Currently, MW-1 and MW-6 are the only wells with detectable benzene concentrations. The highest benzene and TPH-g concentrations detected during the September 2009 groundwater monitoring event were detected in MW-1 at a concentration of 1.3 ug/L and 86 ug/L, respectively. MTBE has never been detected above laboratory reporting limits. Historical samples collected from a domestic well located within 500 feet of the site and from the Wise Canal located adjacent to the site did not contain petroleum hydrocarbons above laboratory reporting limits.

Remedial activities conducted between April 2002 and April 2008 have reduced soil and groundwater concentrations to the point where natural attenuation is appropriate. The consultant for the site, Apex, anticipates that natural attenuation will reduce TPH-g and benzene concentrations in groundwater to water quality objectives by the end of 2015.

A Tier 2 Human Health Risk Assessment (HHRA), conducted using the Risc 4 model, indicated that none of the constituents of concern for on-site vapor inhalation exceed the 1-in-1,000,000 risk level or hazard quotient for residential risk levels. Furthermore, there is no risk posed to human health from soil ingestion or dermal contact on-site based on commercial risk levels and off-site based on residential risk levels.

Based on available information, the corrective action ensures the protection of human health, safety and the environment and Fund manager recommends that the case be closed.