

# **Final**

**August 10, 2011**

**Review of Leaking Underground  
Storage Tank Cases  
Not in Cleanup Fund and Open  
Over 15 Years**

**Sonoma County Local Oversight Program**

**Prepared as in-kind task as part of Cooperative Agreement  
LS-97952501-2 between U.S. EPA Region 9 and the California State  
Water Resources Control Board**

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## **Executive Summary**

The Draft version of this report was submitted on September 3, 2010, with a request for a follow-up meeting and input from Sonoma County Local Oversight Program (LOP) into the “Next Steps for Agency” column of the case cleanup status spreadsheet.

Sonoma County LOP met with USEPA Region 9 and Sullivan International Group, Inc. in a conference call on June 7, 2011 to discuss the draft report and their next steps for each case. The agency acknowledges several challenges with these cases. The largest challenge that the agency identified are state agencies that lack adequate funding to address their LUST sites.

Additional challenges faced by the agency in bringing these cases to closure include increased levels of hexavalent chromium due to ozone injections at one site, a dispute between potentially responsible parties, and the continued need for site investigations and post-remedial monitoring at several sites. LOP staff also discussed a case where the responsible party (RP) has missed a second deadline and is now out of compliance. The Agency has sent a second warning letter to the RP, to which the RP has not responded, and are considering proceeding with enforcement.

## Sonoma County LOP

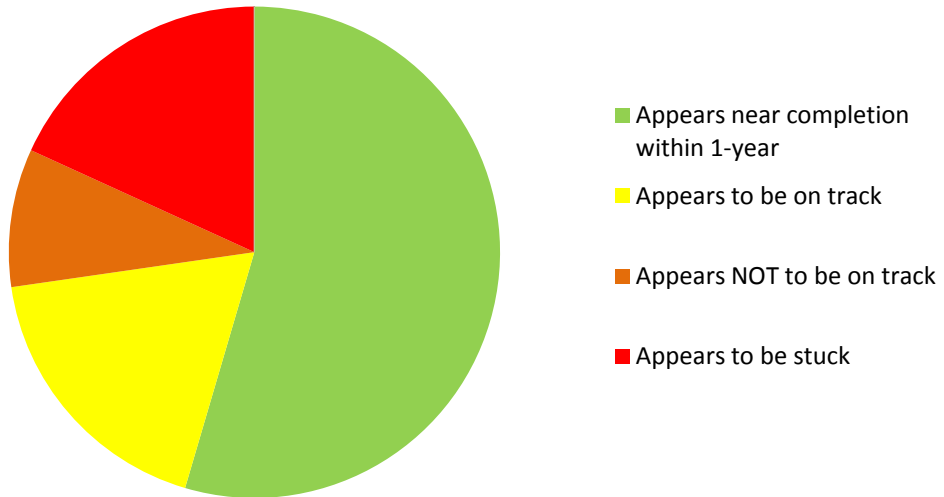
### Apparent Case Status: Initial and After

TOTAL NUMBER OF CASES REVIEWED = 11  
 NUMBER OF ACTIVE LUST CASES ON NOVEMBER 1, 2010 = 184 CASES  
 DRAFT REVIEW REPORT PREPARED AND SENT TO AGENCY ON SEPTEMBER 3, 2010  
 MEETING WITH AGENCY ON JUNE 7, 2011

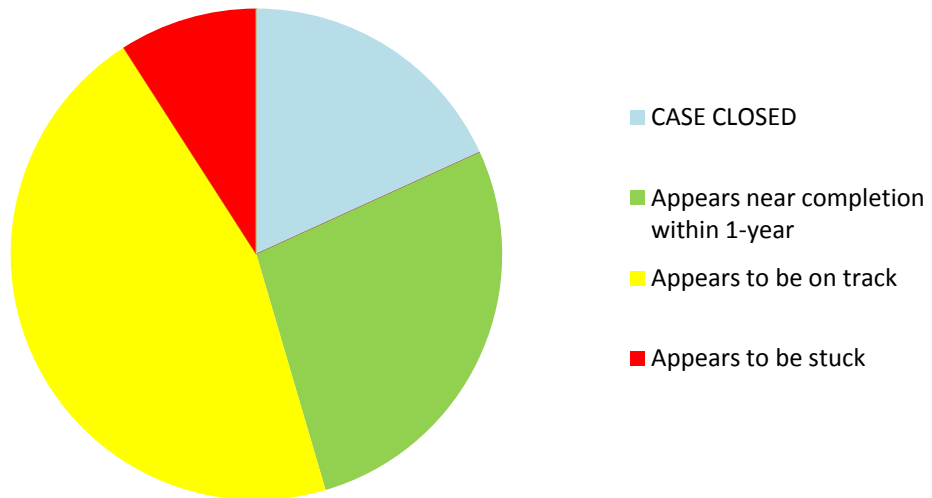
APPARENT STATUS OF CASES REVIEWED – INITIAL REVIEW AND AFTER MEETING TO DISCUSS CASES

Apparent Case Status	Initial Assessment Number of Cases (9-3-2010)	Post Meeting Assessment Number of Cases (06-07-2011)
CASE CLOSED	0	2
Appears close to completion	0	0
Appears near completion within 1-year	6	3
Appears to be on track	2	5
Appears NOT to be on track	1	0
Appears to be stuck	2	1
Unable to determine (Insufficient information in GeoTracker)	0	0
NOT FEDERAL UST CASE	0	0
OTHERS - Not Non-CUF, Older than 15-years Case	0	0

### Initial Assessment Percentage of Cases (9-3-2010)



### Post Meeting Assessment Percentage of Cases (06-07-2011)



CASE REVIEW SUMMARY TABLE  
(SONOMA COUNTY LOP)

ESTIMATED STATUS IN THE CLEANUP PIPELINE?	CHANGE IN STATUS IN THE CLEANUP PIPELINE (BASED ON MEETING/CALL WITH AGENCY) ON 06/07/2011	SITE NAME (CASE LEAD AGENCY: SONOMA COUNTY LOP)	CITY	GLOBAL ID	CASE WORKER	APPARENT TYPE OF RP	RELEASE DATE	DISCUSSION NOTES FROM MEETING/CALL (06-07-2011)	NEXT STEPS FOR AGENCY
Appears near completion within 1-year	Appears near completion within 1-year	Sonoma Developmental Ctr.	Glen Ellen	T0609700929	DB	G - Government Entity (include School, Hospital, Utility)	4/8/1988	Closure is pending monitoring well destruction. Monitoring well destruction will be completed when funding is available, this is expected to occur in FY 2012, or possible FY2013	Complete closure process in 1-year (includes well decommission)
Appears near completion within 1-year	Appears to be on track	CDF - Hilton	Guerneville	T0609700142	DB	G - Government Entity (include School, Hospital, Utility)	5/10/1988	The Regional Board has requested that monitoring wells be installed and sampled at this site. The RP for this site is a state agency and is waiting for the beginning of fiscal year 2012 in order to fund the work. Sampling is to be conducted during the wet season in order to sample when groundwater is at its highest for the year. Case is considered on track but will not be closed within 1 year.	Push for new/additional remedial investigation (RI)/risk assessment
Appears near completion within 1-year	Appears near completion within 1-year	CDF GLEN ELLEN FOREST FIRE STATION	Glen Ellen	T0609700833	DB	G - Government Entity (include School, Hospital, Utility)	5/10/1988	Closure is pending document the uploading of relevant documents to GeoTracker.	Complete closure process in 1-year (includes well decommission)
Appears near completion within 1-year	Case is now Closed	CDF - Healdsburg For.Fire	Healdsburg	T0609700046	DB	G - Government Entity (include School, Hospital, Utility)	5/10/1989	Case Closed as of 4/16/2011	NOT APPLICABLE
Appears near completion within 1-year	Appears near completion within 1-year	Petaluma Maint. Station	Petaluma	T0609700795	DR	G - Government Entity (include School, Hospital, Utility)	11/29/1989	Closure is pending post-remedial monitoring and GeoTracker uploads. Closure is possible within 1 year if funding is provided in FY2012	Complete closure process in 1-year (includes well decommission)
Appears near completion within 1-year	Case is now Closed	Warm Springs Dam Hatchery	Geyserville	T0609700064	CI	G - Government Entity (include School, Hospital, Utility)	4/21/1994	Case closed as of 12/16/2010	NOT APPLICABLE
Appears to be on track	Appears to be on track	Santa Rosa U-Haul Center	Santa Rosa	T0609700082	CI	I - Industry (Railroad, Steel etc)	3/11/1987	A deep investigation has just been conducted at the site. The case remains "On Track"	Continue current remediation until low-risk criteria is met
Appears to be on track	Appears to be on track	Warm Springs Dam	Geyserville	T0609700314	CI	G - Government Entity (include School, Hospital, Utility)	5/8/1989	Verification monitoring continues. Closure will be granted pending future test results and regional board concurrence	Continue verification monitoring and await Regional Board concurrence for closure
Appears NOT to be on track	Appears to be on track	Calif. Hwy. Patrol (frmr)	Santa Rosa	T0609700348	CI	G - Government Entity (include School, Hospital, Utility)	12/3/1991	Remediation was suspended due to increasing concentrations of hexavalent chromium. An alternative remedial strategy will need to be deployed.	Push for new/additional remedial investigation (RI)/risk assessment
Appears to be stuck	Appears to be on track	CITY OF CLOVERDALE ROW	CLOVERDALE	T0609700362	CI	U - Unknown	6/24/1992	Case was delayed by a dispute between potentially responsible parties. ExxonMobil has now accepted responsibility and the case is now moving forward.	Push for new/additional remedial investigation (RI)/risk assessment
Appears to be stuck	Appears to be stuck	Westside Engine & Machine	Santa Rosa	T0609700694	CI	S - Small Private Business	2/9/1993	The responsible party has missed a second deadline and not responded to the Agency's 6/27 enforcement letter. The RP is considered to be out of compliance. The agency is considering proceeding with enforcement	Agency will issue second warning letter and proceed with enforcement if necessary.

## **Attachment 1:**

### **Case Review Power Point Slides from Draft Report**

The contents of this attachment are provided in electronic format only.

## SONOMA DEVELOPMENTAL CTR. (T0609700929)

15000 ARNOLD DR., GLEN ELLEN , CA 95431



Case Age: 22 years  
Primary COC: Gasoline  
RP Identified by Regulator: CALIF. DEPT. OF GENERAL SERVICES, & SONOMA DEVELOPMENTAL CENTER  
Current Land Use: Development center for children with learning disabilities

OPEN - VERIFICATION MONITORING

### CLEANUP OVERSIGHT AGENCIES

SONOMA COUNTY LOP (LEAD) - CASE #: 00001407

CASEWORKER: [DARCY BERING](#) - SUPERVISOR: NONE SPECIFIED

SAN FRANCISCO BAY RWQCB (REGION 2) - CASE #: 49-0166

CASEWORKER: [JOHN JANG](#) - SUPERVISOR: CHUCK HEADLEE

### Possible Reasons Why This Case Is So Old

- No documented investigations or remediation performed at the site prior to 2000 site investigation
- RWQCB has concurred with the LOP's closure decision. Closure summary as been submitted, and the case is in the process of well decommissioning and closure.



NOTE: Data queried from GeoTracker and reviewed in September 2010

## Activities Conducted to Date Based on GeoTracker Info (T0609700929)

### Assessment last 5 years

- Soil Borings advanced 2005
- Periodic groundwater monitoring conducted 2003-2008
- Additional monitoring well installed in 2006

### Remediation last 5 years

- NONE DOCUMENTED

### Assessment older than 5 years

- Soil samples were taken at the time of the 1999 UST removal.
- Site investigation and sensitive receptor survey conducted 2000
- Monitoring wells installed and sampled in 2001
- Periodic groundwater sampling conducted 2003-2008

### Remediation older than 5 years

- 2 USTs removed in 1988
- Additional UST removed in 1999



## **IMPEDIMENTS TO CLOSURE** (T0609700929)

as reported by regulatory agency

### **PROCEDURAL IMPEDIMENTS**

- Monitoring Wells Not Yet Abandoned - *2 of the 4 wells have been destroyed*

### **BENEFITS OF ADDITIONAL WORK**

- Other - *site is in the closure process. Closure concurrence has been granted by the SFBRWQCB*

### **SENSITIVE RECEPTORS LIKELY TO BE IMPACTED AND TIME FRAME FOR IMPACT**

- Domestic Wells Undetermined no wells within 1000' of the site. site is in the closure process

## **Review Conclusions** T0609700929

- Site is in the closure process. The LOP and RWQCB have concurred that closure is appropriate, and 2 of the 4 monitoring wells have been destroyed. Closure will be granted pending the destruction of the remaining 2 wells.
- *Discussion: Closure is pending destruction of the 2 remaining monitoring wells*

## CDF - HILTON (T0609700142)

12604 RIVER RD., GUERNEVILLE, CA 95446



Case Age: 22 years  
Primary COC: DIESEL, GASOLINE  
RP Identified by Regulator: CALIF. DEPT.  
FORESTRY & FIRE, & CALIF. DGS REAL  
ESTATE SERVICES DIV.  
Current Land Use: CDF station

OPEN - SITE ASSESSMENT

### CLEANUP OVERSIGHT AGENCIES

SONOMA COUNTY LOP (LEAD) - CASE #: 00001209

CASEWORKER: [DARCY BERING](#) - SUPERVISOR: NONE SPECIFIED

NORTH COAST RWQCB (REGION 1) - CASE #: 1TSO183

CASEWORKER: [Sonoma County LOP Lead](#) - SUPERVISOR: JOAN FLECK

### Possible Reasons Why This Case Is So Old

- Agency requested information for site closure in September, 2006, response received June 2009.
- July 23, 2009 agency correspondence states primary impediment to closure “declaration that the UST and soil generated during tank removal were properly disposed of”.
- While contamination remains in subsurface, slope and space constraints at the site limit investigation and remedial options. No nearby wells are impacted, regulator has asked for closure documentation.
- Government entity site



NOTE: Data queried from GeoTracker and reviewed in September 2010

## Activities Conducted to Date Based on GeoTracker Info (T0609700142)

### Assessment last 5 years

- Soil boring advanced and monitoring well installed in 2006
- Groundwater investigation conducted 2005. 4 borings were advanced and soil and groundwater samples were taken.

### Remediation last 5 years

- NONE DOCUMENTED

### Assessment older than 5 years

- Nearby water supply wells sampled 1999

### Remediation older than 5 years

- UST removed August 1986

# IMPEDIMENTS TO CLOSURE (T0609700142)

as reported by regulatory agency

## **PROCEDURAL IMPEDIMENTS**

- Other - *Closure report is required to adhere to the NCRWQCB Fact Sheet for closure.*

## **BENEFITS OF ADDITIONAL WORK**

- Other - *closure report that meets NCRWQCB Fact Sheet required*

## **SENSITIVE RECEPTORS LIKELY TO BE IMPACTED AND TIME FRAME FOR IMPACT**

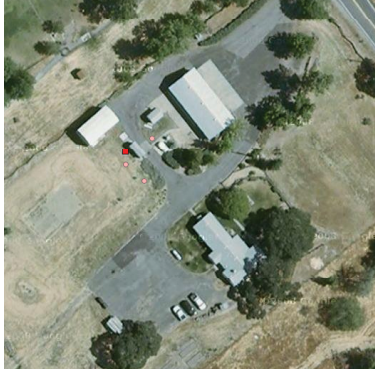
- Groundwater Already Impacted

# Review Conclusions T0609700142

- Additional investigation and remediation at the site is limited due to nearby slopes and space constraints.
- Agency has requested closure documentation in 2006, 2007 and issued a directive letter in July 2009 requesting information or a declaration regarding the disposal of the UST and petroleum impacted soil. The RP has yet to respond to any of these requests.
- No environmental barriers remain to closure. Only the submittal of a Closure Report, and a declaration regarding the final disposition of the UST and contaminated soil are preventing closure.
- 3 existing water supply wells within 400 and 500 feet of the site were sampled in 1999 and all resulted in non-detects for petroleum hydrocarbons and BTEX.
- *Discussion: Case has been stuck for 4 years pending documentation or a declaration regarding the final disposition of the UST and impacted soil. After years the agency should consider issuing a notice of violation and referring case for possible enforcement actions. While this is a government entity, funding does not appear to be an issue as no additional work is required for closure.*

## CDF GLEN ELLEN FOREST FIRE STATION (T0609700833)

14000 SONOMA HWY., GLEN ELLEN, CA 95442



**Case Age: 22 years**  
**Primary COC: Diesel, Gasoline**  
**RP Identified by Regulator: CALIF. DEPT. FORESTRY & FIRE**  
**Current Land Use: CDF Fire Station**

**OPEN - VERIFICATION MONITORING**

### CLEANUP OVERSIGHT AGENCIES

SONOMA COUNTY LOP (**LEAD**) - CASE #: 00001178

CASEWORKER: [DARCY BERING](#) - SUPERVISOR: NONE SPECIFIED

SAN FRANCISCO BAY RWQCB (REGION 2) - CASE #: 49-0066

CASEWORKER: [JOHN JANG](#) - SUPERVISOR: CHUCK HEADLEE

### Possible Reasons Why This Case Is So Old

- Case reported to be 22 years old, but tank removal and sampling conducted in 1998.
- Case has had several periods of inactivity, groundwater monitoring sporadic. December 2009 Sampling Report has not been submitted
- Primary barrier to closure is failure of RP to conduct/submit final monitoring report.
- Government entity site.



NOTE: Data queried from GeoTracker and reviewed in September 2010

## Activities Conducted to Date Based on GeoTracker Info (T0609700833)

### Assessment last 5 years

- Soil sampling of soil disposal area conducted in December 2009
- Groundwater sampling conducted April 2006 and December 2008

### Remediation last 5 years

- NONE DOCUMENTED

### Assessment older than 5 years

- Soil samples taken at time of UST removal in 1998
- 8 soil borings were advanced and 3 monitoring wells were installed and sampled in 2001
- Groundwater appears to have been sampled semi-annually in 2002 and 2003

### Remediation older than 5 years

- USTs removed 1998
- Over excavated soil was aerated on site before being spread over the ground in an area behind the former UST pit

# IMPEDIMENTS TO CLOSURE (T0609700833)

as reported by regulatory agency

## **SITE ASSESSMENT INCOMPLETE**

- Extent of Contamination Has Not Been Determined - *awaiting soil stockpile sampling investigation*

## **BENEFITS OF ADDITIONAL WORK**

- Other - *awaiting a summary report for stockpile area sampling*

## **SENSITIVE RECEPTORS LIKELY TO BE IMPACTED AND TIME FRAME FOR IMPACT**

- Domestic Wells Already Impacted

# Review Conclusions T0609700833

- Contaminants have not been detected above actionable levels since 2002
- Soil from the UST excavation was aerated on site, and eventually spread in a 3" layer at the site without confirmation sampling. In 2009 the area where the soil was spread was sampled for TPH and BTEX.
- A September 2009 directive letter from the regulator required soil sampling and groundwater monitoring be conducted by December 3, 2009. While soil sampling was conducted no documentation regarding the groundwater monitoring has been submitted to GeoTracker
- If the next groundwater sampling event, which is several months overdue, shows no residual groundwater impact, the consultant intends to ask for closure
- Closure review states that domestic wells are already impacted by this site. However, the only nearby well is an abandoned well 150 feet north of the former UST and has never been sampled.
- *Discussion: Current impediment to closure is the failure of the RP to submit, or possibly conduct, the December 2009 groundwater monitoring report. Agency does not appear to be enforcing regulatory requirements for this RP.*

**CDF - HEALDSBURG FOR.FIRE (T0609700046)**  
**17475 FREDSON ROAD, HEALDSBURG , CA 95448**



**Case Age: 21 years**  
**Primary COC: Diesel, Gasoline**  
**RP Identified by Regulator: CALIF. DEPT. FORESTRY & FIRE**  
**Current Land Use: CDF Fire Station**

**OPEN - SITE ASSESSMENT**

**CLEANUP OVERSIGHT AGENCIES**

SONOMA COUNTY LOP (LEAD) - CASE #: 00001197  
 CASEWORKER: DARCY BERING - SUPERVISOR: NONE SPECIFIED  
 NORTH COAST RWQCB (REGION 1) - CASE #: 1TSO071  
 CASEWORKER: [Sonoma County LOP Lead](#) - SUPERVISOR: JOAN FLECK

**Possible Reasons Why This Case Is So Old**

- On site domestic well historically impacted by the release, but has been non-detect since 2008
- A 15 year gap between the installation of the first monitoring wells and the next sampling event in 2004
- Estimated 320 lbs of hydrocarbons remain in subsurface
- Estimated site will reach WQOs in ~ 18 months
- Request for No Further Action submitted July 2010. Denied closure due to a lack of proper documentation for the disposal of the excavated soils, USTs, associated piping, residual fuels in UST, and investigation derived wastes.
- Government entity site



NOTE: Data queried from GeoTracker and reviewed in August 2010

**Activities Conducted to Date Based on GeoTracker Info  
 (T0609700046)**

**Assessment last 5 years**

- Site investigation conducted in 2010. 4 soil borings were advanced
- Periodic groundwater monitoring conducted 2004 to 2010
- Additional Monitoring well installed 2006
- Soil stockpiled during the 1989 UST removal was sampled and disposed of in 2006

**Remediation last 5 years**

- NONE DOCUMENTED

**Assessment older than 5 years**

- Soil Samples were taken at the time of UST removal in 1989
- 3 Monitoring wells were installed in 1989
- Soil Boring advanced 2004
- Additional Monitoring well installed and sensitive receptor survey conducted 2005
- Groundwater monitoring resumed in 2004

**Remediation older than 5 years**

- 2 USTs removed in 1989

# IMPEDIMENTS TO CLOSURE (T0609700046)

as reported by regulatory agency

## **SITE ASSESSMENT INCOMPLETE**

- Extent of Contamination Has Not Been Determined - *Additional investigation is needed in the vicinity of MW-4*

## **GROUNDWATER IMPACTS**

- Groundwater Impacted Above Other Cleanup Goal - *ncrwqcb WQO's*

## **BENEFITS OF ADDITIONAL WORK**

- Protect Existing Water Supply Wells - *Onsite well*

## **SENSITIVE RECEPTORS LIKELY TO BE IMPACTED AND TIME FRAME FOR IMPACT**

- Domestic Wells Undetermined No SCM completed

# Review Conclusions T0609700046

- Site was inactive from 1989 to 2004 when site investigation and monitoring commenced.
- The on-site domestic well has historically been impacted by petroleum hydrocarbons, however, all samples from this well have been non-detect since 2008.
- Soil from the original UST excavation was left on site for 16 years before it was sampled and disposed of.
- Based on contaminant trends groundwater at the site is expected to meet WQOs by December 2011 to January 2012.
- The consultant asked for No Further Action, and the Regulator has denied closure pending submission of requested information, corrections to the No Further Action Report and entering of Lat/Long data into GeoTracker.
- *Discussion: After many years of delay the site now appears to be actively managed and on a path to closure. Should the LOP and RWQCB concur, closure could be granted in the next 6 to 12 months, provided RP fills requested information gaps.*

## PETALUMA MAINT. STATION (T0609700795)

611 PAYRAN ST., PETALUMA , CA 94952



Case Age: 21 years  
Primary COC: Gasoline  
RP Identified by Regulator: Caltrans District 4  
Current Land Use: Caltrans Maintenance Station

OPEN - VERIFICATION MONITORING

### CLEANUP OVERSIGHT AGENCIES

SONOMA COUNTY LOP (LEAD) - CASE #: 00002471

CASEWORKER: DALE RADFORD - SUPERVISOR: NONE SPECIFIED

SAN FRANCISCO BAY RWQCB (REGION 2) - CASE #: 49-0025

CASEWORKER: JOHN JANG - SUPERVISOR: CHUCK HEADLEE

### Possible Reasons Why This Case Is So Old

- Closure denied July 2010, for additional verification monitoring, and until all required documents are uploaded to GeoTracker.
- Government entity site.
- Lack of funding has been an issue with this RP, Several quarterly verification monitoring events have not been performed, and deadlines missed due to a lack of funding.



NOTE: Data queried from GeoTracker and reviewed in September 2010

## Activities Conducted to Date Based on GeoTracker Info (T0609700795)

### Assessment last 5 years

- Groundwater sampling conducted April 2010
- Sporadic groundwater monitoring conducted 2000 to 2007
- A site investigation was conducted in November 2005. 6 soil borings were advanced.
- Monitoring well installed May 2006

### Remediation last 5 years

- ISCO Pilot test conducted June 2008

### Assessment older than 5 years

- Soil samples taken and 3 monitoring wells installed at time of 1989 tank removal
- Groundwater samples taken at time of 2<sup>nd</sup> UST removal in 1999
- Soil and groundwater investigation conducted in 2000; 7 borings were advanced, 2 monitoring wells were installed and a sensitive receptor survey conducted.

### Remediation older than 5 years

- 3 USTs removed from site in 1989. Over-excavation performed at that time.
- 2 additional USTs were removed in 1999



# IMPEDIMENTS TO CLOSURE (T0609700795)

as reported by regulatory agency

## PLUME INSTABILITY

- Verification Monitoring Not Complete –

## PROCEDURAL IMPEDIMENTS

- RP Says They Do Not Have Adequate Funds to Initiate or Continue Work at the Site  
- Site Data And Reports Not Uploaded to GeoTracker –

## BENEFITS OF ADDITIONAL WORK

- Verify Remedial Action Effectiveness -

## SENSITIVE RECEPTORS LIKELY TO BE IMPACTED AND TIME FRAME FOR IMPACT

- Groundwater Already Impacted

# Review Conclusions T0609700795

- Pilot ISCO test conducted in June 2008. After the test the RP was required to perform 4 quarterly monitoring events to evaluate its effectiveness. No monitoring events were conducted until the 2<sup>nd</sup> quarter 2010 due to funding issues.
- Closure was requested in June 2010 and denied in July. The reasons given were a lack of adequate verification monitoring spanning an entire hydrologic cycle, and the failure of the consultant to upload all requested documents to GeoTracker.
- The only remaining CoC that is detectable in groundwater at the site is MTBE. The Consultant has been instructed to only sample for that contaminant in future monitoring events.
- The ISCO pilot test appears to have lowered MTBE contamination by an order of magnitude, and as of April 2010 the site appears to be below MCLs for all contaminants.
- *Discussion: Final impediments to closure for this site appear to be completion of remedial verification monitoring, uploading of required documents to GeoTracker, and proper well abandonment. Site is potentially closable within 1 year if funding is made available for groundwater sampling and well destruction and RP follows through and performs the required work.*

**WARM SPRINGS DAM HATCHERY (T0609700064)**  
3246 SKAGGS SPRINGS RD., GEYSERVILLE, CA 95441



Case Age: 16 years  
Primary COC: Gasoline  
RP Identified by Regulator: US ARMY CORPS OF ENGINEERS – **UNCLAIMED IN GEOTRACKER**  
Current Land Use: FISH HATCHERY

OPEN - VERIFICATION MONITORING

CLEANUP OVERSIGHT AGENCIES

SONOMA COUNTY LOP (LEAD) - CASE #: 00001489  
CASEWORKER: [CLIFF IVES](#) - SUPERVISOR: NONE SPECIFIED

NORTH COAST RWQCB (REGION 1) - CASE #: 1TS0091  
CASEWORKER: [Sonoma County LOP Lead](#) - SUPERVISOR: JOAN FLECK

**Possible Reasons Why This Case Is So Old**

- No further action required after ~ 1995, the site was not closed due to its association with the LUFT case at the Dam Headquarters.
- Site is now being considered for closure. Closure is pending documentation of the proper disposal of the USTs, investigation derived waste and soil, as well as the submission of a URF.
- This information has been requested three times since December 2009.
- Government entity site



NOTE: Data queried from GeoTracker and reviewed in September 2010

**Activities Conducted to Date Based on GeoTracker Info  
(T0609700064)**

<p><b><u>Assessment last 5 years</u></b></p> <ul style="list-style-type: none"><li>• NONE DOCUMENTED</li></ul>	<p><b><u>Remediation last 5 years</u></b></p> <ul style="list-style-type: none"><li>• NONE DOCUMENTED</li></ul>
<p><b><u>Assessment older than 5 years</u></b></p> <ul style="list-style-type: none"><li>• Samples taken at the time of UST removal.</li><li>• Investigation conducted in 1994</li></ul>	<p><b><u>Remediation older than 5 years</u></b></p> <ul style="list-style-type: none"><li>• USTs removed in April 1994</li></ul>

## **IMPEDIMENTS TO CLOSURE** (T0609700064)

as reported by regulatory agency

### **PROCEDURAL IMPEDIMENTS**

- Other - *Waste Material disposal receipts and URF has not been filed.*

### **BENEFITS OF ADDITIONAL WORK**

- Other - *RCRA compliance for waste disposal*

### **SENSITIVE RECEPTORS LIKELY TO BE IMPACTED AND TIME FRAME FOR IMPACT**

- Surface Water (Bay, Estuary, Stream, Lake) Undetermined Impact is not anticipated

## **Review Conclusions** T0609700064

- Site presents no danger to human health or the environment, and No Further Action was granted 15 years ago.
- If proper documentation of the disposal of the soil, USTs and investigation derived wastes cannot be located, a declaration that these items have been improperly disposed of may be considered?
- The only barriers to closure are procedural, and the non-compliance of the RP for the submission of the required documentation or declarations.
- *Discussion: Site is closable within one year if RP will respond to the regulator's requests. Consider enforcement if no reply.*

**SANTA ROSA U-HAUL CENTER (T0609700082)**  
**3601 SANTA ROSA AVE., SANTA ROSA , CA 95407**



**Case Age: 23 years**  
**Primary COC: GASOLINE, WASTE OIL / MOTOR / HYDRAULIC / LUBRICATING**  
**RP Identified by Regulator: U-HAUL OF SAN FRANCISCO , and AMERCO REAL ESTATE COMPANY**

**Possible Reasons Why This Case Is So Old**

- Air sparging shut down February 2010 due to change in consultants. The system restarted June 2010.
- 12 production wells are located within an approximate 750 foot radius of the site. One on-site production well discovered in 2008, and impacted with MTBE in excess of MCLs when sampled at a depth of 132 feet. The well was destroyed and the Agency requested an investigation of contaminants in the deeper water bearing zone. August 2010, consultant submitted investigation of nearby water supply wells. Of the 11 nearby wells, 5 were sampled, one had detectable levels of TPHd. A second round of testing detected no contaminants.
- RWQCB MCLs for groundwater are still exceeded for TPHg, TPHd and Benzene
- Gaps in gw monitoring occurred in 1993, and 1996-1999
- The 15,000 gallon gasoline UST reported leaking in 1989, but the UST was repaired and not removed until 1993

**OPEN - REMEDIATION**

**CLEANUP OVERSIGHT AGENCIES**  
SONOMA COUNTY LOP (LEAD) - CASE #: 00002091  
CASEWORKER: [CLIFF IVES](#) - SUPERVISOR: NONE SPECIFIED  
NORTH COAST RWQCB (REGION 1) - CASE #: 1TSO112  
CASEWORKER: [Sonoma County LOP Lead](#) - SUPERVISOR: JOAN FLECK

NOTE: Data queried from GeoTracker and reviewed in September 2010

**Activities Conducted to Date Based on GeoTracker Info (T0609700082)**

**Assessment last 5 years**

- Water supply well sampling conducted in June/July 2010
- Semi-annual groundwater monitoring is ongoing
- Sensitive receptor survey conducted 2008

**Remediation last 5 years**

- Air sparging conducted at site 2007 to 2010, and resumed in June of 2010. Once approval is granted by the RWQCB this will be converted into an ozone sparging system.
- Remedial pilot study using in-situ chemical oxidation by ozone infiltration conducted 2005

**Assessment older than 5 years**

- 4 soil borings were advanced in 1988, 3 of these were converted to monitoring wells
- Shallow vapor gas survey conducted 1988
- Monitoring well installed 1989
- Preliminary site assessment conducted 1990, 4 soil borings advanced, 2 monitoring wells installed.
- 1991 Soil gas survey conducted
- Second phase site assessment conducted 1992
- Confirmation samples taken at time of waste oil UST over excavation in 1994
- Groundwater monitoring conducted 1991 – 1992, 1994 -1996 and 1999 to present.

**Remediation older than 5 years**

- Waste Oil UST removed and over-excavation performed 1987
- Interim free product recovery system installed 1991
- Gasoline and Diesel USTs removed in 1993, over excavation performed
- Over-excavation of waste oil tank pit conducted 1994

# IMPEDIMENTS TO CLOSURE (T0609700082)

as reported by regulatory agency

## WELL IMPACTS

- Domestic Wells Impacted - *Onsite MTBE impact*

## BENEFITS OF ADDITIONAL WORK

- Restore Beneficial Uses - *Onsite well MTBE impact*

## SENSITIVE RECEPTORS LIKELY TO BE IMPACTED AND TIME FRAME FOR IMPACT

- Domestic Wells Already Impacted Onsite well MTBE impact

# Review Conclusions T0609700082

- Site has been managed and monitored since 1987.
- Remediation has resumed as of June 2010.
- At least 1 production well has been impacted and 12 more are located within 750' of the site.
- Regulator has requested an investigation of MTBE impacts on the deeper aquifer which supplies drinking water to nearby residences and businesses.
- Ozone sparging has been delayed for years pending approval from the RWQCB
- Nearby water supply wells were sampled in June/July 2010. Permission for sampling only granted for 5 of the 11 nearby wells. The sampled wells do not appear to be impacted at this time
- *Discussion: Site appears to be on track towards closure, however, without data regarding the deeper aquifer available in GeoTracker it is unclear what the time frame for closure will be.*

**WARM SPRINGS DAM (T0609700314)**  
 3333 SKAGGS SPRINGS RD., GEYSERVILLE, CA 95441



**Case Age: 21 years**  
**Primary COC: DIESEL, GASOLINE, WASTE OIL / MOTOR / HYDRAULIC / LUBRICATING**  
**RP Identified by Regulator: US ARMY CORPS OF ENGINEERS**  
**Current Land Use: Warm Springs Dam Headquarters**

**OPEN - REMEDIATION**

CLEANUP OVERSIGHT AGENCIES  
 SONOMA COUNTY LOP (**LEAD**) - CASE #: 00002120  
 CASEWORKER: **CLIFF IVES** - SUPERVISOR: NONE SPECIFIED  
 NORTH COAST RWQCB (REGION 1) - CASE #: 1TSO437  
 CASEWORKER: **Sonoma County LOP Lead** - SUPERVISOR: **JOAN FLECK**

**Possible Reasons Why This Case Is So Old**

- Site has historically had free product and dissolved phase TPH-GRO high as 280,000 µg/L
- The pace of site investigation sporadic with multi year gaps between site activities.
- Government entity site
- Site consultant proposed MNA as preferred remedial approach.
- At current rates of attenuation TPH-GRO is expected to reach the NCRWQCB WQO of 5 µg/L in January 2025

ACTION TYPE	ACTION DATE	ACTION
ENFORCEMENT/ORDERS	7/31/2009	Staff Letter
ENFORCEMENT/ORDERS	9/22/2008	Staff Letter
RESPONSE - REPORTS	*11/22/2008	Soil and Water Investigation Report
ENFORCEMENT/ORDERS	4/14/2004	13267 Monitoring Program
CLEANUP ACTION	5/2/2003	Excavate and Dispose
LEAK ACTION	5/8/1999	Leak Reported
LEAK ACTION	5/8/1989	Leak Discovery

NOTE: Data queried from GeoTracker and reviewed in September 2010

**Activities Conducted to Date Based on GeoTracker Info (T0609700314)**

<p><b><u>Assessment last 5 years</u></b></p> <ul style="list-style-type: none"> <li>• 2 borings were advanced, and one groundwater monitoring well installed 2008</li> <li>• 4 quarterly monitoring events conducted 2008 to 2009</li> </ul>	<p><b><u>Remediation last 5 years</u></b></p> <ul style="list-style-type: none"> <li>• NONE DOCUMENTED</li> </ul>
<p><b><u>Assessment older than 5 years</u></b></p> <ul style="list-style-type: none"> <li>• Soil samples taken in 1991 at time of UST removal</li> <li>• Soil borings advanced down-gradient of former USTs. Free product observed 1998</li> <li>• 10 additional borings advanced and 2 converted to monitoring wells in 1999</li> <li>• 4 Monitoring wells were installed in 2000</li> <li>• 2 Monitoring wells advanced in 2001</li> <li>• 2 monitoring wells were replaced in 2003, but not sampled</li> </ul>	<p><b><u>Remediation older than 5 years</u></b></p> <ul style="list-style-type: none"> <li>• UST removed 1989</li> <li>• 2 USTs removed in 1991. No over-excavation conducted</li> <li>• 1400 cubic yards of soil excavated from site in 2003</li> </ul>

## **IMPEDIMENTS TO CLOSURE** (T0609700314)

as reported by regulatory agency

### **PLUME INSTABILITY**

- Verification Monitoring Not Complete - *Further sampling is required.*

### **GROUNDWATER IMPACTS**

- Groundwater Impacted Above Other Cleanup Goal - *MCLs exceeded. Trend analysis is needed.*

### **BENEFITS OF ADDITIONAL WORK**

- Verify Remedial Action Effectiveness - *Further sampling is required.*
- Protect Existing Water Supply Wells - *Water supply well are reported in the area*

### **SENSITIVE RECEPTORS LIKELY TO BE IMPACTED AND TIME FRAME FOR IMPACT**

- Groundwater Already Impacted Further sampling is required.

## **Review Conclusions** T0609700314

- TPH-GRO has fallen from a high of 280,000 µg/L to 2700 µg/L, however, it is not expected to meet WQOs via natural attenuation until 2025
- No Fuel oxygenates or lead scavengers have been detected in the monitoring wells
- *Discussion: Site has been largely idle since it was first reported. Consultant is now proposing leaving the case open under annual groundwater monitoring for potentially another 15 years. Have any remedial alternatives been explored? Is 15 years of monitored attenuation cost effective?*

**CALIF. HWY. PATROL (FRMR) (T0609700348)**  
 3854 SANTA ROSA AVE., SANTA ROSA, CA 95402



Case Age: 19 years  
 Primary COC: Gasoline  
 RP Identified by Regulator: Susan Fanali, CHP  
 Facilities Section, and Calif. DGS Real Estate  
 Services Div.  
 Current Land Use: Car Rental Facility

**OPEN - REMEDIATION**

**CLEANUP OVERSIGHT AGENCIES**  
 SONOMA COUNTY LOP (LEAD) - CASE #: 00001063  
 CASEWORKER: CLIFF IVES - SUPERVISOR: NONE SPECIFIED  
 NORTH COAST RWQCB (REGION 1) - CASE #: 1TS0488  
 CASEWORKER: Sonoma County LOP Lead - SUPERVISOR: JOAN FLECK

**Possible Reasons Why This Case Is So Old**

- Ozone sparging halted in April 2009. The regulator extended the deadline for the resumption of ozone sparging to Sept. 30, 2010. While data from a July 2010 sampling event has been uploaded to GeoTracker, no report has been submitted
- Nearby domestic wells are impacted by MTBE, it is unclear whether this site is the source of contamination due to a number of other LUST sites in the vicinity
- Government entity site, funding and regulation issues?



NOTE: Data queried from GeoTracker and reviewed in September 2010

**Activities Conducted to Date Based on GeoTracker Info  
 (T0609700348)**

<p><b><u>Assessment last 5 years</u></b></p> <ul style="list-style-type: none"> <li>• Periodic groundwater monitoring conducted from 2006 to 2009.</li> <li>• Groundwater sampling conducted July 2010</li> </ul>	<p><b><u>Remediation last 5 years</u></b></p> <ul style="list-style-type: none"> <li>• Ozone sparging system operated at site from July 2008 until April 2009 (The regulator has ordered the system restarted by Sept. 30, 2010)</li> </ul>
<p><b><u>Assessment older than 5 years</u></b></p> <ul style="list-style-type: none"> <li>• Soil samples taken at the time of UST removal in 1991</li> <li>• 3 Monitoring wells installed 1992</li> <li>• 4 Monitoring wells installed 1994</li> <li>• Groundwater sampling conducted in 2000</li> </ul>	<p><b><u>Remediation older than 5 years</u></b></p> <ul style="list-style-type: none"> <li>• UST removed 1991</li> </ul>



## **IMPEDIMENTS TO CLOSURE** (T0609700348)

as reported by regulatory agency

### **GROUNDWATER IMPACTS**

- Groundwater Impacted Above Other Cleanup Goal - *TPHg 5100 ppb, benzene 48 ppb (7/23/09)*
- Groundwater Will Not Meet Relevant WQOs Before the Beneficial Use of the Groundwater is Needed - *GW exceeds WQOs with domestic water wells onsite and in the area*

### **BENEFITS OF ADDITIONAL WORK**

- Protect Existing Water Supply Wells - *GW exceeds WQOs with domestic water wells onsite and in the area*

### **SENSITIVE RECEPTORS LIKELY TO BE IMPACTED AND TIME FRAME FOR IMPACT**

- Groundwater Already Impacted TPHg 5100 ppb, benzene 48 ppb (7/23/09)

## **Review Conclusions** T0609700348

- Site work was sporadic prior to 2005 when periodic groundwater monitoring was implemented.
- Ozone sparging was shut down in April 2009 after less than an year of operation. During operation an increase in dissolved metals and other naturally occurring contaminants was observed in monitoring wells located near the ozone sparging point.
- The restart of the ozone sparging has been delayed. Most recently the deadline for the startup report was extended to September 30, 2010, and the RP is now required to sample the monitoring wells monthly for naturally occurring contaminants that may be mobilized by the ozone injection.
- Site activity appear set to restart, and the case may start moving towards closure. However, once active remediation begins again, it will take months to years of sparging to reduce contamination to acceptable levels and an additional year to two of verification monitoring to achieve closure.
- *Discussion: RP is Government Entity, has funding been an issue? Site activity may restart in the next month, however, there were gaps in activity between 1994 and 2000, 2000 and 2005 and 2009 to present. Gaps in activity have resulted in this case stretching out for more years than normally necessary to achieve cleanup and closure.*

**CITY OF CLOVERDALE ROW (T0609700362)**  
**132 CLOVERDALE BLVD, S. CLOVERDALE, CA 95425**



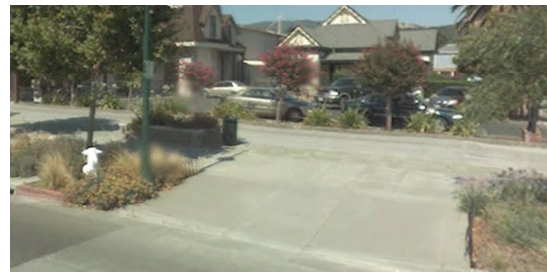
**Case Age: 18 years**  
**Primary COC: Gasoline**  
**RP Identified by Regulator: CALTRANS District 4, and City of Cloverdale, Most recently the regulator has named ExxonMobile as a potentially responsible party – UNCLAIMED IN GEOTRACKER**  
**Current Land Use: Sidewalk/Public right of way**

**Possible Reasons Why This Case Is So Old**

- USTs first suspected of a release in 1991 due to hydrocarbon detections in down-gradient wells at a separate site.
- The initially identified RP disputed his responsibility in the release, and was finally deleted as the RP in GeoTracker in August 2010. The City of Cloverdale, and CalTrans continued to dispute responsibility until present. In August 2010, Exxon/Mobile was also named a potential responsible party.
- USTs were not removed until 2003. Hydrocarbons were detected in the soil at that time. Oversight was transferred from the RWQCB to Sonoma county in 2005. However, no additional assessment has been conducted to date, and no additional activity was documented in GeoTracker until 2008. A preliminary site assessment has been requested, however, the deadline for this report has been continuously extended as the dispute over which party is responsible has progressed.
- Government entity site

*OPEN - SITE ASSESSMENT*

CLEANUP OVERSIGHT AGENCIES  
 SONOMA COUNTY LOP (LEAD) - CASE #: 00027298  
 CASEWORKER: [CLIFF IVES](#) - SUPERVISOR: NONE SPECIFIED  
 NORTH COAST RWQCB (REGION 1) - CASE #: 1TSO510  
 CASEWORKER: [Sonoma County LOP Lead](#) - SUPERVISOR: JOAN FLECK



NOTE: Data queried from GeoTracker and reviewed in September 2010

**Activities Conducted to Date Based on GeoTracker Info (T0609700362)**

<p><b><u>Assessment last 5 years</u></b></p> <ul style="list-style-type: none"> <li>• NONE DOCUMENTED</li> </ul>	<p><b><u>Remediation last 5 years</u></b></p> <ul style="list-style-type: none"> <li>• NONE DOCUMENTED</li> </ul>
<p><b><u>Assessment older than 5 years</u></b></p> <ul style="list-style-type: none"> <li>• Soil samples take at time of 2003 UST removal</li> </ul>	<p><b><u>Remediation older than 5 years</u></b></p> <ul style="list-style-type: none"> <li>• 3 USTs removed from right of way adjacent to site address in 2003. (These USTs had previously been abandoned in place by being partially filled with sand, and had not been in used for approximately 20 years at that time)</li> </ul>

# IMPEDIMENTS TO CLOSURE (T0609700362)

as reported by regulatory agency

## **SITE ASSESSMENT INCOMPLETE**

- Pollutant Sources Have Not Been Adequately Identified or Evaluated - *PSA required*
- Extent of Contamination Has Not Been Determined - *PSA required*
- Potential Risks, Threats, And Other Environmental Concerns Have Not Been Adequately Identified And Assessed - *PSA required*
- Sensitive Receptor Survey Has Not Been Completed - *PSA required*

## **BENEFITS OF ADDITIONAL WORK**

- Complete CSM and Our Understanding of Hydrogeologic Regime and Fate and Transport of Contaminants - *PSA required*

## **SENSITIVE RECEPTORS LIKELY TO BE IMPACTED AND TIME FRAME FOR IMPACT**

- Groundwater Already Impacted Plume reported in dg MW installed for adjacent site

# Review Conclusions T0609700362

- Site was first suspected of a release in 1991 due to the presence of petroleum hydrocarbons in a down-gradient monitoring well associated with an adjacent LUST site.
- Tanks were removed in 2003 by the City of Cloverdale.
- No assessment has been conducted beyond the initial tank removal and sampling due to a protracted dispute over responsibility for the cleanup between CalTrans, The City of Cloverdale, and the adjacent property owner. Most recently the regulator named Exxon/Mobile as the Potentially Responsible Party and has given them until September 17, 2010 to respond. The deadline for the Preliminary Site Assessment has once again been extended and the new deadline is in November 2010. It is expected that this deadline will once again be extended if Exxon/Mobile refutes their designation as responsible party.
- *Discussion: While the dispute over responsibility for this site has continued, no additional work has been performed. It has now been 7 years since any site activity. Government entity may indicate funding issues and issues with agency taking enforcement actions. Case appears stuck.*

# WESTSIDE ENGINE & MACHINE (T0609700694)

12 3RD ST W SANTA ROSA, CA 95401



Case Age: 17 years

Primary COC: Gasoline

RP Identified by Regulator: Westside Engine & Machine, and Ronald C. Rosetti

Current Land Use: Auto Service

### Possible Reasons Why This Case Is So Old

- Regulator repeatedly requested a preliminary site assessment since 1993, however, the RP only submitted a work plan for this work in October 2008.
- Regulator referred site to RWQCB for enforcement 2005.
- Regulator began referral to the District Attorney's office for enforcement in April of 2007. At that time 8 directive letters had been sent to RP requesting a PSA in 14 years.
- A preliminary site assessment report was finally submitted in January 2009, however, neither the report or any workplans have been uploaded to GeoTracker
- Most recently in Oct. 2009 a work plan for a Soil and Groundwater Investigation was denied for gross deficiencies. The due date for the submittal of the work plan was subsequently extended to July 2010.
- To date, documents or data of any type have ever been submitted to GeoTracker by the RP or their consultants.

### OPEN - SITE ASSESSMENT

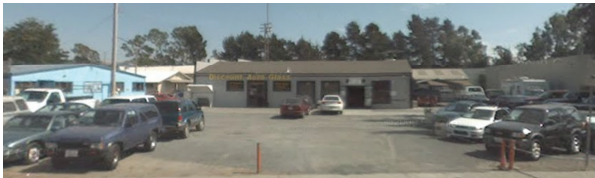
#### CLEANUP OVERSIGHT AGENCIES

SONOMA COUNTY LOP (LEAD) - CASE #: 00014351

CASEWORKER: CLIFF IVES - SUPERVISOR: NONE SPECIFIED

NORTH COAST RWQCB (REGION 1) - CASE #: 1TSR244

CASEWORKER: Sonoma County LOP Lead - SUPERVISOR: JOAN FLECK



NOTE: Data queried from GeoTracker and reviewed in September 2010

## Activities Conducted to Date Based on GeoTracker Info (T0609700694)

### Assessment last 5 years

- NONE DOCUMENTED

### Remediation last 5 years

- NONE DOCUMENTED

### Assessment older than 5 years

- Samples taken at time of UST removal

### Remediation older than 5 years

- UST removed in 1992

## **IMPEDIMENTS TO CLOSURE** (T0609700694)

as reported by regulatory agency

### **SITE ASSESSMENT INCOMPLETE**

- Pollutant Sources Have Not Been Adequately Identified or Evaluated - *First PSA investigation results inconclusive because of on-site equipment malfunction.*
- Extent of Contamination Has Not Been Determined - *Second PSA to confirm data is required. Work Plan submitted Sept, 2009.*
- Sensitive Receptor Survey Has Not Been Completed - *Not yet completed*

### **BENEFITS OF ADDITIONAL WORK**

- Groundwater Impacted Above Background - *sample results require verification sampling*

### **SENSITIVE RECEPTORS LIKELY TO BE IMPACTED AND TIME FRAME FOR IMPACT**

- Groundwater Undetermined grab sample from one boring show up to 4900ppb TPHG

## **Review Conclusions** T0609700694

- Recalcitrant RP took 16 years to respond to repeated requests for a preliminary site assessment.
- Regulator began referral proceedings to the DA after 14 years of inactivity.
- RP responded with a minimal amount of work that has never been uploaded to GeoTracker and submitted a deficient workplan.
- RP is once again late on submitting a requested workplan which was due July 6, 2010
- *Discussion: RP has shown a consistent pattern of non-compliance over a period of 17 years, however, it appears that only Notices of Pending Enforcement Action or similar letters have been issued and not one actual Notice of Violation or other action taken. The RP is again in Violation and no enforcement actions appear to have been taken to date. No reasonable estimate on how long this case will take to close can be made on the available information. Case is stuck. Consider transferring to RWQCB for oversight and enforcement?*