Final
May 11, 2011

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

San Diego Regional Water Quality Control Board

Prepared as in-kind task as part of Cooperative Agreement LS-96934701-1
between U.S. EPA Region 9 and the California State Water Resources
Control Board
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1. T0607302833 (TEXACO USA (TERMINAL))
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4. T0607300836 (CUNOCAR ACCOUNTING SERVICE)
5. T0607301751 (SAN DIEGO EQUIPMENT RENTALS)
Executive Summary

The Draft version of this report was submitted on May 26, 2010, with a request for a follow-up meeting and input from San Diego Regional Water Quality Control Board (RWQCB) into the “Next Steps for Agency” column of the case cleanup status spreadsheet. The initial report detailed five leaking underground storage tank (LUFT) cases under the oversight of the San Diego RWQCB which were older than 15 years old, and were not enrolled in the Cleanup Fund (CUF). Since the report was issued, San Diego RWQCB has closed 1 case, updated 2 cases with (CUF) data, removing them from the scope of this report, and corrected one case so that it correctly shows up as part of the Cleanup Program. Because only one San Diego RWQCB case remains that is not in the CUF and older than 15 years from the original report, a follow up meeting was not held.
**Apparent Case Status: Initial and After**

TOTAL NUMBER OF CASES REVIEWED = 5
NUMBER OF ACTIVE LUST CASES ON NOVEMBER 1, 2010 = 54 CASES
DRAFT REVIEW REPORT PREPARED AND SENT TO AGENCY ON May 26, 2010
Follow Up Review May 4, 2011

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

<table>
<thead>
<tr>
<th>Apparent Case Status</th>
<th>Initial Assessment Number of Cases (5-26-2010)</th>
<th>Follow Up Assessment Number of Cases (05-04-2011)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CASE CLOSED</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Appears close to completion</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Appears near completion within 1-year</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Appears to be on track</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Appears NOT to be on track</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Appears to be stuck</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Unable to determine (Insufficient information in GeoTracker)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>NOT FEDERAL UST CASE</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>OTHERS - Not Non-CUF, Older than 15-years Case</td>
<td>0</td>
<td>2</td>
</tr>
</tbody>
</table>
Final Review of LUST Cases, Not in the CUF and Over 15 Year, San Diego RWQCB

Initial Assessment Percentage of Cases (5-26-2010)
- Appears to be on track: 20%
- Appears NOT to be on track: 40%
- Appears to be stuck: 40%

Follow Up Assessment Percentage of Cases (05-04-2011)
- CASE CLOSED: 20%
- Appears NOT to be on track: 40%
- NOT FEDERAL UST CASE: 20%
- OTHERS - Not Non-CUF, Older than 15-years Case: 20%
<table>
<thead>
<tr>
<th>ESTIMATED STATUS IN THE CLEANUP PIPELINE?</th>
<th>CHANGE IN STATUS IN THE CLEANUP PIPELINE (BASED ON A REVIEW OF CASES 01-04-2011)</th>
<th>SITE NAME / LEAD AGENCY; SAN DIEGO RWQCB - REGION 9</th>
<th>GLOBAL ID</th>
<th>CASE WORKER</th>
<th>APPARENT TYPE OF RP</th>
<th>RELEASE DATE</th>
<th>NEXT STEPS FOR AGENCY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appears to be on track</td>
<td>OTHER - Case is now entered as a Cleanup Program Site</td>
<td>TEXACO USA (TERMINAL)</td>
<td>T0607302833</td>
<td>SM</td>
<td>Z - Major Oil Company</td>
<td>7/1/1986</td>
<td>No next steps Under the LUST program.</td>
</tr>
<tr>
<td>Appears NOT to be on track</td>
<td>OTHER - Case is now entered in Cleanup Fund</td>
<td>WESTERN FLIGHT INC.</td>
<td>T0607300994</td>
<td>MT</td>
<td>I - Industry (Railroad, Steel etc)</td>
<td>2/26/1992</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Appears NOT to be on track</td>
<td>Appears NOT to be on track</td>
<td>PARSLEY-KENNEDY INC</td>
<td>T0607301327</td>
<td>SJP</td>
<td>O - Other (Individual, Homes etc)</td>
<td>11/10/1993</td>
<td>Push for additional/alternate remediation (current remediation ineffective)</td>
</tr>
<tr>
<td>Appears to be stuck</td>
<td>OTHER - Case is now entered in Cleanup Fund</td>
<td>CUNOCAR ACCOUNTING SERVICE</td>
<td>T0607300836</td>
<td>KK</td>
<td>O - Other (Individual, Homes etc)</td>
<td>10/1/1991</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Appears to be stuck</td>
<td>CASE CLOSED as of 3/24/2011</td>
<td>SAN DIEGO EQUIPMENT RENTALS</td>
<td>T0607301751</td>
<td>SM</td>
<td>O - Other (Individual, Homes etc)</td>
<td>1/24/1995</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>
Attachment 1:

Case Review Power Point Slides from Draft Report

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

1. T0607302833 (TEXACO USA (TERMINAL))
2. T0607300994 (WESTERN FLIGHT INC.)
3. T0607301327 (PARSLEY-KENNEDY INC)
4. T0607300836 (CUNOCAR ACCOUNTING SERVICE)
5. T0607301751 (SAN DIEGO EQUIPMENT RENTALS)
TEXACO USA (TERMINAL) (T0607302833)
9966 SAN DIEGO MISSION RD, SAN DIEGO, CA 92108-1721

Case Age: 24 Years
Primary CoC: GASOLINE
RP Identified by Regulator: Texaco Refining & Marketing, and Southern Pacific Pipeline Prtn.
Current Land Use: Bulk Fuel Terminal

Possible Reasons Why This Case Is So Old

• Case is managed in conjunction with Mission Valley Terminal Site. Closure will not be granted until both sites are ready.
• Case transferred to RB only in 2007. Only document uploaded to Geotracker is the Case Transfer Letter and no ESI submittals or documents.

Activities Conducted to Date Based on Geotracker Info T0607302833

- Assessment last 5 years: NONE DOCUMENTED
- Remediation last 5 years: NONE DOCUMENTED
- Assessment older than 5 years: NONE DOCUMENTED
- Remediation older than 5 years: NONE DOCUMENTED
IMPEDEMENTS TO CLOSURE T0607302833
as reported by regulatory agency

PROCEDURAL IMPEDIMENTS
Regional Water Board Objects to Closure - *Regional Board objects to closure until the groundwater pollution has been cleaned up from the MVT and Texaco sites.*
Other - *The MISSION VALLEY TERMINAL (SL607392800) is the responsible party for the Texaco case.*

BENEFITS OF ADDITIONAL WORK
Remove / Reduce Source Mass - *Source mass is currently being remediated.*
Restore Beneficial Uses - *City of San Diego has proposed to use groundwater from this aquifer when the cleanup is complete. BNU must be restored.*

SENSITIVE RECEPTORS LIKELY TO BE IMPACTED AND TIME FRAME FOR IMPACT

<table>
<thead>
<tr>
<th>SENSITIVE RECEPTOR</th>
<th>TIME FRAME FOR IMPACT</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Groundwater</td>
<td>Already Impacted</td>
<td>Diesel/gasoline has impacted groundwater.</td>
</tr>
</tbody>
</table>

Review Conclusions T0607302833

• This site overlays a very large LNAPL plume from the adjacent Cleanup Program Site (Mission Valley Terminal), which is in the assessment and remedial action phase in GT. That site involves hundreds of monitoring wells and wells extending to one and a half miles down gradient. The Regional Board has denied closure until such time as the Mission Valley site has been closed.

• No documents or site history regarding this site are present in GeoTracker, and no details are presented in the documents for Mission Valley Terminal regarding this site specifically.

• Activities report indicates, “Responsible Party Information Kinder Morgan Energy Partners is responsible for the cleanup of this site. All documents can be viewed on the Mission Valley Terminal Site.”

• *Discussion: Next step – insert site history in GT for public to easily understand site status?*
Case Age: 18 years
Primary COC: AVIATION
RP Identified: Western Flight International
Current Land Use: Airport fueling pad

Possible Reasons Why This Case Is So Old
• No activities or enforcement documented between 1989 to 2005.
• No remedial activities.
• At least 2 releases, the first was in 1987, the second in 1992.
• Slow progress.

Activities Conducted to Date Based on Geotracker Info

Assessment last 5 years
• MWs sampled in 8/2005
• Subsurface investigation conducted in 2006
• Groundwater monitoring wells were installed and a soil boring advanced in 2007
• Last GWMR submitted 7/2009

Remediation last 5 years
• NONE DOCUMENTED

Assessment older than 5 years
• Investigations conducted in 1987, 1988, and 1989
• WP assessment prepared in 1997 not implemented

Remediation older than 5 years
• NONE DOCUMENTED
IMPEDEMENTS TO CLOSURE
as reported by regulatory agency

SITE ASSESSMENT INCOMPLETE
Extent of Contamination Has Not Been Determined - *Delineation is not complete.* Potential Risks, Threats, And Other Environmental Concerns Have Not Been Adequately Identified And Assessed - *Delineation is not complete or adequately assessed.*

PROCEDURAL IMPEDIMENTS
Regional Water Board Objects to Closure - *Regional Board objects to closure. Free product must be removed from groundwater.*

BENEFITS OF ADDITIONAL WORK
Fill-in RI Data Gaps - *Delineate plume, remove free product from groundwater.*
Remove / Reduce Source Mass - *Remove free product.*

SENSITIVE RECEPTORS LIKELY TO BE IMPACTED AND TIME FRAME FOR IMPACT

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<th>SENSITIVE RECEPTOR</th>
<th>TIME FRAME FOR IMPACT</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Groundwater</td>
<td>Already Impacted</td>
<td>Free product remains near former UST.*</td>
</tr>
</tbody>
</table>

Review Conclusions

• Per 1/2009 report, elevated soil and GW samples detected, but “no separate phase hydrocarbons has been observed in any of the wells during the current and previous groundwater sampling events;” however, the closure review indicates, “free product remains near former UST.”

• Site overlays Land Disposal Case **PALOMAR AIRPORT LANDFILL (L10003501496).** This is an actively managed former landfill site. 1/2009 report also indicated that additional monitoring wells and soil borings west of the site may put the integrity of the landfill cover system at risk and create a preferential pathway for the migration of water within the landfill. Site is located in a groundwater basin that has been determined to have no potential or existing beneficial uses.

• Per GT activities report, regulator conducted site visit on 3/12/2009 and met with consultant to discuss CAP. Also, internal meeting to discuss “County LEA referral letter to RWQCB” dated 2/15/2010.

• *Discussion: Next step – how to move this case towards cleanup closure?*
Possible Reasons Why This Case Is So Old

- Free product remains in 4 of the 15 GW monitoring wells, and dissolved benzene up to 12,000 ppb in MW-4 in May 2009.
- Other than free product removal from 4 wells (62 gallons total), no active remediation has occurred.

Activities Conducted to Date Based on Geotracker Info T0607301327

**Assessment last 5 years**
- Quarterly GWM, now semi-annual.
- Vapor survey 7/2009
- Three MWs were installed in approx. 2008.
- Risk assessment and SRS submitted 10/2009

**Remediation last 5 years**
- USTs removed in 2007 (installed after initial removal but never put into service)
- LPH removal during GWM events

**Assessment older than 5 years**
- 1991-2003 site assessment; MWs installed and ongoing monitoring

**Remediation older than 5 years**
- Soil excavation after UST removals in 1984.
- Free product removal from 4 wells during 1996-2003
- Vacuum truck used to remove LPH in 6/2003
IMPEDEMENTS TO CLOSURE

as reported by regulatory agency

SITE ASSESSMENT INCOMPLETE
Incomplete Conceptual Site Model (CSM) - Needs additional site assessment, health risk assessment.
Extent of Contamination Has Not Been Determined - Groundwater plume not delineated.

INADEQUATE SOURCE CONTROL
Feasible Source Control Not Performed - Only remove free product; no other remediation performed.

GROUNDWATER IMPACTS
Groundwater Impacted Above Other Cleanup Goal - Site in non-beneficial use area for groundwater, but free product still exists after 16 years.

PROCEDURAL IMPEDIMENTS

SENSITIVE RECEPTORS LIKELY TO BE IMPACTED AND TIME FRAME FOR IMPACT

<table>
<thead>
<tr>
<th>SENSITIVE RECEPTOR</th>
<th>TIME FRAME FOR IMPACT</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Groundwater</td>
<td>Already Impacted</td>
<td>Free product.</td>
</tr>
</tbody>
</table>

Review Conclusions

- Site assessment occurred from 1991 to 2008 with the installation of a total of 17 GW monitoring wells, and quarterly GW monitoring.

- Free product removal from 4 of the MWs has yielded only 62 gallons total for all collection years.

- GW beneath the site (shopping mall) is NOT considered beneficial for any uses -“exempt from beneficial uses” (GW is 7-11 feet bgs).

- Risk assessment and SVS submitted 10/2009 – concluded there is a potentially a health threat posed by the migration of benzene vapors from the site subsurface into the shopping center buildings. CAP and additional site assessment recommended.

- Only GW monitoring and free product recovery has occurred in the 16 years since the USTs were removed.

- Discussion: Next step – how to move this case towards cleanup closure?
CUNOCAR ACCOUNTING SERVICE (T0607300836)
425 25TH ST., SAN DIEGO, CA 92102

Case Age: 19 years
Primary COC: GASOLINE
RP Identified by Regulator: DONALD AND MARLENE SWALL (Tank Owners)
Current Land Use: Commercial

Possible Reasons Why This Case Is So Old

- Recalcitrant RP: No enforcement activities between 1993 and 2006. Case transferred to RB in 2006 and several enforcement actions issued in GT.
- 2008 assessment resulted in a request for an additional assessment. Multiple enforcement letters sent, but appears work has not resumed.
- No ESI submittals in GT.

Activities Conducted to Date Based on Geotracker Info
T0607300836

Assessment last 5 years
- Subsurface assessment conducted in 2008

Assessment older than 5 years
- Soil samples collected at time of removal in 1991
- Soil samples collected after over-excavation in 1993

Remediation last 5 years
- NONE DOCUMENTED

Remediation older than 5 years
- UST removed in 1991
- Soil excavation in 11/1993

NOTE: Data queried from GeoTracker and reviewed in May 2010
IMPEDEMENTS TO CLOSURE as reported by regulatory agency

IMPEDEMENTS TO CLOSURE
SITE ASSESSMENT INCOMPLETE
Extent of Contamination Has Not Been Determined - Site assessment has not been completed.
Other Impediments
Recalcitrant RP.

BENEFITS OF ADDITIONAL WORK
Complete CSM and Our Understanding of Hydrogeologic Regime and Fate and Transport of Contaminants - Assessment needs to be completed prior to completing CSM and determining risks to human health and the environment.

SENSITIVE RECEPTORS LIKELY TO BE IMPACTED AND TIME FRAME FOR IMPACT

<table>
<thead>
<tr>
<th>SENSITIVE RECEPTOR</th>
<th>TIME FRAME FOR IMPACT</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storm drain (Runoff of contaminated soil)</td>
<td>Undetermined</td>
<td>Need to complete assessment to determine potential impact.</td>
</tr>
<tr>
<td>Indoor Air (Residential or Commercial)</td>
<td>Undetermined</td>
<td>Need to complete assessment to determine potential impact.</td>
</tr>
</tbody>
</table>

Review Conclusions

• RP performed no work at the site from 1993 to 2008.

• An assessment was conducted in 2008 that resulted in the recommendation for further site characterization. Shallow soil impacted, deep soil not impacted, and groundwater not encountered. Multiple enforcement actions in GT, but appears work has not resumed.

• Closure summary page lists indoor air as a potential sensitive receptor, but after 18 years the volatile components of gasoline have most likely attenuated or degraded.

• Discussion: Next step – how to move this case towards cleanup closure? Enhanced enforcement? EAR or refer to the District Attorney? No ESI submittals, enforce ESI compliance? Evaluate if vapor is feasible issue?
SAN DIEGO EQUIPMENT RENTALS (T0607301751)
6990 MISSION GORGE ROAD, SAN DIEGO, CA 92120

Case Age: 15 years
RP Identified by Regulator: DOUGLAS R. PRICE
Primary COC: DIESEL
Current Land Use: Light industry (i.e., Superior Marine)

Possible Reasons Why This Case Is So Old

- No site assessment has occurred since TPH-diesel was detected at 14,000 PPM during the UST removals in 1995. No ESI submittals, site history is limited.
- The case was transferred from the LOP to the RWQCB in January 2007.
- The RP's September 2007 application to the State Fund is still pending.

Activities Conducted to Date Based on Geotracker Info T0607301751

<table>
<thead>
<tr>
<th>Assessment last 5 years</th>
<th>Remediation last 5 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Assessment older than 5 years</th>
<th>Remediation older than 5 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soil sampling during the UST removals in 1995 showed a maximum of 14,000 PPM TPH as diesel.</td>
<td>None</td>
</tr>
</tbody>
</table>
IMPEDEMENTS TO CLOSURE

IMPEDEMENTS TO CLOSURE

SITE ASSESSMENT INCOMPLETE
Incomplete Conceptual Site Model (CSM) - No CSM submitted. No assessment has been conducted. Pollutant Sources Have Not Been Adequately Identified or Evaluated - TPH up to 14,000 mg/kg was identified in soil during tank removal in 1995. No assessment has been conducted.
Extent of Contamination Has Not Been Determined - TPH up to 14,000 mg/kg was identified in soil during tank removal in 1995. No assessment has been conducted.
Potential Risks, Threats, And Other Environmental Concerns Have Not Been Adequately Identified And Assessed - TPH up to 14,000 mg/kg was identified in soil during tank removal in 1995. No assessment has been conducted.
Sensitive Receptor Survey Has Not Been Completed - TPH up to 14,000 mg/kg was identified in soil during tank removal in 1995. No assessment has been conducted.

PROCEDURAL IMPEDIMENTS
RP Says They Do Not Have Adequate Funds to Initiate or Continue Work at the Site - RP submitted a request to the Cleanup Fund in September 2007 and has not yet been approved by the Fund.

BENEFITS OF ADDITIONAL WORK
Complete CSM and Our Understanding of Hydrogeologic Regime and Fate and Transport of Contaminants - No CSM has been submitted. Need to document how contaminants are expected to migrate in space and time.
Protect Designated Beneficial Uses - Aquifer used for drinking water supply.

SENSITIVE RECEPTORS LIKELY TO BE IMPACTED AND TIME FRAME FOR IMPACT

<table>
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<tr>
<th>SENSITIVE RECEPTOR</th>
<th>TIME FRAME FOR IMPACT</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Groundwater</td>
<td>Undetermined</td>
<td>TPH at concentrations up to 14,000 mg/kg may be able to leach to Groundwater</td>
</tr>
</tbody>
</table>

Review Conclusions T0607301751

- During the removals of 5 USTs in 1995, TPH-diesel was detected at up to 14,000 PPM in 4 of 10 soil samples. Enforcement letters sent 1995, No follow-up sampling or site assessment has occurred.
- The RP’s September 2007 application to the State Fund is still pending.
- According to the GeoTracker entries, the underlying GW is a potential drinking water source. Follow-up sampling needs to occur to determine the extent of any remaining hydrocarbon contamination.
- Site walk conducted on 2/2010 and consultant is bidding for site assessment (regulator recommended soil/GW sampling near former USTs.) Incremental progress being made.

- **Discussion:** Next step – how to move this case towards cleanup closure?