

Case Closure Summary

UNDERGROUND STORAGE TANK (UST) PROGRAM

I. CASE INFORMATION

DATE: September 10, 2004

| | | |
|---|--|---|
| Site Name: UST 85, Defense Fuel Support Point, Naval Base Point Loma, USN-FISC Fuel Farm | | |
| Site Address: 207 Rosecrans Street, San Diego, CA 92106 | | |
| Responsible Party Name: Commander, Navy Region Southwest, Environmental Code N4512.TM | | |
| Responsible Party Address: 33000 Nixie Way, Bldg. 50, Ste. 326, San Diego, CA 92147-5110 | | |
| Current Land Use: Active Military Base | | RP Phone Number: 619-524-6399 (Theresa Morley) |
| RWQCB File Number: 9UT3642 | Local Case Number: H80028-014 | RWQCB Staff: Laurie Walsh |
| Basin Number: 908.10 | Basin Uses: Non Beneficial Use Ground Water Basin | |

II. RELEASE AND SITE CHARACTERIZATION INFORMATION

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|--|---|
| Description of the unauthorized release (cause, release date, source[s]): Evidence for a release of motor fuel (gasoline) was reported in 1976 in the exterior concrete plug of the sludge piping into the valve pit. Tank was drained, cleaned, repaired, and returned to service. After 1990, the tank was used to store JP-5/diesel. A release was reported in 1996, after which the tank was drained, cleaned, relined, and fitted with leak detection equipment. Evidence for a release of JP-5/diesel was reported in 2002. Soil samples indicated JP-5/diesel, and a tracer gas test indicated a leak. Tank was drained and cleaned. Return to service pending no further action determination on the releases described herein. | |
| Contaminant[s] identified and amount leaked: Based on estimate of volume of impacted soil, a minimum of 350 gallons of JP-5/diesel was released. BTEX, MTBE, and TBA identified in shallow (20 and 30-foot) samples. | |
| Description of the soil/geology: Fill over Cabrillo and Point Loma Formations. Fill, upper 20 feet, is loose silty sand, with increasing clay content with depth. Formations are hard silty clay to very dense sand, with disrupted bedding planes suggestive of recent land sliding at 70 feet. | |
| Is soil contamination completely delineated (to what levels)? Yes. TPH _d ND<10 mg/kg, TPH _g ND<10 mg/kg, BTEX ND<10 mg/kg, MTBE ND<10 mg/kg. | |
| Areal extent? 80-foot diameter | |
| Vertical extent? Approximately 80 feet | |
| Est. Volume of contaminated soil left on site and concentration: Approximately 310 cubic yards of soil. Maximum measured soil concentration 400 mg/kg TPH-diesel. | |
| Is groundwater contamination completely delineated (to what levels)? Yes. TPH _d <1000 ug/l, TPH _g <1000 ug/l, BTEX ND<1.0 ug/l, and MTBE ND< 20 ug/l. | |
| Monitoring wells installed, properly permitted? None | Number of monitoring wells: None |
| Depth to groundwater: 76.8 feet bgs | Seasonal or tidal fluctuation: Not measured. |
| Groundwater flow direction: East northeast | Gradient: Unknown |
| Is groundwater or surface water impacted? Groundwater | |
| Is groundwater contamination contained on site? Yes. TPH _g ND < 500 ug/l, TPH _d ND < 500 ug/l, and BTEX ND < 10 ug/l (20 ug/L for m,p-xylenes). | |
| Nearest receptor (Inland Surface Water, Bay, Drinking Water Wells, etc.): San Diego Bay, approx. 1,200 ft | |

Notes: ¹ Volume of soil: $V = \frac{1}{3}h\pi r^2$ (right cone subtending an angle of 45 degrees), $h = 20$ feet, $r = 20$ feet. Assuming a cone-shaped zone of affected soil, from a single release point at the bottom of the tank (at 20 feet bgs), extending to the depth where no TPH was detected in soil (40 feet bgs), and spreading at a 45-degree angle.

III. MAXIMUM DOCUMENTED CONTAMINANT CONCENTRATION

| Contaminant | Soil (mg/kg) initial | Soil (mg/kg) current | USEPA Soil Residential PRGs ¹ (mg/kg) | Water (ug/l) initial | Water (ug/l) current | RWQCB Interim Guidance ² ug/l |
|-------------------|-------------------------|-------------------------|---|-------------------------|-------------------------|---|
| TPH-gasoline | 130 | 130 | NE | 9,500 | 9,500 | NE |
| TPH-diesel | 400 | 400 | NE | 1,800 | 1,800 | NE |
| Benzene | 0.780 | 0.780 | 0.6 | 89 | 89 | 400 |
| Toluene | 7.1 | 7.1 | 520 | 461 | 461 | 5,000 |
| Ethylbenzene | 3.3 | 3.3 | 8.9 | 85 | 85 | 430 |
| Xylenes, total | 17.8 | 17.8 | 270 | 588 | 588 | 10,000 |
| Naphthalene | 780 | 780 | 56 | 160 | 160 ³ | 2,350 |
| PNAs ⁴ | 507 | 507 | NE | 150.2 | 150.2 | 300 |
| TBA | .043 | .043 | NE | NA | NA | NE |
| MTBE | 110 | 110 | 62 (17 CalMod) | ND<10 | ND<10 | 13 ⁵ |

Notes: NA- Not Analyzed

NE – Not Established

ND – Not Detected

¹US EPA Preliminary Remediation Goals 2002 Update

²RWQCB Interim Guidance for Low Risk Fuel Release Sites - 1996, 2001 Update

³Synthetic Precipitation Leaching Procedure (SPLP)

⁴The PNA soil concentration is the sum of Acenaphthylene, Acenaphthene, Fluorene, Phenanthrene, and Fluoranthene. The dissolved concentration listed under the Water Current and Initial column represents the sum of the corresponding SPLP values.

⁵California Department of Health Services – Public Health Goal

IV. TREATMENT AND DISPOSAL OF AFFECTED MATERIAL

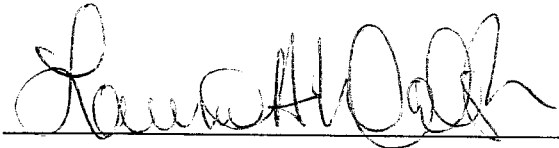
| Material | Amount (include units) | Action (treatment or disposal) | Concentration | Date |
|---------------------|------------------------|--------------------------------|---------------|------|
| <i>Soil</i> | None | NA | NA | NA |
| <i>Groundwater</i> | None | NA | NA | NA |
| <i>Free Product</i> | None | NA | NA | NA |
| <i>Barrel(s)</i> | NA | NA | NA | NA |
| <i>Tank(s)</i> | NA | NA | NA | NA |
| <i>Piping</i> | NA | NA | NA | NA |

Notes: NA – Not Applicable

V. CLOSURE

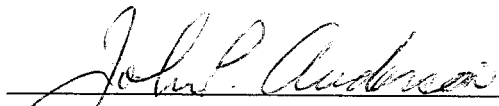
| | | |
|--|--|----------------------------------|
| <p><i>Does completed corrective action protect beneficial uses per the RWQCB Basin Plan?</i> Yes. Adequate information has been submitted to demonstrate that existing site conditions are protective of human health and the environment and that contaminant concentrations in ground water are at levels below those determined to be protective of human health and the environment. The dissolved petroleum hydrocarbon plume has been delineated and is stable, and BTEX, naphthalene, and PNAs are below the Regional Board Interim Guidance on Required Cleanup at Low-Risk Fuel Contaminated Sites (1996, as amended). Ground water has no designated beneficial uses and is not used for drinking.</p> | | |
| <p><i>Should corrective action be reviewed if land use changes?</i> Yes</p> | | |
| <p><i>Monitoring wells decommissioned?</i> 0</p> | <p><i>Number decommissioned:</i> 0</p> | <p><i>Number retained:</i> 0</p> |
| <p><i>Enforcement actions taken:</i> None</p> | | |
| <p><i>Enforcement actions rescinded:</i> None</p> | | |

VI. Signature of Reviewer

 _____ Date September 10, 2004

Laurie A. Walsh
 Water Resource Control Engineer
 Site Mitigation and Cleanup Unit

VII. Signature of Senior Staff

 _____ Date September 10, 2004

John P. Anderson
 Senior Engineering Geologist
 Site Mitigation and Cleanup Unit