

**STATE OF CALIFORNIA  
REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL COAST REGION**

**STAFF REPORT FOR REGULAR MEETING OF DECEMBER 10, 2009**

Prepared November 12, 2009

**ITEM NUMBER: 10**

**SUBJECT: Recommended Case Closures**

**Background:**

This staff report provides summaries for cleanup sites that Central Coast Water Board staff has recommended for closure, although the groundwater beneath these sites has not attained water quality goals for one or more constituents. Staff's closure recommendations are premised on the knowledge that: 1) the remaining constituent concentrations are sufficiently low so as to not pose a threat to surrounding existing beneficial uses of the water (e.g., supply wells, surface waters, etc.); 2) the constituent sources have been removed; 3) monitoring has indicated that the groundwater plumes are contracting in size and concentration; and 4) continued monitoring at these sites would not provide additional benefit for the staff resources invested. These sites are appropriate for closure, based on site-specific information provided below.

**Hampton Inn, 5665 Hollister Avenue, Goleta, Santa Barbara County**  
**[Katie DiSimone, (805) 542-4638]**

Central Coast Water Board staff recommends case closure, as partial soil remediation has been completed and groundwater concentrations are below Central Coast Water Board action levels.

The subject property, owned by Ocean Park Hotels LLC, is located in a commercial district in the City of Goleta and is occupied by a 54,355-square foot, three-story hotel that was constructed in 2007. The Hampton Inn's hotel elevator hydraulic system includes a reservoir for the hydraulic fluid and a steel fluid supply line that runs beneath the hotel floor to the elevator shaft. In response to a reported loss of hydraulic fluid from the elevator system, the hotel's building contractor exposed selected portions of the hydraulic fluid supply line and found accumulations of oil where pipe fittings were reportedly not tightly screwed together.

In January and February 2009, Ocean Park Hotels LLC's consultant conducted partial site remediation by removing a limited volume of contaminated soil (approximately 15.6 tons) and some free phase product oil (approximately 20 gallons of oil/water mix). The consultant also installed two monitoring wells to assess potential impacts to groundwater.

To determine the lateral and vertical extent of oil wastes in soil, the consultants collected 58 soil samples from 19 soil borings and from the remedial excavation and analyzed the samples for potential wastes, including diesel/oil range total petroleum hydrocarbon (TEPH), volatile organic compounds (VOCs), metals, and polychlorinated biphenyls (PCBs). TEPH was present as the only waste in the soil. Based on sampling results, an estimated volume of 660 cubic yards of contaminated soil remains underneath the hotel's concrete foundation, with a maximum soil concentration of 39,000 milligrams per kilogram (mg/Kg). TEPH in the immediate area of the elevator shaft and hydraulic fluid reservoir. VOCs and PCBs were not detected (detection limits of 0.005 and 0.10 mg/kg, respectively) in soils.

Groundwater was sampled during two events (January and February 2009) from two monitoring wells and analyzed for TEPH. The first sample collected from MW-1 contained 1,140 µg/L TEPH. The second sample collected from MW-1 in February 2009 contained 205 µg/L TEPH. The Central

Coast Regions' cleanup goal for TEPH is 1,000 µg/L. MW-2 was also sampled twice and was below the cleanup goal on both events. The closest municipal production well is the Goleta Water District's "SB Distributing" Well located one-half mile northeast (upgradient) of the site.

The removed free phase oil was analyzed for PCBs, VOCs, metals, and TEPH. Metals were below hazardous waste levels. PCBs were not detected (detection limit of 4 mg/L). VOCs and TEPH were within the typical range for free product samples.

Based on the Material Safety Data Sheet provided for the hydraulic fluid used at the site, the fluid is not regulated as a hazardous material, is not listed as a carcinogen, and is not expected to be harmful to aquatic organisms.

Ocean Park Hotels LLC submitted a *Summary of Final Site Assessment and Request for Site Closure Report* to the County of Santa Barbara Fire Prevention Division (County Fire) on March 18, 2009. In March 2009, County Fire referred the case to the Water Board for oversight. Water Board staff reviewed that report, as well as the analytical results from the site. Ocean Park Hotels LLC will be recording a Notice of Residual Soil Contamination for the subject property to ensure proper handling of the site soils should future site development expose residual contamination.

Central Coast Water Board staff recommend closure of this case based on the following:

1. The extent of the hydraulic fluid release has been adequately characterized;
2. Wastes in soil and groundwater were remediated to the maximum extent possible given constraints presented by having an operating hotel structure immediately overlying the polluted area;
3. The remaining soil pollution above the cleanup goal is limited in extent and contained within the lateral footprint of the hotel's foundation (e.g. beneath the concrete slab of the hotel structure);
4. Ocean Park Hotels LLC will be recording a Notice of Residual Soil Contamination for the subject property to ensure proper handling of the site soils should future site actions require exposing residual pollution;
5. The nearest water supply well is located approximately 2,640 ft of the site, and remaining contamination is unlikely to reach any water supply wells;
6. The current fee titleholders of the subject property and adjacent properties have been notified of the proposed case closure and have no objections to case closure; and
7. Closure is consistent with Section III.G. State Board Resolution No. 92-49, allowing consideration of cost effective abatement measures for a site where attainment of reasonable objectives less stringent than background water quality does not unreasonably affect present or anticipated beneficial uses of groundwater.

The recommended case closure is consistent with closure of similar petroleum hydrocarbon cases by the Central Coast Water Board in the past. Unless the Water Board directs staff otherwise, the Executive Officer will issue a case closure letter, pending proper well abandonment and recordation of the Notice of Residual Soil Contamination.

**Former 76 Service Station No. 0821, 1308 Monterey Street, San Luis Obispo,  
San Luis Obispo County [Corey Walsh (805) 542-4781]**

Central Coast Water Board staff recommends closure of this underground storage tank (UST) case where recent groundwater sample results indicate tributyl alcohol (TBA) remains at concentrations slightly greater than Central Coast Water Board cleanup goals. Groundwater samples collected from one on-site monitoring well continue to exceed the cleanup goals of 12 micrograms per liter (µg/L) for TBA. During the most recent groundwater sampling event, a sample showed TBA in MW-2 at 44 µg/L. Other common contaminants associated with gasoline and fuel oxygenates have been

analyzed for, and are below cleanup goals, or are below laboratory detection limits. Historic groundwater analytical results show the primary constituents of concern were TBA and methyl-tertiary-butyl-ether (MTBE). Figure 1, *Groundwater Elevation Contour Map*, presents groundwater flow direction and monitoring well locations. The Basin Plan designates groundwater beneficial uses beneath this site as domestic and municipal supply, agricultural supply, and industrial supply.

In addition, analytical results from the May 2007 installation of monitoring wells MW-8 and MW-9 indicate residual soil contamination remains at concentrations slightly greater than San Luis Obispo Fire Department, and Central Coast Water Board cleanup goals of 100 milligrams per kilogram (mg/kg) for total petroleum hydrocarbons (TPH), 1.7 mg/kg for naphthalene, and 0.12 mg/kg for TBA. Soil samples that exceeded cleanup goals were collected at depths ranging from 5 to 12 feet (ft) below ground surface (bgs), and indicated concentrations of TPH as gasoline (TPH-g) of 250 mg/kg, TPH as diesel (TPH-d) of 130 mg/kg, naphthalene of 4.4 mg/kg, and TBA of 0.33 mg/kg.

The subject site is no longer a retail gasoline service station and is scheduled to be redeveloped to include mixed use retail commercial and residential. The property is located at the northeastern corner of the intersection of Monterey Street and Johnson Avenue in San Luis Obispo. Contractors first discovered the release of petroleum hydrocarbons in August 1998 during fuel piping and dispenser upgrade work. Contractors have excavated a total of 220 tons of impacted soil from the site. Excavated soils were disposed off-site at an appropriate facility. In addition, approximately 1,000 lbs. of Oxygen Releasing Compounds™ (ORC-Advanced™) slurry was injected into 25 direct-push borings located around monitoring wells MW-2, MW-8 and MW-9 to enhance biodegradation of the remaining petroleum hydrocarbons. The responsible party (ConocoPhillips) commissioned several phases of soil and groundwater investigation. Central Coast Water Board staff expects these residual levels of soil and groundwater contamination to degrade naturally over time.

Central Coast Water Board staff notified the site property owner (Monterey & Johnson LLC), neighboring property owners, and other interested parties that we intended to recommend this UST case for closure. We have not received any comments to date. The City of San Luis Obispo City Fire Department agrees with the proposed case closure.

Groundwater currently ranges in depth from approximately 5 to 8 ft below ground surface (bgs) and generally flows to the southwest at average gradient of 0.02 ft per ft. There are five active water supply wells located within a one-half mile radius of the site. San Luis Coastal Unified School District (SLCUSD) operates three of these wells. The closest well is the SLCUSD-Tiger Water Supply Well #2, which is located approximately 1,600 ft southeast of the site and is used for irrigation. The school district operates two other irrigation supply wells located approximately 2,000 ft southeast of the site. The City of San Luis Obispo maintains an idle municipal supply well at Mitchell Park, located approximately 2,300 ft south of the site. In addition, a private irrigation well (Jesse Norris/Sands Motel well) is located approximately 2,600 ft northeast of the site. San Luis Obispo Creek is located approximately 2,000 ft southeast of the site. The residual petroleum hydrocarbons remaining are unlikely to affect these wells or surface waters considering groundwater flow direction, area geology, well distances, and low remaining contaminant concentrations.

Our recommendation for closure is based on the following:

1. The extent of the release has been adequately characterized,
2. The soil contaminant source was removed from the site, to the extent practical,
3. The remaining soil pollution above the cleanup goal is limited in extent,
4. The remaining groundwater constituent of concern is limited to TBA, and the groundwater plume is declining in size and concentration, and is contained in only one onsite well (MW-2),
5. TBA concentrations in groundwater have been reduced from a maximum of 884 µg/L to between non-detect and 44 µg/L,

6. MTBE concentrations in groundwater have been reduced from a maximum of 2,890 µg/L to between non-detect and 2.9 µg/L,
7. The remaining TBA is limited to one onsite monitoring well located down gradient of the former dispensers and USTs,
8. Monitoring data indicate favorable conditions for natural attenuation of petroleum hydrocarbons and concentrations are expected to continue to decrease with time,
9. The nearest water supply well is located approximately 1,600 ft of the site, and remaining contamination is unlikely to reach any water supply wells,
10. The current fee titleholders of the subject property and adjacent properties have been notified of the proposed case closure and have no objections to case closure, and
11. Closure is consistent with Section III.G. State Board Resolution No. 92-49, allowing consideration of cost effective abatement measures for a site where attainment of reasonable objectives less stringent than background water quality does not unreasonably affect present or anticipated beneficial uses of groundwater.

Very localized residual soil and groundwater contamination still underlies the site that could pose an unacceptable risk under certain site development activities such as site grading, excavation, or dewatering. The Central Coast Water Board, San Luis Obispo County Environmental Health Services (EHS), City of San Luis Obispo City Fire Department, and the appropriate local planning and building departments must be notified prior to any changes in land use, grading activities, excavation, or dewatering. This notification should include a statement that residual soil and groundwater contamination underlie the property and may underlie nearby properties, and a description of the mitigation actions necessary (if any) to ensure that any possibly contaminated soils or groundwater brought to the surface by these activities are managed appropriately. The levels of residual contamination and any associated risks are expected to reduce with time.

The recommended case closure is consistent with closure of similar low-risk petroleum hydrocarbon cases by the Central Coast Water Board in the past. Unless the Water Board directs staff otherwise and pending proper monitoring well destruction, the Executive Officer will issue a case closure letter pursuant to California Underground Storage Tank Regulations.

Attachment 1: Groundwater Elevation Contour Map

**Former Pillsbury Green Giant Facility, 735 West Beach Street, Watsonville,  
Santa Cruz County [John Mijares, (805) 549-3696]**

Central Coast Water Board staff recommends closure of this UST case where groundwater sample results showed concentrations of benzene greater than the Central Coast Water Board cleanup goal of 1.0 microgram per liter (µg/L). Other petroleum hydrocarbon constituents were either not detected or were below their respective cleanup goals in monitoring wells MW-1 through MW-3. Benzene was detected in one monitoring well (MW-4) at a concentration of 7.1 µg/L in October 2005 when the last monitoring was conducted. The last monitoring was conducted in 2005 to verify that the site had met the Water Board's low-threat closure criteria. Closure activities were delayed because the responsible party was not able to submit requested documents. The attached site map (Attachment 2) shows the location of the monitoring wells.

Pillsbury Green Giant (Pillsbury) owned and operated a food processing and refrigerated warehousing facility at the subject site from 1983 to 1994. Martinelli and Sons purchased the property in 1994 and currently operates an apple processing facility at the site. General Mills purchased Pillsbury Green Giant in 2001 and is currently the responsible party for this UST case. In 1988, Pillsbury commissioned the removal of a 1,000-gallon gasoline UST under the supervision of the City of Watsonville Fire Department. Analytical results of a groundwater sample collected from the UST excavation pit indicated gasoline total petroleum hydrocarbons at 12,000 micrograms per liter (µg/L), benzene at 59 µg/L, and xylenes at 2,600 µg/L. These concentrations exceeded the

groundwater cleanup goals of 1,000 µg/L for gasoline hydrocarbons, 1 µg/L for benzene, and 1,750 µg/L for total xylenes. No soil data were reported from the excavation pit; however, analytical results from a 1985 soil sample showed no evidence of gasoline hydrocarbons. The responsible party did not conduct any groundwater remediation at the site other than natural attenuation, due to the relatively low remaining concentrations in groundwater following the excavation. In addition, no gasoline hydrocarbons were detected in soil from borings of the three monitoring wells (MW-1 through MW-3), which were within 35 feet of the former UST. Results of long-term groundwater (1990 through 2005) monitoring in wells MW-1 through MW-3 indicate that gasoline hydrocarbons, benzene, toluene, ethylbenzene, and xylenes are not present above laboratory reporting limits. Methyl tertiary-butyl ether (MTBE) was detected once in MW-1 at 1.1 µg/L in 2002 and once in MW-3 at 8.7 µg/L also in 2002. The groundwater cleanup goal for MTBE is 5 µg/L. MTBE has not been detected in subsequent groundwater monitoring at either location.

The responsible party installed MW-4 in the UST excavation pit in 1989 and monitored the well until 2005. During this monitoring period, the concentrations of benzene fluctuated from a high of 140 µg/L, to below the laboratory detection limit. Investigations showed that MW-4 was placed in the tank backfill without a sanitary seal. As discussed above, the last groundwater monitoring was conducted in 2005. Benzene concentrations have decreased in MW-4 from a high of 140 µg/L in 1989 to 7.1 µg/L in October 2005. MW-4 was installed to depth of five feet bgs and is located at a low spot in the parking lot where surface runoff collects and creates the potential for the infiltration of petroleum-contaminated parking lot runoff. As an added benefit of closure, Water Board staff believes the destruction of MW-4 will eliminate the potential of shallow groundwater contamination from parking lot runoff infiltration.

The City of Watsonville has two water supply wells in the greater vicinity of the site. One is approximately 1,500 feet northeast and the other is approximately 1,500 southeast of the site. The benzene plume is not expected to impact these wells because of the distance, low benzene concentration, and its limited and localized extent. The depth to groundwater varies from four to seven feet below ground surface. The shallow regional groundwater flows to the south-southeast towards the Pajaro River.

We recommend closure of this case based on the following:

1. The primary source of contamination was removed with the UST removal in 1988;
2. The extent of the benzene plume has been fully delineated, is localized and limited in a small area in the vicinity of well MW-4;
3. The proper destruction of MW-4, prior to case closure, will eliminate the potential of shallow groundwater contamination from the parking lot runoff;
4. Groundwater data indicate that natural attenuation processes have significantly reduced concentrations of contaminants in groundwater and Water Board staff expect that natural attenuation will continue; and
5. Case closure is consistent with State Board Resolution No. 92-49, Section III.G. which allows consideration of cost effective abatement measures where attainment of reasonable objectives, less stringent than background water quality, does not unreasonably affect present or anticipated beneficial uses of groundwater, and will not result in water quality less than that prescribed by the Basin Plan.

On May 8, 2009, Central Coast Water Board staff notified the site's property owner (current fee title holder) regarding the proposed case closure, pursuant to Section 13307.1 of the California Water Code and Section 25296.20 of the California Health and Safety Code. In addition, as part of our effort to increase public participation, we also notified the Santa Cruz County Health Services Agency, and the landowners, businesses, and residents within 200 feet of site regarding the proposed case closure. We have not received any objections to the proposed case closure from any of the parties mentioned above.

This recommended case closure is consistent with closure of similar low-risk petroleum hydrocarbon cases by the Central Coast Water Board in the past. Unless the Water Board directs staff otherwise, the Executive Officer will direct the responsible party to proceed with case closure activities including destruction of the monitoring wells. The Executive Officer will issue a final case closure letter upon receipt of a well destruction report documenting the proper destruction of all monitoring wells.

Attachment 2: Site Map

**McCormix Corporation Cardlock, 3663 Via Real Carpinteria, Santa Barbara County**  
**[John Mijares (805) 549-3696]**

Central Coast Water Board staff and the Santa Barbara County Fire Prevention Division (County Fire) staff recommend closure of this UST case where sample results indicate groundwater contaminants remain at concentrations greater than Central Coast Water Board cleanup goals. Fourth Quarter 2008 groundwater data indicate MTBE at 15.4 micrograms per liter ( $\mu\text{g/L}$ ) in one monitoring well (MW-1). MTBE was either not detected above laboratory reporting limits or was below cleanup goals in the other eight monitoring wells at the site. The Central Coast Water Board cleanup goal for MTBE is 5  $\mu\text{g/L}$ .

In July and August 2002, the UST piping and dispensers at the site were upgraded. During the upgrade activities, consultants identified diesel and gasoline contamination in soil at various locations beneath the product piping and dispensers.

During the 2002 facility upgrade, the responsible party removed approximately 85 cubic yards of gasoline-contaminated soil from areas of identified diesel and/or gasoline contamination beneath the product lines and dispensers. Generally, shallow "spot" excavation was successful in removing contaminated soil. However, in the vicinity of two high-speed diesel dispensers, excavation extended to 9 feet below grade (fbg), at which point groundwater was encountered. Approximately 85 cubic yards of excavated soil was disposed of at an appropriate disposal facility. The corresponding petroleum hydrocarbon mass could not be calculated since the previous consultant did not have, or did not provide the petroleum hydrocarbon concentrations in the excavated soil.

After installation of groundwater monitoring wells in 2003, monitoring results showed benzene, toluene, ethylbenzene, xylenes (BTEX) and MTBE in groundwater in the vicinity of the USTs and diesel dispensers. By the time the contaminant plume was delineated in 2007 with the installation of downgradient wells, concentrations of BTEX had attenuated to below cleanup goals and only MTBE remained at concentrations above drinking water standards. Over the course of the six most recent quarterly monitoring events, MTBE has persisted in well MW1 (shown in Attachment 3), at concentrations ranging from 5.17  $\mu\text{g/L}$  to 22.5  $\mu\text{g/L}$ .

The site lies within the Carpinteria Groundwater Basin. The "Water Quality Control Plan, Central Coast Region" (Basin Plan) designates groundwater beneficial uses in this Basin to be domestic and municipal supply, agricultural supply, and industrial supply. Groundwater at the site is at approximately 5 to 8 fbg and generally flows to the east-southeast. The Pacific Ocean is located approximately 500 feet south of the site. No domestic, agricultural, or municipal supply wells are known to exist within 1 mile of the site.

Central Coast Water Board staff and County Fire staff recommend closure of this case based on the following:

1. Contaminated soil within the vadose zone was excavated to the extent feasible;
2. The extent of the residual contaminant plume is limited to the immediate vicinity of the USTs, and is not expected to impact surface water or groundwater beyond the site boundaries;
3. We expect natural attenuation processes to eventually reduce concentrations of MTBE to below the groundwater cleanup goals in a reasonable time; and

4. Case closure is consistent with State Board Resolution No. 92-49, Section III.G., which allows consideration of cost effective abatement measures where attainment of reasonable objectives, less stringent than background water quality, does not unreasonably affect present or anticipated beneficial uses of groundwater, and will not result in water quality less than that prescribed by the Basin Plan.

This recommended case closure is consistent with the Central Coast Water Board's previous closure of similar low-risk petroleum hydrocarbon cases. Unless the Water Board directs staff otherwise, the Executive Officer will issue a case closure letter pursuant to California Underground Storage Tank Regulations. On September 22, 2009, the County Fire notified the current fee titleholders and other interested parties of the proposed case closure pursuant to Water Code Section 13307.1 and the California Health and Safety Code, Section 25296.20. The Central Coast Water Board and County Fire have not received any objections or comments regarding the proposed case closure.

Attachment 3 – Extent of MTBE in Groundwater Map, October 2008

**McCarthy Tank and Steel Property, 313 South Street, San Luis Obispo,  
San Luis Obispo County [Corey Walsh, 805-542-4781]**

Central Coast Water Board staff recommends closure of this UST case where groundwater sample results indicate benzene remains at concentrations slightly greater than the Water Board cleanup goal. Groundwater samples collected from one on-site monitoring well continues to exceed the cleanup goal of 1.0 microgram per liter ( $\mu\text{g/l}$ ) benzene. During the most recent sampling event, benzene was detected in monitoring well MW-8 at a concentration 1.45  $\mu\text{g/l}$ . Figure 4, *Chemical Detections in Groundwater*, presents groundwater petroleum hydrocarbon detections and monitoring well locations for the site. Historic analytical results show the primary constituents of concern were total petroleum hydrocarbons reported as gasoline (TPH-g), and benzene, toluene, ethylbenzene, and xylenes (BTEX). The historic maximum concentrations for TPH-g and BTEX observed in monitoring wells at the site were as follows: 16,000  $\mu\text{g/l}$ , 323  $\mu\text{g/l}$ , 27  $\mu\text{g/l}$ , 1,800  $\mu\text{g/l}$ , and 3,400  $\mu\text{g/l}$ , respectively. During the most recent groundwater monitoring event, TPH-g and BTEX were not detected in six of the seven monitoring wells present at the site, and concentrations of TPH-g, toluene, ethylbenzene, and xylenes in monitoring well MW-8 were below the Water Board cleanup goals. Other common contaminants associated with gasoline, diesel, and fuel oxygenates have historically been analyzed for and are below cleanup goals, or are below laboratory detection limits. The groundwater monitoring data indicate that petroleum hydrocarbons will continue to degrade naturally. Central Coast Water Board staff believe that groundwater beneath the site will meet cleanup goals in the near future. The Basin Plan designates groundwater beneficial uses beneath this site as domestic and municipal supply, agricultural supply, and industrial supply.

In addition, analytical results from the October 2002 UST remedial soil excavation indicate residual soil contamination remains at concentrations greater than San Luis Obispo Fire Department, and Central Coast Water Board cleanup goals of 100 milligrams per kilogram (mg/kg) for total petroleum hydrocarbons as gasoline (TPH-g). Observations indicate a 2 to 4 foot (ft) thick lens of hydrocarbon-impacted soil left in-place at approximately 22 ft. below ground surface (bgs). Soil samples were collected at depths ranging from 14 to 22.5 ft bgs, and indicate concentrations of TPH-g of 2,200 mg/kg, 1,300 mg/kg, & 1,040 mg/kg.

The site is an active commercial building located on the south side of South Street in the City of San Luis Obispo. The responsible party has commissioned several phases of soil and groundwater investigation and remediation. Nine groundwater monitoring wells and five treatment wells have been installed at the site since in 2002. Two monitoring wells have since been abandoned due to site redevelopment activities. Two USTs (one known to have stored gasoline) were removed from the site in 2002. Approximately 1,565 tons (1,200 cubic yards) of petroleum hydrocarbon impacted soil

surrounding the tanks was also excavated and disposed of off-site. Remediation activities have also included: three dual-phase, high-vacuum extraction events in late 2005, which removed approximately 10,600 gallons of hydrocarbon-impacted groundwater. The responsible party also conducted fifteen months of in-situ chemical oxidation with ozone injection between March 2007 and August 2008. Any residual soil and groundwater contaminant levels and any associated risks are expected to diminish with time.

Depth to groundwater has ranged from 12 to 23 ft. bgs and generally flows to the southwest at a gradient between 0.005 and 0.01 foot/feet. The nearest surface water is Meadow Creek located approximately 600 ft. south, and San Luis Obispo Creek located approximately 2,000 ft. south of the site. The nearest municipal water supply well, the Mitchell Park Well, is located approximately 4,000 ft. to the northeast of the site. The well is owned and operated by the City of San Luis Obispo, but is currently inactive. The residual petroleum hydrocarbons remaining are unlikely to affect this well or these surface waters considering groundwater flow direction, area geology, well distance, and the low and localized remaining contaminant concentrations.

Our recommendation for closure is based on the following:

1. The extent of the release has been adequately characterized;
2. The source and a majority of the contaminant mass have been removed from the site, to the maximum extent practical, through various remedial actions including: soil excavation, high vacuum dual phase extraction, and *in-situ* oxidation using ozone injection,
3. The remaining constituent of concern is limited to benzene at very low concentration;
4. The remaining soil pollution above the cleanup goal is limited in extent, and generally underlying the warehouse building between 11 and 22 ft. bgs;
5. The groundwater plume has been adequately characterized and is declining in size and concentration;
6. TPH-g concentrations in groundwater have been reduced from a maximum of 160,000 µg/l to between non-detect and 459 µg/l (below the Central Coast Water Board cleanup goal);
7. Benzene concentrations in groundwater have been reduced from a maximum of 2,300 µg/l to between non-detect and 1.45 µg/l (slightly above the Central Coast Water Board cleanup goal of 1.0 µg/l);
8. The remaining groundwater pollution above the benzene cleanup goal is limited to one on-site monitoring well;
9. Monitoring data indicate the petroleum hydrocarbon concentrations are expected to continue to decrease with time;
10. The remaining hydrocarbon contamination is unlikely to reach drinking water supply wells or other sensitive receptors considering the low groundwater contaminant concentrations remaining;
11. The current fee titleholders of the subject property and adjacent properties have been notified of the proposed case closure and have no objections to case closure; and
12. Closure is consistent with Section III.G. of the State Water Board Resolution No. 92-49, allowing the consideration of cost effective abatement measures for a site where attainment of reasonable objectives less stringent than background water quality does not unreasonably affect present or anticipated beneficial uses of groundwater, and will not result in water quality less than that prescribed by the Basin Plan.

Central Coast Water Board staff notified the site property owner (Hand & McCarthy LLC), neighboring property owners, and other interested parties that the UST case was being considered for closure. We have not received any comments to date. The City of San Luis Obispo, City Fire Department agrees with the proposed case closure.

Residual soil and groundwater contamination still underlies the site that could pose an unacceptable risk under certain site development activities such as site grading, excavation, or de-watering. The



Central Coast Water Board, San Luis Obispo County Environmental Health Services (EHS), City of San Luis Obispo City Fire Department, and the appropriate local planning and building departments must be notified prior to any changes in land use, grading activities, excavation, or dewatering. This notification should include a statement that residual soil and groundwater contamination underlie the property and may underlie nearby properties, and a description of the mitigation actions necessary (if any) to ensure that any possibly contaminated soils or groundwater brought to the surface by these activities are managed appropriately. Future site disturbance could require worker health and safety protection, and restrictions on the disposal of soil and groundwater. The levels of residual contamination and any associated risks are expected to diminish with time. Additionally, San Luis Obispo County EHS may also require a Health Risk Assessment be conducted should this site be redeveloped.

The recommended case closure is consistent with closure of similar low-risk petroleum hydrocarbon cases by the Central Coast Water Board in the past. Unless the Water Board directs staff otherwise and pending proper monitoring well destruction, the Executive Officer will issue a case closure letter pursuant to California Underground Storage Tank Regulations.

Attachment 4: Chemical Detections in Groundwater map