

July 28, 2009

Mr. Paresh C. Khatri  
Hazardous Materials Specialist  
Alameda County Health Care Services Agency  
1131 Harbor Bay Parkway, Suite 250  
Alameda, California 94502

**Re: Quarterly Status Report –  
April through June 2009**  
76 Service Station No. 11270  
3255 Mecartney Road  
Alameda, California  
Fuel Leak Case No. RO0000511

**RECEIVED**

10:02 am, Oct 20, 2011

Alameda County  
Environmental Health



Dear Mr. Khatri,

On behalf of Atlantic Richfield Company (ARC), a British Petroleum (BP) affiliated company, Delta Consultants (Delta) is submitting this subject report for the above referenced site.

Please contact Tony Perini at (408) 826-1867 if you have questions.

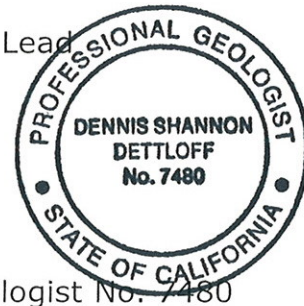
Sincerely,  
**Delta Consultants**

A handwritten signature in blue ink, appearing to read "Tony Perini".

Tony Perini.  
Senior Project Manager, Remediation Lead

A handwritten signature in blue ink, appearing to read "Dennis S. Dettloff".

Dennis S. Dettloff, P.G.  
Senior Project Manager  
California Registered Professional Geologist No. 7480



cc: Mr. Paul Supple – ARC (electronic copy only)

## **QUARTERLY STATUS REPORT April through June 2009**

76 Service Station No. 11270  
3255 Mecartney Road  
Alameda, California

County: Alameda

### **SITE DESCRIPTION**

The site is an operational service station located within a developed shopping center at the northern corner of the intersection of Island Drive and Mecartney Road in Alameda, California. The site is located in a mixed commercial residential neighborhood.

Site features include three (3) gasoline underground storage tanks (USTs), two pump islands, a station building, and a service bay with two hoists. The on-site USTs include one 12,000 gallon, one 10,000 gallon, and one 6,000 gallon fiberglass tanks installed in 1981.

### **SITE BACKGROUND AND ACTIVITY**

BP acquired the site from Mobil in 1989 and TOSCO subsequently acquired the site from BP in 1994.

May 1990 - Two soil samples (P1 and P2) were collected from beneath the product dispensers during a routine dispenser modification. The respective samples were collected from material excavated to a depth of approximately 4.5 feet below ground surface (bgs). After additional excavation in the vicinity of sample location P1, one additional soil sample P1(8) was collected at a depth of approximately 8 feet bgs. Two sidewall samples (SW1 and SW2) were collected from the sidewalls of the product line trench in the vicinity of sample point P1 at a depth of approximately 4.5 feet bgs. All soil samples collected were analyzed for total petroleum hydrocarbons as gasoline (TPHg), benzene, toluene, ethylbenzene, and total xylenes (BTEX), and total lead. Based on the petroleum hydrocarbon concentrations reported in sample SW1, additional soil was excavated 8 feet laterally and to a depth of approximately 8 feet bgs in the vicinity of sample location SW1. During over-excavation, water was encountered at approximately 8 feet bgs. Three soil samples (SW3, SW4, and SW5) were subsequently collected at depths of 8, 4.5, and 4.5 feet bgs and analyzed for TPHg, BTEX, and total lead. Based on the petroleum hydrocarbon concentrations reported in samples SW4 and SW5, additional soil was excavated 7 feet laterally and to a depth of approximately 8 feet bgs in the vicinity of samples SW4 and SW5. Four soil samples (SW6 through SW9) were collected from material excavated using a backhoe to a depth of approximately 4.5 feet bgs and analyzed for TPHg, BTEX, and total lead. Soil was not excavated south of sample location SW3 due to its proximity to the UST complex. A total of approximately 195 cubic yards of soil was excavated, aerated on-site and appropriately disposed off-site.

August 1992 - A preliminary site assessment was conducted at the site involving the sampling of two pre-existing Mobil groundwater monitoring wells MW-2 and MW-4. Samples could not be collected from two additional pre-existing monitoring wells MW-1 and MW-3 due to insufficient recharge. Product sheen was observed on the purge water from all the monitoring wells. Records of boring logs and well construction details for wells MW-1 through MW-4 could not be located.

October 1994 - As part of a supplemental site assessment, two exploratory soil borings (TB-1 and TB-2) were advanced to a depth of 11.5 feet bgs. Analytical results from the soil samples collected during the advancement of these two borings indicated that petroleum hydrocarbons were not present above the laboratory's indicated reporting limits. Groundwater samples collected from borings, TB-1 and TB-2 contained 1,500 parts per billion (ppb) and 310 ppb TPHg, respectively.

June 1993 - A 4-inch diameter groundwater monitoring well, MW-5, was installed off-site, near the western corner of the site.

January 1995 - One 4-inch diameter monitoring well, MW-6, was installed on-site and one 2-inch diameter monitoring well, MW-7, was installed off-site. Borings MW-5 and MW-6 were advanced to 15 feet bgs and MW-7 was advanced to 16.5 feet bgs. Groundwater was encountered in the monitoring wells at depths ranging from 5 to 7.5 feet bgs. Monitoring wells, MW-1 through MW-4, were subsequently destroyed in January 1995.

November 1996 - A Tier 2 risk-based corrective action (RBCA) evaluation was conducted to determine the potential exposure risk to residual benzene concentrations in on-site soils. The results of the evaluation indicated that the levels of benzene in soil 8 feet bgs should not pose a risk to on-site workers. Risks to potential hypothetical future residents reportedly exceeded the lower, more protective end of the Environmental Protection Agency (EPA) acceptable risk range. The evaluation also concluded that ongoing natural attenuation was likely to reduce residual benzene concentrations to below the acceptable risk range prior to the unlikely scenario of the site being converted to residential use.

December 1996 - The oil/water separator located on the floor of the vehicle service bay at the west side of the service station building was cleaned and removed. Two soil samples (OWS-1, 0.5' and OWS-1, 2') were subsequently collected from beneath the former oil/water separator location. Analytical results indicated that total recoverable petroleum hydrocarbons (TRPH) were present in the soil with a maximum concentration of 49 parts per million (ppm). All other constituents tested were below the laboratory's indicated reporting limits.

August 1997 - Samples of pea gravel base material (S-1, through S-4) were collected from the bottom of each dispenser and analyzed for TPHg, BTEX and methyl tertiary butyl ether (MTBE).

July 1998 - One 1,000 gallon single-walled fiberglass used-oil UST was removed from the site. The removed UST was noted to be intact with no visible holes or cracks. One

native soil sample (S-6-T1E) was collected from the eastern sidewall of the UST cavity at a depth of approximately 7 feet bgs.

August 2000 – On-site dispensers and product lines were removed and replaced. A total of four pea gravel samples (PD-1-2', PD-2-1.5', PD-3-1.5', and PD-4-1.5') were collected from beneath each of the four product dispensers, and four pea gravel samples (PL-3-1.5', PL-4-1.5', PL-6-1.5', and PL-7-1.5') were collected from beneath the product lines. Three pea gravel samples were also collected at each of the ends of the fuel USTs (F-1-4', F-2-4', and F-5-3').

### **SENSITIVE RECEPTORS**

In November 1992, a sensitive receptor survey and existing well search were conducted. No public water supply wells were identified within approximately 2,500 feet of the site. No private water supply wells were identified within 1,000 feet of the site. Additionally, no subways, basements, and schools were identified within 1,000 feet of the site. The survey identified a surface water body located approximately 500 feet from the site, but did not name it. As observed during a site visit by URS, this surface water body is a channel excavated as part of a residential development. Based on current aerial photo review, there appears to be, more than one mile of channel before connecting to San Francisco Bay from the channel point closest to the site.

### **GROUNDWATER MONITORING AND SAMPLING**

Groundwater monitoring and sampling was not conducted during the second quarter of 2009.

### **REMEDIATION STATUS**

Active soil and/or groundwater remediation is not currently being conducted at the site.

### **CHARACTERIZATION STATUS**

The site is monitored and sampled annually. The next monitoring and sampling event is scheduled for the third quarter 2009.

Previous annual sampling results show the TPHg and benzene plume to be stable and defined within the current monitoring well network. However, MTBE concentrations in groundwater were present in up-gradient well XW-1 and down-gradient wells XW-3, MW-6, and MW-7.

### **RECENT CORRESPONDENCE**

Delta submitted a work plan in June for a soil vapor survey.

**THIS QUARTER ACTIVITIES (Second Quarter 2009)**

- No monitoring and sampling of the groundwater monitoring well network was conducted this quarter.
- A work plan was prepared and submitted to the Alameda County Health Care Services Agency.

**NEXT QUARTER ACTIVITIES (Third Quarter 2009)**

- Groundwater monitoring and sampling will be conducted during the third quarter 2009.

**CONSULTANT: Delta Consultants**