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January 9, 2005

Mr. Don Hwang Alameda County Health Agency Department of Environmental Health 1131 Harbor Bay Parkway Alameda, California 94502

RE: Quarterly Summary Report - Third Quarter 2005

Delta Project Number: C1Q-5487-011

Dear Mr. Hwang:

On behalf of ConocoPhillips (COP), Delta Environmental Consultants, Inc. (Delta) is forwarding the quarterly summary report for the following location:

No. 6435

**Service Station** 

76 Service Station No 5487

Location

28250 Hesperian Boulevard Hayward, California

Sincerely,

CC:

Delta Environmental Consultants, Inc.

Eric G. Hetrick Project Manager

Daniel J. Davis, R.G.

California Registered Geologist No. 6435

Shelby Lathrop, ConocoPhillips

A member of:

Inogen\*

Environmental Alliance

# QUARTERLY SUMMARY REPORT Third Quarter 2005 76 Branded Facility No. 5487 28250 Hesperian Boulevard Hayward, California

## PREVIOUS ASSESSMENT

The Site is located at 28250 Hesperian Boulevard in Hayward, California. Two gasoline underground storage tanks (USTs), one waste oil UST and associated piping were removed from the site in January 1989 during the UST replacement activities. Seven soil samples from the sidewalls of the gasoline UST excavation and one soil sample from the base of the waste oil UST were collected for laboratory analysis. Following collection of the soil samples, approximately 2,000 gallons of groundwater was extracted from the gasoline UST excavation and properly disposed.

Laboratory analytical results for the soil samples collected from the gasoline UST excavation sidewalls revealed the presence of total petroleum hydrocarbons as gasoline (TPH-g) at concentrations ranging from below the laboratory detection limits to 130 milligrams per kilogram (mg/kg). Additionally, analysis of the soil sample collected from the base of the former waste oil UST showed the presence of 800 mg/kg TPH as diesel (TPH-d), 60 mg/kg TPH-g, and 3.6 mg/kg benzene.

Based on the results of the soil samples collected following the UST removal activities, the waste oil UST excavation was extended laterally on each side to approximately 21 feet by 29 feet by ten feet deep on February 1, 1989. During the over-excavation activities, four sidewall samples were collected from the excavation for confirmation laboratory analysis. Laboratory analysis of the soil samples collected from the sidewalls of the waste oil UST excavation showed the presence of TPH-d ranging from below the laboratory detection limit to 180 mg/kg and TPH-g ranging from below the laboratory detection limit to 110 mg/kg.

On February 14, 1989, approximately 17,500 gallons of groundwater was extracted from the gasoline UST excavation and disposed of in preparation for the installation of new USTs. A groundwater sample collected during the extraction event showed the presence of 110 micrograms per liter (ug/l) TPH-d and 2.2 ug/l benzene.

The northeast sidewall of the waste oil UST excavation was extended an additional eight feet laterally on February 17, 1989 and February 24, 1989. Confirmation soil sampling from the final completed excavation did not reveal the presence of petroleum hydrocarbons in excess of the laboratory detection limits. However, a groundwater sample collected from the base of the excavation revealed the presence of 1,300 ug/l TPH-d, 500 ug/l TPH-g, and 52 ug/l benzene. Based on these results, approximately 4,500 gallons of groundwater was extracted from the waste oil UST excavation and disposed.

Based on the laboratory results of the soil and groundwater samples collected from the UST excavation areas, five groundwater monitoring wells (MW-1 through MW-5) were advanced at the site. Laboratory analytical results of soil samples collected during the well installations of monitor wells MW-1 through MW-4 did not reveal TPH-g or benzene, toluene, ethyl benzene and xylenes (BTEX) in excess of the laboratory detection limits with the exception of 1.4 mg/kg TPH-g in a soil sample collected from MW-4 at a depth of nine feet below ground surface. Further, laboratory analysis of a soil sample collected during the installation of monitor well MW-5 showed the presence of 900 mg/kg TPH-g and 3.1 mg/kg benzene.

Groundwater analysis of groundwater samples from monitor wells MW-2, MW-3, and MW-5 did not reveal petroleum hydrocarbons in excess of the laboratory detection limits. However, groundwater samples collected from MW-1 and MW-4 showed benzene at concentrations of 2.1 ug/l and 0.33 ug/l, respectively. Based on this information, a monthly monitoring and quarterly groundwater sampling program was initiated at the site.

Due to fluctuating concentrations of petroleum hydrocarbons in groundwater samples collected from monitor well MW-5, two additional wells (MW-6 and MW-7) were installed at the site in June 1992. Laboratory analytical results of soil samples collected from borehole MW-7 did not show hydrocarbon concentrations in excess of the laboratory detection limits. However, soil samples collected during the installation of monitor well MW-6 showed 410 mg/kg TPH-g and 115 mg/kg total BTEX. Analysis of groundwater samples collected from these two wells was similar to the soil analytical results. Analytical results revealed that samples collected from monitor well MW-7 were below applicable laboratory detection limits; however, samples collected from monitor well MW-6 showed TPH-g concentrations ranging from 300 ug/l to 540 ug/l and benzene concentrations ranging from 12 ug/l to 66 ug/l.

Currently, groundwater monitoring wells MW-5, MW-6 and MW-7 are sampled annually during the first quarter of each year. The highest concentrations of benzene and MTBE were consistently detected in wells adjacent to the UST cavity and pump islands (wells MW-4, MW-5, and MW-6) in the southeastern portion of the site.

### MONITORING AND SAMPLING

Groundwater monitoring is conducted annually during the first quarter of each year. As this site is monitored and sampled on an annual basis, the following is a re-statement from the First Quarter 2005 Quarterly Summary Report, dated April 2, 2005.

Currently, groundwater samples are collected from the three site wells MW-5, MW-6, and MW-7 on an annual basis during the first quarter of each year. The sampled wells are submitted to Severn Trent Laboratories for analysis of total purgeable petroleum hydrocarbons (TPPH), BTEX and MTBE. Additionally, samples from monitor well MW-6 are monitored for ethanol.

During the first quarter 2005, groundwater samples and depth to water measurements were collected from the referenced wells on March 2, 2005. During the event, depth to groundwater measurements ranged from 4.01 feet (MW-7) to 6.30 feet (MW-3).

Laboratory analytical results of the groundwater samples collected from wells MW-5, MW-6 and MW-7 revealed MTBE at concentrations of 350  $\mu$ g/l, 390  $\mu$ g/l and 120  $\mu$ g/l, respectively. Additionally, benzene concentrations were detected in wells MW-5 and MW-6 at respective concentrations of 8.2  $\mu$ g/l and 3.0  $\mu$ g/l. Finally, TPH-g concentrations were detected in monitoring well MW-5 at a concentration of 110  $\mu$ g/l. No additional analytes were detected in excess of the laboratory detection limits.

#### **REMEDIATION STATUS**

Approximately 650 cubic yards of soil were removed from the gasoline and waste oil UST areas during the lateral extension of each excavation in January 1989. Additionally, an approximate total of 24,000 gallons of hydrocarbon-impacted groundwater was extracted from the gasoline and waste oil UST excavations in January and February 1989.

## **CHARACTERIZATION STATUS**

Based on the laboratory analytical results from soil samples collected during the UST over-excavation activities, it appears that hydrocarbon-saturated soils have been removed from the site. However, based on annual groundwater monitoring data, specifically MTBE concentrations, collected from the most downgradient monitor well (MW-7), the extent of contamination in groundwater has not been adequately delineated in the downgradient direction.

#### RECENT CORRESPONDENCE

Historical correspondence from 2003 includes a letter from the City of Hayward dated April 18, 2003, in which the City stated that the oversight of the UST Site Contamination Case for the 28250 Hesperian Boulevard property was transferred to the Alameda County Department of Environmental Health (ACDEH). The letter referred to Mr. Scott Seery, Hazardous Materials Specialist with the ACDEH, as the contact for the site. However, Delta has since determined that the site is currently managed by Mr. Don Hwang of the ACDEH.

ConocoPhillips and Delta have initiated verbal correspondences and dialog with Mr. Hwang. Future correspondence with Mr. Hwang and the ACDEH will include the recommendation to complete interim remediation activities to minimize offsite migration of the dissolved MTBE plume. Delta has scheduled a meeting with the ACDEH to discuss this site and the path forward recommendations during the fourth quarter 2005.

# THIS QUARTER ACTIVITIES (Third Quarter 2005)

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Delta submitted a Second Quarter Quarterly Summary Report on July 24, 2005.

# **NEXT QUARTER ACTIVITIES (Fourth Quarter 2005)**

 Delta anticipates the preparation of a work plan to complete an additional assessment/feasibility study to further assess the dissolved-phase hydrocarbon plume in the area of MW-6. Delta and ConocoPhillips have planned a meeting to discuss the path forward for the site in the fourth quarter 2005.

CONSULTANT: Delta Environmental Consultants, Inc.