ConocoPhillips
76 Broadway
Sacramento, California 95818

July 13, 2009

Barbara Jakub
Alameda County Health Agency
1131 Harbor Bay parkway, Suite250
Alameda, California 94502-577

Re: ***Semi-Annual Summary Report January –June 2009***
76 Service Station # 0746 RO # 0203
3943 Broadway Street
Oakland, CA

Dear Ms. Jakub:

I declare under penalty of perjury that to the best of my knowledge the information and/or recommendations contained in the attached report is/are true and correct.

If you have any questions or need additional information, please call me at (916) 558-7666.

Sincerely,

Terry L. Grayson
Site Manager
Risk Management & Remediation

July 10, 2009

Ms. Barbara Jakub
Supervising Hazardous Materials Specialist
Alameda County Health Care Services
1131 Harbor Bay Parkway
Alameda, California 94502-6577

DELTA

Re: Semi-Annual Summary Report
January through June 2009
76 Service Station No. 0746
3943 Broadway
Oakland, California
RO# 0203
AOC 1085

Dear Ms. Jakub,

On behalf of ConocoPhillips Company (ConocoPhillips), Delta Consultants (Delta) is submitting the subject report.

Please contact me at (916) 503-1260 if you have questions.

Sincerely,

Delta Consultants

John Reay, P.G.
Senior Project Geologist

PROFESSIONAL GEOLOGIST
JOHN R. REAY
NO. 4716
STATE OF CALIFORNIA

Alan Buehler
Staff Geologist

Enclosure

cc: Mr. Terry Grayson – ConocoPhillips (electronic copy only)

a member of: Inogen Environmental Alliance

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SEMI-ANNUAL SUMMARY REPORT
January through June 2009

76 Service Station No. 0746, RO# 0203
3943 Broadway
Oakland, California
County: Alameda

INTRODUCTION

During the first and second quarters of 2009 this site was unavailable for groundwater sampling due to on-site construction at this site. This report is submitted in accordance with Appendix A, RWQCB Tri-Regional Recommendations, Section 3.3 Quarterly Status Report- §2652(d).

The last sampling conducted at this site was on December 30, 2008 at which time TRC conducted semi-annual groundwater monitoring and sampling on behalf of ConocoPhillips. This semi-annual monitoring and sampling is performed as part of site assessment and characterization activities.

SITE DESCRIPTION

The site is currently an active service station located on the western corner of Broadway and 40th Street in Oakland, California (Figure 1.) Station facilities include two 12,000-gallon double-wall glasteel gasoline underground storage tanks (USTs) in a common pit, one 520-gallon double-wall glasteel waste oil UST, two dispenser islands, one station building, and a car wash building.

SITE BACKGROUND AND ACTIVITY

August 1989 Two 10,000- gallon steel gasoline USTs and one 280-gallon steel waste oil UST were removed and replaced with the current USTs. A total of approximately 350 cubic yards of soil was removed from the site during UST removal activities. The confirmatory soil sample was reported as non-detect for all constituents. The product piping was also removed. Confirmation soil sampling beneath piping and the waste oil tank contained low levels of petroleum hydrocarbons. During the tank removal activities, approximately 6,500 gallons of groundwater were pumped from the UST cavity. Concentrations of total petroleum hydrocarbons as gasoline (TPH-g) and benzene were reported as 1,200 micrograms per liter (µg/l) and 12 µg/l, respectively.

October 1989 Three monitoring wells (MW-1, MW-2, and MW-3 were installed at the site to depths ranging from 20 to 22.5 feet below ground surface (bgs).

January 1990 Two additional monitoring wells (MW-4 and MW-5 were installed at the site to a depth of 20 feet bgs.

January 1992 Two offsite monitoring wells (MW-10 and MW-11) were installed in the vicinity of the site at depths ranging from 19 to 22 feet bgs.

June 1992 One recovery well (RW-1) and one additional offsite monitoring well (MW-12) were installed at the site to depths of 17.5 feet bgs.

February 1998 The product piping and associated dispenser islands were replaced at the site. Four soil samples were collected from beneath the dispenser islands. Petroleum hydrocarbons were reported at low to moderate levels. A total of 30.20 tons of stockpiled soil was transported from the site to the Forward Inc. Landfill in Stockton, California.

October 2003 Site environmental consulting responsibilities were transferred to TRC.

March 2007 TRC submitted a Feasibility Study Workplan to conduct a 120-hour (5-day) DPE event using a mobile treatment system (MTS).

October 2007 Site environmental consulting responsibilities were transferred to Delta Consultants.

June 2008 Delta submitted Work Plan For Source Area Vertical Delineation.

SENSITIVE RECEPTORS

On February 8, 2007, TRC completed a sensitive receptor survey for this site. The only surface water body within the vicinity of the site is Glen Echo Creek, located approximately 1,630 feet southeast of the Site, is not within the path of local groundwater flow.

Three water supply wells found to be within a one-half mile radius of the site were not within the path of local groundwater flow.

GROUNDWATER MONITORING AND SAMPLING

No monitoring or sampling occurred during the first and second quarters of 2009. The following is a review of the most recent S&M data, dated December 30, 2009.

The groundwater monitoring well network, consisting of eight onsite and five offsite monitoring wells, has been monitored and sampled on a semi-annual basis since May 1996. During the most recent groundwater sampling event conducted on December 30, 2008, reported depth to groundwater ranged from 7.47 feet (MW-6) to 13.56 feet (MW-10) below top of casing (TOC).

The groundwater flow direction was reported southwest at a gradient of 0.05 ft/ft during the December 2008 sampling event. This is consistent with a gradient of 0.05 ft/ft south during the previous sampling event (June 9, 2008). Reported historical groundwater flow direction has been primarily to the southwest.

Dissolved groundwater concentrations are reported as follows.

TPH-G Detected in three of the twelve sampled wells with a maximum concentration of 970 µg/L in well MW-9 during the December 2008 sampling event. This is an increase from a maximum concentration of 9,700 µg/L in well MW-3 during the June 2008 sampling event.

Benzene Detected in none twelve sampled wells during the December 2008 sampling event. This is a decrease from the maximum concentration of 190 µg/L in well MW-3 during the June 2008 sampling event.

Ethylbenzene Detected in one of the twelve wells at a concentration of 0.84 µg/L in MW-9 during the December 2008 sampling event.

MTBE Detected in five of the seven sampled wells with a maximum concentration of 5.0 µg/L in well MW-9 during the December 2008 sampling event. This is a decrease from a maximum concentration of 39 µg/L in well RW-1 during the June 2008 sampling event. MW-1, MW-4, MW-7, and MW-8 showed concentrations of 3.2 µg/L, 1.1 µg/L, 1.0 µg/L, and 2.9 µg/L respectively during the December 2008 sampling event.

There was measurable LPH (0.13 feet) in MW-5 and therefore, this well was not sampled during the December 2008 sampling event.

REMEDIATION STATUS

In 1989, approximately 350 cubic yards of soil was removed from the site during UST removal activities. During the tank removal activities, approximately 6,500-gallons of groundwater were pumped from the UST cavity.

In 1990, groundwater recovery tests were performed on four wells to determine potential locations fro placement of recovery wells.

In 1993, a pilot vapor extraction test was performed at the site on well RW-1. A maximum concentration of 8.6 µg/l TPH-G was reported in the influent vapor stream. The calculated maximum hydrocarbon extraction rate during the test was 0.00049 lbs/hr.

Based on the low extraction rate, high groundwater levels, and fine-grained soil beneath the site, vapor extraction was determined to not be a feasible remedial option. Well RW-1 was initially installed to perform a groundwater recovery test, but due to lack of groundwater recharge, the test was not performed.

In 1998, the product piping and associated dispenser islands were replaced at the site. Denbeste Transportation, Inc. of Windsor, California transported a total of 30.20 tons of stockpiled soil from the site to the Forward Inc. Landfill in Stockton, California for the disposal.

On April 5-8, 2005, TRC conducted a 69-hour dual-phase extraction (DPE) event at the site using a mobile treatment system (MTS). This event was successful in removing a substantial amount of vapor-phase petroleum hydrocarbons from the subsurface in a relatively short time period. Influent vapor concentrations decreased over the course of the event and appeared to reach asymptotic levels. The influent concentrations and mass removal rates indicate that further short-term DPE treatment may be an effective means of reducing source material in the vicinity of RW-1, MW-3, and MW-5.

CHARACTERIZATION STATUS

Maximum historic TPH-G, benzene, and MTBE soil concentrations were reported at 9,700 ppm, 190 ppm, and 39 ppm, respectively.

During the December 2008 sampling event, maximum TPH-G, benzene and MTBE were detected at 970 µg/L (MW-9), ND, and 5.0 µg/L (MW-9) respectively.

RECENT CORRESPONDENCE

December 2008 Submittal of DWR *Well Completion Report Release Request and Confidentiality Agreement – Regulatory-Related Environmental Cleanup Study* submitted to ACEH for review and approval.

RECENT ACTIVITIES (First and Second Quarters 2009)

- On-site construction prevented any M&S from being done.
- Delta prepared *Semi-Annual Summary Report January through June 2009.*

UPCOMING ACTIVITIES (Third and Fourth Quarters 2009)

- TRC will perform the third and fourth quarter 2009 groundwater monitoring and sampling event.
- TRC shall prepare the *Quarterly Monitoring Report, July through December 2009.*

CONSULTANT: Delta Consultants