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November 10, 2005

Mr. Jerry Wickham
Alameda County Health Care Services
1131 Harbor Bay Parkway
Alameda, CA 94502-6577

Re: Quarterly Summary Report – Third Quarter 2005
Delta Project Number: C3Q-4186-011

Dear Mr. Wickham:

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

Service Station	Location
76 Service Station No. 4186	1771 First Street Livermore, California

Sincerely,
Delta Environmental Consultants, Inc.

Daniel J. Davis, R.G.
Project Manager

REGISTERED GEOLOGIST
DANIEL J. DAVIS
No. 6435
STATE OF CALIFORNIA

cc: Ms. Shelby Lathrop, ConocoPhillips (electronic copy only)

RECEIVED
By lopprojectop at 8:51 am, Nov 15, 2005

QUARTERLY SUMMARY REPORT
Third Quarter 2005
76 Station No. 4186
1771 First Street
Livermore, California

PREVIOUS ASSESSMENT

This site is an operating Union 76 service station located on First Street between N Street and O Street in Livermore, California. The facility property contains the station building, four product dispenser islands, and two gasoline underground storage tanks (UST).

On June 6, 1996, six soil samples were collected from beneath the fuel dispensers and product delivery piping during dispenser and piping replacement activities. Results of soil sample analyses were reported as not detected (ND) for total petroleum hydrocarbons as gasoline (TPHg), and benzene, toluene, ethylbenzene and total xylenes (BTEX) for each sample collected beneath the dispenser islands and product delivery piping.

On September 10, 1997, a soil gas survey was conducted as part of a baseline site evaluation associated with transfer of the property from Unocal Corporation to Tosco. Six soil gas probes were advanced and samples collected at 3 or 15 feet below ground surface (bgs) in the vicinity of the UST complex, dispenser islands, and product lines. Analytical results of the soil samples ranged from 41 to 4,500 parts per billion by volume (ppb-v) of TPHg, ND to 110 ppb-v of benzene and ND to 8,000 ppb-v of methyl tertiary butyl ether (MtBE). The area of highest soil vapor concentration was localized around the UST complex.

On April 8, 1998, the Alameda County Zone 7 Water Agency files were reviewed to identify water supply wells located within a one-half mile radius from the site. Two municipal wells were identified approximately 1,500 feet and 1,800 feet northwest of the site, and two domestic wells were located approximately 1,900 feet and 2,800 feet southwest and west of the site.

On June 16, 1998, three 2-inch diameter groundwater monitor wells (U-1 through U-3) were installed. The wells were each installed to a depth of approximately 34 feet bgs. Soil samples collected from the three well borings were reported as ND for TPHg, benzene, and MtBE.

In May 2000, a site conceptual model (SCM) was completed for the site. In the SCM, groundwater flow velocity was calculated to determine the plume travel time to the nearest receptor. Ground water velocity was calculated at 46 feet per year. The SCM concluded that hydrocarbon impact to groundwater appears to fluctuate with the rise and fall of the groundwater surface beneath the site.

On February 21, 2001, two 2-inch diameter offsite groundwater monitor wells (U-4 and U-5) were installed. The wells were installed to depths of approximately 47 feet bgs. TPHg, BTEX and MtBE were not detected in the soil samples analyzed. TPHg and benzene were ND in groundwater samples analyzed from wells U-4 and U-5. MtBE was detected in groundwater samples from wells U-4 and U-5 at concentrations of 38.2

micrograms per liter (µg/l) and 55.4 µg/l, respectively; other fuel oxygenates were non-detectable. Groundwater monitoring and sampling of the wells was initiated in July 1998 and has continued on a quarterly basis to the present time. Historically, groundwater flow directions have varied from north to southwest. Depth to groundwater has varied from approximately 23 to 46 feet below top of casing.

On December 5 – 7, 2001, two monitor wells (U-6 and U-7) and eight ozone microsparge points (SP-1 through SP-8) were installed. The monitor wells were each installed to 46 feet bgs using 8-inch diameter hollow stem augers. Borings SP-1 through SP-8 were completed as sparge wells with the installation of 2-inch diameter KVA sparge points attached to ¾-inch diameter blank schedule 80 PVC casing through the hollow-stem augers. The sparge points are composed of 30-inch long microporous plastic. Sparge points SP-1 through SP-4 were installed to depths of 45 feet bgs. Sparge points SP-6S and SP-7S were installed to depths of 25 feet bgs. The remaining two sparge locations contain nested sparge points (SP-5, SP-5S, SP-8 and SP-8S) installed to 25 and 45 feet bgs in each boring. Upon completion of the sparge point installation, an interim remediation system was installed consisting of a K-V Associates, Inc. (KVA) "C-Sparge" ozone microsparge system.

MONITORING AND SAMPLING

Groundwater is currently monitored and sampled on a quarterly basis each year. During the September 23, 2005 monitoring and sampling event, groundwater depths ranging from 27.64 feet (U-3) to 33.01 feet (U-5) below top of casing (TOC). The groundwater flow direction was reported towards the south and west at a gradient of 0.06 ft/ft. Maximum dissolved groundwater concentrations were present as follows: TPPH (6,000 µg/L in U-3), benzene (78 µg/L in U-6), and MtBE (8,900 µg/L in U-3). Groundwater monitoring and sampling is conducted by TRC under direct contract to ConocoPhillips.

The MtBE concentrations are fluctuating in groundwater samples from monitor wells across the site. The groundwater monitoring report for the quarter is attached.

REMEDIATION STATUS

The ozone sparge system, manufactured by KVA, was placed into operation on December 19, 2001 and is designed to cycle the ozone/oxygen injection between 8 sparge points. A typical injection schedule for this site was designed to operate at 18 times a day at 5 and 15 minutes per point per cycle. The system's current cycle frequency is 7 minutes. Remediation system operation and maintenance is conducted by SECOR under direct contract to ConocoPhillips.

For the third quarter 2005, the ozone sparge system operated at 34% of the programmed run time, 938 hours, and injected 8.4 pounds of ozone. System operation and maintenance (O&M) activity is conducted on a monthly to semi-monthly basis.

The system was off on July 11, 2005 due to malfunction of the compressor. The compressor was removed on August 8, 2005 and replaced on August 26, 2005 at which time the system was started. However, sparge points OZ-5 and OZ-6 were turned off due to leaks and the system program modified to remain at 100% runtime. The system was off on September 13, 2005 due to the ozone alarm being tripped because of leaks from OZ-4 and OZ-7. These sparge points were turned off and the system restarted. A site visit on September 30 found the system up and running; sparge points OZ-4, OZ-5,

OZ-6, and OZ-7 remained off due to leaks. O&M visits will continue to be scheduled during the fourth quarter 2005. The O&M report for the quarter is attached.

CHARACTERIZATION STATUS

The furthest up-gradient monitor well, U-3, contained 8,900 µg/l MtBE and 6,000 µg/l TPHH during the third quarter 2005 sampling event. The furthest offsite downgradient well, U-5, contained 53 µg/l of MtBE this quarter. The TPPH concentration in monitor well U-6 was 5,000 µg/l, down from 12,000 µg/l last quarter; this may be due to a drop of 3.63 feet in the groundwater elevation in U-6 since the last reporting period or reflect reductions through the remediation process.

RECENT CORRESPONDENCE

1. Alameda County Environmental Health (ACEH) responded to the work plan submitted by ATC (*Work Plan – Site Assessment*, May 23, 2005) with technical comments dated July 15, 2005.

2. ATC submitted a *Revised Work Plan – Agency Response and Further Site Characterization Activity*, dated August 12, 2005, in which comments by ACEH to the original work plan were incorporated.

3. ACEH sent a letter to ATC, dated September 9, 2005, approving the revised work plan.

THIS QUARTER ACTIVITIES (Third Quarter 2005)

1. TRC performed quarterly monitoring and sampling at the site.

2. SECOR performed system operation and maintenance activities at the site.

3. A Revised Work Plan submitted by ATC to the Alameda County Environmental Health was approved in a letter dated September 9, 2005.

WASTE DISPOSAL SUMMARY

No waste was generated this quarter.

June 1996 - A total of 25 cubic yards of soils was excavated and disposed.

NEXT QUARTER ACTIVITIES (Fourth Quarter 2005)

1. One monitor well will be installed in the up-gradient direction. Drilling is scheduled to be conducted on December 12, 2005.

2. SECOR will continue operation and maintenance on the ozone/oxygen sparge system at the site.

3. TRC will sample and monitor the well network.

CONSULTANT: Delta Environmental Consultants, Inc.