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8:56 am, Jan 28, 2010

Alameda County Environmental Health

January 26, 2010

Mark Detterman Alameda County Health Agency 1131 Harbor Bay parkway, Suite250 Alameda, California 94502-577

Re: Quarterly Summary Report—Fourth Quarter 2009 76 Service Station # 3737 RO 067 1400 Powell Street Emeryville, CA

Dear Mr. Detterman,

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

January 19, 2010

Mr. Mark Detterman Alameda County Health Agency Department of Environmental Health 1131 Harbor Bay Parkway Alameda, CA 94502-6577

Re: Quarterly Summary Report – Fourth Quarter 2009 76 Service Station No. 3737 1400 Powell St Emeryville, California RO# 0067

Dear Mr. Detterman,

On behalf of ConocoPhillips Company (ConocoPhillips), Delta Consultants (Delta) is submitting this quarterly summary report for the following site:

Service Station

Location

ConocoPhillips Station #3737

1400 Powell Street Emeryville, California

Sincerely, Delta Consultants

mette Pico FOR

Evan Chantikian Senior Staff Geologist

Lia Holden, PG #8584 Geologist - Project Manager



Figures: Figure 1 – Site Location Map Figure 2 – Site Plan

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



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QUARTERLY SUMMARY REPORT Fourth Quarter 2009

ConocoPhillips Station #3737 1400 Powell Street Emeryville, Alameda County, CA

SITE DESCRIPTION

The site is located at 1400 Powell Street, Emeryville, California and is currently an active service station. A site vicinty map is provided as **Figure 1**. The approximate locations of current and historic site features are shown on **Figure 2**. Properties in the immediate site vicinity are predominantly residential and commercial. Local topography is generally flat with an average site elevation of approximately 15 feet above mean sea level (MSL). Site soils consist of interbedded silts, lean clays, and gravely and sandy clays. Groundwater beneath the site is encountered at approximately six to ten below grade (fbg). The site overlies a former Unocal bulk fuel plant, as does one adjacent open case (RO#2621, Emeryville Industrial Court); the responsible party for this neighboring case is Wareham Development.

SITE BACKGROUND AND ACTIVITY

Between 1917 and 1964 Union Oil Company of California operated a Distribution Plant that was bounded by Powell Street to the south, 59th Street to the north, Peladeau Street to the west, and Hollis Street to the east. This distribution facility contained numerous above ground and underground storage tanks (ASTs and USTs), a garage along Hollis Street and an auto repair shop along Peladeau Street (Treadwell & Rollo, 2007). The entire gasoline service station was constructed on what was Union Oil Company of California Distribution Plant property. On the portion of the former Distribution Plant that the Subject site currently occupies, there were a total of eight ASTs containing oil and gasoline on the west side, and an oil warehouse, oil pump, and asphalt staging area on the east side.

The eight former ASTs located on the western portion of the Site had a combined storage capacity of 624,000 gallons, and were installed within the former berm. The lateral extent of this former bermed area includes the location of the three existing USTs as well as a majority of the existing underground piping and dispensers currently at the site. According to Treadwell & Rollo's Site Management Completion report for 5885 Hollis Street, Emeryville, dated January 5, 2007, elevated levels of hydrocarbons were observed in soils of the Emeryville Industrial Court, now Emerystation East, the property located north of the subject site, soil samples collected from soil borings TR-25 and TR-28, located approximately 5 feet north of the Site's northern property line, contained maximum concentrations of 2,100 milligrams per kilogram (mg/kg) of total petroleum hydrocarbons as gasoline (TPH-G) and 280 mg/kg of total petroleum hydrocarbons as motor oil (TPH-MO), respectively, at 6 fbg. A grab groundwater sample collected from TR-25 contained 150,000 micrograms per liter (ug/L) TPH-G and 2,500 ug/L benzene.

The entire Emerystation East property was excavated to a total depth of approximately 12 to 15 fbg to prepare the foundation of the building that currently occupies the site. Confirmation soil samples collected in the area to the north of the Subject site on the Emerystation East property indicated that TPH-G and TPH-MO were detected at maximum concentrations of 10 *mg/kg* and 6.0 *mg/kg*, respectively. During the excavation of the foundation for the Emerystation East building, three dewatering wells were installed and sampled on a weekly basis. Dewatering well DW-14, located in the southwestern corner of the property, had high levels of TPH-G, total petroleum hydrocarbons as diesel (TPH-D), and benzene, toluene, ethyl benzene, and total

xylenes (BTEX) throughout the course of the excavation work. The maximum concentrations of TPH-G and TPH-D detected in extracted groundwater were 1,800 ug/L and 370 ug/L, respectively (Treadwell & Rollo, 2007).

August 11, 1993: GeoStrategies oversaw the removal of an Oil-Water separator.

<u>September 10, 1997</u>: A soil gas survey was conducted by Pacific Environmental Group Inc.

<u>May 7, 1999</u>: Under the supervision of TRC, Norman and Norman completed the removal of product piping associated with the former fuel dispenser islands. Immediately following the piping removal soil samples D-I, D-2, PL-I, PL-2, PL-3, and PL-4 were collected at selected points along the former product line trench and at the former dispenser islands, at depths ranging from 1.5 to 4.0 fbg. The samples were analyzed for total petroleum hydrocarbons as gasoline (TPH-G), total petroleum hydrocarbons as diesel (TPH-D), benzene, toluene, ethylbenzene, and total xylenes (BTEX), and methyl tertiary butyl ether (MTBE) by EPA Methods *8015/8020*.

<u>May 11, 1999</u>: Norman and Norman under the supervision of TRC and Robert Weston with Alameda County Environmental Health Services, over excavated soil from below the former northwest dispenser and product piping. Approximately six cubic yards of soil was removed. Soil sample PL-2 was collected from below the excavation, at a depth of 4 fbg. In addition, a groundwater sample (TCW-I) was collected and analyzed for TPH-G, TPH-D, BTEX, and MTBE by EPA Methods *8015/8020*.

<u>May 24, 1999</u>: One single-walled 550-gallon steel waste oil UST, located west of the station building was removed under the direction of Susan Hugo with ACHCS and supervision of TRC. Soil samples WO-4 through WO-7 and WO-I were collected from the bottom and sidewalls of the excavation at depths of 7.5 and 10 fbg and analyzed for TPH-G, TPH-D, total petroleum hydrocarbons as motor oil (TPH-MO), BTEX, and MTBE.

November 6, 2007: Site transferred to Delta Consultants.

<u>July 2009</u>: Delta oversaw the advancement of CPT borings CPT-1 through CPT-7 to depths of approximately 60 fbg. Details of this investigation are presented in Delta's *Report of CPT Delineation of Fuel Hydrocarbon Affected Soil and Groundwater*, dated August 18, 2009.

SENSITIVE RECEPTORS

In January 2010, Delta conducted a sensitive receptor survey, identifying sensitive receptors within a one-half mile radius of the site. The survey entailed contacting the Department of Water Resources (DWR) to obtain a well search report. Delta used this report to identify all wells within a one-half mile radius of the site, including domestic, municipal, and irrigation wells. No domestic, municipal, or agricultural wells were located within a one-half mile radius of the site.

Additional sensitive receptors located within a one-half mile radius of the site include four schools and two child day care centers. The nearest body of surface water located is the San Francisco Bay, which is approximately one-half mile to the west of the site. Complete details of this survey are presented in Delta's *Sensitive Receptor Survey*, dated January 18, 2010.

GROUNDWATER MONITORING AND SAMPLING

As wells are not installed at the site, there is no monitoring and sampling program.

REMEDIATION STATUS

Remediation is not currently conducted at this site.

RECENT CORRESPONDENCE

In correspondence dated November 18, 2009, Alameda County Environmental Health (ACEH) requested an additional Soil and Groundwater Investigation Work Plan, due to be submitted by January 30, 2010. The directive requested that groundwater samples collected in the vicinity of the nearby dry cleaners and former bulk fuel plant be analyzed for full scan VOCs by EPA method 8260B, and for motor oil by EPA method 8015. Additionally, the ACEH requested that ConocoPhillips and Wareham Development (responsible party for adjacent case RO#2621) share case data as both sites overlie a former Unocal bulk fuel plant and share a common source area.

On December 11, 2009, Delta and ConocoPhillips met with Wareham Development, and their consultant Treadwell & Rollo, to share current data and to discuss the paths forward for the investigations of each site.

In email correspondence dated January 11, 2010, the ACEH extended the deadline for the required Work Plan by 90 days, with a revised due date of April 30, 2010. The extension was not requested by ConocoPhillips, but was directed by ACEH to allow time for an investigation at a neighboring site (RO# 2621) to be completed. As both sites overly a former Unocal bulk fuel pant, sharing a common source area, data from the adjacent investigation may aid in the formulation of a more comprehensive scope of work for the ConocoPhillips (Case #R0067) work plan.

CONCLUSIONS AND RECOMMENDATIONS

Delta conducted a site assessment using cone penetrometer test (CPT) equipment. The *Report* of CPT Delineation of Fuel Hydrocarbon Affected Soil and Groundwater, dated August 18, 2009, concluded that contaminants of concern are present at low to moderate concentrations in the northeastern portion of the site, and at lesser concentrations in the southwestern portion of the site. From this investigation, Delta reported that the extent of dissolved phase petroleum hydrocarbon plume was not fully defined, and the groundwater flow direction needed to be established.

Delta recommends the installation of groundwater monitoring wells to determine current constituent concentrations in groundwater and establish groundwater flow direction beneath the site; however, as directed by ACEH, Delta will await the results of the investigation associated with the neighboring site (RO 2621; Emeryville Industrial Court). Delta will prepare and submit a work plan detailing proposed field activities on or before April 30th, 2010.

A sensitive receptor survey was conducted within a one-half mile radius of the site during the first quarter of 2010. No municipal, domestic or agricultural water-supply wells were identified within a one-half mile radius of the site. The results of this recent receptor survey will be submitted under separate cover during the current quarter.

THIS QUARTER ACTIVITIES (Fourth Quarter 2009)

• Groundwater monitoring and sampling was not conducted.

NEXT QUARTER ACTIVITIES (First Quarter 2010)

- No monitoring and sampling program is scheduled.
- Delta will prepare and submit a well installation work plan
- Delta completed a sensitive receptor survey to identify municipal, agricultural and domestic wells within a one-half mile radius of the Site.

REMARKS

The descriptions, conclusions, and recommendations contained in this report represent Delta's professional opinions based upon the currently available information and are arrived at in accordance with currently acceptable professional standards. For any reports cited that were not generated by Delta, the data from those reports is used "as is" and is assumed to be accurate. Delta does not guarantee the accuracy of this data for the referenced work performed nor the inferences or conclusions stated in these reports. This report is based upon a specific scope of work requested by the client. The Contract between Delta and its client outlines the scope of work, and only those tasks specifically authorized by that contract or outlined in this report were conducted. This report is intended only for the use of Delta's Client and anyone else specifically listed on this report. Delta will not and cannot be liable for unauthorized reliance by any other third party. Other than as contained in this paragraph, Delta makes no express or implied warranty as to the contents of this report.

CONSULTANT: Delta Consultants

REFERENCES:

The Sanborn Library LLC, Site Plan, 1951.

- GeoStrategies, Inc., *Oil/Water Separator Abandonment*, Unocal Service Station No. 3737, 1400 Powell Street, Emeryville, California, August 11, 1993.
- Pacific Environmental Group, Inc., *Soil Gas Survey Results*, Unocal Service Station 3737, 1400 Powell Street, Emeryville, California, October 29, 1997.
- TRC Alton Geoscience, *Underground Storage Tank Closure Report*, Former Tosco 76 Service Station 3737, 1400 Powell Street, Emeryville, California, August 2, 1999.
- Treadwell & Rollo, 2007, Site Management Completion Report, 5885 Hollis Street, Emeryville, California, January 5, 2007.
- Delta Consultants, *Report of CPT Delineation of Fuel Hydrocarbon Affected Soil and Groundwater*, 76 Service Station No. 3737, 1400 Powell Street, Emeryville, California, August 18, 2009.





LEGEND:

	TANK CAVITY WELL		
- -	APPOROXIMATE LOCATION OF DEWATERING WELL (OFFSITE)		
۲	APPROXIMATE BORING LOCATION BY TREADWELL AND ROLLO (OFFSITE), 2000–2005		
\oplus	HISTORICAL BORING LOCATION (ONSITE)		
•	CPT BORING LOCATION, 2009		
	APPOROXIMATE LOCATION OF SITE FEATURES ON 1951 SANBORN MAP		



SITE PLAN ADAPTED FROM A MAP CREATED BY TRC FROM UNION OIL CO. SITE PLAN (1979).

FIGURE 2 SITE PLAN

FORMER 76 STATION #3737 1400 POWELL STREET EMERYVILLE, CALIFORNIA

JECT NO.	PREPARED BY	DRAWN BY	
737	NP	JH	
E	REVIEWED BY	FILE NAME	
8/09	LH	76–3737	