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**Shaw**™ Shaw Environmental, Inc.

4005 Port Chicago Hwy  
Concord, California 94520

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

Re: **Report Transmittal  
Quarterly Report  
First Quarter – 2005  
76 Station 5043  
449 Hegenberger Road, Oakland, CA**

Environmental Health

MAR 18 2005

Alameda County

Dear Mr. Hwang:

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) 558-7609.

Sincerely,

**Shelby Suzanne Lathrop**  
Project Manager  
Shaw Environmental, Inc.  
Approved service provider of ConocoPhillips -Risk Management & Remediation  
Cell: 707-592-1146

Client Contact Information:  
**ConocoPhillips**  
76 Broadway  
Sacramento, California 95818  
Client office: 916-558-7609  
Client fax: 916-558-7639

Attachment  
cc: Liz Sewell, ConocoPhillips



March 14, 2005

TRC Project No. 42014401

Mr. Don Hwang  
Alameda County Health Care Services Agency  
1131 Harbor Bay Parkway  
Alameda, CA 94502-6577

**RE: Quarterly Status Report - First Quarter 2005**  
**76 Station #5043, 449 Hegenberger Road, Oakland, California**  
**Alameda County**

Environmental Services  
MAR 18 2005  
Alameda County

Dear Mr. Hwang:

On behalf of ConocoPhillips Company (ConocoPhillips), TRC is submitting the First Quarter 2005 Quarterly Status Report for the subject site, shown on the attached Figures 3 through 5.

**PREVIOUS ASSESSMENTS**

The subject site is an operating ConocoPhillips (76) service station, situated on the southwestern corner of Hegenberger Road and Edgewater Drive in Oakland, California. Station facilities include three underground storage tanks (USTs), four dispenser islands, and a station building. A total of six groundwater-monitoring wells are located at or near the site.

October 1991: Four soil samples were collected from the product pipe trenches at depths of approximately 3 feet below ground surface (bgs) during a dispenser island modification. Petroleum hydrocarbon concentrations were moderate to elevated. The product pipe trenches were subsequently excavated to the groundwater depth at 4 to 4.5 bgs.

February 1992: Three monitoring wells were installed at the site to depths ranging from 13.5 to 15 feet bgs.

August 1992: Three additional monitoring wells were installed at the site to depths of 13.5 feet bgs.

September 1994: One 280-gallon waste oil UST was removed from the site. The tank was made of steel, and no apparent holes or cracks were observed in the tank. One soil sample was collected from beneath the former tank at a depth of approximately 9 feet bgs. No petroleum hydrocarbons were detected.

January 1995: Two additional monitoring wells were installed at the site to a depth of 13 feet bgs. In addition, two existing monitoring wells were destroyed in order to accommodate the

construction of a car wash at the subject site. Wells MW-4 and MW-5 were fully drilled out and backfilled with neat cement.

March 1995: Two 10,000-gallon gasoline USTs and one 10,000-gallon diesel UST were removed from the site. Groundwater was encountered in the tank cavity at a depth of approximately 8.5 feet bgs. Soil samples contained low levels of total petroleum hydrocarbons as diesel (TPH-d) and benzene, and moderate levels of total petroleum hydrocarbons as gasoline (TPH-g). Approximately 125,000 gallons of groundwater were pumped from the site for remediation and properly disposed offsite. Four dispenser islands and associated product piping were also removed. Based on detections in confirmation samples, the product dispenser islands were over excavated to approximately 6 feet bgs.

March-April 1995: During demolition activities of the former station building, soil samples were collected from two excavations, which were subsequently over excavated. Confirmation samples contained low petroleum hydrocarbons. An additional area on the south side of the former station building was excavated based on photoionization detector (PID) readings. Two monitoring wells were destroyed in order to allow for over excavation activities to extend to an area adjacent to the dispenser islands in the southeastern quadrant of the site. The excavated areas were subsequently backfilled with clean-engineered fill.

April 1997: Two additional monitoring wells were installed in the vicinity of the site to depths of 13 to 15 feet bgs. In addition, well MW-3, which was damaged during the UST cavity overexcavation in 1995, was fully drilled out and reconstructed in the same borehole.

October 2003: Site environmental consulting responsibilities were transferred to TRC.

## **SENSITIVE RECEPTORS**

A sensitive receptor survey has not been performed for the site.

## **MONITORING AND SAMPLING**

Groundwater samples have been collected on a quarterly basis since 1992. Since 1995, the highest hydrocarbon concentrations, with the exception of methyl tertiary butyl ether (MTBE), have been observed in onsite monitoring well MW-6.

Currently, three onsite and three offsite wells are monitored and sampled quarterly. All wells were sampled this quarter. The groundwater gradient and flow direction were 0.01 foot/foot to the south. These data were consistent with historical data.

## **CHARACTERIZATION STATUS**

Total purgeable petroleum hydrocarbons (TPPH) were detected in all wells, at a maximum concentration of 71,000 micrograms per liter ( $\mu\text{g/l}$ ) in onsite monitoring well MW-6. These levels were consistent with recent historical data.

Benzene was detected in four of the six wells, at a maximum concentration of 1,600  $\mu\text{g/l}$  in onsite monitoring well MW-6. These levels were consistent with recent historical data.

MTBE was detected in one of the six wells, at a maximum concentration of 64  $\mu\text{g/l}$  in onsite monitoring well MW-3. These levels were consistent with recent historical data.

Total petroleum hydrocarbons as diesel (TPH-d) were detected in five of six wells, at a maximum concentration of 12,000  $\mu\text{g/l}$  in onsite monitoring well MW-6. These levels were consistent with recent historical data.

## **REMEDIATION STATUS**

Remediation is not currently being conducted at the site.

## **RECENT CORRESPONDENCE**

October 13, 2004: TRC submitted the work plan for dual phase vacuum extraction (DPVE) pilot test. The objective of this test is to evaluate the DPVE's effectiveness in removing hydrocarbon mass in soil and groundwater at the localized "hot spot" in the vicinity of MW-6.

As of March 8, 2005, no comments were received from Alameda County on the work plan, and per California Code of Regulations Title 23, Div 3, Chapter 6, Article 11, Section 2722, TRC submitted an e-mail to Don Hwang at Alameda County. In the email, the scheduling of the pilot test for late March/early April 2005 was discussed, and the County was informed of the intent to proceed with the work. If no comments are received by March 18, 2005 it will be assumed that Alameda County has no objections to the implementation of the work plan. Any comments received by the referenced date will be addressed prior to mobilization to the field.

## **CURRENT QUARTER ACTIVITIES**

January 10, 2005: TRC performed groundwater monitoring and sampling. Wastewater generated from well purging and equipment cleaning was stored at TRC's groundwater monitoring facility in Concord, California, and transported by Onyx to the ConocoPhillips Refinery in Rodeo, California, for treatment and disposal.

## **NEXT QUARTER ACTIVITIES**

Perform DPVE test at localized "hot spot" in the vicinity of MW-6.

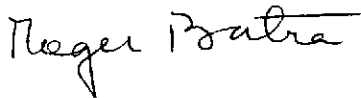
QSR – First Quarter 2005  
76 Service Station #5043, Oakland, California  
March 14, 2005  
Page 4

Continue quarterly monitoring and sampling to assess plume stability and concentration trends at key wells.

If you have any questions regarding this report, please call me at (925) 688-2466.

Sincerely,

TRC



Roger Batra  
Senior Project Manager

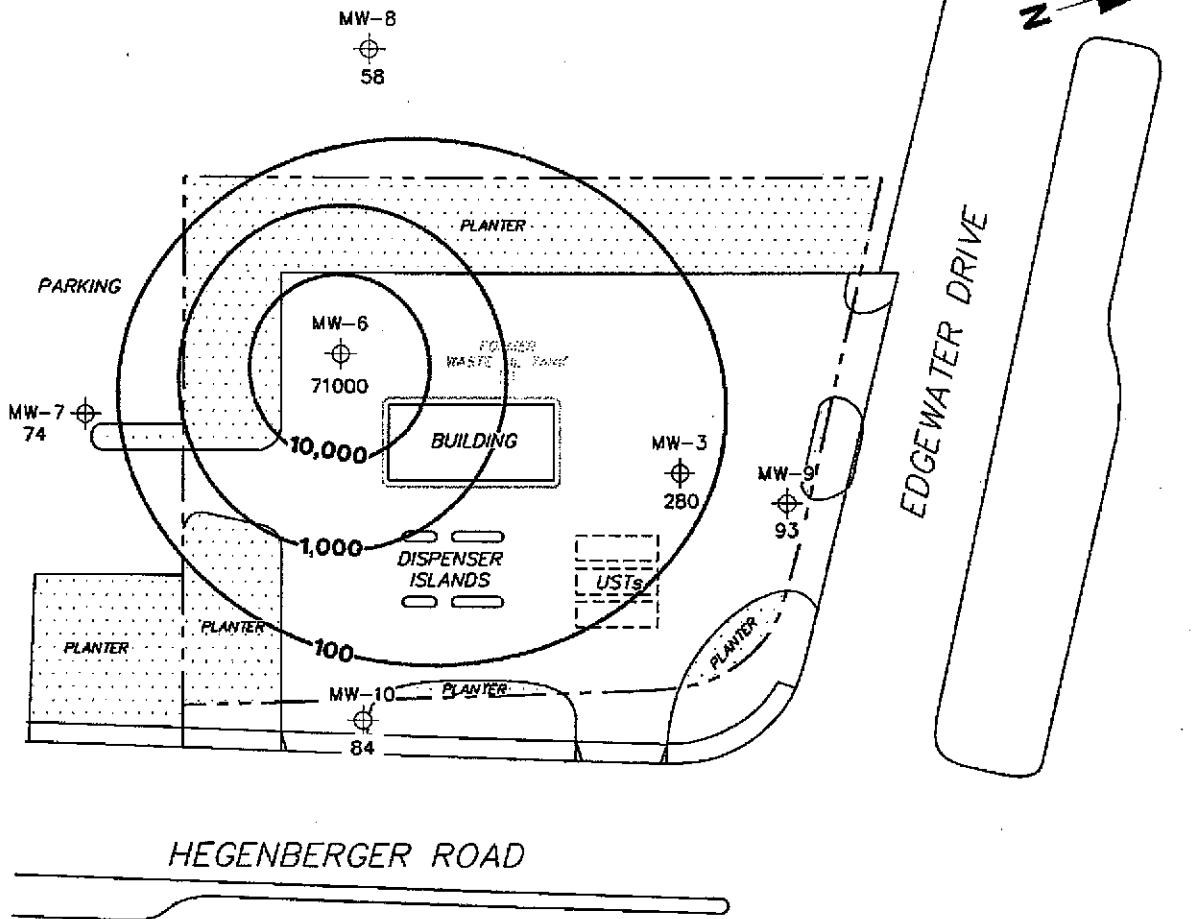
Attachments:

Figure 3 – Dissolved-Phase TPPH Concentration Map, January 10, 2005, from Quarterly Monitoring Report, January through March 2005, dated February 25, 2005 by TRC.

Figure 4 – Dissolved-Phase Benzene Concentration Map, January 10, 2005, from Quarterly Monitoring Report, January through March 2005, dated February 25, 2005 by TRC.

Figure 5 – Dissolved-Phase MTBE Concentration Map, January 10, 2005, from Quarterly Monitoring Report, January through March 2005, dated February 25, 2005 by TRC.

cc: Shelby Lathrop, ConocoPhillips (electronic upload)  
Beretta Investment Group, 39560 Stevenson Pl., Suite 118, Fremont, CA 94539



**NOTES:**

Contour lines are interpretive and based on laboratory analysis results of groundwater samples. TPPH = total purgeable petroleum hydrocarbons. µg/l = micrograms per liter. UST = underground storage tank. Results obtained using EPA Method 8260B.

**LEGEND**

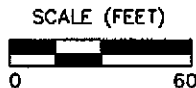
MW-10 ⊕ Monitoring Well with Dissolved-Phase TPPH Concentration (µg/l)

—10,000— Dissolved-Phase TPPH Contour (µg/l)

**DISSOLVED-PHASE TPPH CONCENTRATION MAP**  
**January 10, 2005**

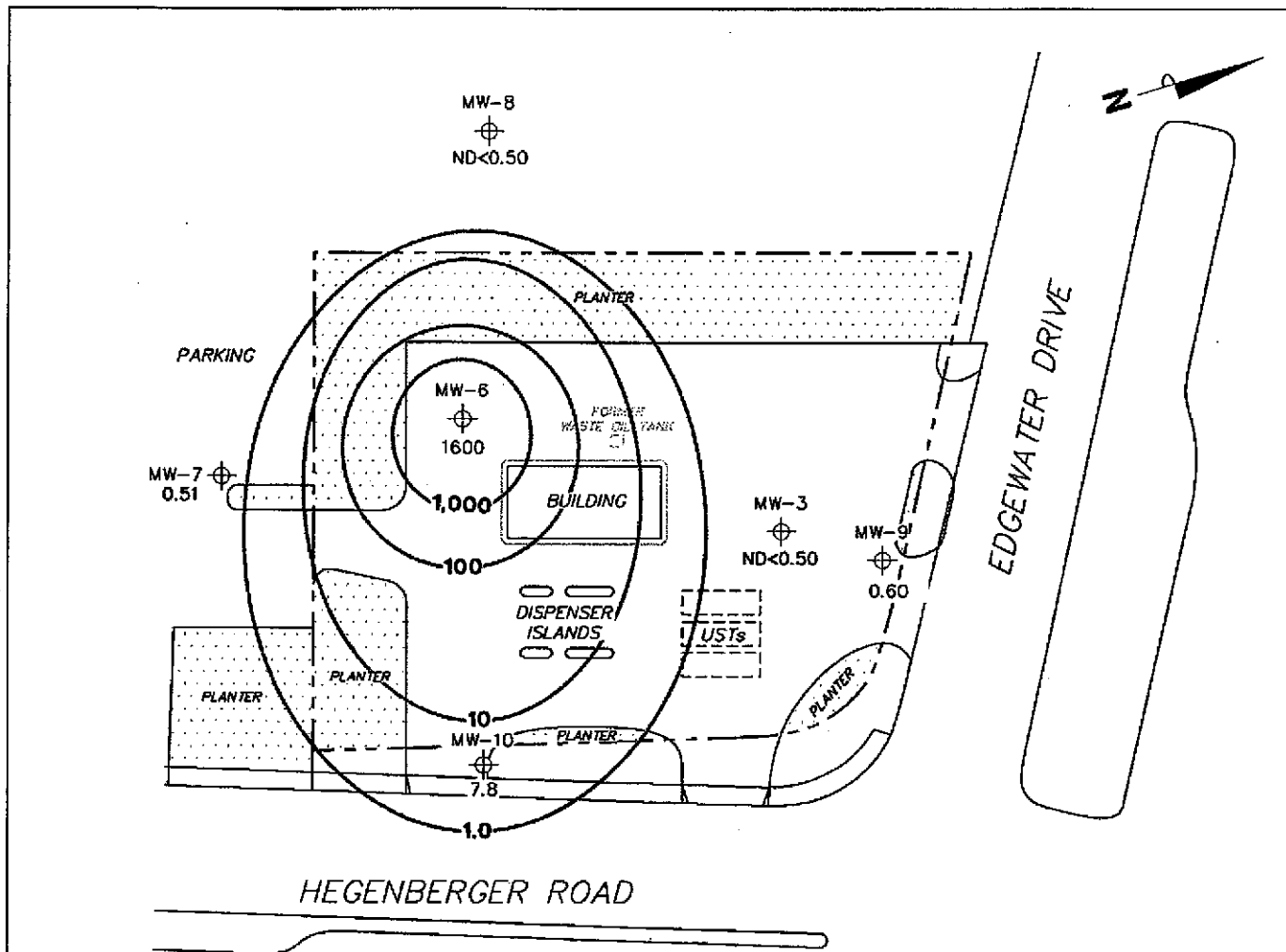
76 Station 5043  
 449 Hegenberger Road  
 Oakland, California

**TRC**



**FIGURE 3**

PS=1:15043-003



**NOTES:**

Contour lines are interpretive and based on laboratory analysis results of groundwater samples.  
 $\mu\text{g/l}$  = micrograms per liter. ND = not detected at limit indicated on official laboratory report.  
 UST = underground storage tank.

**LEGEND**

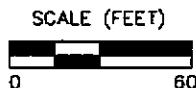
MW-10 ⊕ Monitoring Well with Dissolved-Phase Benzene Concentration ( $\mu\text{g/l}$ )

-1,000- Dissolved-Phase Benzene Contour ( $\mu\text{g/l}$ )

**DISSOLVED-PHASE BENZENE  
 CONCENTRATION MAP  
 January 10, 2005**

76 Station 5043  
 449 Hegenberger Road  
 Oakland, California

**TRC**



**FIGURE 4**

PS=1:1 5043-003