



76 Broadway
Sacramento, California 95818

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Alameda County
Environmental Health

May 2, 2007

Ms. Donna Drogos
Supervising Hazardous Materials Specialist
Alameda Clara Health Care Services
1131 Harbor bay Parkway
Alameda, CA 94502-6577

Re: **Quarterly Report Transmittal**
First Quarter – 2007
76 Service Station #0746
3943 Broadway
Oakland, Alameda County, CA

Dear Ms. Drogos:

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) 558-7604.

Sincerely,

Eric G. Hetrick
Site Manager
Risk Management & Remediation



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#A
Concord, CA 94520

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April 26, 2007

TRC Project No. 42016314

Ms. Donna Drogos
Supervising Hazardous Materials Specialist
Alameda County Health Services
1131 Harbor Bay Parkway
Alameda, California 94502-6577

**RE: Quarterly Status Report -First Quarter 2007
76 Station #0746, 3943 Broadway, Oakland, California
Alameda County**

Dear Ms. Drogos:

On behalf of ConocoPhillips Company (ConocoPhillips), TRC is submitting the First Quarter 2007 Status Report for the subject site. The site is situated on the western corner of the intersection of Broadway and 40th Street in Oakland, California. 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.

This site is on a semi-annual groundwater monitoring schedule.

PREVIOUS ASSESSMENTS

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 ($\mu\text{g}/\text{l}$) and 12 $\mu\text{g}/\text{l}$, respectively.

October 1989: Three monitoring wells were installed at the site to depths ranging from 20 to 22.5 feet below ground surface (bgs).

January 1990: Two additional monitoring wells were installed at the site to a depth of 20 feet bgs.

October 1990: Four additional monitoring wells were installed at and in the vicinity of the site at depths ranging from 20 to 22 feet bgs. Groundwater recovery tests were performed on four wells to determine potential locations for placement of recovery wells.

January 1992: Two offsite monitoring wells were installed in the vicinity of the site at depths ranging from 19 to 22 feet bgs.

June 1992: One recovery well and one additional offsite monitoring well 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.

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.

MONITORING AND SAMPLING

Currently, eight onsite and five offsite groundwater wells are monitored and sampled semi-annually. No gauging or sampling was performed this quarter.

CHARACTERIZATION STATUS

This site is sampled on a semi-annual schedule. The following is a summary of the data obtained during the fourth quarter of 2006.

Total petroleum hydrocarbons as gasoline (TPH-g) were detected in six of thirteen wells sampled at a maximum concentration of 78,000 micrograms per liter ($\mu\text{g}/\text{l}$) in well MW-5. Benzene was detected in four of thirteen wells sampled at a maximum concentration of 490 $\mu\text{g}/\text{l}$ in well MW-5. MTBE was detected in ten of thirteen wells sampled at a maximum concentration of 96 $\mu\text{g}/\text{l}$ in wells MW-3 and MW-5.

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 for 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 disposal on March 3, 1998.

On April 5-8, 2005, TRC conducted a 68-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.

RECENT CORRESPONDENCE

March 8, 2007: TRC submitted a Feasibility Study Work Plan to the Alameda County Health Care Services Agency (ACHCS) proposing a 120 hour (5-day) dual phase extraction (DPE) event to evaluate the feasibility of soil vapor and groundwater extraction for treating residual hydrocarbons in groundwater in the vicinity of monitoring well MW-5.

CURRENT QUARTER ACTIVITIES

No gauging or sampling was performed this quarter. The next monitoring and sampling event is scheduled for the second quarter 2007.

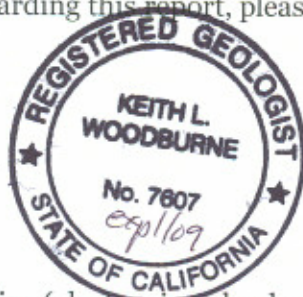
CONCLUSIONS AND RECOMMENDATIONS

TRC recommends continuing semi-annual monitoring and sampling to assess plume stability and concentration trends at key wells. Upon approval by the ACHCS, TRC will implement the scope of work outlined in the March 8, 2007 Feasibility Study Work Plan.

If you have any questions regarding this report, please call me at (925) 688-2488.

Sincerely,

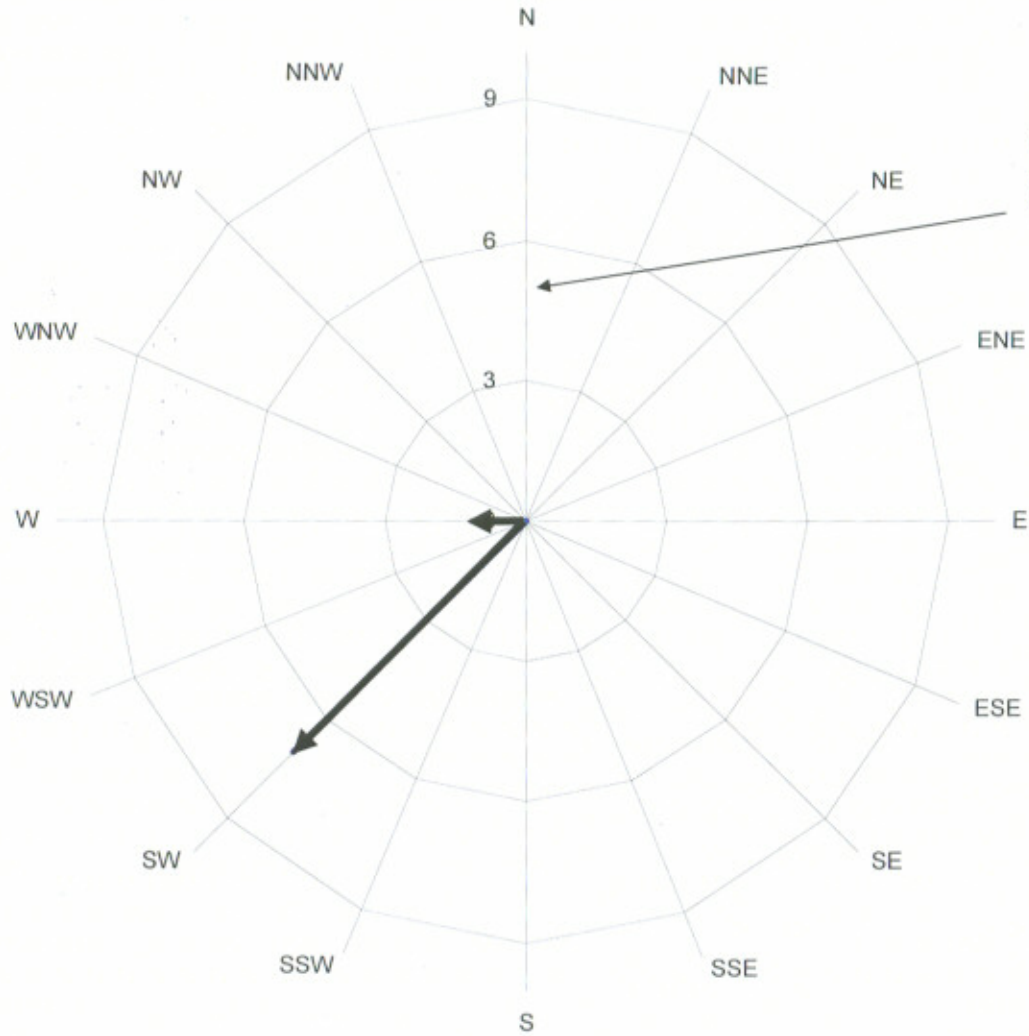

Keith Woodburne, P.G.
Senior Project Manager



cc: Eric Hetrick, ConocoPhillips (electronic upload only, without attachment)



**Historical Groundwater Flow Directions
for Tosco (76) Service Station No. 0746
November 2002 through March 2007**



Number of monitoring events in which groundwater was reported to flow in a particular direction.

