



California Regional Water Quality Control Board

Los Angeles Region



Linda S. Adams
Cal/EPA Secretary

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Arnold Schwarzenegger
Governor

May 5, 2008

Ms. Holly Quasem
ConocoPhillips Company
3611 Harbor Boulevard, Suite 200
Santa Ana, CA 92799-5376

**GENERAL WASTE DISCHARGE REQUIREMENTS FOR GROUNDWATER CLEANUP AT
PETROLEUM HYDROCARBON FUEL, VOLATILE ORGANIC COMPOUND AND/OR
HEXAVALENT CHROMIUM IMPACTED SITES
76 STATION 251112
5740 ATLANTIC AVENUE, LONG BEACH
(ORDER NO. R4-2007-0019, SERIES NO. 057; CI NO. 9410)**

Dear Ms. Quasem:

We have completed our review of your application for coverage under the General Waste Discharge Requirements to inject ozone at the site referenced above in Long Beach, California, for groundwater cleanup and remediation.

The Site is an active retail gasoline service station located on the southeast corner of Atlantic Avenue and South Street in Long Beach, California (Site) (Latitude: N 33.86⁰, Longitude: W 118.18⁰). The Site contains two 10,000-gallon gasoline underground storage tanks (USTs) and one 550-gallon waste oil UST.

Several site assessments have been conducted at the Site since 1985. Site investigations found soil and groundwater contaminations beneath the Site. A quarterly groundwater monitoring program was initiated in 1992. The most recent monitoring data in December 2007 showed the maximum total petroleum hydrocarbon as gasoline (TPH_G) concentration at 98,000 µg/L, benzene concentration at 32,000 µg/L, toluene concentration at 16,000 µg/L, ethylbenzene concentration at 6,400 µg/L, methyl tertiary butyl ether (MTBE) concentration at 33,000 µg/L, and tertiary butyl alcohol (TBA) concentration at 37,000 µg/L (TRC figure 2-groundwater map and TRC figures 4, 5 & 6-plume map).

A soil vapor extraction pilot test was performed in October 1994. The test results indicated that SVE was a feasible method to clean up fuel hydrocarbon in soil and groundwater. In December 1994, a bio-vent test was conducted to evaluate intrinsic bioremediation to treat both soil and groundwater. Based on the results of the pilot test, a bio-venting remedial action plan was prepared and approved. The bio-vent remedial system had been operated since 1999.

Delta Environmental Consultants, Inc., (Delta) prepared an "Addendum to Interim Remedial Action (Workplan)," dated July 31, 2007, and "Interim Remedial Action (Workplan)," dated March 20, 2007, for the subject site. Delta proposes to install 5 injection wells (OS-1 through OS-5) in the vicinity of wells BC-1R, BC-3R, MW-2 and MW-3 (Delta Figure 2) to inject ozone into the groundwater as a pilot test. The Workplan was approved by the Regional Board on October 26, 2007.

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The groundwater monitoring program CI-9410 will be performed for groundwater monitoring wells up-gradient groundwater monitoring wells BC-6 & -8, source wells BC-1R, -3R, MW-2 & -3, and down-gradient wells BC-4, -5 & -7 (Delta figure 2) to assess the groundwater contamination plume and the effectiveness of the treatment. Each of these wells will be monitored prior to the initiation of the remediation activities and periodically during completion of the injection activities.

Regional Board staff has determined that the proposed discharge meets the conditions specified in Order No. R4-2007-0019, "*Revised General Waste Discharge Requirements for Groundwater Remediation At Petroleum Hydrocarbon Fuel, Volatile Organic Compound and/or Hexavalent Chromium Impacted Sites (General WDRs)*," adopted by the Los Angeles Regional Water Quality Control Board on March 1, 2007.

Enclosed are your Waste Discharge Requirements, consisting of General WDRs Board Order No. 2007-0019 and Monitoring and Reporting Program No. CI-9410 and Standard Provisions.

If the pilot test proves to be a viable remedial method, this WDR will be applicable to the full scale implementation at the Site.

The WDRs issued shall not be rescinded until Regional Board staff determine the WDRs are no longer needed for the subject site.

The Monitoring and Reporting Program requires you to implement the monitoring program on the effective date of this enrollment under Regional Board Order No. R4-2007-0019. All monitoring reports shall be sent to the Regional Board, ATTN: Information Technology Unit.

When submitting monitoring or technical reports to the Regional Board per these requirements, please include a reference to Compliance File No. CI-9410, which will assure that the reports are directed to the appropriate file and staff. Do not combine other reports with your monitoring reports. Submit each type of report as a separate document.

We are sending a copy of Order No. R4-2007-0019 only to the applicant. A copy of the Order will be furnished to anyone who requests it, or on line at:

http://www.waterboards.ca.gov/losangeles/board_decisions/adopted_orders/general_orders/r4-2007-0019/r4-2007-0019.pdf

If you have any questions, please contact Mr. Rod Nelson at (213) 576-6119.

Sincerely,

Tracy J. Egoscue
Executive Officer

- Enclosures: 1. Board Order No. R4-2007-0019
2. Monitoring and Reporting Program No. CI-9410
3. Standard Provisions

Ms. Holly Quasem
ConocoPhillips Company

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May 5, 2008

cc: Ms. Yvonne Shanks, State Water Resources Control Board, Underground Storage Tank
Cleanup Fund
Ms. Nancy Matsumoto, Water Replenishment District of Southern California
Mr. Jeff Benedict, City of Long Beach, Department of Health and Human Services
Mr. Andrew Ewing, URS Corporation

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