



# California Regional Water Quality Control Board

## Los Angeles Region



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Arnold Schwarzenegger  
Governor

September 28, 2007

Ms. Shari London  
ConocoPhillips Company  
3611 Harbor Boulevard, Suite 200  
Santa Ana, CA 92704

**General Waste Discharge Requirements for Groundwater Remediation at Petroleum Hydrocarbon Fuel, and/or Volatile Organic Compound, and/or Hexavalent Chromium Impacted Sites - Ozone Sparging  
Tosco/76 Station Number 6267 Facility, at 23670 Pacific Coast Highway, Malibu, California File No. I-00097A, CI-9326, Order No. R4-2007-0019, Series No. 036**

Dear Ms. London:

We have completed our review of your application for coverage under the General Waste Discharge Requirements for the injection of ozone at the site referenced above in Malibu, California.

ConocoPhillips Company (hereinafter Discharger) is conducting groundwater cleanup activities at Tosco/76 Station No. 6267 (Site) located at 23670 Pacific Coast Highway, Malibu, California. The Site contains an active fueling station with two 12,000-gallon gasoline underground storage tanks (USTs).

Following initial site assessments beginning in 1987, the Regional Board granted closure in 1996. Additional site investigations began in 1997 when two gasoline underground storage tanks (USTs), dispensers, associated piping, and 1,292 tons of impacted soil were removed. Residual soil impacts by total petroleum hydrocarbons as gasoline (TPH<sub>G</sub>), benzene, and methyl tertiary butyl ether (MTBE) were identified at maximum concentrations of 1,800 milligrams per kilogram (mg/kg) (TPH<sub>G</sub>), 4.8 mg/kg (benzene), and 31 mg/kg (MTBE). Groundwater monitoring from 1997 to 2007 indicated that groundwater has been contaminated with petroleum hydrocarbons. Historical maximum groundwater concentrations for TPH<sub>G</sub>, benzene, MTBE, and tertiary butyl alcohol (TBA) have been 160,000 micrograms per liter (µg/L) (TPH<sub>G</sub>), 8,200 µg/L (benzene), 300,000 µg/L (MTBE), and 280,000 µg/L (TBA), respectively. Groundwater contamination has extended offsite to the south and east. Based on the most recent groundwater data from May 2007, TPH<sub>G</sub>, benzene, MTBE, and TBA were detected at maximum concentrations of 1,300 µg/L (TPH<sub>G</sub>), 0.14 µg/L (benzene), 47 µg/L (MTBE), and 53,000 µg/L (TBA), respectively.

The site is located within the Malibu Valley Groundwater Basin. Soil beneath the site generally consists of clays with lenses of silts and sands. Site assessments identified groundwater at approximately 7 feet below ground surface (bgs). The groundwater flow direction is generally toward the southeast, although it varies between east and south. The closest production well (01N08W33P01S) is located over 34,000 feet from the Site.

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On June 5, 2007, TRC submitted a WDR Permit Application on behalf of the Discharger to conduct cleanup of petroleum hydrocarbons in groundwater at the subject site using ozone sparging. Microbubbles of encapsulated ozone will be injected below the water table at ten onsite locations at flow rates ranging from 0.5 to 0.9 standard cubic feet per minute at 50 pounds per square inch (psi). Ozone sparge rates will range from approximately 1.3 to 5.5 pounds per day at 6 percent concentration. Ozone sparging will be performed on a cycled basis with each sparge point cycled on for 5 to 10 minutes at a time. A Remedial Action Plan (RAP) was submitted in February 2007 and the Regional Board approved the RAP on September 24, 2007.

Any potential adverse water quality impacts that may result shall be localized, of short-term duration, and shall not impact any existing or prospective uses of groundwater.

Regional Board staff have 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*," adopted by this Regional Board on March 1, 2007.

Enclosed are your Waste Discharge Requirements, consisting of Regional Board Order No. R4-2007-0019 (Series No. 036), Monitoring and Reporting Program No. CI-9326, and Standard Provisions.

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

The Monitoring and Reporting Program requires you to implement the monitoring program on the effective date of this enrollment (September 28, 2007) under Regional Board Order No. R4-2007-0019. You are required to utilize 10 ozone sparge points onsite as injection points dedicated to the introduction of the ozone in order to meet the conditions specified in Order No. R-4-2007-0019 for the proposed project. The existing monitoring wells shall not be used as injection points. 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-9326, 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. A copy of the order can also be found online at [http://www.waterboards.ca.gov/losangeles/html/permits/gen\\_orders/R4-2007-0019/R4-2007-0019.pdf](http://www.waterboards.ca.gov/losangeles/html/permits/gen_orders/R4-2007-0019/R4-2007-0019.pdf).



Ms. Shari London, ConocoPhillips  
23670 Pacific Coast Highway

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September 28, 2007

If you have any questions, please contact Mr. Rodney Nelson at (213) 620-6119. Questions regarding the underground storage tank issues should be forwarded to Mr. Dave Bjostad at (213) 576-6713 or [dbjostad@waterboards.ca.gov](mailto:dbjostad@waterboards.ca.gov).

Sincerely,

***Original signed by David A. Bacharowski for***

Deborah J. Smith  
Interim Executive Officer

Enclosures:   1. Monitoring and Reporting Program No. CI-9326  
                  2. Board Order No. R4-2007-0019  
                  3. Standard Provisions

cc: Ms. Yvonne Shanks, State Water Resources Control Board, Underground Storage Tank  
      Cleanup Fund  
      Ms. Nancy Mastumoto, Water Replenishment District of Southern California  
      Mr. Tim Smith, Los Angeles County Department of Public Works  
      Mr. John Nordenstam, TRC

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