



California Regional Water Quality Control Board

Los Angeles Region



Recipient of the 2001 *Environmental Leadership Award* from Keep California Beautiful

Alan C. Lloyd, Ph.D.
Agency Secretary

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Arnold Schwarzenegger
Governor

July 12, 2005

Mr. Mark Kelishadi
Mark's Mobil Station
5400 Atlantic Avenue
Long Beach, CA 90805

GENERAL WASTE DISCHARGE REQUIREMENTS COVERAGE FOR PROPOSED OXYGEN RELEASE COMPOUND (ORC) INJECTION TO GROUNDWATER (ORDER NO. R4-2005-0030; SERIES 007; CI NO. 8915) AT MARK'S MOBIL STATION AT 5400 ATLANTIC AVENUE, LONG BEACH (UST FILE NO. 908050216; CUFID NO. 11598)

Dear Mr. Kelishadi:

We have received your application for coverage under General Waste Discharge Requirements to emplace Oxygen Release Compound (ORC) into groundwater aquifer for use in in-situ bioremediation to address the MTBE plume in groundwater which is originated from the subject site.

Mark's Mobil Station (hereinafter Discharger) is conducting the groundwater cleanup activities at a facility commonly known as Mark's Mobil Station (Site) located at 5400 Atlantic Avenue, Long Beach, California (Figures 1 and 2) (Latitude: 38° 51' 17", Longitude: 118° 11' 03"). The Site is occupied by an operating Mobil Station (Mark's Mobil Station). Service station facilities include a convenience store building, two fuel islands, and three underground storage tanks (USTs). The station was upgraded in 1996 to meet State and Federal requirements at the time. Surrounding properties are developed with commercial and residential uses. Site investigation started in March 1996 during the USTs removal and upgrade activities indicated that the underlying soil and groundwater had been contaminated with gasoline constituents including benzene, toluene, ethylbenzene, xylenes (BTEX), and methyl tertiary butyl ether (MTBE). Approximately 70 cubic yards of contaminated soil were removed from the UST pit and transported off-site for proper disposal by T&L Pearce, Inc. during the USTs removal and upgrade. Soil vapor extraction (SVE) was conducted at the site from October 6, 2003, to early May 2004. A total 2,217 pounds or 380 gallons of gasoline product have been extracted from the soils and uppermost groundwater underlying the site with SVE system. The SVE system was shut down due to diminished recovery from the extraction wells.

Ten on-site (MW-1 through MW-8, MW-10 and MW-11) and three off-site (MW-12 through MW-14) groundwater monitoring wells were installed. The most recent groundwater monitoring data (December 30, 2004) indicated the maximum total petroleum hydrocarbon gasoline (TPHg) concentration at 13,000 µg/L, benzene concentration at 1,500 µg/L and MTBE concentration at 260 µg/L were detected. The extent of the groundwater contamination has been defined.

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Our mission is to preserve and enhance the quality of California's water resources for the benefit of present and future generations.

We have reviewed the information provided and have determined that the proposed discharge meets the conditions specified in Regional Board Order No. R4-2005-0030, "Revised *General Waste Discharge Requirements for Groundwater Remediation at Petroleum Hydrocarbon Fuel and/or Volatile Organic Compound Impacted Sites*," adopted by this Regional Board on May 05, 2005.

Also, enclosed are Waste Discharge Requirements consisting of Regional Board Order No. R4-2005-0030, and Monitoring and Reporting Program No. CI-8915 and Standard Provisions.

The "Monitoring and Reporting Program" requires you to implement the monitoring program on the effective date of this enrollment under Regional Board Order No. R4-2005-0030. Regional Board staff have determined that, the proposed down gradient monitoring well MW-14 alone appear to be insufficient for the down gradient groundwater monitoring. Therefore, you are required to install at least one additional groundwater monitoring well (MW-15) offsite and immediately down gradient from well MW-5 to meet the conditions specified in Order No. R4-2005-0030 for the proposed project. The well shall be constructed and installed using the same materials and methods discussed in the Regional Board workplan approved letter for groundwater well dated August 28, 2001. Well location map must be submitted for approval prior to field work. All these groundwater monitoring wells (MW-4, MW-5, MW-6, MW-10, MW-14 and MW-15) shall be sampled for all constituents identified in Section III-Monitoring & Reporting Requirements (Pages T-2 and T-3) prior to the application of any ORC at the site.

The "Monitoring and Reporting Program" requires you to implement the monitoring program on the effective date of this enrollment (July 12, 2005) under Regional Board Order No. R4-2005-0030. All monitoring reports should 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-8915," which will assure that the reports are directed to the appropriate file and staff. Also, please 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. R4-2005-0030 only to the applicant. A copy of the Order will be furnished to anyone who requests it.

If you have any questions, please contact Mr. Rodney Nelson at (213) 620-6119.

Sincerely,

Jonathan S. Bishop
Executive Officer

Enclosures: 1. Board Order No. R4-2005-0030
2. Monitoring and Reporting Program No. CI-8915

California Environmental Protection Agency



Mr. Mark Kelishadi
Mark's Mobil Station

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July 12, 2005

Cc (w/o Board Order No. R4-2005-0030):

Mr. Ted Johnson, Water Replenishment District of Southern California

Mr. Mark Steward, Central Basin Watermaster, California Department of Water Resources

Mr. Jeff Benedict, City of Long Beach

Mr. Henry Oliver, Geo-Cal, Inc.

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