



California Regional Water Quality Control Board

Los Angeles Region



Dan Skopec
Acting Agency Secretary

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

320 W. 4th Street, Suite 200, Los Angeles, California 90013
Phone (213) 576-6600. FAX (213) 576-6640 - Internet Address: <http://www.waterboards.ca.gov/losangeles>

Arnold Schwarzenegger
Governor

May 12, 2006

Mr. Anthony Yumori
OTY Incorporated
16820 S. Figueroa St.
Gardena, CA 90248

GENERAL WASTE DISCHARGE REQUIREMENTS FOR INJECTION OF OZONE INTO GROUNDWATER – OTY INCORPORATED, 16820 SOUTH FIGUEROA STREET, LOS ANGELES, CA (FILE NO. R-11706) (ORDER NO. R4-2005-0030, SERIES NO. 038; CI NO. 9049)

Dear Mr. Yumori:

On July 26, 2005, you submitted an application for waste discharge requirements for the injection of ozone into groundwater. The injection of ozone is for remediation of petroleum hydrocarbon impacted groundwater at the subject site.

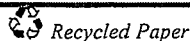
OTY Incorporated (hereinafter Discharger) owns the site located at 16820 South Figueroa Street, Gardena, in the West Coast Groundwater Basin. The site is a commercial topsoil blending facility. The site is located on the east side of South Figueroa Street and West 168th Street and West 170th Street. The surrounding land uses are primarily commercial. Groundwater was encountered in all existing 15 monitoring wells at approximately 30 to 33 feet below ground surface. The nearest water well to this site is well No. 03S13W29F11S, located approximately 4,268 feet away.

In April 1999, two USTs were removed from the site. Between April 1999 – May 2004, 15 groundwater monitoring wells were installed and numerous soil borings advanced to define the extent of petroleum hydrocarbons and to characterize soil and groundwater beneath the site. Historically free product has been detected in wells AEI-MW2, AEI-MW3, AEI-MW5, and AEI-MW7. Last groundwater sampling event in December 2005 did not detect free product in any wells. The highest concentrations of TPHg, benzene, and MTBE detected in soil during these investigations were 6,640; 75; and 306 mg/kg; respectively. Periodic groundwater monitoring also recorded TPHg, TPHd, benzene, and MTBE at concentrations up to 395,000; 370,000; 20,900; and 735 µg/L; respectively.

To remediate the petroleum hydrocarbon impacted groundwater beneath the site, you submitted a remedial action plan dated May 26, 2004, in which you proposed to utilize a C-Sparge system. The proposed C-Sparge system includes installation/construction of six single sparge wells, three nested dual nested sparge wells, control panel, compressor, and ozone generator. The Regional Board approved the remedial action plan on February 9, 2005.

The C-Sparge technology combines low-flow air sparging with ozonation. Ozone will be introduced below water table through sparge points to oxidize contaminants into benign

California Environmental Protection Agency



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

Mr. Anthony Yumori
OTY Incorporated

- 2 -

May 12, 2006

byproducts. These byproducts and residual compounds include acetate, butyrate, formate, propionate, carboxylic acids, tertiary butyl formate, formaldehyde, carbon dioxide, hydrogen peroxide, and oxygen. The release of oxygen with hydrogen peroxide to groundwater promotes aerobic bacterial growth that will consume the byproducts.

We have reviewed the information provided and have determined that the proposed discharge meets the conditions specified in Order No. R4-2005-0030, "*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 5, 2005.

Enclosed are your Waste Discharge Requirements, consisting of Regional Board Order No. R4-2005-0030, Monitoring and Reporting Program No. CI-9049, and Standard Provisions.

The Monitoring and Reporting Program requires you to implement the monitoring program on the effective date of this enrollment (May 12, 2006) under Regional Board Order No. R4-2005-0030. 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-9049, 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. R4-2005-0030 only to the applicant. A copy of the Order can be download from www.waterboards.ca.gov/losangeles or will be furnished upon request.

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

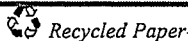
Sincerely,

fw *David A. Bachowski, AEO*
Jonathan S. Bishop
Executive Officer

Enclosures: 1. Board Order No. R4-2005-0030
2. Monitoring and Reporting Program No. CI-9049

cc: Yvonne Shanks, SWRCB, Underground Storage Tank Cleanup Fund
Nancy Matsumoto, Water Replenishment District of Southern California
Tim Smith, Los Angeles County Department of Public Works, Environmental Programs
Division
Joseph Derhake, AEI Consultants, Incorporated
Herman Fuette, Interinsurance Exchange Auto Club of Southern California
3333 Fairview Road, Costa Mesa, CA 92626
Ross Wright, 426 West 168th Street, Gardena, CA 90248

California Environmental Protection Agency



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