



California Regional Water Quality Control Board

Los Angeles Region



Terry Tamminen
Secretary for
Environmental
Protection

Over 51 Years Serving Coastal Los Angeles and Ventura Counties
Recipient of the 2001 *Environmental Leadership Award* from Keep California Beautiful

Arnold Schwarzenegger
Governor

320 W. 4th Street, Suite 200, Los Angeles, California 90013
Phone (213) 576-6600 FAX (213) 576-6640 - Internet Address: <http://www.swrcb.ca.gov/rwqcb4>

December 31, 2003

Mr. William Curtas, Trustee
Anadite California Restoration Trust
711 West Hurst Boulevard
Hurst, TX 76053

GENERAL WASTE DISCHARGE REQUIREMENTS FOR GROUNDWATER REMEDIATION PILOT STUDIES – ANADITE SOUTH GATE, 10647 GARFIELD AVENUE, SOUTH GATE, CALIFORNIA (CAO NO. 98-004, FILE NO. 97-019, SLIC NO. 541, SITE ID NO. 2041C00)

Dear Mr. Curtas:

Los Angeles Regional Water Quality Control Board (Regional Board) staff have completed review of your application, dated August 27, 2003, for coverage under General Waste Discharge Requirements to inject sodium lactate and potassium permanganate solutions into groundwater at the subject site (approximately at Latitude: N33° 55' 57", Longitude: W118° 10' 12"). The injected amendments will be used in in-situ groundwater remediation pilot studies proposed for the site. The March 13, 2003, *Work Plan for Groundwater Remediation Pilot Study* was approved by the Regional Board on June 10, 2003.

Regional Board staff have reviewed the information provided and have determined that the proposed pilot studies will meet the conditions specified in Regional Board Order No. R4-2002-0030, *General Waste Discharge Requirements for Groundwater Remediation at Petroleum Hydrocarbon Fuel and/or Volatile Organic Compounds Impacted Sites*, adopted by this Regional Board on January 24, 2002. Refer to the enclosure for more information on Order No. R4-2002-0030.

Based on the remedial alternative screening and evaluation, enhanced anaerobic bioremediation (EAB) and in-situ chemical oxidation (ISCO) have been selected as primary technologies for pilot studies at the site. The EAB proposed for the site involves the injection of an electron donor into the subsurface to stimulate the natural reactions of microorganisms to dechlorinate the contaminants into non-toxic end products, such as ethene. ISCO involves the injection of chemical oxidants into the subsurface to destroy organic contaminants. The chemical oxidants react with the contaminants, producing innocuous substances such as carbon dioxide (CO₂), water (H₂O), and inorganic chloride.

Three pilot studies are proposed for the site to evaluate the effectiveness of EAB and ISCO technologies to reduce the VOCs contamination in groundwater. The pilot studies will be conducted at three selected areas of the site. Each area has its own injection and monitoring well network, which includes one injection well and two to three performance monitoring wells. A summary of the proposed pilot studies is provided in the attached Fact Sheet. The pilot studies will be completed in approximately 12 months. 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. Groundwater quality shall be monitored to verify no long-term adverse impact to water quality.

Enclosed are your Waste Discharge Requirements, consisting of Regional Board Order No. R4-2002-0030 (Series No. 0043) and Monitoring and Reporting Program No. CI-8685. Please note that the water quality

California Environmental Protection Agency



Recycled Paper

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

objectives in Attachment A (DWR Basin No.4-11 [Central Basin]) of Order No. R4-2002-0030 are applicable to your discharge.

The "Monitoring and Reporting Program" requires you to implement the monitoring program on the effective date of this enrollment (December 19, 2003) under Regional Board Order No. R4-2002-0030. All Monitoring Reports (two copies per report) 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-8685", 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. Please submit each type of reports as a separate document.

Please note that the annual fee for the proposed discharge (injection) during fiscal year 2004/2005 (July 1, 2004 to June 30, 2005) will be based on the new fee schedule (as adopted by State Water Resources Control Board, Resolution No. 2003-0064) included in Attachment B of Order No. R4-2002-0030.

We are sending a copy of Order No. R4-2002-0030 only to the applicant and their consultant. A copy of the Order will be furnished to anyone who requests it.

If you have any questions, Please contact Dr. Rebecca Chou at (213) 576-6733, or Ms. Su Han at (213) 576-6735.

Sincerely,

Dennis A. Dickerson
Executive Officer

Enclosures:

Board Order No. R4-2002-0030
Monitoring and Reporting Program No. CI-8685
Fact Sheet

cc: Mike Floyd, Division of Water Quality, State Water Resources Control Board
Bruce Mowry, Water Replenishment District of Southern California
Richard Wagner, Department of Health Services, County of Los Angeles
John Didun / Bob Rathburn, Anadite South Gate
William Weaver, Camp Dresser & McKee Inc.

