NOTICE OF APPLICABILITY OF GENERAL ORDER NO. R5-2008-0149 – XX, JAMES COSTIGAN, JR. (TRUSTEE FOR ARTHUR A. LABOUR ESTATE) AND DEPARTMENT OF TOXIC SUBSTANCES CONTROL, FORMER SACRAMENTO PLATING SITE, 2809 AND 2815 S STREET, SACRAMENTO, IN-SITU REMEDIATION OF VOLATILE ORGANICS AND HEXAVALENT CHROMIUM, SACRAMENTO COUNTY

The Department of Toxic Substances Control and James Costigan, Jr. (trustee for Arthur A. Labour Trust) submitted a Notice of Intent, dated 15 November 2011, requesting coverage under General Order No. R5-2008-0149, General Waste Discharge Requirements for In-situ Groundwater Remediation at Sites with Volatile Organic Compounds, Nitrogen Compounds, Perchlorate, Pesticides, Semi-Volatile Compounds and/or Petroleum Compounds. Based on information in your submittal, it is our determination that this project meets the required conditions to be approved under Order No. 2008-0149. All of the requirements contained in the general order are applicable to your project. You are assigned Order No. R5-2008-0149-XX.

Project Location:

The project is in the City of Sacramento in Sacramento County,
Section 4, T8N, R1W MDB&M.
Assessor's Parcel Nos. 010-0053-009-0000 and 010-0053-008-0000.

Project Description:

Past operations at the Former Sacramento Plating Site at 2809 and 2815 S Street in Sacramento (See Figure 1) caused pollution of the soil and groundwater. The principal pollutants of concern in groundwater are trichloroethene (TCE), it's breakdown products – cis-1,2-dichloroethene and vinyl chloride, and hexavalent chromium. The facility was in operation from 1949 to 1990 providing chrome stripping, bumper grinding and rebuilding and nickel, chrome, copper and brass plating services. The facility was demolished in 1996 and the debris hauled away. In 1998 contaminated soils and a concrete was excavated and disposed of. Groundwater was found to contain TCE and hexavalent chromium above drinking water standards (MCLs). The MCL for TCE is 5.0 micrograms per liter (µg/L) and the Public Health Goal is 1.7 µg/L. There is no MCL for hexavalent chromium, however there is a Public Health Goal of 0.02 µg/L. In addition there is an MCL for total chromium of 50 µg/L. Several bench scale tests were conducted to determine if in-situ reduction of TCE and immobilization of hexavalent chromium was a viable groundwater remedial option. The results of the bench tests were mixed, but it appeared that in-situ reduction of TCE and hexavalent chromium was possible at the site.

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The goal of this project is to conduct a pilot study to attempt to reduce TCE to ethene and hexavalent chromium to trivalent chromium which will then precipitate out in a very low soluble chrome hydroxide. This will be done in an area of high concentrations of the two pollutants on-site (See Figure 2). To do so, EHC^{TM}, a mixture of controlled-release, complex carbon and zero valent iron (VZI), will be injected in three locations surrounding monitor well MW01. Five hundred pounds of injectant will be injected in a single event over a three day period in each of the three injection points. As the goal is to produce reducing conditions, increases in concentrations of dissolved iron and manganese in the treatment zone are likely. A sufficient number of monitor wells already exist at the site to monitor this project. If unacceptable concentrations of vinyl chloride, iron, manganese and/or total dissolved solids are confirmed at the point of compliance (monitor well MW03) then the Discharger will undertake corrective action. The Discharger will also be conducting sampling and reporting the results as described in the attached Groundwater Monitoring and Reporting Program.

XX comments were received on the draft Notice of Applicability and Monitoring and Reporting Program during the 30-day public comment period ending X December 2011.

General Information:

1. The project will be operated in accordance with the requirements contained in the General Order and in accordance with the information submitted in the Notice of Intent.

2. The required annual fee (as specified in the annual billing you will receive from the State Water Resources Control Board) shall be submitted until this Notice of Applicability is officially revoked.

3. Injection of materials other than a solution of EHC^{TM} and water into the subsurface is prohibited.

4. Failure to abide by the conditions of the General Order could result in an enforcement action as authorized by provisions of the California Water Code.

5. The project will implement the final contingency plan included as part of the Notice of Intent within 30-days of it being triggered.

6. The Discharger shall comply with the attached Monitoring and Reporting Program, Order No. R5-2008-0149-XXX, and any revisions thereto as ordered by the Executive Officer.

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If you have any questions regarding this matter, please call Alexander MacDonald at (916) 464-4625 or contact him at amacdonald@waterboards.ca.gov.

PAMELA C. CREEDON
Executive Officer

Attachments

cc: Della Kramer, Regional Water Quality Control Board, Sacramento
Chris Parent, Department of Toxic Substances Control, Sacramento
Greg Korose, URS Corporation, Sacramento

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