

STATE OF CALIFORNIA  
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
LOS ANGELES REGION  
320 West 4<sup>th</sup> Street, Suite 200, Los Angeles, California 90013

FACT SHEET  
WASTE DISCHARGE REQUIREMENTS  
FOR  
FORMER YELLOW FREIGHT TERMINAL

HYDROGEN RELEASE COMPOUND INJECTION

ORDER NO. R4-2007-0019 (SERIES NO. 163)  
CI-9714, FILE NO. 11-097

FACILITY ADDRESS

2350 Dominguez Street  
Carson, CA 90810

FACILITY MAILING ADDRESS

YRC Enterprise Services, Inc.  
10990 Roe Avenue, Mail Stop A605 KCG  
Overland Park, KS 66211

**PROJECT DESCRIPTION**

This former motor freight terminal site is located at 2350 Dominguez Street in Carson and has been operating since 1967. Several underground tanks were located at the site. An oil/water separator formerly used in connection with truck steam-cleaning operations was located outside the north wall of the vehicle maintenance shop. In the past, effluent from this separator drained to a series of seepage pits north of the shop building. Based on a previously performed, multi-staged investigation, it was found that soil and groundwater have been impacted with volatile organic compounds (VOCs), primarily trichloroethylene (TCE), 1,1-dichloroethylene (DCE), 1,2-DCE, and diisopropyl ether.

On January 26, 2011, Regional Board staff approved the following workplans prepared by BSK & Associates for enhanced in-situ bioremediation and in-situ pilot test using Hydrogen Release Compound (HRC):

- March 16, 2006, Workplan, In-Situ Pilot Test
- December 15, 2009, Remedial Action Plan Enhanced In-Situ Bioremediation
- August 11, 2010, Remedial Action Plan Addendum, Response to Comments by Regional Water Quality Control Board

The Discharger proposes to inject HRC to lower the concentration of VOCs in groundwater at the site.

**VOLUME AND DESCRIPTION OF INJECTION**

As part of the pilot test, the HRC will be injected at three injection points. The HRC injection points will be advanced to a maximum depth of 70 feet bgs. Two groundwater monitoring wells (MW-6 and MW-7) will be located downgradient of the injection points at distances of 5 feet and 10 feet from the central injection point to estimate the effective radius of the treatment cell. The HRC injection pump will be operated at pressures of 200 pounds per square inch (psi) to 1,500 psi. Injection of HRC will be

performed using a 1.5-inch diameter direct-push rod at a rate of 4 pounds per foot. The HRC will be pumped into the aquifer until refusal of pumping is noted. One section of drive rod will then be removed and HRC will again be pumped into the aquifer. This process will be repeated until the bottom of the drive rod is at a depth of 25 feet bgs. The top 25 feet of the hole will be backfilled with neat cement.

After completion of the pilot test with the six month period of groundwater monitoring, the Discharger will re-evaluate the HRC injection through a total of 59 injection points for 5,900 pounds of HRC in the treatment zone at a rate in pounds per vertical foot of injection of 4 lbs/foot per injection point. Hydrogen peroxide decomposes exothermically into water and oxygen gas spontaneously that are innocuous chemical substances.