

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

**FACT SHEET
WASTE DISCHARGE REQUIREMENTS
FOR
SHELL OIL PRODUCTS US
FORMER SHELL SERVICE STATION #204-4530-1201
ORDER NO. R4-2002-0030: SERIES NO. 045
(UST ID# R-05560)**

FACILITY ADDRESS

Former Shell Service Station
8873 Sunset Boulevard
West Hollywood, CA 90069

FACILITY MAILING ADDRESS

Mr. Joe Lentini
Shell Oil Products US
2255 North Ontario Street
Burbank, CA 91504

PROJECT DESCRIPTION

The site is a vacant lot located at 8873 Sunset Boulevard, West Hollywood, California (Site). Prior to 1988, the Site was a Shell Service Station. During the station demolition in October 1988, five underground storage tanks (USTs) were removed and approximately 200 cubic yards of soils were excavated. Analytical results of soil samples collected during the tank removal indicated the presence of hydrocarbon-impacted soil at the site. Several site assessments have been conducted since 1988 to identify and delineate petroleum hydrocarbon contamination associated with the USTs. A quarterly groundwater monitoring program has been implemented since January 1992. Currently 19 groundwater monitoring wells were included in the quarterly groundwater monitoring program.

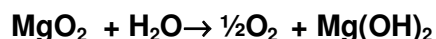
In June 1994, a Groundwater Pump and Treatment system was initiated to clean up the groundwater contamination. The groundwater pump and treat system has been marginally successful in cleaning up the groundwater contamination. The system was shut down in March 2002. In March 2003, three dual phase extraction wells were installed. In April 2003, a 24-hour high vacuum vapor extraction test was performed.

Shell Oil Products US and the prospective property owner propose to re-develop the Site. Groundwater wells MW-1 through MW-10 and MW-19 will be abandoned so that the property can be developed to a commercial building. Due to limited time frame available for site redevelopment, a combination of options is proposed to clean up the soil/groundwater contamination and allow site development. In the Remedial Action Plan (RAP), dated May 21, 2003, and the Addendum to May 21, 2003, Remedial Action Plan (Addendum), dated June 19, 2003, Shell Oil Products US proposes to:

- a) conduct limited excavation to remove residual hydrocarbons from the subsurface in the vicinity of Wells MW-4, MW-5, MW-9, and MW-10,
- b) add Oxygen Release Compounds (ORC) to on-site groundwater monitoring wells as they are abandoned,
- c) install nine new groundwater monitoring wells, and
- d) monitor natural attenuation.

ORC PRODUCT DESCRIPTION

ORC is a proprietary formulation of magnesium peroxide designed to provide a timed release of oxygen. ORC contains both magnesium oxide and magnesium peroxide. A few percent of food-grade potassium phosphate is also present. ORC offers a passive, cost-effective, low intensity approach to accelerating aerobic bioremediation in the oxygen-limited contaminated subsurface. The timed-release oxygen of ORC is environmentally safe when hydrated in accordance with the following chemical reaction:



There have been no reports of adverse impacts associated with these products for cleaning up dissolved hydrocarbon fuel plumes in groundwater. There may be small increases associated with soluble gases such as dissolved oxygen (DO) and carbon dioxide.

INJECTION PROCEDURES

ORC is to be incorporated into backfill material from 25 to 35 feet in six 5-foot diameter excavation auger borings along the east side of the Site and from 25 to 40 feet in the eight groundwater monitoring wells outside the excavated area that are scheduled for abandonment. The non-saturated portion of the abandoned well borings will be backfilled with neat cement.

ORC will be incorporated into 1-sack slurry used for the excavation auger boring backfill at a rate of 0.2 % ORC by weight of material used that are presented in the table below:

Excavated area to incorporate ORC in the backfill	Type of backfill to be used	Volume of backfill required per boring ft ³	Weight of excavated material per boring Lbs	ORC to incorporated in backfill material per boring Lbs	Total number of borings	Total ORC to be used in backfill material lbs
5' diameter 10' length	1-sack cement and sand slurry with ORC at 0.2%	196	21,816	44	6	264
12' diameter 15' length	sand slurry with ORC at 1%	12	1,333	13	8	104

Attachment 1 is the plot plan showing well and excavation auger locations.

GROUNDWATER MONITORING PROGRAM

Currently, a quarterly groundwater monitoring program under the UST program is being implemented for nineteen groundwater monitoring wells at the Site. Eleven groundwater monitoring wells MW-1 through MW-10 and MW-19 will be abandoned during the site development activities. Nine new groundwater monitoring wells, MW-20 through MW-28 will be installed (Attachment 2). Wells MW-11 and MW-25 through MW-28 will be used as downgradient compliance point.

The groundwater monitoring program CI-8703 will be performed for one upgradient groundwater monitoring well MW-22, and five downgradient wells (Wells MW-11 and MW-25 through MW-28) to assess the groundwater contamination plume and the effectiveness of the ORC treatment.