## 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 SCHLUMBERGER FACILITY

### ORDER NO. R4-2002-0030 SITE ID NO. 2047300

### FACILITY ADDRESS

#### FACILITY MAILING ADDRESS

2230 Statham Boulevard Oxnard, CA 93030

225 Schlumberger Drive Sugar Land, TX 77478

# **PROJECT DESCRIPTION:**

The Lansco Properties, Inc. owns the subject property which was formerly leased to Schlumberger Resource Management Services. The facility is currently occupied by a theatresets storage facility with offices, a loading dock, and storage buildings. In April 1993, two 550-gallon underground storage tanks were removed from the subject site. Groundwater underneath the subject site is impacted by 1,1,1-trichloroethane (1,1,1-TCA), trichloroethene (TCE), dichloroethane (DCA), 1,2-dichloroethene (1,2-DCE), tetrachloroethene (PCE), and total petroleum hydrocarbons (TPH). The approximate plume size is 1,560 feet by 390 feet. Currently, the groundwater is extracted from wells EX1 and EX2 and treated using two 2000-pound granular activated carbon (GAC) vessels. The treated groundwater is discharged to the City of Oxnard sanitary system under Discharge Permit Number 95G. During and for two years following injection, the groundwater extraction and treatment system will be temporarily shutdown to allow for the potassium permanganate (KMnO<sub>4</sub>) process to occur, to ensure that KMnO<sub>4</sub> is not prematurely removed, and to allow for post-injection monitoring of volatile organic compound (VOC) concentrations.

The depth to groundwater at the subject site ranges from 5 to 8 feet below ground surface. The groundwater gradient is southerly at 0.002 to 0.008 ft/ft.

## **VOLUME AND DESCRIPTION OF INJECTION:**

 $KMnO_4$  is capable of oxidizing dissolved-phase PCE and TCE and possibly dense non-aqueous phase liquid (DNAPL).  $KMnO_4$  solution will be injected through a total of 41 points at the subject site located at 2230 Statham Boulevard, Oxnard, California (Latitude:  $37^\circ 10' 35''$ , Longitude:  $121^\circ$ 42' 32''). A total of 3,000 gallons of 30,000 mg/L KMnO\_4 solution will be injected at each point. Injection at each borehole will occur at depths of 8 to 40 feet below ground surface. The maximum rate of injection will vary from 20 to 40 gallons per minute.  $KMnO_4$  solution will also be injected into three horizontal vapor extraction wells onsite to address a portion of the source area beneath the building (Figure 8). Approximately 6,000 gallons of 30,000 mg/L solution will be injected into each horizontal well. The injection process will be completed in approximately three weeks. After one year, it is expected that the in-situ bioremediation and VOC dechlorination will be complete, that the  $KMnO_4$  and its byproducts will have been stabilized, without any degradation associated with the groundwater. Any potential adverse water quality impacts that may result will be localized, of short-term duration, and will not impact any existing or prospective uses of groundwater. Groundwater quality will be monitored to verify no long-term adverse impact to water quality.