

**California Regional Water Quality Control Board** 

Los Angeles Region



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Arnold Schwarzenegger Governor

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January 9, 2004

Mr. David Graves Interstate Brands Corporation 2330 Ripple Street Los Angeles, CA 90039-2826 CERTIFIED MAIL RETURN RECEIPT REQUESTED CLAIM NO. 7000 0520 0020 1693 5534

Dear Mr. Graves:

## GENERAL WASTE DISCHARGE REQUIREMENTS FOR INJECTION OF NUTRIENTS AND HYDROGEN PEROXIDE – INTERSTATE BRANDS WEST CORPORATION, 6841 SAN FERNANDO ROAD, GLENDALE, CALIFORNIA (FILE NO. 915200025, CI-8661)

We have completed our review of your application for coverage under General Waste Discharge Requirements to inject nutrients and hydrogen peroxide at the site to test its effectiveness for the remediation of the diesel contaminated soil. The pilot test results will be considered for the remediation of the contaminated groundwater at the site.

Interstate Brands Corporation (IBC) owns and operates IBC Manufacturing Plant No. 27 (site) located at 6841 San Fernando Road in Glendale, California (Figure 1). The site has been operated as a bakery with a fleet of delivery trucks fueling from underground storage tanks (USTs) since the late 1940s or early 1950s. Underground storage tank locations, past and present, are found at three locations on the site – Area A, Area B, and Area C (Figure 2).

In 1978 a 10,000-gallon UST from Area B was punctured and released approximately 4,700 gallons of diesel fuel into the subsurface. In May 1986 the same tank failed an integrity test and released an additional 4,500 gallons of diesel fuel to the subsurface. In October and November 1986, the 8,000-gallon fresh oil tank in Area B was punctured and approximately 1,200 gallons of oil were released. In June and July 1987, all four USTs in Area B were removed. In July 1988, the 10,000-gallon diesel UST along with 503 cubic yards of soil in Area A was removed.

From December 1987 to October 1989, eighteen groundwater monitoring wells (MW-1 through MW-3 and MW-7 through MW-21) were installed throughout the site and five soil borings (DH-1 through DH-3, B2-1 and B2-2) were drilled in Area A. In 1992 IBC installed 27 groundwater recovery wells along the southern perimeter of the site. Diesel free product was skimmed from the recovery wells and transported through an oil/water separator into a holding tank. This system has been in operation since August 1993 and as of December 2001, 16,128 gallons of free product have been removed. In November 2001, thirteen observation wells (OW-1 through OW-7 and OW-9 through OW-14) were installed in Area C for the purpose of monitoring remote drawdown during pumping. In November and December 2001, six additional groundwater monitoring wells (MW-55 through MW-60) were installed to further delineate the lateral extent of the free product plume. In February 2002, three additional observation wells (INJ-1, INJ-2 and OW-8) were installed in Area C to monitor remote drawdown from pumping wells (Figure 2).

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The site is located in the southeastern portion of the San Fernando Valley, a large east-west trending alluvial basin. Groundwater is between approximately 41 and 64 feet below ground surface (bgs). The direction of groundwater flow has been reported as south-southeast, with variations locally at gradients varying between 0.01 and 0.04 feet per foot (Figure 3).

A free phase diesel plume currently occupied the southern extent of the property. The free product plume is believed to have originally been the commingled plumes of Area A and Area B combined. Diesel contaminated soil is detected from approximately 15 feet bgs to groundwater at approximately 43 feet bgs. The outline of the area is approximately 130 feet long and 50 feet wide. Based on an area of 6,500 square feet at an average depth of 43 feet, the volume of contaminated soil is approximately 10,352 cubic yards.

For the pilot test, an infiltration gallery will be placed over diesel contaminated soil in Area C and used for field pilot scale operations. The anticipated areal extent of the pilot study is eighteen feet by twenty feet. Naturally occurring microorganisms isolated from the site will be augmented in a modified Sequencing Batch Reactor (SBR) onsite. Water and nutrients (ammonium chloride and sodium tripolyphosphate) will be added to the SBR to enhance the growth of microorganisms. Approximately 200 gallons of the microorganism-nutrient mixed fluid will be extracted from the SBR and applied to the infiltration gallery on a monthly basis. In addition, a solution of up to 1.5% hydrogen peroxide will be applied on a routine basis to the infiltration gallery. A maximum of 1,500 gallons of microorganism-nutrient mixed fluid and 1,500 gallons of hydrogen peroxide will be applied to the infiltration gallery per week. The pilot test is anticipated to last for a period of no more than twelve months. Dr. Yi Lu, Chief of Underground Storage Tank – L.A. River Unit of this Regional Board, approved the pilot test on June 20, 2003.

If the pilot test is determined to be successful and a full-scale treatment system is proposed for site cleanup, then the following is required:

- a. A final Remedial Action Plan (RAP) is to be submitted to the Regional Board for review and approval prior to its implementation; and
- b. A revised Report of Waste Discharge (ROWD) is to be submitted for the fullscale treatment system.

Regional Board staff will review the revised ROWD to determine if it is complete or if additional information is needed. In addition, upon receipt of a complete ROWD, the Monitoring and Reporting Program will be revised to incorporate the approved full-scale treatment plan.

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 as required in the Monitoring and Reporting Program No. CI-8661 to verify no long-term adverse impact to water quality. There may be small increases associated with soluble gases such as methane, ethane, ethene, and carbon dioxide. The site is located in the City of Glendale at Latitude: 34° 10' 13" and Longitude: 118° 17' 47". The quantities of microorganism-nutrient mixed fluid and hydrogen peroxide solution injected shall be documented per the Monitoring and Reporting Program No. CI-8661.

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Regional Board staff have reviewed the information provided and have determined that the proposed discharge meets the conditions specified in Order No. R4-2002-0030, "General Waste Discharge Requirements for Groundwater Remediation at Petroleum Hydrocarbon Fuel and/or Volatile Organic Compound Impacted Sites," adopted by this Regional Board on January 24, 2002.

Enclosed are your Waste Discharge Requirements, consisting of Regional Board Order No. R4-2002-0030 (Series No. 037) and Monitoring and Reporting Program No. CI-8661 and Standard Provisions. Please note that the discharge limits in Attachment A (San Fernando Valley – San Fernando Groundwater Basin – East of Highway 405) 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 (January 9, 2004) under Regional Board Order No. R4-2002-0030. All monitoring reports shall be sent to the Regional Board, <u>ATTN: Information Technology Unit.</u>

When submitting monitoring or technical reports to the Regional Board per these requirements, please include a reference to Compliance File No. CI-8661, which will assure that the reports are directed to the appropriate file and staff. Do not combine other reports with your monitoring reports. Submit each type of report as a separate document.

We are sending a copy of Order No. R4-2002-0030 only to the applicant. A copy of the Order will be furnished to anyone who requests it. If you have any questions, please contact Mr. David Koo at (213) 620-6155.

Sincerely,

Dennis A. Dickerson Executive Officer

Enclosures:

- 1. Board Order No. R4-2002-0030
- 2. Monitoring and Reporting Program No. CI-8661
- 3. Standard Provisions Applicable to Waste Discharge Requirements (addressee only)

cc: Ms. Vera Melnyk, State Department of Health Services,

Drinking Water Field Office Branch

- Mr. Mark Maekowski, Upper Los Angeles River Area Watermaster
- Mr. Scott Fagan, Environmental Consulting & Construction Inc.

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