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 THE BOEING COMPANY FORMER COMPTON SITE ORDER NO. R4-2002-0030 (SERIES NO. 024) CI-8586

FACILITY ADDRESS

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157 and 200 East Stanley Street and 233 East Manville Street, Compton 6633 Canoga Avenue, MC T487 Canoga Park, CA 91309

PROJECT DESCRIPTION:

The Boeing Realty Corporation (BRC) is managing environmental remediation activities at the Former Compton Site (Site) at 157 and 200 East Stanley Street and 233 East Manville Street in Compton. The Former Compton Site is located in Los Angeles at Latitude: 33 degrees 52 minutes North, Longitude: 118 degrees 13 minutes West. North American Aviation (NAA, a heritage company of Boeing) formerly leased buildings at the Site to manufacture aerospace components. Subsequent to NAA's tenancy, the Site was used by others for a number of industrial activities, including aircraft assembly and electronics production. BRC submitted a Pilot Test Workplan for in-situ bioremediation of volatile organic compounds (VOCs) in groundwater beneath the Site. The workplan for this project has been approved by this Regional Board on February 26, 2003. Molasses will be added to the groundwater to enhance bioremediation during the proposed Pilot Test. Food-grade materials including molasses, cheese whey, corn syrup, and other carbohydrate solutions are being used to enhance bioremediation in a number of similar remediation efforts. This technology has been included in the General Waste Discharge Requirements (Board Order No. R4-2002-0030). The molasses will be used in three areas known as Parcels 1 through 3. The main plume (>2,000 µg/L VOCs) at Parcel 1 extends over an area of approximately 30 feet by 30 feet; the main plume at Parcel 2 extends over an area of approximately 320 feet by 160 feet; and the main plume at Parcel 3 extends over an area of approximately 160 by 140 feet.

VOLUME AND DESCRIPTION OF DISCHARGE (INJECTION):

A mixture of 10 to 20 percent food-grade molasses, potassium bromide (approximately 100 to 300 mg/L), sodium bicarbonate, and potable water will be introduced to the aquifer underlying the Site. The sodium bicarbonate is a food-grade reagent used as a buffering agent. The potassium bromide is added as a tracer and has been accepted by state and federal agencies as a tracer for similar applications. When placed in a contaminated aquifer, the molasses stimulates microbial activity and changes the geochemical conditions in the subsurface, starting a multi-step process resulting in the degradation of chlorinated solvents and their derivatives.

Forty-three injection points will be used to deliver the molasses solution (refer to Figures 1 through 4). It is estimated that a total of approximately 825,000 gallons of solution will be injected over the duration of this project. The injection activities are expected to start after certain buildings are demolished, the Site is re-graded, and new building construction has begun. It is currently estimated that the injections may occur around 1st Quarter 2004. Molasses is an innocuous amendment that is easily biodegradable and edible. No undesirable effect is expected from its use. There may be small increases of soluble gases such as methane, ethane, ethene, and carbon dioxide. The quantities of molasses injected will be required to be documented per the Monitoring and Reporting Program No. 8586. The molasses solution volume, concentration, and frequency may be adjusted based on monitoring results. The estimated duration of the Pilot Test is 3 years. Data collected during this test will be used to evaluate the overall effectiveness of this remedial approach and additional remedial measures will be developed as necessary.