



California Regional Water Quality Control Board

Los Angeles Region



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December 10, 2004

Ms. Elizabeth Brown
Northrop Grumman Systems Corporation
1840 Century Park East
Los Angeles, CA 90067-2199

CERTIFIED MAIL
RETURN RECEIPT REQUESTED
CLAIM NO. 7002 0860 0001 0650 9286

Dear Ms. Brown:

GENERAL WASTE DISCHARGE REQUIREMENTS FOR POTASSIUM PERMANGANATE SOLUTION INJECTIONS AT PETROLEUM HYDROCARBON FUEL AND/OR VOLATILE ORGANIC COMPOUND IMPACTED SITES – FORMER NORTHROP GRUMMAN EAST COMPLEX FACILITY (PLANT 1 AREA: BUILDING 1-1 PILOT PROJECT) AT ONE NORTHROP AVENUE, HAWTHORNE, CALIFORNIA (FILE NO. 04-177, CI NO. 8823)

We have completed our review of your application for coverage under General Waste Discharge Requirements for the injection of potassium permanganate solution at the site referenced above in Hawthorne, California.

Northrop Grumman Systems Corporation (hereinafter Discharger) is conducting the soil and groundwater cleanup activities at a former facility commonly known as the Northrop East Complex Facility (Site) located at One Northrop Avenue in Hawthorne, California (Figure 1) (Latitude: 118.3293W, Longitude: 33.9214N). Vought Aircraft Industries, Inc owns the land and the Site. The business activities at the Site involved aircraft manufacturing operations from 1940 to approximately 2000. The industrial activities at the Site included the use of a variety of products such as fuels (including gasoline, diesel, and jet fuel), solvents including isopropanol, 1,1,1-trichloroethane (TCA) and tetrachloroethene (PCE), acid sludge, fluorescent dye and hydraulic oil. Site investigations indicate that soil and groundwater have been contaminated with volatile organic compounds (VOCs). The VOCs identified in the groundwater include total petroleum hydrocarbon as gasoline (TPHg) TPH as diesel (TPHd), PCE, trichloroethene (TCE), cis-1,2-dichloroethene (DCE), 1,1-dichloroethane, 1,1-DCE, chloroform, carbon tetrachloride, and benzene. However, TPHg and TPHd have not been detected in the soil and groundwater at the specific pilot test area (Building 1-1 sub-area), which is located within the Plant 1 Area (Figure 2A).

The Site was granted Resource Conservation and Recovery Act (RCRA) Interim Status by the State of California Health and Welfare Agency, Department of Health Services (DHS) in 1981. The Department of Toxic Substances Control (DTSC) has been designated as the sole oversight agency for RCRA Correction Action. On August 19, 2004, the DTSC approved the Pilot study for the Site. In the proposed pilot study, ENSR International, on behalf of the Discharger, proposes two phased potassium permanganate injections. The first phase will consist of the injection of up to 129,000 gallons of 5-mg/L potassium permanganate solution into well P1-ISCO-03 at a flow rate of three gallons per minute (Figure 3). The second phase

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will be conducted based on the results of the first injection. The injection zone will be from 50-61 feet below ground surface (bgs).

Groundwater depth ranges between 48 through 51 feet bgs in monitoring wells installed at the Site. Groundwater flow direction is to the south-southeast at a hydraulic gradient of approximately 0.062.

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.

Regional Board staff 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. 056) and Monitoring and Reporting Program No. CI-8823 and Standard Provisions.

The Monitoring and Reporting Program requires you to implement the monitoring program on the effective date of this enrollment (December 10, 2004) under Regional Board Order No. R4-2002-0030. All monitoring reports shall be sent to the Regional Board, ATTN: Information Technology Unit. Also, a copy of the monitoring report shall be sent to DTSC, ATTN: Ms. Maria Teresa M. Fabella.

When submitting monitoring or technical reports to the Regional Board per these requirements, please include a reference to Compliance File No. CI-8823, 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. Orlando H. Gonzalez at (213) 620-2267 or Dr. Kwang Lee at (213) 620-2269.

Sincerely,

Jonathan Bishop
Executive Officer

Enclosures:

1. Board Order No. R4-2002-0030
2. Monitoring and Reporting Program No. CI-8823

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cc: Mr. Robert Sams, Office of Chief Counsel, State Water Resources Control Board
Mr. Michael Lauffer, Office of Chief Counsel, State Water Resources Control Board
Ms. Maria Teresa M. Fabella, DTSC
Mr. Ted Johnson, Water Replenishment District of Southern California
Mr. Mark Stewart, Central Basin Watermaster, California Department of Water Resources
Mr. Steven R. Briggs, Vice President and Deputy, Air Combat System, Northrop Grumman System Corporation
Mr. Michael T. Martin, Northrop Grumman Systems Corporation
Mr. Larry W. Cragun, Vought Aircraft Industries, Inc., Hawthorne, CA
Mr. Harry Van Den Berg, Project Manager, ENSR International
Ms. Sally Bilodeau, Lead Project Manager, ENSR International

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