



# 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

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED  
CLAIM NO. 7002 0860 0001 0650 9262

Dear Ms. Brown:

**GENERAL WASTE DISCHARGE REQUIREMENTS FOR HYDRPGEN PEROXIDE WITH FENTON'S REAGENT AND SODIUM LACTATE AND PHOSPHATE BUFFER SOLUTION INJECTIONS AT PETROLEUM HYDROCARBON FUEL AND/OR VOLATILE ORGANIC COMPOUND IMPACTED SITES – FORMER NORTHROP GRUMMAN EAST COMPLEX FACILITY (PLANT 3 AREA: BUILDING 3-10 PILOT PROJECT), ONE NORTHROP AVENUE, HAWTHORNE, CALIFORNIA (FILE NO. 04-176, CI NO. 8822)**

We have completed our review of your application for coverage under General Waste Discharge Requirements for the injection of hydrogen peroxide with fenton's reagent and sodium lactate and phosphate buffer 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 Grumman East Complex Facility (Site) located at One Northrop Avenue in Hawthorne, California (Figure 1) (Latitude: 118.3289, Longitude: 33.9213). Vought Aircraft Industries, Inc owns the land and the Site. The business activities at the Site involved aircraft manufacturing operation 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 3-10 sub-area), which is located within the Plant 3 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, the consultant (Camp Dresser & McKee, Inc. (CDM)) on behalf of the Discharger proposes two phased injections. The first phase will consist of the injection of approximately 1,800 to 6,000 gallon hydrogen peroxide with fenton's

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Ms. Elizabeth Brown  
Northrop Grumman Systems Corporation  
(Former Northrop Grumman East Complex Facility)

- 2 -

December 10, 2004

reagent solution into three nested wells PS-1, PS-2, and PS-3 at rates between one to four gallons per minute (gpm) (Figure 3-2). The second phase will consist of the injection of solution of a sodium lactate and phosphate into well PS-1 at a rate of 0.5 gpm. The injection zone will be from 50-61 feet below ground surface (bgs). On September 23, 2004, CDM on behalf of the Discharger, submitted a report of waste discharge (RoWD) for the above-proposed injections at the Site.

Groundwater depth ranges between 48 through 51 feet bgs in monitoring wells installed at the Site. Groundwater flow direction is to the northwest and south-southeast at a hydraulic gradient of approximately 0.062 feet of vertical displacement per foot of horizontal distance (Figure 3-1).

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. 055) and Monitoring and Reporting Program No. CI-8822 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-8822, 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

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- 3 -

December 10, 2004

Enclosures:

1. Board Order No. R4-2002-0030
2. Monitoring and Reporting Program No. CI-8822

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, Department of Toxic Substances Control  
Mr. Ted Johnson, Water Replenishment District of Southern California  
Mr. Mark Stewart, Central Basin Watermaster, California Department of Water Resources  
Mr. Michael T. Martin, Northrop Grumman Systems Corporation  
Mr. Steven R. Briggs, Vice President and Deputy, Air Combat Systems, Northrop Grumman Systems Corporation  
Mr. William J. Weaver, Sr. Project Manager, Camp Dresser & McKee, Inc.  
Mr. Steven L. Brewer, Sr. Vice President, Camp Dresser & McKee, Inc.

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