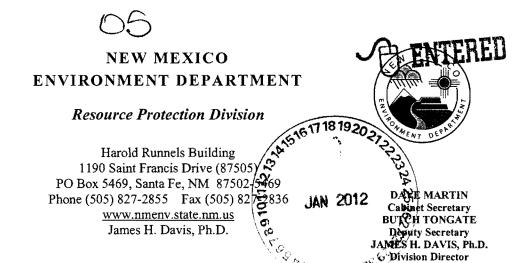


SUSANNA MARTINEZ Governor JOHN A. SANCHEZ Lieutenant Governor



CERTIFIED MAIL – RETURN RECEIPT REQUESTED

January 13, 2012

Michael Graham Associate Director, Environmental Programs Los Alamos National Laboratory PO Box 1663, MS-K490 Los Alamos, NM 87544 Chris Cantwell Associate Director ESH & Q, Los Alamos National Laboratory PO Box 1663, MS-K490 Los Alamos, NM 87544

RE: Temporary Permission to Discharge, Treated Well Development and Pump Test Ground Water Discharge at Regional Monitoring Well R-28, DP-1793

Dear Messrs. Graham and Cantwell:

The New Mexico Environment Department has reviewed your application dated December 22, 2011, and request for temporary permission to discharge no more than 400,000 gallons of treated industrial wastewater generated from a proposed regional monitoring well R-28 pump test. Ground water in the area of R-28 has been determined to contain chromium at levels in exceedance the Water Quality Control Commissions (WQCC) standards. The pump test and development water is to be treated for chromium using an ion exchange treatment system. Treated water is proposed to be land applied on approximately 83 acres via water trucks along approximately three miles of dirt road in the vicinity of regional monitoring well R-28. The proposed discharge is located in Mortandad Canyon, approximately three miles southeast of Los Alamos in Section 24, Township 19N, Range 06E, within the boundaries of Los Alamos National Laboratory, Los Alamos County.

Temporary permission to discharge is hereby granted until May 5, 2012, pursuant to Subsection B of 20.6.2.3106 NMAC of the New Mexico Water Quality Control Commission Regulations. This approval is contingent on your discharging and reporting as described in your December 22, 2011 request and upon the following conditions:



h.

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- 1. Water generated from the pump testing of monitoring well R-28 shall be contained and treated to a chromium concentration of less than 0.05 mg/L prior to discharge.
- 2. The total volume of treated water discharged shall be recorded.
- 3. Land application of the treated water shall not occur in a watercourse or result in run-off to a watercourse.
- 4. Land application of the treated water shall not result in ponding.
- 5. Land application shall be conducted in a manner that minimizes potential impacts to ground water quality and maximizes evaporation.
- 6. Land application is restricted to daylight hours and a maximum of 10 hours per day.
- 7. Land application must be supervised at all times.
- 8. Land application of the treated water is prohibited while precipitation is occurring or during times when the ground is saturated or frozen to the extent that land applied water cannot be absorbed.
- 9. LANL shall collect representative samples of the treated water twice daily and analyze the samples for chromium using a method with a minimum detection limit below the required discharge limit of 0.05 mg/L. All sample collection, preservation and analysis shall conform to the methods identified in Subsection B of 20.6.2.3107 NMAC of the WQCC Regulations.
- 10. Should a chromium sample analysis reveal the presence of chromium at a concentration of 0.05 mg/L or greater, discharge of treated water shall immediately cease and NMED shall be notified. Following the implementation of corrective actions to ensure that chromium concentrations of the treated water meet less than 0.05 mg/L and NMED's approval, discharge may resume.
- 11. All ion exchange treatment vessels used in the treatment system shall be properly disposed of in accordance with all local, state and federal laws and regulations.
- 12. A final project report shall be submitted to NMED within 30 days of the final cessation of discharge. The report shall provide the total volume of treated water discharged and the analytical results of the chromium analyses for the project, and identify the locations that received the treated water.

Although NMED is granting temporary permission for the proposed discharge, the application which was submitted on December 22, 2011, contains insufficient information to proceed with the issuance of a Discharge Permit. NMED has requested several times in writing (letters dated December 16, 2010 and November 9, 2011) and during several recent teleconference calls (November 16 and December 7, 2011) that LANL submit a single application for a ground water Discharge Permit to cover <u>all</u> potential such temporary on-site treatment and discharge activities associated with contaminated ground water which is intended to be land applied. NMED is seeking supplemental information regarding such discharges in accordance with the required elements under Subsection C of 20.6.2.3106 NMAC. NMED is aware that the timelines and volumes of each event may be variable and therefore recommends using a conservative approach in estimating volumes and locations in the supplemental information. The supplemental information is required to be submitted by NMED within 60 days of the date of this letter (by February 10, 2012).

This temporary permission does not relieve you of the responsibility to comply with any other applicable federal, state, and/or local laws and regulations, such as zoning requirements and nuisance ordinances. Also, this approval does not relieve you of liability should your operation result in actual pollution of surface or ground waters.

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If you have any questions, please contact Jennifer Fullam of the Ground Water Pollution Prevention Section at 505-827-2909.

Sincerely,

James H. Davis, Ph.D. Director, Resource Protection Division

JD:JF

cc: Robert Italiano, District Manager, NMED District II NMED Santa Fe Field Office **County File** James Bearzi, NMED SWQB Richard Powell, NMED SWQB John Kieling, NMED HWB Steven Yanicak, NMED-DOE-Oversight Bureau Gene Turner, LASO-EO, Los Alamos National Laboratory, A316, Los Alamos, NM 87545 Hai Shen, LASO-EO, Los Alamos National Laboratory, A316, Los Alamos, NM 87545 Carl Beard, PADOPS, Los Alamos National Laboratory, A102, Los Alamos, NM 87545 Victoria George, REG-DO, Los Alamos National Laboratory, M991, Los Alamos, NM 87545 Kate Lynnes, REG-COM, Los Alamos National Laboratory, M991, Los Alamos, NM 87545 Steve Veenis, PMFS-DO, Los Alamos National Laboratory, M997, Los Alamos, NM 87545 Ted Ball, PMF-FUNCT, Los Alamos National Laboratory, M996, Los Alamos, NM 87545 Mark Everett, ET-EI, Los Alamos National Laboratory, M992, Los Alamos, NM 87545 Michael Saladen ENV-RCRA, Los Alamos National Laboratory, K490, Los Alamos, NM 87545

Bob Beers, ENV-RCRA, Los Alamos National Laboratory, K490, Los Alamos NM, 87545