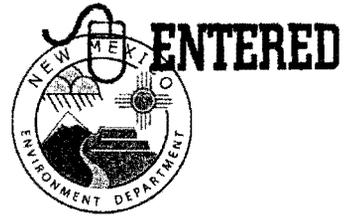




TA16

NEW MEXICO
ENVIRONMENT DEPARTMENT



Ground Water Quality Bureau

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RON CURRY
Secretary
SARAH COTTRELL
Deputy Secretary

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

December 16, 2010

Anthony R. Grieggs, Group Leader
Environmental Protection Division
Water Quality & RECR (ENV-RCRA)
P.O. Box 1663, Mail Stop K-490
Los Alamos, NM 87545



RE: Response to Notice of Intent to Discharge and Request for Temporary Permission to Discharge for Treated Development and Pump Test Water at TA-16, [AI:856, PRD201000008]

Dear Mr. Grieggs:

The Ground Water Quality Bureau of the New Mexico Environment Department received a Notice of Intent, dated October 27, 2010, from the Los Alamos National Laboratory (LANL) regarding the one-time discharge of 200,000 – 400,000 gallons of treated pump test and development ground water from intermediate monitoring well CdV-16-4ip. The ground water contains the “toxic pollutant” hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX), as defined by Section 20.6.2.7.WW NMAC, New Mexico Water Quality Control Commission (WQCC) Regulations, (20.6.2 NMAC). Development water will be generated from the well in an attempt to remove fine-grained sediments to restore porosity and permeability of the formation materials around the well screen. Pump test water will be generated during pump tests conducted in order to measure aquifer parameters in accordance with the NMED-approved *Hydrologic Testing Work Plan for Consolidated Unit 16-021(c)-99*. LANL’s NOI and proposal for discharge under temporary permission involve removing the RDX from the development and pump test water to a concentration of < 3 µg/L using a granular activated carbon (GAC) treatment system and discharging the treated water by water trucks for dust control of dirt roads in the vicinity.

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Section 20.6.2.3104 NMAC of the WQCC Regulations prohibits the discharge of effluent or leachate in such a manner that the effluent or leachate could move directly or indirectly into ground water without a Discharge Permit. None of the exemptions identified under Section 20.6.2.3105 NMAC apply to this discharge. The discharge is located at Technical Area 16 (TA-16), at Section 29, Township 19N, Range 6E, Los Alamos National Laboratory, Los Alamos County. **Pursuant to Subsection A of 20.6.2.3106 NMAC; you are hereby notified that a Discharge Permit is required for this discharge.**

Any appeal of this determination that a Discharge Permit is required must be made to the New Mexico WQCC within 30 days of receipt of this letter, in accordance with Subsection B of 20.6.2.3112 NMAC. A copy of the WQCC Regulations, 20.6.2 NMAC, is available at <http://www.nmcpr.state.nm.us/nmac/title20/T20C006.htm>.

Due to the temporary nature of the discharge and in place of a Discharge Permit, temporary approval to discharge for up to 120 days is hereby granted in accordance with Section 20.6.2.3106.B NMAC, with the following conditions:

1. Water generated from the development and pump testing of monitoring well CdV-16-4ip shall be contained and treated to $< 3 \mu\text{g/L}$ RDX 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 or pooling.
5. Land application shall be conducted in a manner that maximizes infiltration and 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, frozen or covered with ice.
9. LANL shall collect representative samples of the treated water twice daily and analyze the samples for RDX using a method with a minimum detection limit (MDL) of $2 \mu\text{g/L}$ for RDX. All sample collection, preservation and analysis shall conform to the methods identified in Section 20.6.2.3107.B. of the WQCC Regulations.
10. Should a RDX sample analysis reveal the presence of RDX at a concentration of $5.5 \mu\text{g/L}$ ¹ or greater, discharge of treated water shall immediately cease and NMED shall be notified. Following replacement of the GAC treatment vessel and NMED authorization, discharge may resume.
11. All GAC treatment vessels used in the temporary treatment system shall be properly disposed 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 present the total volume of treated water discharged and the analytical results of the RDX analyses for the project, and identification of the locations that received the treated water.

¹ This value represents 90% of the EPA Regional Screening Level for RDX

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This temporary approval to discharge is for one time only and is granted for up to 120 days. Therefore, discharges performed under this temporary approval shall cease by April 15, 2011. Should LANL seek to perform temporary on-site treatment and discharge of contaminated water at any location within the Laboratory in the future, an application for a ground water Discharge Permit must be submitted to NMED in accordance with Section 20.6.2.3106 NMAC.

If you have any questions, please contact either Jennifer Fullam at (505) 827-2909 or Robert George of the Ground Water Pollution Prevention Section, at (505) 476-3648.

Sincerely,



William C. Olson, Chief
Ground Water Quality Bureau

WO:RJG/rg

Cc: · Robert Italiano, Manager, NMED District II
· Richard Powell, NMED SWQB
· James Bearzi, Chief, NMED HWB
· Steven Yanicak, NMED-DOE-Oversight Bureau
· Erik Galloway, NMED-DOE-Oversight Bureau
· Gene Turner, LASO-EO, Los Alamos National Laboratory, A316, Los Alamos, NM 87545
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