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**Environmental Protection Division**  
Environmental Compliance Programs (ENV-CP)  
PO Box 1663, K490  
Los Alamos, New Mexico 87545  
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**National Nuclear Security Administration**  
Los Alamos Field Office, A316  
3747 West Jemez Road  
Los Alamos, New Mexico, 87545  
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**RECEIVED**

Date: **NOV 12 2013**  
Symbol: ENV-DO-13-0264  
LAUR: 13-28301

**NOV 14 2013**  
**NMED**  
**Hazardous Waste Bureau**

Mr. Jerry Schoeppner, Chief  
Ground Water Quality Bureau  
New Mexico Environment Department  
Harold Runnels Building, Room N2250  
1190 St. Francis Drive  
P.O. Box 26110  
Santa Fe, NM 87502

Dear Mr. Schoeppner:

**SUBJECT: NOTIFICATION OF CHANGE IN PROJECT SCHEDULE, CDV-16-4IP, SOURCE REMOVAL TESTING, DP-1793**

On August 19, 2013, the New Mexico Environment Department (NMED) granted the U.S. Department of Energy and Los Alamos National Security, LLC (DOE/LANS) temporary permission to discharge treated groundwater from source removal testing at intermediate monitoring well CdV-16-4ip (Enclosure 1). Subsequently, on October 4, 2013, the temporary permission granted by NMED was revised (Enclosure 2). The 60-day source removal testing at monitoring well CdV-16-4ip was originally scheduled for the months of October and November, 2013. The shutdown of the federal government from October 1 to October 17 has, however, forced DOE/LANS to reschedule the CdV-16-4ip source removal testing until the spring of 2014. Source removal testing cannot be conducted during the winter season because of the impacts of freezing conditions on both treatment and land application. In the spring of 2014, DOE/LANS will notify the NMED within 5 business days of commencing the discharge, as required by Condition No. 1 of the temporary permission authorization letter.

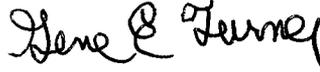


Please contact Robert S. Beers by telephone at (505) 667-7969 or by email at [bbeers@lanl.gov](mailto:bbeers@lanl.gov) if you have questions regarding this quarterly report.

Sincerely,

  
Alison M. Dorries  
Division Leader  
Environmental Protection Division  
Los Alamos National Security, LLC

Sincerely,

  
Gene E. Turner  
Environmental Permitting Manager  
Environmental Projects Office  
Los Alamos Field Office  
Department of Energy

AMD:GET:RSB/lm

Enclosures:

1. August 19, 2013, letter from the NMED to DOE/LANS granting temporary permission to discharge from CdV-16-4ip
2. October 4, 2013, letter from the NMED to DOE/LANS revising the August 19, 2013, temporary permission to discharge from CdV-16-4ip

Cy: James Hogan, NMED/SWQB, Santa Fe, NM  
John E. Kieling, NMED/HWB, Santa Fe, NM  
Steven M. Yanicak, NMED/DOE/OB, (E-File)  
Hai Shen, NA-OO-LA, (E-File)  
Gene E. Turner, NA-OO-LA, (E-File)  
Eric L. Trujillo, NA-OO-LA, (E-File)  
Carl A. Beard, PADOPS, (E-File)  
Michael T. Brandt, ADESH, (E-File)  
Jeffrey D. Mousseau, ADEP, (E-File)  
Alison M. Dorries, ENV-DO, (E-File)  
Victoria A. George, REG-DO, (E-File)  
John P. McCann, CAP, (E-File)  
Danny Katzman, ET-EI, (E-File)  
Charles J. English, REG-SP, (E-File)  
Michael R. Alexander, CAP-FS, (E-File)  
Michael T. Saladen, ENV-CP, (E-File)  
Robert S. Beers, ENV-CP, (E-File)  
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ENV-CP Correspondence File, K490

# **ENCLOSURE 1**

August 19, 2013, letter from the NMED to  
DOE/LANS granting temporary permission to  
discharge from CdV-16-4ip

ENV-DO-13-0264

LAUR-13-28301

Date: NOV 12 2013



SUSANA MARTINEZ  
Governor  
JOHN A. SANCHEZ  
Lieutenant Governor

NEW MEXICO  
ENVIRONMENT DEPARTMENT

*Ground Water Quality Bureau*

Harold Runnels Building  
1190 St. Francis Drive  
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RYAN FLYNN  
Cabinet Secretary-Designate  
BUTCH TONGATE  
Deputy Secretary

**CERTIFIED MAIL – RETURN RECEIPT REQUESTED**

August 19, 2013

Ms. Alison Dorries, LANS-EP-RS  
Los Alamos National Security, LLC  
P.O. Box 1663 MS K404  
Los Alamos, NM 87545

Mr. Gene Turner, DOE/AIP/POC  
U.S. Department of Energy  
Los Alamos Site Office, MS A316  
528 35th Street  
Los Alamos, NM 87545

RE: Temporary Permission to Discharge, Treated Well Development and Pump Test Ground Water Discharge from Regional Monitoring Well CdV-16-4ip, DP-1793 (AI:856, PRD20130006)

Dear Mr. Turner and Ms. Dorries:

The New Mexico Environment Department (NMED) has reviewed your request for temporary permission, dated June 3, 2013 (copy enclosed) to discharge no more than 561,600 gallons of treated industrial wastewater generated from a proposed intermediate monitoring well CdV-16-4ip extended pump test. Ground water in the area of CdV-16-4ip has been determined to contain the "toxic pollutant" hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX) as defined by Subsection WW of 20.6.2.7 NMAC of the Water Quality Control Commission's (WQCC's) regulations. The water generated during the pump test is to be stored in above ground tanks (frac tanks) and treated to remove RDX using a granular active carbon (GAC) treatment system. Treated water will be temporarily stored in 21,000 gallon frac tanks and then land applied within nine zones totaling 153 acres within Technical Area (TA) 16 as defined in the June 3, 2013 request for temporary permission. The proposed discharge is located approximately three miles southwest of Los Alamos in Sections 29, 30, 31, 32 and 36, Township 19N, Range 06E, within the boundaries of Los Alamos National Laboratory (LANL), Los Alamos County.

Temporary permission to discharge is hereby granted, for a duration not to exceed 120 days from the date discharge commences, pursuant to Subsection B of 20.6.2.3106 NMAC of the New

Mr. Turner and Ms. Dorries, DP-1793 (AI:856, PRD20130006)

August 19, 2013

Page 2

Mexico WQCC Regulations. This approval is contingent on your discharging and reporting as described in your February 28, 2013 request and upon the following conditions:

1. NMED shall be notified within five business days of the date discharge commences.
2. Water generated from the pump testing of monitoring well CdV-16-4ip shall be contained and treated to a RDX concentration equal to or less than 5.5 µg/L prior to discharge<sup>1</sup>.
3. The total volume of treated water discharged shall be recorded and submitted to NMED with the final project report.
4. Land application of the treated water shall not occur in a watercourse or result in run-off to a watercourse.
5. Land application of the treated water shall not result in ponding.
6. Land application shall be conducted in a manner that minimizes potential impacts to ground water quality and maximizes evaporation.
7. Treatment of contaminated water and land application of the treated water is restricted to daylight hours and a maximum of 10 hours per day.
8. Land application of the treated water must be supervised at all times.
9. 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.
10. 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 µg/L for RDX. All sample collection, preservation and analysis shall conform to the method identified in Subsection B of 20.6.2.3107 NMAC. All analytical results shall be submitted to NMED with the final project report.
11. Discharges from the frac tanks to the land application areas shall only commence following confirmation that the treated water analytical results for RDX concentrations do not exceed 5.5 µg/L.
12. Should a RDX sample analysis reveal the presence of RDX at a concentration of 5.5 µg/L 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.
13. Following final cessation of discharge, the treatment system and frac tanks shall be properly disposed of in accordance with all local, state and federal laws and regulations. A summary describing final disposition of treatment units and frac tanks shall be submitted to NMED in the final project report.
14. 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 RDX analyses for the project, and identify the locations that received the treated water.

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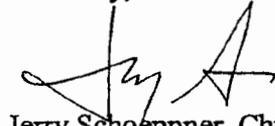
<sup>1</sup>This value represents 90% of the EPA Regional Screening Level for RDX at the time Temporary Permission was granted

Mr. Turner and Ms. Dorries, DP-1793 (AI:856, PRD20130006)  
August 19, 2013  
Page 3

This temporary permission does not relieve LANL 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 LANL of liability should operations result in actual pollution of surface or ground waters.

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

Sincerely,



Jerry Schoeppner, Chief  
Ground Water Quality Bureau

JS:JF

Enc: Request for Temporary Permission dated June 3, 2013

cc: Robert Italiano, District Manager, NMED District II  
NMED Santa Fe Field Office  
County File  
James Hogan, NMED SWQB  
Erin Trujillo, NMED SWQB  
John Kieling, NMED HWB  
Dave Cobrain, NMED HWB  
Steven Yanicak, NMED-DOE-Oversight Bureau  
Hai Shen, LASO-EO, Los Alamos National Laboratory, A316, Los Alamos, NM 87545  
Pete Maggiore, NA-OO-LA, Los Alamos National Laboratory, A316, Los Alamos, NM  
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Carl Beard, PADOPS, Los Alamos National Laboratory, A102, Los Alamos, NM 87545  
Michael T. Brandt, ADESH, Los Alamos National Laboratory, K491, Los Alamos, NM  
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David J. McInroy, CAP, Los Alamos National Laboratory, M996, Los Alamos, NM  
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Victoria George, REG-DO, Los Alamos National Laboratory, M991, Los Alamos, NM  
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Danny Katzman, ET-EI, Los Alamos National Laboratory, M992, Los Alamos, NM  
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Michael Saladen ENV-RCRA, Los Alamos National Laboratory, K490, Los Alamos, NM  
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Bob Beers, ENV-RCRA, Los Alamos National Laboratory, K490, Los Alamos NM,  
87545

## **ENCLOSURE 2**

October 4, 2013, letter from the NMED to  
DOE/LANS revising the August 19, 2013, temporary  
permission to discharge from CdV-16-4ip

ENV-DO-13-0264

LAUR-13-28301

Date: NOV 12 2013



SUSANA MARTINEZ  
Governor  
JOHN A. SANCHEZ  
Lieutenant Governor

NEW MEXICO  
ENVIRONMENT DEPARTMENT

*Ground Water Quality Bureau*

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RYAN FLYNN  
Cabinet Secretary-Designate  
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Deputy Secretary

**CERTIFIED MAIL – RETURN RECEIPT REQUESTED**

October 4, 2013

✓  
Ms. Alison Dorries, LANS-EP-RS  
Los Alamos National Security, LLC  
P.O. Box 1663 MS K499  
Los Alamos, NM 87545

Mr. Gene Turner, DOE/AIP/POC  
U.S. Department of Energy  
Los Alamos Site Office, MS A316  
528 35th Street  
Los Alamos, NM 87545

U1400093

IRM-RMS 1 ANI

RE: **REVISED** Temporary Permission to Discharge, Treated Well Development and Pump Test  
Ground Water Discharge from Regional Monitoring Well CdV-16-4ip, DP-1793 (AI:856,  
PRD20130006)

Dear Mr. Turner and Ms. Dorries:

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Mr. Turner and Ms. Dorries, DP-1793 (AI:856, PRD20130006)  
October 4, 2013  
Page 2

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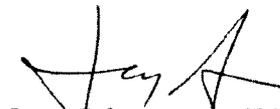
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Sincerely,



Jerry Schoepner, Chief  
Ground Water Quality Bureau

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