STATE OF NEW MEXICO
ENVIRONMENT DEPARTMENT

IN THE MATTER OF:

UNITED STATES DEPARTMENT OF ENERGY AND LOS ALAMOS NATIONAL SECURITY LLC	)	**ADMINISTRATIVE ORDER UNDER THE NEW MEXICO HAZARDOUS WASTE ACT § 74-4-13**
LOS ALAMOS NATIONAL LABORATORY LOS ALAMOS COUNTY, NEW MEXICO	)	

ADMINISTRATIVE ORDER

Pursuant to NMSA 1978, Section 74-4-13(A) of the Hazardous Waste Act ("HWA"), the New Mexico Environment Department ("NMED") hereby orders the Department of Energy ("DOE"), and Los Alamos National Security, LLC ("LANS"; collectively, with DOE, the "Permittees"), to comply with the terms and conditions of this Administrative Order ("Order") relating to the Los Alamos National Laboratory ("LANL").

BACKGROUND

1. Pursuant to the Department of Environment Act, NMSA 1978, Sections 9-7A-1 to -15, the NMED is an agency of the executive branch within the government of the State of New Mexico.

2. The NMED, through the Hazardous Waste Bureau of the Environmental Health Division, is charged with administration and enforcement of the HWA and the Hazardous Waste Management Regulations, 20.4.1 NMAC ("HWMR").

3. The Permittees comprise a "person" within the meaning of Section 74-9-3(I) of the HWA.

4. The DOE and LANS are co-Permittees under a Treatment, Storage, and Disposal Facility ("TSDF") Permit, EPA I.D. NUMBER NM0890010515-TSDF ("Permit").

5. The Permittees are engaged in the management, storage, and treatment of hazardous waste at LANL. Hazardous waste is subject to the Resource Conservation and Recovery Act ("RCRA"), 42 U.S.C. § 6901 to 6992k.

6. The U.S. Environmental Protection Agency ("EPA") has granted the State of New Mexico delegated authority to implement RCRA within the state. The HWMR incorporate portions of 40 CFR 260 through 40 CFR 270, 40 CFR 279 and related federal regulations by reference.

7. The DOE is a federal agency; LANS is a for-profit corporation doing business in New Mexico.

8. On February 15, 2014, the NMED was informed by the DOE and Nuclear Waste Partnership, LLC, co-permittees under a TSDF Permit for the Waste Isolation Pilot Plant ("WIPP"), EPA I.D. NUMBER NM4890139088-TSDF, of a radiological incident that occurred within the WIPP underground repository at approximately 11:30 PM on February 14, 2014. The WIPP was still in "stand down" due to a fire in the underground on February 5, 2014.

9. On February 19, 2014, the NMED became aware that an off-site particulate air sample collected and analyzed by the Carlsbad Environmental Monitoring and Research Center ("CEMRC") indicated an airborne release of radioactive material.

10. On May 2, 2014, the DOE Carlsbad Field Office published an Occurrence Reporting and Processing System Operating Experience Report Notification, titled *Potential for the presence of untreated nitrate waste salts in TRU waste packages* ("ORPS Report").

11. The ORPS Report indicated that experts, after review of evidence from re-entries into the WIPP underground, concluded that a possible cause of the condition was the presence of untreated nitrate salts in waste packages, and it was postulated that an energetic chemical reaction could have resulted from an untreated nitrate compound coming into contact with cellulosic material present in the packages. Certain nitrate salt bearing waste containers were present in the affected area in Panel 7, Room 7, which contained an americium/plutonium ratio similar to the isotopic ratios seen on environmental filter samples taken during the release event, including containers generated at LANL.

12. Once notified that a nitrate salt bearing waste container from LANL may have been the source of the release, NMED verbally required DOE to take immediate action to isolate and secure all such nitrate salt bearing waste containers at LANL and WIPP.

13. On May 16, 2014, following review of photographs obtained during the May 15, 2014 re-entry into the WIPP underground, NMED was notified by DOE that one of two suspect LANL nitrate salt bearing waste containers emplaced in the underground, at Panel 7, Room 7, was breached, and was a cause of the February 15, 2014 release in the WIPP underground. The photographs from the May 15, 2014 re-entry indicate that the lid of a LANL nitrate salt bearing waste container had opened and there was heat damage to the surrounding area.

14. The suspect nitrate salt bearing waste containers are described in the same acceptable knowledge summary report CCP-AK-LANL-006, which contains four waste streams: LA-MHD01.001; LA-CIN01.001; LA-MIN02-V.001; and, LA-MIN04-S.001. The DOE indicated

that two of the four waste streams contain varying amounts of nitrate salts, LA-MIN02-V.001 and LA-MHD01.001. LA-MIN02-V.001 is a mixed absorbed waste stream that is largely comprised of transuranic ("TRU") waste such as liquids and solids absorbed or mixed with absorbents. The two suspect LANL nitrate salt bearing waste containers are part of the LA-MIN02-V.001 waste stream, which has been identified by DOE as the primary waste stream that contains nitrate salts absorbed with cellulose based kitty litter ("Litter"). All the LA-MIN02-V.001 containers at LANL contain nitrate salts mixed with the Litter.

15. The most recent numbers provided to NMED by the Permittees indicate that there are 57 containers that contain similar nitrate salt bearing waste that were remediated with Litter at LANL, one of which is a sibling container of one of the two suspect containers is Panel 7, Room 7, in the WIPP underground.

16. Based on the evidence provided to NMED, the current handling, storage, treatment and transportation of the hazardous nitrate salt bearing waste containers at LANL may present an imminent and substantial endangerment to health or the environment.

17. This Order addresses immediate steps to isolate, secure and/or treat all nitrate salt bearing waste containers at LANL.

ORDER

18. It is hereby ORDERED that to ensure continued protection of human health and the environment, the Permittees shall submit to the NMED, by 2:00 PM MST on May 21, 2014, a ***LANL Nitrate Salt Bearing Waste Container Isolation Plan***.

a) The LANL Nitrate Salt Bearing Waste Container Isolation Plan shall contain the following:

i. A detailed description of how DOE and LANS will isolate, secure and/or treat all nitrate salt bearing waste containers currently stored at LANL, so that a potential release from any nitrate salt bearing waste containers at LANL does not pose a threat to human health or the environment; and

ii. A schedule of implementation for isolating, securing and/or treating all nitrate salt bearing waste containers stored at LANL.

b) Upon receipt of the LANL Nitrate Salt Bearing Waste Container Isolation Plan, NMED will either: approve the LANL Nitrate Salt Bearing Waste Container Isolation Plan; approve with modification; or, respond to the Permittees with changes that must be incorporated into the LANL Nitrate Salt Bearing Waste Container Isolation Plan and resubmitted to NMED in a timeframe indicated by NMED.

c) Upon NMED approval of the LANL Nitrate Salt Bearing Waste Container Isolation Plan, the Permittees shall immediately begin implementation of the LANL Nitrate Salt Bearing Waste Container Isolation Plan.

19. The Permittees shall provide daily updates on the implementation of the LANL Nitrate Salt Bearing Waste Container Isolation Plan during pre-scheduled technical calls with NMED, and memorialize such updates in daily written submissions to NMED until NMED indicates otherwise.

20. All submissions to NMED related to this Order shall be posted in the Information Repository within five (5) working days of submission to NMED.

21. All terms and conditions of the Permit, and terms and conditions of the March 1, 2005 Order on Consent shall stay in effect unless specifically superseded by this Order.

22. The Permittees shall submit all required information to NMED via electronic mail and to the following addresses:

Bureau Chief
Hazardous Waste Bureau
2905 Rodeo Park Drive East, Building 1
Santa Fe, New Mexico 87508-6303

and

Division Director
Environmental Health Division
Harold Runnels Building
1190 Saint Francis Drive, PO Box 5469
Santa Fe, New Mexico 87502-5469

It is so ORDERED.

5/19/2014

RYAN FLYNN
SECRETARY OF ENVIRONMENT **DATE**

CERTIFICATE OF SERVICE

I hereby certify that on this 19th day of May, 2014, a copy of the foregoing Administrative Order was mailed via certified mail return receipt requested to:

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