Environmental Protection Division
Environmental Compliance Programs (ENV-CP)
PO Box 1663, K490
Los Alamos, New Mexico 87545
(505) 667-0666

National Nuclear Security Administration
Los Alamos Field Office, A316
3747 West Jemez Road
Los Alamos, New Mexico, 87545
(505) 667-5794/Fax (505) 667-5948

Date: OCT 2 3 2014
Symbol: ENV-DO-14-0288
LAUR: 14-27603
Locates Action No.: Not Applicable

Mr. John E. Kieling, Chief
Hazardous Waste Bureau
New Mexico Environment Department
2905 Rodeo Park Drive East, Building 1
Santa Fe, NM 87505-6303

Dear Mr. Kieling:

Subject: **Notification of a Class 1 Permit Modification to Update Attachment A, Technical Area (TA) – Unit Descriptions and Attachment D, Contingency Plan, of the Los Alamos National Laboratory (LANL) Hazardous Waste Facility Permit, EPA ID # NM0890010515**

The purpose of this letter is to notify the New Mexico Environment Department's Hazardous Waste Bureau (NMED-HWB) of a Class 1 permit modification to the Los Alamos National Laboratory (LANL) Hazardous Waste Facility Permit (Permit). The Permit was issued to the Department of Energy (DOE) and Los Alamos National Security, LLC (LANS), the Permittees, in November 2010. This modification includes an update to the emergency equipment language within Attachment A, *Technical Area (TA) – Unit Descriptions* and Attachment D, *Contingency Plan*.

The Permittees have prepared this permit modification notification in accordance with Title 40 of the Code of Federal Regulations (40 CFR) § 270.42(a)(1). All of the changes made to the Permit as part of this modification fall under Appendix I of 40 CFR §270.42, Items (A)(3) "*Equipment replacement or upgrading with functionally equivalent components*", and B(6)(b) "*Replacement with functionally equivalent equipment, upgrade, or relocate emergency equipment listed*". Attachment D, *Contingency Plan* and Attachment A, *Technical Area (TA) – Unit Descriptions* require language updates to reflect the equipment addition for structure TA-54-153. A full description of the permit modification and the necessary changes has been included in Enclosure 1 (LAUR-14-27603).

This permit modification notification includes this letter and an enclosure that contains a description of the permit modification, text edits of the Permit sections and a signed certification page. Three hard copies and one electronic copy of this submittal will be delivered to the NMED-HWB. The hardcopy submittal

contains pages or sections where text has been changed rather than copies of full attachments of the Permit. The electronic copy contains a reproduction of the hardcopy in portable document format (PDF) along with all the word processing files used to create the hardcopy.

Notification of this modification will be sent to the NMED-HWB-maintained LANL facility mailing list in accordance with 40 CFR § 270.42(a)(1)(ii) within ninety days of the transmittal of this permit modification request. If you have comments or questions regarding this permit modification, please contact Gene E. Turner, DOE, at (505) 667-5794 or Mark P. Haagenstad, LANS, at (505) 665-2014.

Sincerely,

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

Sincerely,

Kimberly Davis Lebak
Manager
Los Alamos Field Office
U.S. Department of Energy

AMD:KDL:MPH/kt

Enclosures: (1) Redline of Attachment A, Technical Area (TA) – Unit Descriptions and Attachment D, Contingency Plan
(2) Certification

Cy: Laurie King, USEPA/Region 6, Dallas, TX, (E-File)
Dave Cobrain, NMED/HWB, Santa Fe, NM, (E-File)
Tim Hall, NMED/HWB, Santa Fe, NM, (E-File)
Peter Maggiore, NA-LA, (E-File to aosburn@lanl.gov)
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RECEIVED
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NMED
Hazardous Waste Bureau

Mr. John E. Kieling, Chief
Hazardous Waste Bureau
New Mexico Environment Department
2905 Rodeo Park Drive East, Building 1
Santa Fe, NM 87505-6303

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The Permittees have prepared this permit modification notification in accordance with Title 40 of the Code of Federal Regulations (40 CFR) § 270.42(a)(1). All of the changes made to the Permit as part of this modification fall under Appendix I of 40 CFR §270.42, Items (A)(3) "*Equipment replacement or upgrading with functionally equivalent components*", and B(6)(b) "*Replacement with functionally equivalent equipment, upgrade, or relocate emergency equipment listed*". Attachment D, *Contingency Plan* and Attachment A, *Technical Area (TA) – Unit Descriptions* require language updates to reflect the equipment addition for structure TA-54-153. A full description of the permit modification and the necessary changes has been included in Enclosure 1 (LAUR-14-27603).

This permit modification notification includes this letter and an enclosure that contains a description of the permit modification, text edits of the Permit sections and a signed certification page. Three hard copies and one electronic copy of this submittal will be delivered to the NMED-HWB. The hardcopy submittal

ENCLOSURE 1

Redline of Attachment A, Technical Area (TA) – Unit Descriptions and Attachment D, Contingency Plan

ENV-DO-14-0288

LA-UR-14-27603

Date: OCT 2 3 2014

Permit Modification Notification

This document contains a notification for a Class 1 Permit Modification to the Los Alamos National Laboratory (LANL) Hazardous Waste Facility Permit (Permit) issued to the Department of Energy and the Los Alamos National Security, LLC, collectively known as the Permittees, in November 2010. The proposed changes are shown in redline text for Permit Attachments A and D. The changes are included as Attachment 1 to this modification.

Basis

The Permittees are submitting this change to the NMED-HWB as a Class 1 permit modification request pursuant to the conditions of 40 CFR §270.42, Appendix I, *Classification of Permit Modification*, Item A.3 for equipment upgrading or replacement with functionally equivalent components and B(6)(b) for replacement with functionally equivalent equipment, upgrade, or relocate emergency equipment. The addition of fire detection system is an equipment upgrade. The change is shown in redline in Attachments A, *Technical Area (TA) – Unit Descriptions*, page 19 and Attachment D, *Contingency Plan*, page 49.

Description of Change

A fire detection system in Dome 54-153 will be added. The system consists of ultra-violet detectors along with additional smoke and audible devices. Once fully installed and tested, the facility system will become active. While the system is being replaced, the existing system will remain in operation at all times. Normal operations will continue in Dome TA-54-153 throughout this project. The following permit changes have been made in response to the system change:

Permit Attachment A, *Technical Area (TA) – Unit Descriptions*, Section A.4.2.6, *Dome 153*, page 19, was revised to incorporate the following language, "Dome 153 is equipped with a fire detection and alarm system".

Permit Attachment D, *Contingency Plan*, Table D-2, *TA-54, Area G, Emergency Equipment*, page 49, a line stating "Ultra-violet detectors, smoke and audible devices will be located within structure TA-54-153" was added.

Permit Attachment D, *Contingency Plan*, Table D-2, *TA-54, Area G, Emergency Equipment*, page 49, the language stating "Flame or smoke detection equipment and fire alarm pull stations will be located within structures at TA-54-229, TA-54-230, TA-54-231, and TA-54-232." was modified to state "Flame or smoke detection equipment and fire alarm pull stations are located within structures at TA-54-229, TA-54-230, TA-54-231, and TA-54-232". The fire control equipment has been in operation in TA-54-229, TA-54-230, TA-54-231, and TA-54-232; therefore, the language has been modified to reflect the current status.

ATTACHMENT A

TECHNICAL AREA (TA) - UNIT DESCRIPTIONS

Area G fence-line to clear vegetation necessary to minimize fire hazards. The gate is chain-link and approximately eight feet tall with razor wire on the top. The gate is not equipped with a badge reader and is locked at all times unless used by authorized personnel for maintenance purposes.

Dome 224

Storage Dome 224, located on former pad 8, is approximately 110 feet long and 60 feet wide, with a peak height of 26 feet (*see* Figure 32 in Attachment N (*Figures)*). The design and materials of construction for dome 224 are the same as other domes at TA-54. This dome is anchored to Pad 8 with anchor bolts. It is equipped with a single-panel roll-up door at the north end and four personnel doors to allow adequate access by vehicles and by personnel. A 1-foot, 8-inch wide by 2-feet, 4-inch deep concrete ring wall surrounds the interior of dome 224. A high-density polyethylene (HDPE) liner exists below the asphaltic pad within the dome. Storage sheds 144, 145, 146, and 177 are prefabricated sheds constructed of steel. Each shed measures 6 feet long, 5 feet-wide, and 9 feet high. Access to each shed is obtained through a single door. The sheds are elevated by design, which prevents run-on and each shed is constructed with a liquid-tight sump to ensure containment of any potential leaks or spills and to prevent runoff. The floor of each shed is constructed of steel and has a metal grate that covers the entire sump area. Containers are placed directly on the metal grates, which prevent contact with liquids that may have accumulated in the sumps. The designed sump storage capacity of each shed is 120 gallons which exceeds the amount necessary to hold 10% of the total storage capacity of each shed (330 gallons).

Storage Sheds

Storage sheds 1027, 1028, 1029, and 1041 are equipped with three sets of double doors on one side of the shed for ease of access. Sheds 1027, 1028, 1030, and 1041 contain a single compartment and sump within each shed (*see* Figure 32 in Attachment N (*Figures)*). The designed storage capacity of each sump is 750 gallons which exceeds the amount necessary to hold 10% of the total capacity of each shed (1,760 gallons).

A.4.2.6 Pad 6

This permitted asphalt pad, approximately 633 ft long, 99 ft wide and 4 inches thick, is sloped approximately 1.2% from west to east and is located in the north-central portion of Area G. Storage domes 153 and 283 are located on Pad 6 (*see* Figure 33 in Attachment N (*Figures)*) and the design and materials of construction for domes 153 and 283 are the same as the other domes at TA-54.

Dome 153

Dome 153 is approximately 326 ft long and 60 ft wide, with a peak height of 26 ft (*see* Figure 33 in Attachment N (*Figures)*). A double-panel rolling door is located at the west end of the dome and 10 personnel doors are located approximately every 40 to 125 ft along the dome's length. Dome 153 is equipped with a fire detection and alarm system.

ATTACHMENT D

CONTINGENCY PLAN

Table D-2

TA-54 AREA G

Emergency Equipment

FIRE CONTROL EQUIPMENT

ABC and/or BC rated fire extinguishers are available at TA-54-8, TA-54-33, TA-54-48, TA-54-49, TA-54-153, TA-54-224, TA-54-229, TA-54-230, TA-54-231, TA-54-232, TA-54-283, TA-54-375, and TA-54-412, and on Pads 1, 9 and 10.

Description of General Capabilities:
These portable, manually operated fire extinguishers may be used by any qualified employee in the event of a small fire. For larger fires, security personnel and the Los Alamos Fire Department (LAFD) are alerted.

Flame or smoke detection equipment and fire alarm pull stations ~~will be~~are located within structures at TA-54-229, TA-54-230, TA-54-231, and TA-54-232.

Ultra-violet detectors, smoke and audible devices are located within structure TA-54-153.

Dry-chemical fire suppression systems are available at TA-54-1027, TA-54-1028, TA-54-1030, and TA-54-1041.

A dry-pipe fire suppression system is available at TA-54-412.

Fire alarm pull stations are available at TA-54-33, TA-54-48, TA-54-49, TA-54-153, TA-54-224, TA-54-229, TA-54-230, TA-54-231, TA-54-232, TA-54-283, TA-54-375, and TA-54-412.

Description of General Capabilities:
Fire alarms may be activated by any employee in the event of a fire to notify the LAFD and security personnel. Security personnel and LAFD are also notified upon activation of the flame or smoke detectors.

Several fire hydrants are located in Area G. These fire hydrants will supply water at an adequate volume and pressure to satisfy the requirements of 40 CFR 264.32(d)

SPILL CONTROL EQUIPMENT

Spill control stations and/or portable spill kits are located at TA-54-8, TA-54-33, TA-54-48, TA-54-49, TA-54-153, TA-54-224, TA-54-229, TA-54-230, TA-54-231, TA-54-232, TA-54-283, TA-54-375, and TA-54-412.

Each spill kit generally includes bags of absorbent and an inventory of tools and supplies.

ENCLOSURE 2

Certifications

ENV-DO-14-0288

LA-UR-14-27603

Date: OCT 2 3 2014

CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

10/9/14

Alison M. Dorries
Division Leader
Environmental Protection Division
Los Alamos National Laboratory
Operator

Date Signed

10/22/14

Kimberly Davis Lebak
Manager, Los Alamos Field Office
National Nuclear Security Administration
U.S. Department of Energy
Owner/Operator

Date Signed

LA-UR-14-27603