



**Associate Laboratory Directorate for
Environment, Safety, Health, & Quality**

Los Alamos National Laboratory
P.O. Box 1663, MS M325
Los Alamos, NM 87545
505-667-4218



National Nuclear Security Administration

Los Alamos Field Office
3747 West Jemez Road, A316
Los Alamos, NM 87544
505-667-5794/Fax 505-606-5948

Symbol: ALDESHQ-25-005

Date: February 28, 2025

LA-UR: 25-20673

Mr. JohnDavid Nance, Chief
Hazardous Waste Bureau
New Mexico Environment Department
2905 Rodeo Park Drive East, Building 1
Santa Fe, NM 87505-6313

**Subject: Class 1 Permit Modification Request for the Technical Area 54-38
West Outdoor Pad**

Dear Mr. Nance:

The United States Department of Energy (DOE) National Nuclear Security Administration, Los Alamos Field Office (NA-LA), in association with Triad National Security, LLC (Triad), submit to the New Mexico Environment Department-Hazardous Waste Bureau (NMED-HWB) this Class 1 permit modification request. The permit modification provides proposed revisions to the Los Alamos National Laboratory (LANL) Hazardous Waste Facility Permit within Attachment A, *Technical Area (TA) – Unit Descriptions*.

The proposed modifications have been prepared in accordance with the Code of Federal Regulations, Title 40 (40 CFR) § 270.42(a)(2). This Class 1 permit modification request consists of changes to remove permit conditions that are no longer applicable in accordance with 40 CFR § 270.42, Appendix 1, Item A.8.

Included in this permit modification package are the transmittal letter and an enclosure. The enclosure provides a certification page, a description of the proposed changes, and pages of revised text in Attachment A, Section A.4.3, *TA-54 West*.

Included herein are three hard copies and one electronic copy of this submittal. The hardcopy submittal contains pages or sections where text has been changed, rather than copies of the entire collection of Permit attachments. The electronic copy, provided only to the NMED-HWB, contains a reproduction of the hardcopy in portable document format (PDF) along with all the word processing files used to create the hardcopy.

Upon approval by the NMED-HWB, this permit 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 incorporation of this modification into the Permit by the NMED-HWB.

If you have any questions or comments concerning this permit modification request, please contact Robert A. Gallegos (NA-LA) at (505) 901-3824 or by email at robert.gallegos@nnsa.doe.gov or Luciana Vigil-Holterman (Triad) at (505) 665-3435 or by email at luciana@lanl.gov.

Sincerely,

STEVEN A.
COLEMAN (Affiliate)

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A. COLEMAN (Affiliate)
Date: 2025.02.20 17:22:39
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Steven A. Coleman
Associate Laboratory Director
Environment, Safety, Health, and Quality
Triad National Security, LLC
Los Alamos National Laboratory

Sincerely,

THEODORE
WYKA

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Date: 2025.02.27
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Theodore A. Wyka
Manager
National Nuclear Security Administration
Los Alamos Field Office
U.S. Department of Energy

SAC/TAW

Enclosure: *Class 1 Permit Modification Request to Remove Permit Conditions No Longer Applicable at the Technical Area 54-38 West Outdoor Pad*

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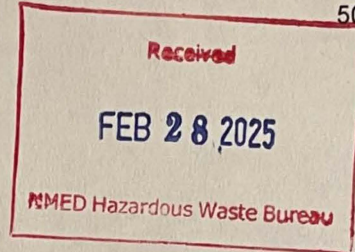


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The proposed modifications have been prepared in accordance with the Code of Federal Regulations, Title 40 (40 CFR) § 270.42(a)(2). This Class 1 permit modification request consists of changes to remove permit conditions that are no longer applicable in accordance with 40 CFR § 270.42, Appendix 1, Item A.8.

Included in this permit modification package are the transmittal letter and an enclosure. The enclosure provides a certification page, a description of the proposed changes, and pages of revised text in Attachment A, Section A.4.3, *TA-54 West*.

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ENCLOSURE

*Class 1 Permit Modification Request to Remove Permit
Conditions No Longer Applicable at the Technical Area 54-38
West Outdoor Pad*

Date: February 28, 2025

ALDESHQ-25-005
LA-UR-25-20673

U.S. Department of Energy,
National Nuclear Security Administration Los Alamos Field Office, and
Triad National Security, LLC

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CERTIFICATION

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Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision according to 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.

STEVEN A.
COLEMAN (Affiliate)

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A. COLEMAN (Affiliate)
Date: 2025.02.20 17:22:55
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Steven A. Coleman

Date Signed

Associate Laboratory Director
Environment, Safety, Health, and Quality
Triad National Security, LLC
Los Alamos National Laboratory
Operator

THEODORE
WYKA

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THEODORE WYKA
Date: 2025.02.27 16:27:49
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Theodore A. Wyka

Date Signed

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



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Class 1 Permit Modification Request to Remove Permit Conditions No Longer Applicable at the Technical Area 54-38 West Outdoor Pad

This document consists of a Class 1 permit modification request to update the Los Alamos National Laboratory (LANL) Hazardous Waste Facility Permit (Permit) issued to the United States Department of Energy (DOE) National Nuclear Security Administration, Los Alamos Field Office (NA-LA), in association with Triad National Security, LLC (Triad). Proposed changes are shown in redline strikeout within Permit Attachment A, *Technical Area (TA) – Unit Descriptions*. A signed certification, as required by Title 40 of the Code of Federal Regulations (40 CFR) § 270.11, is also provided.

Description

The purpose of this modification request is to remove permit conditions that are no longer applicable to the TA-54-38 West Outdoor Pad through updates to Attachment A, Section A.4.3, *TA-54 West*. The proposed changes are presented in redline and attached here as Redline Text.

The permit conditions that are proposed to be removed were previously included in the Permit to meet Triad technical safety requirements. Based on Triad's most recent documented safety analysis, the technical safety requirements for the Radioassay and Nondestructive Testing Facility (RANT) no longer require the additional storage configuration conditions currently included in the Permit language. The TA-54-38 West Outdoor Pad will continue to comply with the Permit requirements stated in Permit Part 3, Section 3.5.1, *Storage Configuration and Minimum Aisle Space*.

Basis

The proposed modification has been prepared in accordance with 40 CFR § 270.42(a)(2). This Class 1 permit modification request consists of changes to remove permit conditions that are no longer applicable in accordance with 40 CFR § 270.42, Appendix 1, Item A.8.

Discussion of Changes

Revision to Attachment A, Section A.4.3, *TA-54 West*, is provided in redline-strikeout format and reflects the removal of permit conditions that are no longer applicable.



REDLINE TEXT

ATTACHMENT A
TECHNICAL AREA (TA) - UNIT DESCRIPTIONS

Waste treatment, storage and repackaging are performed in the Perma-Con® within Dome 375. The Perma-Con® is equipped with a HEPA filtration system and a fire detection system. Additional emergency and safety equipment for Dome 375 can be found in Attachment D, Contingency Plan.

Mobile equipment such as gantry cranes, fume hoods, dedicated ventilation units, drum shakers and drum lifts are used in the treatment and repackaging processes. Containers holding hazardous or mixed waste with free liquids is stored on portable spill pallets or pans. Containers vary in size and determine the quantity of waste to be treated. These include 55-gallon drums, 85-gallon drums and SWBs.

Waste characterization data is used to determine whether waste is amenable to stabilization and whether pretreatment via neutralization is necessary. Neutralization may be performed as a pre-treatment option via pH adjustment to facilitate subsequent treatment via stabilization with zeolite.

When deemed necessary, neutralization is performed in containers within the Perma-Con® in TA-54-0375. The neutralization step consists of verifying pH and adding HCl or NaOH to bring the waste within a 3 to 10 pH range to ensure waste is amenable to stabilization with zeolite. The liquids are stabilized with zeolite in a minimum ratio of 3:1 (three-parts zeolite to one-part liquid waste). In cases where there is insufficient volume of liquid waste, the neutralization step of the treatment process is performed, and these minute quantities of liquids are stabilized with zeolite or a WIPP-approved absorbent.

Debris waste (i.e., waste containing no liquids) which do not require additional treatment are either be placed back into the parent container or placed directly into the daughter container with the treated waste.

A hydraulic power supply (HPS) unit (i.e., diesel engine) is housed in a prefabricated steel shed on the southwest corner of Pad 11. The HPS will power the hydraulic shear used to cut the corrugated metal pipes (CMPs) in the PermaCon® in TA-54, Area G, Dome 54-0375.

A.4.3 TA-54 West

The two permitted units at TA-54 West include the indoor low bay and the high bay at TA-54-38 and the outdoor storage pad which surrounds the north, east, and south sides of TA-54-38 and the loading dock at TA-54-38. The permitted units at TA-54 West are used to store solid mixed low level and mixed transuranic waste (*see* Figure 37 in Attachment N (*Figures*)).

The permitted units at TA-54-38 West may receive any container that may be stored at the units in accordance with Permit Section 3.3 (e.g. 85-gallon drums, 100-gallon drums, and ten-drum overpacks); however, most often the units receive WIPP-ready 55-gallon drums and SWBs for final preparation and packaging. All waste containers are handled in a manner that will not cause them to rupture.

Waste is generally brought into the TA-54-38 West Outdoor Pad through the south-eastern vehicle gate and placed in storage on the northern portion of the TA-54-38 West Outdoor Pad. ~~At the outdoor unit, waste is not stored in front of gates or within 10 feet of the fence line or within 60 feet of the building.~~ No paved or unpaved roadways are located within 5 feet of the waste storage area. From the outdoor permitted unit, containers are generally moved into the Low Bay at TA-54-38 West and made amenable for placement in a WIPP-compliant shipping container. Normal operations for making the individual waste containers ready for shipment include stretch wrapping 14 drum configurations (or drum payloads) and ratchet strapping SWBs one on top of the other. Generally, these Type A container configurations are then moved by forklift into the High Bay where they are loaded into TRUPACT II Type B shipping containers using a bridge crane.

Empty TRUPACT II containers that are received from WIPP are usually moved into the High Bay using the western bay door and are opened and inspected prior to waste being placed within the High Bay. After the containers are opened, the drum payloads or SWBs are placed into the containers. The TRUPACT II containers are then closed. Metal loading platforms allow for personnel access to the top of the TRUPACT II containers so that the TRUPACT II containers can be opened or closed, and to ensure that there is no issue while placing the shipping containers within the TRUPACT II containers.

After the TRUPACT II containers are loaded and the trailer is prepared for shipment, the trailer is moved via trailer jockey or other approved vehicle through the eastern bay door and to the TA-54-38 West Outdoor Storage Pad for storage prior to shipment to WIPP or out the southeastern gate of the TA-54-38 West Outdoor Pad to a staging area to await inspection and shipment to WIPP. When a loaded trailer of TRUPACT II containers is stored at the TA-54-38 West Outdoor Pad, the trailer is not placed in front of a gate and is not stored within 10 feet of the fence line. Gates at the TA-54-38 West Outdoor Pad are locked when not in use.

Containers are handled with forklifts (using drum grapplers, when appropriate) or drum dollies while present at TA-54-38 West and are placed directly in the appropriate permitted unit when active packaging is not underway. The bridge crane is utilized in the High Bay to place drum payloads directly into the TRUPACT II containers. A second bridge crane provides redundancy and ensures that a back-up crane is available while the original is undergoing maintenance activities. A switch mechanism ensures that only a single crane will be used at one time.

A.4.3.1 TA-54 West Building (RANT)

TA-54-38 is a building constructed of 36-ft-high pre-cast concrete panel walls topped by pre-stressed double-T concrete roof sections. Its foundation consists of a 6-inch reinforced concrete slab on compacted fill. The building is divided into several offices and houses the Indoor permitted unit which includes the low bay and the high bay (*see* Figure 37 in Attachment N (*Figures*)). The low bay is approximately 40 ft-wide and 34 ft long. An 8 ft-wide by 12 ft-high roll-up door is located at the east end and opens to an outdoor loading dock. A second 8-ft-wide by 12-ft-high roll-up door is located in the southeast corner and opens into the high bay. The walls and floor of the low bay are coated with industrial grade enamel paint. The high bay, approximately 40 ft wide and 80 ft long, is used for loading