ESHID-603961

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June 8, 2026

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U2600624

RE: NOTICE OF DISAPPROVAL
GENERAL PART A AND B OF THE RCRA PERMIT RENWAL APPLICATION
LOS ALMOS NATIONAL LABORATORY
EPA ID#NM0890010515
HWB-LANL-20-001

Dear Theodore Wyka, Stanely Pyram, Steven Coleman, and Bradley Smith:

The New Mexico Environment Department (NMED) has received the United States Department of Energy's (DOE), Triad National Security, LLC (Triad), and Newport News Nuclear BWXT-Los Alamos, LLC (N3B), (collectively referred to as the Permittees) *Los Alamos National Laboratory General Part A Permit Application, Revision 11.0* and *Part B Permit Application for Renewal of the Los Alamos National Laboratory Hazardous Waste Facility Permit, Revision 1.0* (Revised Permit Application) dated July 10, 2025, and received July 11, 2025.

Background

On June 26, 2020, the Permittees submitted the RCRA Permit Renewal Application. NMED determined that the renewal application was Administratively Incomplete and provided comments to the Permittees on March 23, 2021. On July 21, 2021, the Permittees responded to comments which were not adequate. On January 25, 2022, NMED issued a Second Administrative Incomplete determination. In August of 2022, NMED issued additional Administrative Incomplete comments to the Permittees. On March 28, 2023, the Permittees provided NMED with a path forward for the permit application, which NMED provided direction

to the Permittees on November 15, 2024. On May 6, 2025, the Permittees and NMED agreed to remove the Corrective Action Complete (CAC) Petition portion from the renewal application, which was formalized in a letter sent by NMED on May 12, 2025. This Revised Permit Application was received on July 11, 2025. On September r 30, 2025, NMED issued an Administrative Complete decision on the Revised Permit Application. On December 11, 2025, Permittees paid the fee in full to NMED, and NMED began its technical review. On May 14, 2026, NMED and the Permittees met to discuss several of the technical comments.

NMED has reviewed the Revised Permit Application and is issuing this Notice of Disapproval. Attached to this letter is Enclosure 1 with NMED's Technical Comments.

DOE must submit a revised permit renewal application **to NMED within 120-calendar days from the date of this letter.** The response to the comments must be submitted to NMED in the form of 3 physical copies and at least one electronic copy. An electronic copy must be made available to the public through the Los Alamos Electronic Public Reading Room (EPRR).

If you have any questions regarding this letter, please contact Siona Briley of my staff at (505) 690-5160 or via email at Siona.Briley@env.nm.gov.

Sincerely,

JohnDavid Nance

Digitally signed by JohnDavid Nance
Date: 2026.06.08 10:10:04 -06'00'

JohnDavid Nance
Chief, Hazardous Waste Bureau
New Mexico Environment Department

Enclosure 1: NMED's Technical Comments

Cc w/Enclosure:

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File: 2026 LANL Permit, Notice of Disapproval, LANL General Part A and Part B of the RCRA Permit Renewal Application
LANL-20-001

U2600624

NMED Technical Comments on Part B Permit Application for Renewal of the Los Alamos National Laboratory Hazardous Waste Facility Permit, Revision 1.0 (July 10, 2025)

General Comments

1. **Net Total Explosive Waste (NEW) Treated**

NMED Comment: On June 7, 2022 the EPA published a policy memo *Open Burning and Open Detonation (OB/OD) of Waste Explosives Under the Resource Conservation and Recovery Act (RCRA)* (EPA 2022 Memo) that "Require detailed waste characterization for each waste stream proposed for OB/OD, that (1) confirms the waste has potential to detonate and is characteristic for reactivity/explosivity (D003); (2) ensures potential contaminants of concern are identified, and (3) enables an evaluation of safe alternative technologies. Such characterization would generally include: a description and amount of each waste; chemical composition, including additives; all applicable hazardous waste codes; net explosive weight (NEW); U.S. Department of Transportation (DOT) hazard class; etc. Such characterization may be based on process knowledge and, where needed, chemical and physical testing results."

In Tables 5-1 and 5-2 in Volume 2 and Supplement 4-1, it is unclear when the Permittees started collecting NEW measurements. The Permittees must revise the Permit Application to include a process to weigh the amounts of explosive wastes treated and modify the Table 5-1 and 5-2 to indicate which values are estimated and which values are exact NEW measurements. The Permittees must also ensure that the waste profile form includes the NEW measurements, and the hazardous waste numbers and DOT hazard classification codes as described in the EPA 2022 Memo. (40 CFR 270.41(a)(2)).

2. **Open Burn/Open Detonation (OB/OD) Risk**

NMED Comment: NMED notes that soil samples have not been collected since 2018, and based on the information provided in Supplement 4-1, Table 5-1 that additional treatment activities have occurred at the Flash Pad (16-399) between 2018 and 2023. Additional soil samples must be collected from the flash pad and any OD units that have treated waste since the most recent soil sampling was conducted in 2018. The Permittees must commit to collecting soils samples from the OB and OD units within one calendar year of the Permit being approved and evaluate for risk to human health and environment.

3. **Per- and Poly-Fluorinated Alkyl Substances (PFAS)**

NMED Comment: NMED notes that House Bill 140, which became effective June 20, 2025, amended the definition of hazardous waste in the New Mexico Hazardous Waste Act (HWA) to

include per- or polyfluoroalkyl substances (PFAS). Sampling must be conducted at sites that may have used fire suppression foam containing perfluoroalkyl compounds (PFAS). The 2022 NMED Soil Screening Guidance (SSG) provides guidance to the Permittees on the screening levels associated with PFAS for the Permittees to be able to comply with House Bill 140 when evaluating hazardous waste on site.

As such, the Permittees must modify the Permit Application to include the definitions on PFAS and emerging contaminants of concern (on a later page) to be consistent with the new definition and other Hazardous Waste Permits.

The Permittees must evaluate documentation of use and include PFAS sampling where applicable into Permit Parts 1-11 and Attachment G Closure Plans. (40 CFR 270.41(a)(3))

4. **Legacy Waste**

NMED Comment: The Permittees must define Legacy Waste and must provide a report to NMED on the total volume of hazardous legacy waste and mixed hazardous legacy waste in both cubic meters and pounds in addition to the biennial report and the Site Treatment Plan to ensure that legacy waste from LANL can be prioritized for shipment to WIPP. The report must describe actual volumes and pounds currently in storage based on the units listed in Attachment J-1, and include a table that provides detailed transuranic (TRU) waste volumes and a breakdown of remaining volumes for waste stored above ground and waste stored below ground. The table must have a column which identifies the material disposal area (MDA), pit, or general storage location each waste stream is located in, waste volume in cubic meters and pounds, and be updated annually on March 31 to reflect current data from the Annual Transuranic Waste Inventory Report. (40 CFR 270.41(a)(2) and 40 CFR 270.32(b)(2)).

5. **Public Notices**

NMED Comment: While NMED understands the Permittees' position that there have not been spills or releases and the Permittees' assertation that the operations achieve complete combustion, but without site specific air monitoring, or post treatment sampling, these claims have not been demonstrated.

The Permittees cite that open burn and open detonation fall under "insignificant activities" under their Title V permit and NMAC 20.2.70.300(D)(6) with the NMED Air Quality Bureau. However, only open detonation activities are listed on Table 1.6-1 in the Title V permit for insignificant activities. Table 1.6-1 for open detonation units states that they are subject to Subpart X under RCRA. Open burn for hazardous waste is covered under NMAC 20.2.60.113, which states that it is subject to the New Mexico Hazardous Waste Act. The assertion that Title V provides coverage for these units, does not appear to be supported as RCRA regulations are cited for open burn and open detonation.

As previously discussed in NMED's administratively complete comments 2021-2025, the Permittees must revise Permit Attachment D, Section 3.2 to indicate how spills or off-site contamination from OB/OD operations will be monitored and reported to NMED and communicated to the public to prevent harm to human health or the environment as required by 40 CFR 270.32(b). Additionally, the definition for "insignificant activities" is contingent on the measured tons of emissions per year (TPY), so the Permittees must provide the emissions for the open burn and open detonations units in TPY in the revised permit application and must propose air monitoring that is specific to the units with the results provided in an annual report due to NMED every year on December 1.

Specific Open Burn/Open Detonation Comments

6. **Alternative Technology Evaluation**

   NMED Comment: Supplements 4-4 and 4-12 show results from air sampling at the open detonation units and the open burning treatment unit. NMED requests the Permittees to include the standard operating procedures (SOPs) used in the 2011 and 2022 air monitoring events for the open burn and open detonation units to review.

7. **Supplement 4-1, *Executive Summary*, page vii**

   NMED Comment: NMED does not concur with the Permittees' footnote number 1 in the Executive Summary for the flash pad (TA-16-388 unit) since it meets the existing definition of open burning in accordance with 40 CFR 260.10. The Permittees must remove the footnote as the Permittees are applying to permit it as an open burn unit.

8. **Supplement 4-1, Data Sheets 7-1, *Existing Treatment Technology: Flash Pad*, page 25**
   Permittees' Statement: "Residual ash is contained within the lined burn area, collected, and analyzed for hazardous constituents; generally disposed as non-hazardous. Secondary thermal treatment provided, if necessary."

   NMED Comment: The Permittees must include sampling data from ash residuals and expand on this statement for combustible debris and other wastes that contain polymer-bonded explosives (PBX), barium, and/or lead under open burn conditions.

9. **Supplement 4-1, Section 1, *Introduction*, page 3**

   NMED Comment: While NMED agrees the consideration of toxic by-products is an important consideration, it should not automatically disqualify a technology if the emissions and effluents can be captured and treated to meet applicable standards. Also, in regard to monitorability as a

factor for alternative technologies, the flash operations could be argued as not monitorable as there is no in-plume sampling during operations providing data by which limits are set and compliance is determined. The Permittees must revise the introduction, and applicable tables to provide additional information about capture and treatment of by-products and monitorability.

10. Supplement 4-1, Section 9, *Conclusions*, pages 74-75

Permittees' Statement: "Therefore, any treatment technology that requires additional onsite storage and handling is necessarily unsafe because it introduces significant and unnecessary additional health and safety risks to workers, the public, facilities, and the environment."

NMED Comment: While NMED agrees increased handling may cause an increased safety risk, it is not clear how this risk differs compared to moving sensitive high explosive (HE) materials into an open burn unit. If additional storage is required by the alternative technology, then the technology's capacity was not designed to address the volume of waste it is meant to treat and should be re-designed to fit the needs of the facility.

Alternative treatment technologies and mobile treatment units can be scaled up based on the estimated size of the material or reactivity as described in the EPA's *Compendium of Potential Alternative Technologies to Open Burning and Open Detonation of Hazardous Waste Explosives,* as referenced by EPA 530-R25-002, dated January 3, 2025 and *Alternative Treatment Technologies to Open Burning and Open Detonation of Energetic Hazardous Wastes, as referenced EA 530-R-19-007 and dated December 2019,* Final. The Permittees must either revise this statement since it is not supported, or the Permittees must provide documentation from manufacturers that the equipment cannot be scaled up to meet size or reactivity of LANL's waste stream.

Specific Comments on the Permit Application

11. Section 4.18.2.1 (PDF 146)

Permittees' Statement: "The current LANL Storm Water Individual Permit expired on March 31, 2014, but it has been administratively continued, pending issuance of a new permit. The EPA issued LANL a draft Storm Water Individual Permit on November 30, 2019. A final Permit is expected following a public comment period, which ends on July 31, 2020."

NMED Comment: The Permittees must revise the information for the Storm Water Individual Permit to ensure that it is up to date.

12. Volume 2, Supplemental 4-1, Table 5-1, *Annual Amount of Explosives Waste Treated at the Flash Pad from 2013-2023, by Waste Stream in Pounds (lbs.)*, page 14

NMED Comment: The Permittees must revise to provide Net Weight Explosive calculation in pounds.

13. **Supplement 4-2**

NMED Comment: The Permittees' state in Section 4.18.2.2 of the permit applicate that copper and PCBs had exceedances for target action levels in stormwater, but that data is not found in Supplement 4-2. The Permittees must include the data with Supplement 4-2.

Specific Comments on LANL Permit

Permit Parts 1-11

14. **Permit Part 1.8, *Definitions***

NMED Comment: The Permittees must revise the definition section to include the following terms and references (not listed here in alphabetical order):

Contaminant means any substance in environmental media that is not otherwise a "hazardous waste" or a "hazardous constituent," for which investigation or cleanup is required under this Permit because it:

1) Exceeds a state or federal numeric standard (e.g., 20.6.2.3103 NMAC, MCLs at 40 CFR parts 141 and 143), or
2) Is identified by NMED under 40 CFR 264.1 (b)(2) as posing a threat to human health or the environment

Examples include, but are not limited to:

a) Perchlorate, which is regulated by WQCC groundwater standards, but is not a hazardous waste or hazardous constituent; and,
b) total petroleum hydrocarbons, which is addressed in NMED Risk Assessment Guidance, but is not a listed hazardous constituent

Emerging Contaminant means any substance, chemical, or compound that is not currently listed as a hazardous waste or constituent under 40 CFR Part 261 or 264 but is identified by EPA, NMED, or other authoritative source as posing a potential risk to human health or the environment. This includes substances for which regulatory standards or guidance are under development or anticipated, and for which corrective action may be required under this Permit.

Examples include, but are not limited to:

- Per-and polyfluoroalkyl substances (PFAS) not yet listed under the New Mexico Hazardous Waste Act or RCRA;
- Novel industrial chemicals;
- Pharmaceuticals and personal care products;
- Other contaminants identified through scientific research or regulatory action.

- **Hazardous Waste**, for the purposes of corrective action for solid waste management units and areas of concern conducted pursuant to 74-4-4.2(B) of the HWA, 40 CFR Part 264, Subpart F, or 40 CFR 270.32(b)(2), means a hazardous waste as defined in 74-4-3(K) of the HWA. Hazardous waste, for the purposes of corrective action, includes, without limitation, any hazardous waste as defined in 40 CFR 261.3, any groundwater contaminant listed in the WQCC Regulations in 20.6.2.3103 NMAC, any toxic pollutant listed in 20.6.2.7.T(2) NMAC, and any substance identified as a hazardous constituent or as a contaminant under Section 1.12 of this Permit for corrective action purposes, or for which the EPA has promulgated a maximum contaminant level (MCL) at 40 CFR parts 141 and 143, perchlorate, total petroleum hydrocarbons, methyl tertiary butyl ether, polychlorinated biphenyls (PCBs), dioxins, furans, per- and polyfluoroalkyl substances (PFAS), rocket fuel constituents, waste military munitions, and munitions constituents as defined in 10 U.S.C. 2710(e)(3). Pursuant to 74-4-3(K)(2)(a), hazardous waste includes discarded aqueous film-forming foam containing intentionally added PFAS.
- This definition is consistent with EPA's February 8, 2024 proposed rule clarifying that the statutory definition of hazardous waste applies to corrective action for releases from solid waste management units (SWMUs), and with the RCRA Omnibus provision at 40 CFR 264.1(b)(2), which authorizes regulatory agencies to require corrective action for any substance that may pose a threat to human health or the environment.
- **References**
- U.S. EPA. Hazardous Waste Definition Applicable to Corrective Action for Solid Waste Management Units (SWMUs), Proposed Rule, 89 FR 8520 (Feb. 8, 2024)
- U.S. EPA. Listing of Nine Per- and Polyfluoroalkyl Substances (PFAS) as RCRA Hazardous Constituents, Proposed Rule, 89 FR 8606 (Feb 8, 2024)
- 40 CFR § 264.1(b)(2) RCRA Omnibus Provision.

Per- and Polyfluoroalkyl substances (PFAS) are large class of synthetic organic chemicals characterized by the presence of one or more fully fluorinated carbon atoms (e.g., $-CF_3$, $-CF_2$ - groups). The carbon-fluorine bond is among the strongest in organic chemistry, resulting in extreme resistance to heat, chemical degradation, and environmental breakdown. PFAS vary widely in structure and function and have been used in numerous industrial, commercial, and firefighting applications.

PFAS includes both:

- **perfluoroalkyl substances** in which all hydrogens on the carbon chain are replaced with fluorine (fully fluorinated), and
- **polyfluoroalkyl substances** in which only some hydrogens are replaced with fluorine (partially fluorinated).

PFAS are commonly categorized by carbon-chain length:

- **Long-chain PFAS** include perfluorocarboxylic acids (PFCAs) with eight or more carbons (e.g., PFOA) and perfluorosulfonic acids (PFSAs) with six or more carbons (e.g. PFOS). These compounds are known to bioaccumulate and persist in humans and the environment.

- **Short-chain PFAS** include PFCAs with seven or fewer carbons and PFSAs with five or fewer carbons. These compounds are less bioaccumulative but remain highly persistent and mobile in the environment.

  PFAS also include **precursor compounds**, which contain partially fluorinated carbon chains and can transform into terminal PFAS – such as PFOA, PFOS, PFH_xA, and related perfluoroalkyl acids (PFAAs) through environmental or biological processes. PFAAs are the terminal degradation products of many PFAS and include two major families:

- **Perfluorocarboxylic acids (PFCAs)**
- **Perfluorosulfonic acids (PFSAs)**

  PFAS precursors are a significant component of many PFAS-related formulations, including fluorotelomer-based Aqueous Film Forming Foam AFFF. As a result, both terminal PFAS and PFAS precursors contribute to long-term environmental PFAS loading and are considered PFAS for the purposes of this Permit.

  (PFAS definitions and precursor behavior derived from Interstate Technology & Regulatory Council (ITRC). PFAS Technical and Regulatory Guidance Document (PFAS-1). Updated January 2026. https://itrcweb.org PFAS)

  PFAS-Containing Class B Foams mean synthetic firefighting foams used to suppress flammable liquid fires. These include various formulations that contain PFAS such as AFFF, AR-AFFF, FFFP, AR-FFFP, FP, and AR-FP (defined below). All are considered fluorinated foams and may pose environmental and health risks due to PFAS persistence and mobility.

- **Aqueous Film-Forming Foam (AFFF)** means a fluorinated foam that contains per- and polyfluoroalkyl substances (PFAS). AFFF is a firefighting product intended for fighting high-hazard flammable liquid fires. AFFF products are synthesized by combining hydrocarbon foaming agents with fluorinated surfactants. There are three types of AFFF:

  Legacy PFOS AFFF (manufactured in the US from the late 1960s through 2002)
  Legacy fluorotelomer AFFF, which contains some long-chain PFAS (manufactured in the US from the 1970s until 2016)

  Modern fluorotelomer AFFF (short-chain PFAS became the predominant fluorochemicals used in manufacturing in response to USEPA 2010/2015 voluntary PFOA Stewardship Program)

- **Film-Forming Fluoroprotein Foam (FFFP)** is a synthetic firefighting foam that contains PFAS and combines protein-based components with fluorinated surfactants to form a film over flammable liquids. It was widely used prior to the adoption of AFFF and remains a concern in legacy contamination scenarios.
- **Alcohol-Resistant Film-Forming Fluoroprotein Foam (AR-FFFP)** is a variant of FFFP formulated to suppress fires involving polar solvents. It contains PFAS and includes additional polymers to resist alcohol breakdown while maintaining film-forming properties.

- **Fluoroprotein Foam (FP)** is a protein-based foam enhanced with fluorination surfactants to improve performance against hydrocarbon fires. Though it is less common today, it contains PFAS and may be present at legacy sites.
- **Alcohol-Resistant Fluoroprotein Foam (AR-FP or FPAR)** is a fluoroprotein foam modified to combat polar solvent fires. It contains PFAS and may appear in older inventories or historical use records.
- **Alcohol-Resistant Aqueous Film-Forming Foam (AR-AFFF)** is a formulation of AFFF designed to suppress fires involving polar solvents. It contains PFAS and includes polymers that enhance resistance to alcohol degradation.

  (AFFF-specific information from ITRC. Aqueous Film-Forming Foam (AFFF) Fact Sheet. September 2023. https://itrcweb.org PFAS)

Severe Rusting is rusting on a container that may have an impact on the container integrity either due to the presence of pitting, corrosion, location on the seam, side, and/or base of the container, and/or any other rust that would cause the container to not meet DOT container shipment requirements.

Minor Rusting is any visible rust on container that is not severe.

Indoor Units means any building or structure that prevents containers from coming into contact from precipitation or wind events. Indoor unit should be able to maintain low moisture, e.g., less than 30% humidity, and free of holes/tears to the roof or walls.

Aisle Spacing means maintaining a minimum of two feet, to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment within the permitted units, and forklifts.

Legacy Waste "Legacy Waste" means transuranic or transuranic mixed waste generated prior to October 1, 1999, that is located above and/or below ground, and that excludes waste streams that contain a projected waste component.

Projected Waste is the part of the Annual Transuranic Waste Inventory Report (ATWIR) inventory that has not been generated (does not physically exist) but is estimated to be generated at some time in the future by the TRU waste generator/storage sites. TRU waste in projected waste streams includes waste from programs that have not come on-line as of the data cutoff date for the 2025 ATWIR report, as well as waste from ongoing projects and decontamination and decommissioning (D&D) waste that has not yet been packaged.

15. Section 1.9.9.1, Representative Sampling

NMED Comment: The Permittees must add the following language to the Permit in regards to PFAS.

1.9.9.1 Representative Sampling

All samples and measurements taken by the Permittees under any condition in this Permit shall be representative of the medium, waste, or other material being sampled. To obtain a representative waste sample, the Permittees shall use an appropriate method from 40 CFR Part 261, Appendix I or an equivalent method approved by the Department. Laboratory methods must be those specified in the most current edition of Test Methods for Evaluating Solid Waste Physical/Chemical Methods (SW-846), or an equivalent method, as specified in Attachment C (Waste Analysis Plan) and Permit Section 2.4.

The most current EPA-validated methods for PFAS shall be used for sampling and analysis of the applicable environmental media. Where EPA has validated matrix-specific PFAS methods (e.g. Methods 1633A or 1621), those methods shall be used for the corresponding media. EPA SW-846 Method 8327 is limited to aqueous matrices and shall not be used for non-aqueous media.

16. **Permit Part 1.17.2, *Demolition Activities***

NMED Comment: NMED agrees with a request to reduce the reporting to twice a year for demolition notifications, however these notifications must also a status that includes the dates buildings have been demolished since the last notification or if the building is no longer planned to be demolished.

17. **Permit Part 2.3.1., *Hazardous Waste Shipment to WIPP* (New Subsection)**

NMED Comment: The Permittees must add the following language to the permit for legacy waste.

The Permittees shall ensure that legacy waste is being shipped to the Waste Isolation Pilot Plant (WIPP) through the following schedule:

a. *From January 1, 2027, through December 31, 2031, the Permittees shall ship legacy waste from Los Alamos National Laboratory (LANL) to WIPP such that the Permittees are targeting legacy waste shipment volumes meeting the WIPP requirement that at least 55% of total volume of all waste being emplaced is from LANL.*
b. *Beginning January 1, 2032, and until all LANL legacy waste has been emplaced at WIPP, the Permittees shall ship legacy waste from LANL such that the Permittees are targeting legacy waste shipment volumes meeting the WIPP requirement that at least 75% of total volume of all waste being emplaced is from LANL.*
c. *Within 15 days of the last day of each month, the Permittees shall provide a written report and certification documenting all waste shipped to WIPP. The report shall distinguish between legacy and non-legacy waste.*
d. *Legacy waste stored above-ground at LANL Material Disposal Area-G shall be shipped by July 1, 2028.*

18. **Section 3.2, *Condition of Containers***

NMED Comment: The Permittees must add the clarification to container management to address rusting and to ensure that containers are in good condition.

Section 3.2 CONDITION OF CONTAINERS

The Permittees shall ensure that all containers used to store hazardous wastes subject to this Permit are in good condition (e.g., no ~~severe~~ rusting or apparent structural defects) in accordance with 40 CFR § 264.171, which is incorporated herein by reference. If a container is not in good condition or begins to leak, the Permittees shall transfer the waste from such a container into a container that is in good condition within 24 hours of discovery of the problem, and in accordance with 40 CFR § 264.171.

The Permittee will address any rust (minor and severe) in a timely manner to prevent further deterioration of a container. The Permittee must address severe rust within 24 hours, and must make a determination on minor rust within a month of discovery for if it needs to be treated by the facility or if it is not affecting the container. If the Permittees determine minor rust is not affect the container, the minor rust must be photographed, monitored, and noted in facility inspection records for a year to affirm that it is not becoming severe rust. The Permittee must document how rust has been addressed in the container's waste profile form and in the facility inspection records.

19. **Section 3.5.1, *Management of Containers***

NMED Comment: The Permittees must revise the permit to clarify aisle spacing must be at least two feet and must allow for a forklift to access a container.

The Permittees shall maintain adequate aisle space at all times, at a minimum two feet, to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment within the permitted units, and forklifts. Additionally, emergency egress aisles with a minimum aisle space of two feet must be maintained at all personnel doors (see 40 CFR § 264.35)

20. **Section 3.12.1, *General Operating Conditions***

NMED Comment: The Permittees must add language on evaluating the conditions of domes and scheduling repairs.

Section 3.12.1 General Operating Conditions

The Permittees shall ensure that storage of hazardous waste in containers at TA-54 occurs only in the permitted unit at Area L, the nine permitted units at Area G, the two permitted units at TA-54

West, and as identified in Attachment A (Technical Area Unit Descriptions) and Attachment J (Hazardous Waste Management Units). Permittees Triad and N3B co-operate different permitted units at TA-54. Triad co-operates two permitted units at TA-54 West and N3B co-operates ten permitted units at Areas G and L. The Permittees have a duty to meet the additional Permit requirements of this Section solely for their respective permitted units, as specified below.

The Permittees must evaluate the condition of the Domes on a yearly basis and must schedule preventative repairs or reskinning events. The criteria, findings, and scheduled repairs must be provided to NMED as report and is due to NMED by no later than June 30 annually.

21. Permit Part 3.14, Tables 3.14.3.1, 3.14.3.2, and 3.14.3.3

NMED Comment: The Permittees must update screening levels be consistent with NMED's SSG VISLs.

22. Permit Part 6, Section 6.3.5, *Routine Maintenance*

NMED Comment: The Permittees must revise to include inspection of the concrete pad and 45-mil Hypalon liner. The inspection should identify any cracks and/or any deterioration, and any maintenance or repairs that are recommended and dates of maintenance activities in the facility inspection logs.

23. Section 11.4, Cleanup Levels

NMED Comment: The Permittees must also include the following clean up language for PFAS in the Permit:

11.4 CLEANUP LEVELS

The Department and the New Mexico Water Quality Control Commission (WQCC) have separately specified certain cleanup goals and methods of calculating cleanup levels. The Department has also specified certain reporting requirements for sites where corrective action is required in response to releases to the environment. In general, the Department has selected a human health target risk level of 10^{-5} for carcinogenic substances and a Hazard Index (HI) of 1.0 for non-carcinogenic substances as cleanup goals for establishing site-specific cleanup levels for one or more contaminants for which toxicological data are published. The Permittees shall follow the cleanup and screening levels described in this Permit Part in implementing the corrective action requirements of this Permit. In addition, cleanup levels for the protection of the environment shall address ecological risk consistent with the Department's guidance for assessing ecological risk as specified in Permit Section 11.5.

24. **Permit Part 11, Section 11.4.4, Vapor Intrusion Cleanup Levels (NEW SECTION)**

NMED Comment: The Permit must be revised to include vapor intrusion cleanup levels that were added to the NMED Soils Screening Guidance.

11.4.4 Vapor Intrusion Cleanup Levels

The NMED has specified vapor intrusion screening levels for volatile organic compounds that are based on a target total excess cancer risk of 10-5 and, for noncarcinogenic contaminants, a target HI of one (1.0) for residential and industrial land use scenarios. The target residential and industrial vapor intrusion screening levels for selected substances are listed in NMED's Soil Screening Guidance (SSG)(as updated). Vapor intrusion shall be evaluated for sites that meet the criteria specified in the SSG. If a hazardous constituent or other contaminant (as defined in Section 1.12 of this permit) is not listed in NMED's SSG, the Permittee shall calculate the vapor intrusion screening level following the methodology specified in the SSG.

PFAS Cleanup Levels

For PFAS compounds such as PFOS and PFOA, EPA Regional Screening Levels (RSLs) are calculated at a target excess lifetime cancer risk of 10^{-6}, which is more protective than the 10^{-5} risk level used by NMED for other carcinogens. Where EPA has published updated toxicity values or screening levels for PFAS, those values shall be considered in evaluating site-specific cleanup levels, risk assessments, and remedial decisions. PFAS cleanup levels shall also account for precursor compounds and total PFAS loading, consistent with current guidance.

25. **Permit Part 11, Section 11.10, *Methods and Procedures***

NMED Comment: The Permittees must add language to this section, where applicable, about using laboratory-verified PFAS free equipment when sampling for PFAS.

26. **Permit Part 11, Section 11.10.2.15, *Per-and Polyfluoroalkyl Substances (PFAS) Sample Collection* (NEW SECTION)**

NMED Comment: The Permittees must add language regarding PFAS sampling.

Section 11.10.2.15 Per-and Polyfluoroalkyl Substances (PFAS) Sample Collection

PFAS sampling and analytical methods are evolving and more effective and precise field and laboratory analytical methods will likely be developed in the future. As improved methods become accepted, the NMED will require use of such methods as applicable. At a minimum, the following practices shall be followed until improved methods become available:

The EPA SW-846 methods under development utilize PFAS-free, high-density polyethylene containers; whole sample preparation; and sample holding times of 28 days. EPA has also developed guidelines for field sampling, to minimize sample contamination and optimize data quality for site characterization and

remediation. (USEPA, September 2018, Technical Brief, Perfluoroalkyl and Polyfluoroalkyl Substances (PFAS), EPA/600/F-17/022d)

Due to the widespread use of PFAS, many materials normally used in field and laboratory operations contain PFAS. For example, polytetrafluoroethylene products (tubing, sample containers, and sampling tools) are often used in sampling; however, since these products can contain PFAS, they cannot be used in sampling for PFAS. In addition, many consumer goods, such as water-resistant jackets or fast food wrappers, brought to a sampling site may contain PFAS that can contaminate samples. Proper field sampling and laboratory hygiene protocols are critical to ensuring that testing results reflect actual PFAS levels in the analyzed media. (USEPA, September 2018, Technical Brief, Perfluoroalkyl and Polyfluoroalkyl Substances (PFAS), EPA/600/F-17/022d)

EPA developed Analytical Method 537 and has since developed more accurate methods for the determination of selected perfluorinated alkyl acids in media. Specific methods are required for PFAS sampling to avoid cross contamination and to collect representative samples. For example, Section 8, Sample Collection, Preservation, and Storage, of Method 537 describes the field sample collection procedure as follows (USEPA, September 2009, Method 537. Determination of Selected Perfluorinated Alkyl Acids in Drinking Water by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS), EPA/600/R-08/092). Since PFAS sampling and analysis techniques are evolving, the Permittee must use the most updated methods when proposing and implementing PFAS sampling.

27. **Permit Part 11, Section 11.10.3.6, *Per- and Polyfluoroalkyl Substances (PFAS) Sampling and Analytical Methods* (NEW SECTION)**

    NMED Comment: The Permittees must add language regarding PFAS sampling.

Section 11.10.3.6 Per-and Polyfluoroalkyl Substances (PFAS) Sampling and Analytical Methods

PFAS sampling and analytical methods have been evolving, more effective and precise field and laboratory analytical methods have been developed, and those will continue to be refined in the future. The NMED will require use of these improved, validated, and EPA approved methods. The Permittee must use the most current PFAS sampling and analytical methods specific to each matrix (media) when proposing and implementing PFAS sampling.

Sampling conducted for PFAS in various media is similar for other chemical compounds, however, there are several additional specific considerations and protocols. Due to the widespread use of PFAS, many materials normally used in field and laboratory operations contain PFAS. Proper field sampling and laboratory hygiene protocols are critical in ensuring that resting results reflect actual PFAS levels in the analyzed media (USEPA, September 2018, Technical Brief, Perfluoroalkyl and Polyfluoroalkyl Substances (PFAS), EPA/600/F-17/022d). Several EPA Methods that analyze for PFAS have undergone multi-laboratory validation.

28. **Permit Part 11, Section 11.11.3.1.1, *PFAS-Specific Well Construction Materials* (NEW SECTION)**

NMED Comment: The Permittees must add language regarding PFAS sampling.

Section 11.11.3.1.1 PFAS-Specific Well Construction Materials

Monitoring wells installed for PFAS investigation or corrective action shall be constructed using materials and practices that minimize the potential for PFAS cross-contamination. Consistent with current EPA and ITRC guidance, fluoropolymer materials (including PTFE/Teflon) shall not be used in well casings, screens, risers, or permanent tubing. Preferred materials include stainless steel and high-density polyethylene (HDPE); PVC may be used where documented as compatible. PFAS-containing products such as Teflon tape, PFAS-based lubricants, waterproof markers and similar materials shall not be used in contact with monitoring wells or associated equipment. Guidance References:

1. *ITRC (2021, updated 2023). PFAS Technical and Regulatory Guidance Document. Sections on Investigation Methods, Well Construction Materials, and Cross-Contamination Prevention.*
2. *EPA (2022-2024). PFAS Sampling and Analysis Guidance, including materials restrictions referenced in Draft Method 1633 and associated Best Practices for PFAS Sampling.*
3. *EPA (2020). Interim Guidance on PFAS in Groundwater and Investigations, emphasizing avoidance of fluoropolymer materials and PFAS-containing field supplies.*

Permit Attachments

29. **Supplement 1-2, Attachment A, *General Standards***

NMED Comment: Stabilization is carried out at several permitted units, and in Attachment A of the permit, this process is done in containers greater than 0.1 m^3 capacity (e.g., 55/85-gallon drums), which means the containers used are required to comply with control level 3 as per 40 CFR 264.1086(b)(2). The EPA exemption for RCRA storage and treatment requirements only applies to mixed low-level waste (MLLW). The Permittees must confirm none of these containers contain mixed transuranic waste and provide additional documentation to demonstrate that these containers comply to level 3 standards in 40 CFR 264.1086(e).

30. **Supplement 1-2, Attachment A, Proposed Section A.6.1.5, *TA 54-32***

Permittees' Statement: "These sump capacities exceed the amount necessary to hold 10% of the maximum storage capacity for TA-54-32."

NMED Comment: The Permittees did not state the maximum capacity for TA-54-32 as was done for the other units. The Permittees must provide the maximum storage capacity for TA-54-32 to show that the sump capacities are capable of containing 10% of the maximum storage capacity.

31. **Supplement 1-2, Attachment A, Proposed Section A.6.2.2, *Northwest Bay of Building 412***

Permittees' Statement: "Containers holding hazardous or mixed waste with free liquids will be stored on portable spill pallets or pans which meet the secondary container requirement of 40 CFR 264.175."

NMED Comment: The Permittees must explain how the pallets and pans meet the secondary requirement of 40 CFR 264.175(b)(3).

32. **Supplement 1-3, Attachment C, *Waste Analysis Plan***

NMED Comment: The Permittees must include definitions for legacy waste in attachment C.

33. **Supplement 1-4, Attachment D, *Contingency Plan***

Permittees' Statement: "The Permittees shall implement the provisions of the Plan and the applicable provisions of Permit Part 2 (General Facility Conditions) immediately to minimize hazards whenever there is a fire, explosion, or release of hazardous ~~or mixed~~ waste or hazardous ~~or mixed~~ waste constituents that could threaten human health or the environment."

NMED Comment: The Permittees must add the following language from 40 CFR 264.52 to be consistent with Permit Part 2, "...**any unplanned sudden or non-sudden** release of hazardous waste...".

34. **Supplement 1-4, Attachment D, Section D.1.1, *Emergency Management***

NMED Comment: NMED does not agree with the change to not include the names, addresses, and telephone numbers of the current Primary and Alternate Incident Response Commanders. The information for the emergency coordinators is required by 40 CFR 264.52(d), and this requirement is consistent for other DOE facilities. To comply with 32 CFR 2002, the Permittees may exclude residential addresses for public dissemination but still must submit them to the New Mexico Environment Department's Hazardous Waste Bureau. However, the names and telephone numbers for the incident response commanders must remain in the permit so that the information is easily accessible. The Permittees must include this information in Attachment D and note that the residential addresses will be sent to Hazardous Waste Bureau in a separate unclassified controlled nuclear information (UCNI) submission.

35. **Supplement 1-4, Attachment D, Section D.9.2, *Evacuation Plan***

NMED Comment: The Permittees must provide evacuation routes and alternative routes as required by 40 CFR 264.52(f), and this requirement is consistent for other DOE facilities.

36. **Supplement 3-1, Attachment G, Attachments G.2 and G.3, *TA-36-8 Closure Plan* and *TA-39-6 Closure Plan***

NMED Comment: The Permittees must update the closure plans for the open detonation units, in Attachments G.2 and G.3, with updated treated waste volumes and must also update the dates of operation before the Permit is finalized.

37. **Supplement 3-1, Attachment G, Attachments G.2 and G.3, *TA-36-8 Closure Plan* and *TA-39-6 Closure Plan***

NMED Comment: Attachments G.2 and G.3 must be revised to reference 40 CFR 264 not 40 CFR 265. The Permittees must correct the references in these closure plans.

38. **Supplement 3-1, Attachment G, Attachments G.2 and G.3, *TA-36-8 Closure Plan* and *TA-39-6 Closure Plan***

NMED Comment: Attachments G.2 and G.3 reference financial assurance requirements in 40 CFR 264.143, however since Los Alamos National Laboratory (LANL) is a federal facility and exempt from 40 CFR Subpart H, this reference is not required. The Permittees must remove references to the 40 CFR 264.143 requirement.

39. **Supplement 3-1, Attachment G, Attachments G.23 and G.24, *TA-55 Storage Tank Closure Plan and TA-55 Stabilization Treatment Closure Plan***

NMED Comment: The Permittees did not provide NMED with the following UCNI documents to review: Figure G.23-1 and Figure G.24-1. The Permittees must provide NMED with these documents for review.

40. **Supplement 3-1, Attachment G, Attachment G.23, Table G.23-3, *Potential Waste Materials, Waste Types, and Disposal Options***

NMED Comment: This table includes low-level radioactive waste information and are not consistent with In Volume 1, Section 6.1 *U.S. v. Curry*, page 6-1, which states: "Attachment G, *Closure Plans*, Tables G.1 through G.31: deletion of text 'low-level radioactive solid waste' under column 'Waste Type'." The Permittees must correct or clarify the rationale for the inclusion of low-level radioactive solid waste.

41. **Supplement 3-1, Attachment G, Attachment G.28, Section 1.0, *Introduction***

Permittees' Statement: "The information provided in this closure plan addresses the closure requirements specified in the Code of Federal Regulations (CFR), Title 40, Part 265, Subparts G and P for the thermal treatment units operated at the Facility under the Resource Conservation and Recovery Act (RCRA) and the New Mexico Hazardous Waste Act."

NMED Comment: Attachment G.28 references 40 CFR 265 Subpart G and Subpart P. The Permittees may retain the reference to 40 CFR 265 Subpart P, but must reference 40 CFR 264 Subpart G, which references permitted units. The Permittees must also correct other references to 40 CFR 265 throughout the report that are not in reference to Subpart P, and change them to 40 CFR 264 reference.

42. **Supplement 3-1, Attachment G, Attachment G.28, Figure G.28-2, *Technical Area 16-388 Soil Sample Locations for Closure of Unit***

NMED Comment: The proposed sample locations for Figure G.28-2 do not cover the site as completely as the proposed sampling locations for Attachment G.2 and G.3. In Section 5.2.2 of Attachment G.28, the Permittees state that samples below the pad will determine if the concrete pad is removed, but this figure does not show any samples below the concrete pad. The Permittees must add a grid of proposed incremental sampling locations and add a location that is beneath the concrete pad.

43. **Supplement 3-1, Attachment G, Attachment G.28, Section 5.2.2, *Decontamination of Structures and Related Equipment***

NMED Comment: In this section, there is no discussion on the disposal of the liner beneath the concrete pad if the concrete pad is removed. The Permittees must add a paragraph discussing the possible disposal of the liner if the concrete pad is removed.

44. **Supplement 1-7, Attachment J, Table J-1, *Active Portion of the Facility***

NMED Comment: NMED does not support removing Area names from this table since these areas are also listed in RCRAInfo and it would make it more difficult to review site history without this information.

Typographical Comments

45. **Volume 1, Section 2, Figures 2.4 and 2.5, *Groundwater Elevation Contour and Approximate Extent of 50 ppb Chromium Plume Map, Mortandad Canyon CY2020, Quarter 4* and *Map***

***showing RDX extent and table contours for the upper perched-intermediate groundwater zone at TA-16*, pages 2-27 and 2-28**

NMED Comment: These figures must be updated with current monitoring data, NMED notes that the figure for the RDX plume is dated 2015, and the chromium plume is dated 2021 and does not accurately depict plume boundaries. The Permittees must also revise the titles so that capitalization in figure titles is consistent.

46. **Attachment A, Section A.1.1.1, *TA-3-29 Room 9010***

Permittees' Statement: "Room 9010 measures 21 feet (ft) by 8 inches (in.) wide by 106 ft., 9 in. long..."

NMED Comment: The Permittees must correct the sentence to read: "21 feet (ft.), 8 inches (in.) wide by 106 ft., 9 in. long".

locatesteam

From: Martinez, Cynthia, ENV <cynthia.martinez1@env.nm.gov>
Sent: Monday, June 8, 2026 10:58 AM
To: Wyka, Ted; stanley.pyram@srs.gov; Coleman, Steven Antoine; bradley.smith@em-la.doe.gov
Cc: Nance, JD, ENV; Dhawan, Neelam, ENV; Briley, Siona, ENV; Lepp, Catherine, ENV; Harcek, Brian George; Hyatt, Jnette; Gallegos, Robert; Moseley, Jessica Lee; Hurtle, Jackie C; Vigil-Holterman, Luciana R; Christian T. Maupin; William Alexander; rcra-prr@lanl.gov; eshq-dcrm@lanl.gov; locatesteam; epc-correspondence@lanl.gov; Regulatory Documentation; 'lasomailbox@nnsa.doe.gov'; EMLA Doc Submissions; interface@lanl.gov; n3binterface@em-la.doe.gov
Subject: [EXTERNAL] Notice of Disapproval
Attachments: LANL-20-001_Notice of Disapproval_Permit Renewal Application and NMED Technical Comments..pdf

Categories: Makayla

Good morning,
Please see attachment.

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