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Date: December 1, 2025
Refer To: N3B-2025-0359

Mr. JohnDavid Nance, Hazardous Waste Bureau Chief
Designated Agency Manager
New Mexico Environment Department
2905 Rodeo Park Drive East, Building 1
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Subject: Submittal of Newport News Nuclear BWXT-Los Alamos, LLC, Fiscal Year 2025 Hazardous Waste Minimization Report, Los Alamos National Laboratory, EPA ID# NM0890010515

Dear Mr. Nance:

Enclosed is the "Newport News Nuclear BWXT-Los Alamos, LLC, Fiscal Year 2025 Hazardous Waste Minimization Report, Los Alamos National Laboratory, EPA ID# NM0890019515

If you have any questions, please contact Jennifer von Rohr at (505) 695-4365 (jennifer.vonrohr@em-la.doe.gov) or Brian Harcek at (240) 562-1117 (brian.harcek@em.doe.gov).

Sincerely,

Robert E. Edwards III

Robert Edwards III
Program Manager
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N3B-Los Alamos

Sincerely,

Digitally signed by BRIAN HARCEK
Date: 2025.11.26 12:11:13 -07'00'

Brian Harcek, Director
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Enclosure(s): Two hard copies with electronic files:
1. Newport News Nuclear BWXT-Los Alamos, LLC, Fiscal Year 2025 Hazardous Waste Minimization Report, Los Alamos National Laboratory, EPA ID# NM0890019515 (EM2025-0669)

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December 2025
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Newport News Nuclear BWXT-Los Alamos, LLC, Fiscal Year 2025 Hazardous Waste Minimization Report, Los Alamos National Laboratory, EPA ID #NM089001515

Los Alamos National Laboratory
Hazardous Waste Facility Permit

CERTIFICATION

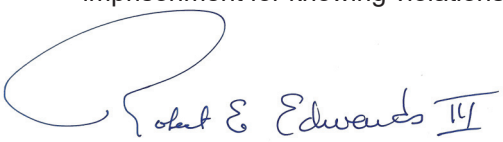
NEWPORT NEWS NUCLEAR BWXT-LOS ALAMOS, LLC

Fiscal Year 2025 Hazardous Waste Minimization at Los Alamos National Laboratory for Newport News Nuclear BWXT-Los Alamos, LLC

CERTIFICATION STATEMENT OF AUTHORIZATION

In accordance with the New Mexico Administrative Code Title 20, Chapter 4, Part 1 (incorporating the Code of Federal Regulations, Title 40 CFR § 270.11):

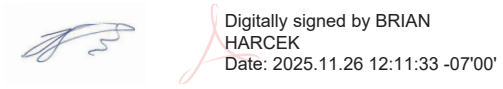
> "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage 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."



November 19, 2025

Robert Edwards III, Program Manager
Environment, Safety, Health and Quality
Newport News Nuclear BWXT-Los Alamos, LLC

Date



Brian Harcek, Director
Office of Quality and Regulatory Compliance
U.S. Department of Energy
Environmental Management
Los Alamos Field Office

Date

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1.0 INTRODUCTION

Newport News Nuclear BWXT-Los Alamos, LLC (N3B) is the contractor selected by the U.S. Department of Energy (DOE) Environmental Management Los Alamos Field Office (EM-LA) to implement the Los Alamos Legacy Cleanup Contract (LLCC). Work conducted under the LLCC includes implementation of the Los Alamos National Laboratory (LANL or the Laboratory) Hazardous Waste Facility Permit (Permit) issued to EM-LA, DOE National Nuclear Security Administration; Triad National Security, LLC, and N3B, collectively the Permittees. This report has been prepared by Permittees EM-LA and N3B in accordance with Part 2.9 of the LANL Permit to describe the N3B Hazardous Waste Minimization Program and to detail N3B's waste reduction achievements for Fiscal Year (FY) 2025.

FY 2025 includes the 12 months from October 1, 2024, through September 30, 2025.

During FY 2025, N3B conducted hazardous waste minimization and pollution prevention efforts in conjunction with investigative and remedial efforts and disposition of stored legacy wastes. Through this work, N3B shipped hazardous waste, mixed transuranic (MTRU) waste, mixed low-level waste (MLLW), and remediation waste off-site. Additionally, scrap metal and other items were recycled by N3B during FY 2025. N3B's FY 2025 accomplishments and analysis of the waste streams are discussed in the following sections.

Figure 1.0-1 depicts wastes disposed of by N3B during FY 2025 by type. In total, 2268 m^3 of waste was disposed of during FY 2025, including low-level waste (LLW), MTRU, solid waste (nonhazardous), New Mexico Special Waste (NM Special Waste), universal waste, MLLW, and hazardous waste. Approximately 18 m^3 of various materials, including scrap metal, was recycled by N3B during FY 2025.

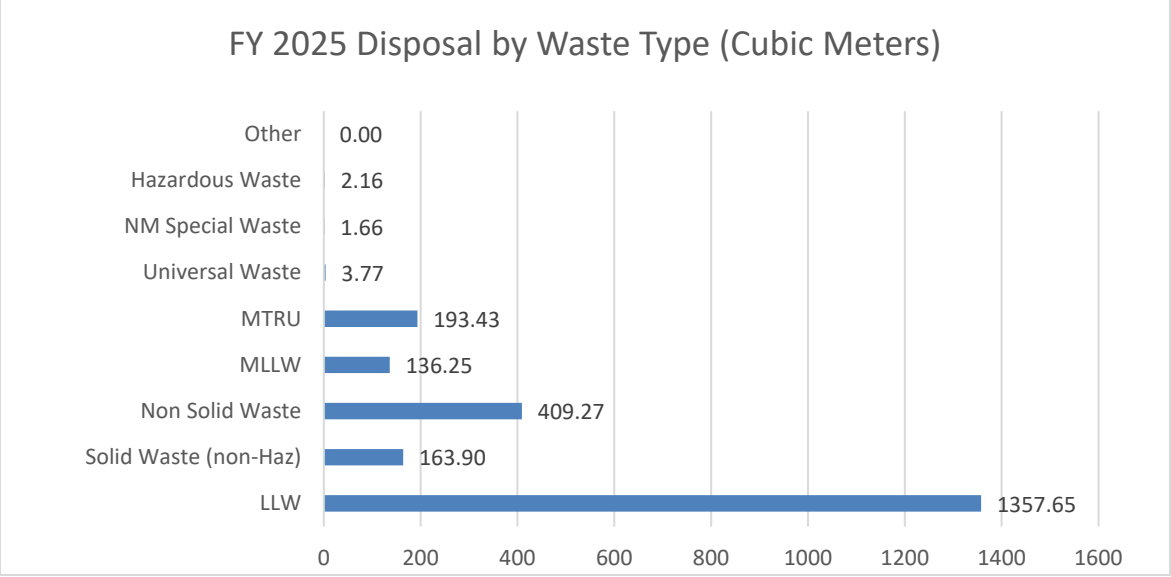

Figure 1.0-1 Wastes disposed of by N3B during FY 2025

1.1 Background

Under the provisions of the Resource Conservation and Recovery Act (RCRA), and in compliance with the Pollution Prevention Act of 1990 and other institutional requirements for treatment, storage, and disposal of wastes, all waste generators must certify that they have a waste minimization program in

place. In addition, Section 2.9 of the LANL Permit requires the Permittees to implement and maintain a waste minimization program to reduce the volume and toxicity of hazardous wastes generated at LANL.

Specific DOE pollution prevention requirements relevant to N3B's operations are found in DOE Order 436.1A, "Departmental Sustainability." However, due to the cancelation of this order on January 30, 2025, many of these requirements no longer apply. Regardless, N3B has incorporated the principles of pollution prevention, energy conservation, and sustainable practices into its operations through its Environmental Management System (EMS). Consequently, waste minimization, pollution prevention, and environmental compliance are the tenets of N3B's Environmental Policy (N3B-POL-ENV-0001, Revision 2).

1.2 Purpose and Scope

This report describes the measures the Permittees implemented throughout FY 2025 to reduce the volume and toxicity of waste generated in conjunction with its work scope. This report also describes the barriers to implementing waste-reduction efforts.

1.3 Operating Permit Requirements

Section 2.9 of the LANL Permit requires that a waste minimization program be in place and that a certified progress report be submitted annually to the New Mexico Environment Department (NMED). The Permit requirements listed in Table 1.3-1 correspond with the section(s) of this report that address each requirement.

Table 1.3-1
Crosswalk of Permit Requirements and Corresponding Report Section

Permit Requirement	Item	Report Section
Section 2.9 (1)	Policy Statement	Section 2.1
Section 2.9 (2)	Employee Training and Incentives	Section 2.2
Section 2.9 (3)	Past and Planned Source Reduction and Recycling	Sections 2.4, 3.3, 4.3, 5.3, 6.3, and 6.4
Section 2.9 (4)	Capital Expenditures and Operating Costs	Section 2.5
Section 2.9 (5)	Barriers to Implementation	Sections 3.4, 4.4, 5.4, and 6.5
Section 2.9 (6)	Investigation of Additional Waste Minimization Efforts	Section 2.4
Section 2.9 (7)	Waste Stream Flow Charts, Tables, and Analysis	Sections 3.2, 4.2, 5.2, and 6.2
Section 2.9 (8)	Justification of Waste Generation	Section 2.3

1.4 N3B Organizational Structure and Staff Responsibilities

N3B's work scope involves the following elements:

- ongoing disposition of legacy MTRU/MLLW waste stored aboveground
- remediation of MTRU wastes for compliance with waste acceptance criteria
- retrieval and processing (size reduction) for disposal of MTRU waste stored belowground
- monitoring and protection of groundwater, stormwater, and surface water
- investigation and evaluation of groundwater contaminant plumes, including documented plumes of hexavalent chromium and high explosives

- campaign investigations and remediation of soils
- decommissioning, demolition, and disposal of facilities
- Implementation of the EMS per LLCC

N3B's organizational structure allows for the efficient implementation of this work scope.

The N3B Environmental Remediation (ER) Program has responsibility for the investigation and cleanup of legacy-contaminated sites in compliance with the 2016 Compliance Order on Consent, as revised in 2024 (Consent Order).

The N3B Environmental Compliance Organization (ECO) is responsible for management and tracking of the EMS, including N3B's Waste Minimization Program. The EMS establishes and documents actionable annual objectives and targets focused on institutional waste minimization and pollution prevention. Through the EMS, the ECO is additionally responsible for tracking municipal solid waste sent to landfills, materials diverted from landfills, and disposition of electronic items company wide.

N3B's CH-TRU (Contact-Handled Transuranic [Waste]) Program provides all N3B waste packaging, transporting, and disposal services. During FY 2025 CH-TRU was additionally responsible for the size reduction, and repackaging for off-site waste disposal of 158 corrugated metal pipes, previously located in belowground storage at Technical Area 54 (TA-54), above Pit 29.

All of N3B's programs share responsibility for waste minimization and recognition of N3B's Environmental Policy.

2.0 WASTE MINIMIZATION PROGRAM ELEMENTS

2.1 Governing Policy on Environment

All waste generation and management of waste by N3B is governed by N3B's Waste Management Policy (N3B-P409-0, Revision 4), and all work scope and supporting activities are implemented in accordance with N3B's Environmental Policy, which calls for the implementation of the LLCC mission in a safe and compliant manner that protects human health and the environment.

N3B's EMS (N3B-SD400, Revision 3) addresses the Pollution Prevention and Site Sustainability Programs. The EMS provides the framework for integration of sustainability and pollution prevention goals into N3B's work scope. In support of this effort, N3B's EMS Continuous Improvement Team (CIT) develops an implementation plan each year for management approval that identifies site-sustainability objectives and targets that support those goals. The EMS CIT is composed of professionals from across N3B functional areas who work to ensure that the environmental objectives, goals, and initiatives identified in the annual plan are integrated throughout N3B's work scope. This group meets periodically to track the objectives and targets of the site sustainability plan. The implementation plan for FY 2025 consists of four overreaching objectives and eight supporting targets (Attachment 1). The four objectives identified in the FY 2025 plan are as follows:

1. Manage and remove waste in support of Laboratory operations and legacy waste remediation.
2. Reduce volume and toxicity of waste from field, office, and remote work support activities.
3. Reduce energy consumption, greenhouse gas emissions, and natural resource consumption.
4. Establish a culture of sustainability among N3B employees and subcontractors.

The following targets included in the FY 2025 plan are identified as directly associated with N3B's overall waste minimization strategy:

- Objective 1, Target 2: Install liquid impediments at TA-54 Dome 0153 and Pad 0281. These impediments will create a physical barrier to isolate hazardous materials from the environment.
- Objective 2, Target 1: Research the viability of purchasing a hydroseeder to reduce the reliance on mulch of questionable quality.
- Objective 3, Target 1: Research the viability of using a battery bank to replace diesel-powered generators that would lower air pollution impacts and reduce noise disturbances. The batteries could be recharged overnight using a charging station and/or using solar power.
- Objective 3, Target 2: Develop implementation plan for completing non-nuclear facility hazard analysis of lithium-ion batteries.
- Objective 4, Target 2: Develop briefing, presentation, and/or training on sustainable acquisitions requirements for N3B's workforce.

2.2 Employee Training and Incentive Programs

N3B employee training is used to promote waste recycling and source reduction. Available training courses include the EMS biennial awareness training (N3B-TS-RS-0003) and training associated with N3B-P409-0, "Waste Generation Overview" (Course 23263); "Waste Generation Overview Refresher" (Course 21464), and "Ensuring Safe and Compliant Waste Deposition" (Course CW-2019-16208). Through the promotion of pollution prevention and waste minimization and ongoing calls for increased efficiency from N3B management, employees and subcontractors are continually encouraged to seek project modifications that minimize environmental impact and waste generation.

2.3 Hazardous Materials Use and Justification

In conjunction with the implementation of N3B's work scope, the primary source of hazardous waste generation is repackaging and shipping of Federal Facility Compliance Order (FFCO) site treatment plan (STP) wastes for final off-site disposition. Other sources of hazardous waste generation include various investigation, remediation, and monitoring efforts, as well as limited, ongoing facility operations. The use of hazardous materials and generation of new hazardous wastes in conjunction with the implementation of N3B's work scope is actively minimized through the N3B project planning and review process defined in N3B-P351, "Project Planning and Regulatory Review, Revision 5." This procedure requires consideration of waste generation and regulatory implications in the early planning phase of each new project. Additionally, N3B considers waste reduction and sustainability as part of its procurement process. Through these and other programs, use of hazardous materials and minimization of waste generation are prime considerations for every project implemented by N3B.

2.4 Investigation of Additional Hazardous Waste Minimization and Pollution Prevention Efforts

In FY 2025, N3B utilized its EMS to define hazardous waste minimization and pollution prevention goals. While N3B made progress with waste-reduction targets, the specific achievements during FY 2025 are still being vetted for an EMS annual report. The EMS annual report will be finalized by the end of Calendar Year 2025 and submitted to N3B management.

2.5 Capital Expenditures and Operating Costs

N3B reported no capital expenditures devoted to hazardous waste source reduction and recycling during FY 2025. Waste management and disposal costs are incorporated into overall project costs.

3.0 HAZARDOUS WASTE

3.1 Introduction

Non-legacy hazardous wastes most commonly generated by N3B include solvents, metals, soil, demolition debris, and other solid waste contaminated with hazardous waste constituents or expired/off-specification hazardous material, as well as contaminated wastewater.

3.2 Waste Stream Analysis

Wastes are generated from all of N3B's operations, including administrative activities; waste management programs; decommissioning, demolition, and disposal operations; ongoing facility operations and maintenance; and remedial and investigation efforts. After a material is declared a waste, it is evaluated and if determined to be hazardous waste, is characterized, labeled, and collected in appropriate storage areas. Hazardous wastes are ultimately shipped to appropriate off-site treatment, storage, and disposal facilities for final treatment and/or disposal. The majority of hazardous waste managed and disposed of by N3B is legacy and environmental remediation waste.

During FY 2025, N3B disposed of 2.16 m^3 of nonradioactive contaminated hazardous waste. The volume of hazardous waste generated during FY 2025 increased from FY 2024, when N3B disposed of 0.64 m^3 of hazardous waste. As Table 3.2-1 summarizes, the volume of hazardous waste generated from year to year is variable, depending on remediation and investigation efforts performed during the year.

Table 3.2-1
Summary of Hazardous Waste Disposal by Fiscal Year

Fiscal Year	Hazardous Waste Disposed (m^3)
2021	0.85
2022	0.776
2023	11.18
2024	0.64
2025	2.16

3.3 Hazardous Waste Minimization

N3B projects undergo an internal regulatory review in accordance with N3B-P351 before approval for implementation. This review includes the development of waste characterization strategy forms, which anticipate all types of waste expected to be generated by the project. This information is reviewed by waste management coordinators with two primary goals: (1) minimizing waste generation and (2) identifying methods or products with lower environmental impact. Additionally, during the planning process, subject matter experts identify opportunities for waste minimization, substitution, and implementation of hazardous waste best management practices. N3B also routinely implements ongoing processes focused on waste minimization and environmental impact considerations. For example, N3B's procurement process requires sustainability and waste generation to be considered in the contractual

process. As N3B has matured as an organization, hazardous waste minimization has been further incorporated into policies and procedures.

Universal wastes, including lead acid batteries and fluorescent lamps, are recycled on a company-wide basis. Scrap metal produced from N3B operations is recycled after radiological sampling/screening is performed to determine the presence/absence of radiological contamination. Wherever possible, N3B uses recyclable lubricating fluids for equipment, such as highly refined mineral oil in place of more hazardous hydraulic fluids. Used oil generated by N3B operations is routinely recycled.

N3B recycled approximately 18 m^3 of scrap metal and other materials during FY 2025.

3.4 Barriers to Hazardous Waste Minimization

Barriers to hazardous waste minimization at N3B include the limited availability of appropriate nonhazardous products, a limited pool of vendors or service providers, and a lack of options for on-site treatment of radioactively contaminated materials.

4.0 MIXED TRANSURANIC WASTE

4.1 Introduction

MTRU waste is RCRA hazardous waste that contains more than 100 nCi of alpha-emitting transuranic (TRU) isotopes per gram of waste. TRU isotopes have an atomic number higher than 92 and half-lives that exceed 20 yr. TRU waste does not include (1) high-level waste; (2) waste which DOE has determined, with the concurrence of the U.S. Environmental Protection Agency, does not need the degree of isolation required by 40 Code of Federal Regulations (CFR) 191; or (3) waste which the U.S. Nuclear Regulatory Commission has approved for disposal on a case-by-case basis in accordance with 10 CFR 61.

MTRU waste is generated from the management and disposal of legacy waste that was produced from research, development, nuclear weapons production, and spent nuclear fuel reprocessing. During FY 2025, N3B was responsible for the disposal of legacy MTRU waste managed at TA-54 but did not generate new MTRU waste. MTRU waste is disposed of at the Waste Isolation Pilot Plant (WIPP), a geologic repository near Carlsbad, New Mexico.

MTRU waste can include solidified liquids, cemented residues, combustible materials, noncombustible materials, and non-actinide metals. MTRU solid waste is packaged for disposal in metal 55-gal. drums, standard waste box containers, or oversized containers and is then stored on-site before being certified for transport and disposal at WIPP.

Standards for packaging waste for acceptance at WIPP change periodically. When this occurs, stored containers of MTRU waste often need to be repackaged to conform to the new standards. The shipment of repackaged MTRU waste accounts for the majority of MTRU waste shipped from N3B to WIPP.

4.2 Waste Stream Analysis

MTRU wastes located at TA-54 include legacy wastes listed in the FFCO STP for ultimate disposal. No new MTRU wastes are deliberately generated, except through routine management of existing MTRU wastes (such as repackaging to meet new requirements) or environmental remediation wastes, as explained in Section 6.0 of this report.

4.3 MTRU Waste Minimization

The N3B CH-TRU Program, which manages and ships mostly legacy MLLW and MTRU wastes, has implemented several activities to reduce the amount of hazardous waste generated from ongoing operational activities. N3B minimizes MTRU waste by carefully segregating non-MTRU waste from the MTRU waste stream. The primary functions of the CH-TRU Program are management and shipping of legacy MLLW and MTRU waste.

During FY 2025, N3B disposed of 193.43 m^3 of MTRU waste.

4.4 Barriers to MTRU Waste Minimization

In order to protect human health and the environment, the MTRU waste packaging requirements defined by WIPP are very stringent, which makes minimization of these wastes difficult. There are radiological wattage and dose limits that cannot be exceeded, and a very small volume of MTRU waste may have a high wattage. Containers sent to WIPP are 55 gal. or larger in capacity.

5.0 MIXED LOW-LEVEL WASTE

5.1 Introduction

For waste to be considered MLLW, it must contain both hazardous and radioactive waste but not be classified as high-level waste, TRU waste, spent nuclear fuel, or byproduct materials, such as uranium or thorium mill tailings. Test specimens of fissionable material irradiated only for research and development (i.e., not for the production of power or plutonium) may be classified as LLW, provided the activity of TRU waste elements is less than 100 nCi/g.

Most of the routine MLLW comes from stockpile stewardship; remediation activities; reclassification of MTRU waste; and decommissioning, demolition, and disposal activities. Most of the nonroutine waste is generated by abnormal events, such as spills in legacy-contaminated areas. Typical MLLW includes contaminated debris, waste gloveboxes, legacy chemicals, mercury-cleanup waste, electronics, copper solder joints, and used oil.

5.2 Waste Stream Analysis

Materials and equipment are introduced into a radiologically controlled area as needed. In the course of operations, materials may become externally contaminated or activated, thus becoming MLLW when no longer needed.

If MLLW is generated, it is transferred to a satellite accumulation area or central accumulation area (CAA) after generation. Whenever possible, MLLW materials are surveyed to confirm the radiological contamination levels. If decontamination eliminates the radiological or the hazardous component, materials are decontaminated to prevent them from becoming MLLW.

MLLW is managed in accordance with all appropriate waste management and U.S. Department of Transportation requirements. It may be shipped to and stored at an on-site CAA or permitted storage facility before transport to off-site commercial or DOE-operated permitted treatment, storage, or disposal facilities.

Reclassification — Waste formerly classified as MTRU waste may be reclassified and disposed of as MLLW based on new nondestructive assay measurements. Since this reclassified waste is already generated, there are no opportunities to minimize this component of the MLLW stream.

Lead Debris — This waste stream can include copper pipes with lead solder; lead-contaminated equipment; brass contaminated with lead; and sheets, rags, circuit boards, cathode ray tubes, or personal protective equipment (PPE) contaminated with lead from maintenance activities. This waste stream is generated primarily from remediation campaigns, and volumes of this waste stream are expected to decrease as remediation efforts progress.

Trash and Maintenance — This waste stream consists of PPE, dry painting debris, paper towels, and rags and can also include unwanted equipment removed during remediation campaigns.

During FY 2025, N3B disposed of 136.25 m^3 of MLLW.

5.3 MLLW Minimization

MLLW is generated by cleanup activities and repackaging efforts. The volume of MLLW from these efforts varies significantly from year to year and often cannot be substantially minimized. It is therefore useful to examine the routine fraction of the MLLW waste stream separately to identify good waste minimization opportunities.

5.4 Barriers to MLLW Minimization

Packaging requirements at final disposition locations are often barriers to MLLW minimization. Containers sent for final disposition have a 55-gal. or greater capacity, often with very small volumes of waste inside the overpacks, and the majority of internal volume is empty space.

6.0 REMEDIATION WASTE

6.1 Introduction

The mission of N3B's corrective action activities is to investigate and remediate potential releases of contaminants as necessary to protect human health and the environment. These activities are implemented to comply with Consent Order requirements.

Through the implementation of this mission, large volumes of waste are typically generated. Because these activities involve investigating and, as necessary, conducting corrective actions at historically contaminated sites, source reduction and material substitution are difficult to control. These wastes often entail special handling, treatment, storage, and disposal requirements. Because of the investigative nature of this work, the volume of waste is often difficult to anticipate. The corrective action process, therefore, involves the responsibility and challenge of minimizing the risk posed by contaminated sites while also minimizing the amount of waste, thus reducing subsequent management or disposal efforts. Three factors make minimization desirable: (1) the high cost of waste management; (2) the limited capacity for on-site or off-site waste treatment, storage, and/or disposal; and (3) reduction of the associated liability.

6.2 Waste Stream Analysis

The following sections summarize the waste that may be generated by corrective actions associated with the investigation and remediation of legacy contaminant releases. Wastes generated include “primary” and “secondary” waste streams.

Primary waste consists of generated legacy-contaminated material or environmental media that was present as a result of past DOE activities before any containment or restoration activities. Primary waste includes contaminated building debris and soil from investigations and remedial activities.

Secondary waste streams consist of materials used in the investigative or remedial process and may include investigation-derived waste (IDW), such as PPE, sampling waste, drill cuttings, or treatment residues, such as spent resins or activated carbon from groundwater treatment; wastes resulting from storage or handling operations; or additives used to stabilize waste. Primary and secondary waste streams generated as a result of investigative and remedial actions may be hazardous waste, nonhazardous waste, or MLLW.

6.3 Remediation Waste Minimization

Waste minimization and pollution prevention are incorporated into N3B standard operating procedures that govern the planning and implementation of field activities. Techniques used to reduce investigation-related waste streams include the following:

Land Application of Groundwater—Well drilling, development, sampling, and rehabilitation/ reconfiguration activities all generate a significant volume of potential wastewater. However, in cases where land application is determined to be protective of human health and the environment, N3B-SOP-ER-3006, the procedure for implementing the NMED-approved “Decision Tree for the Land Application of Groundwater” (November 2016), allows for the minimization of purge water that must be managed as wastewater. During FY 2025, N3B land-applied 114,657 gal. of groundwater using this procedure.

Land Application of Drill Cuttings — Drill cuttings constitute a major potential source of solid waste generation. N3B-AP-RGC-0003, the procedure that incorporates the NMED-approved “Decision Tree for the Land Application of Drill Cuttings” (April 2016), allows drill cuttings to be land-applied if this is protective of human health and the environment. These drill cuttings do not have to be managed or disposed of as waste. In addition, land-applied drill cuttings can be beneficially reused as part of drill site restoration. N3B land-applied 53.52 m^3 drill cuttings using this procedure during FY 2025.

EMS Integration into N3B and Subcontractor Remediation Activities — N3B considers sustainability and waste generation as part of the contractual process. Full implementation of this process will enhance N3B and subcontractor awareness of waste minimization requirements and opportunities.

Sorting, Decontamination, and Segregation — Segregation of contaminated and uncontaminated soils is actively conducted so that uncontaminated soils can be reused as fill, thereby minimizing unnecessary disposal costs. This practice is easily implemented at sites where contaminated subsurface soils and structures are overlain by uncontaminated soils. During excavation to remove the contaminated soils and structures, the uncontaminated overburden is typically segregated and staged on plastic apart from contaminated materials. Any man-made debris present in the excavated material is removed and dispositioned at an appropriate disposal facility.

Following removal of contaminated soils and structures, segregated materials are tested to verify residential soil screening levels are met. Material that meets this standard is typically used as backfill for

the excavation. This practice minimizes the amount of contaminated soil that must be disposed of as waste and the amount of backfill that must be imported from off-site.

Material that does not meet applicable soil screening levels or screening action levels, or which is determined to be LLW or hazardous waste, is managed as waste.

Risk Assessment — Risk assessments are routinely conducted for corrective action projects to evaluate the human health and ecological risk associated with a site. The results of the risk assessment may be used by NMED to determine whether corrective measures are needed at a site to protect human health and the environment. The risk assessment may demonstrate that it is adequately protective to leave waste or contaminated media in place, thus avoiding the generation of waste. Properly designed land-use agreements and risk-based cleanup strategies can provide flexibility to select remedial actions or other technical activities that may avoid or reduce the need to excavate or conduct other actions that typically generate high volumes of remediation waste.

Equipment and Material Reuse — The reuse of equipment and materials, such as plastic gloves, sampling scoops, plastic sheeting, and PPE, after proper decontamination to prevent cross-contamination, can provide waste reduction and cost savings. To facilitate the management of excess materials between projects, N3B has developed an internal sharing bulletin board for qualifying materials. N3B intends to implement this waste minimization tool in FY 2026.

6.4 Pollution Prevention Planning

The potential to incorporate additional pollution prevention practices into future activities will be evaluated annually as part of the EMS planning efforts. This report will be used during the EMS annual management assessment to continue integration efforts across the organization and align environmental protection and sustainability goals. Further actions related to pollution prevention will be incorporated into the EMS as they are identified. Waste generation, management, and disposition processes are being developed to minimize waste generation and maximize pollution prevention. Specific actions and approaches that will be incorporated into planned corrective action projects include:

- segregation and recycle or reuse of uncontaminated materials;
- continued land application of drill cuttings and fluid;
- waste avoidance;
- reuse and recycling of equipment and materials;
- increased use of sustainable acquisition strategies; and
- risk-based cleanup strategies.

In addition, pursuant to the January 2012 Framework Agreement, DOE and NMED have agreed to increase the efficiency of cleanup activities while maintaining protection of human health and the environment. These increased efficiencies should result in a reduction in sampling activities for future investigations and a commensurate reduction in IDW generation.

To help improve the implementation of waste minimization activities, N3B ensures communication of environmental and waste minimization concerns to project participants through N3B-P351. Waste minimization opportunities are and will continue to be integrated into routine project communications to increase awareness of waste minimization and promote the sharing of lessons learned.

6.5 Barriers to Remediation Waste Minimization

Corrective actions involving buried waste or contaminated soil undertaken by N3B typically require removal of these materials. For any given project, this approach has the potential to generate thousands of cubic meters of waste. In evaluating corrective measure alternatives, project leaders generally give preference to alternatives that minimize waste generation, provided they are protective of human health and the environment. The consideration of other factors by external stakeholders, however, may result in the selection of an alternative that generates more waste than the recommended alternative.

Attachment 1

Fiscal Year 2025 Environmental Management System
Integrated Project Team Objectives and Targets

Objective 1 — Manage and remove waste in support of Laboratory operations and legacy waste remediation	Objective 2 — Reduce volume and toxicity of waste from field, office, and remote work support activities	Objective 3 — Reduce energy consumption, greenhouse gas emissions, and natural resource consumption	Objective 4 — Establish a culture of sustainability among N3B employees and subcontractors
Target 1 – Revise N3B-P409, N3B Waste Management, and N3B-P409-1, N3B Waste Acceptance Criteria, to better ensure safety for workers, the public, and the environment, as required by the Documented Safety Analysis for TA-54.	Target 1 – Research the viability of purchasing a hydroseeder to reduce the reliance on mulch of questionable quality.	Target 1 – Research the viability of using a battery bank to replace diesel-powered generators that would lower air pollution impacts and reduce noise disturbances. The batteries could be recharged overnight using a charging station and/or using solar power.	Target 1 – Revise N3B-SD400, Environmental Management System, to improve auditability.
Target 2 – Install liquid impediments at TA-54 Dome 153 and Pad 281. These impediments will create a physical barrier to isolate hazardous materials from the environment.	Target 2 – Form an interdisciplinary working group to respond to anticipated changes to PFAS-related regulations.	Target 2 – Develop implementation plan for completing non-nuclear facility hazard analysis of lithium-ion batteries.	Target 2 – Develop briefing, presentation, and/or training on sustainable acquisitions requirements for N3B's workforce.

N3B President and General Manager:

Bradley Smith

November 19, 2025

Date