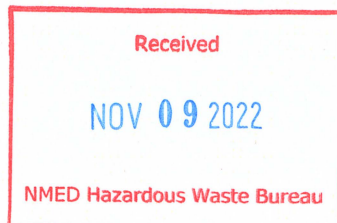




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(505) 257-7690



Environmental Management
Los Alamos Field Office
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Date: November 9, 2022
Refer To: N3B-2022-0433

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

Subject: Response to Notice of Violation with Proposed Penalties Los Alamos National Laboratory

- Reference(s):
1. NMED letter, R. Shean to J. Legare and M. Mikolanis, "Notice of Violation with Proposed Penalties, Los Alamos National Laboratory, EPA ID# NM0890010515," dated September 9, 2022.
 2. EM-LA letter EMLA-2021-0190-02-001, A. Duran to K. Pierard, "Solid Waste Management Unit Assessment Work Plan for Middle DP Road Site, Revision 1," dated March 25, 2021.
 3. N3B email, C. Maupin to N. Dhawan and L. Bishop, "Notification of MDPR Waste Management Approach Changes," dated December 17, 2021.
 4. NMED letter, R. Shean to L. Bishop and J. Murdock, "RE: Request for 30-Day Extension for Central Accumulation Area, Middle DP Road Waste, Los Alamos National Laboratory, EPA ID# NM0890010515, HWB-LANL-20-022," dated December 28, 2021.
 5. N3B/EM-LA letter N3B-2022-0011, J. Murdock and L. Bishop to R. Shean, "Response to Request for Information Regarding Middle DP Road Waste Management Approach Changes," dated January 27, 2022.
 6. NMED letter, R. Shean to J. Legare and M. Mikolanis, "Notice of Proposed Penalties, Los Alamos National Laboratory EPA ID# NM0890010515," dated September 9, 2022.

Dear Mr. Shean:

The U.S. Department of Energy (DOE) Environmental Management Los Alamos Field Office (EM-LA) and Newport News Nuclear BWXT-Los Alamos, LLC (N3B) (collectively, the Permittees) have prepared the following information in response to the New Mexico Environment Department's (NMED's) letter dated September 9, 2022 (Reference 1). Due to complications, this correspondence was not properly received by the appropriate individuals until October 17, 2022.

NMED's letter notes one violation of 20.4.1.300 New Mexico Administrative Code (NMAC), incorporating 40 Code of Federal Regulations (CFR) 262.17(a) due to the accumulation of five 20-yd³ bins in excess of 90 days. The following information has been prepared to provide relevant background to the generation of this waste and to document the corrective actions that have been taken.

Background

The five waste bins referenced in NMED's letter (DB1694, 6122, 5410, 5959 and DB1152) contained soil that was excavated from N3B's Middle DP Road (MDPR) project, which is situated on Los Alamos County land parcels A-16-a and A-8-a; both parcels are former DOE properties that were previously used to support weapons research and development. Prior to transfer of ownership of both parcels to Los Alamos County, three solid waste management units (SWMUs) and one area of concern (AOC) were investigated and closed. Certifications of Completion (COCs) without controls were issued by NMED for the following SWMUs/AOCs:

Parcel No.	SWMU/AOC	Description	Consent Order Status	Issue Date
A-8-a	SWMU 00-030(b)	Septic tanks	COC without controls	February 23, 2006
A-8-a	SWMU 00-30(m)	Former septic tank	COC without controls	February 23, 2006
A-8-a	AOC 00-010(a)	Surface disposal site	COC without controls	December 27, 2005
A-16-a	SWMU 21-015	Material Disposal Area B	COC without controls	May 2015

Los Alamos County owns both parcels.

The current investigation underway at MDPR was initiated in early 2020 due to Los Alamos National Laboratory-related debris and radioactive contamination having been encountered during sewer line installation activities on Parcel A-16-a by a Los Alamos County contractor. N3B's work at the MDPR project involves implementation of the NMED-approved "Solid Waste Management Unit Assessment Work Plan for Middle DP Road Site, Revision 1" (Reference 2). Through this investigation, waste including approximately 3692 yd³ of nonhazardous low-level radioactive contaminated soil and debris, and 93 yd³ of hazardous waste, has been generated for off-site disposal to date.

Prior to initiation of waste generation by N3B at the MDPR project, a review of available site information was conducted for the purpose of project planning and anticipation of waste generation. This review included collection of preliminary analytical data in response to the discovery of debris, historical site information, site investigations conducted on parcels A-16-a and A-8-a before transfer of the properties to Los Alamos County, and input from subject-matter experts. As a result of the review, a waste characterization strategy form (WCSF) was developed for the project that identifies each waste stream anticipated by project implementation. Based on the review of information, N3B anticipated that excavated environmental media from the MDPR project would qualify as nonhazardous, low-level radioactive waste (LLW).

Project implementation, including field screening, site surveys, potholing, and excavation to identify and remove buried radiologically contaminated debris, resulted in the generation of 194 20-yd³ bins by December 2021. Due to space limitations at MDPR, these bins were staged nearby at Technical Area 21. In accordance with pre-project waste characterization, the staged waste was managed as LLW, and composite samples were collected to represent each

20-yd³ container for confirmatory waste characterization analysis. Of these, 33 samples (15%) were selected at random for full Resource Conservation and Recovery Act (RCRA) waste characterization analysis. On December 13, 2021, N3B determined that, of the 33 representative samples analyzed, those collected from bin numbers DB1694 and 6122 met the criteria for hazardous waste based on toxicity characteristic leaching procedure (TCLP) results for cadmium.

Upon review of the TCLP analytical results, N3B initiated the following actions:

- On December 14, 2022, central accumulation areas (CAAs) were established for the 2 bins of newly identified hazardous waste (DB1694 and 6122) and the remaining 161 bins of staged wastes which had not yet been further characterized for TCLP constituents.
- Bins DB1694 and 6122 were labelled as hazardous waste with accumulation start dates of July 26 and August 24, 2021, respectively. Both containers were prepared for shipment for off-site disposal.
- The 161 containers for which waste characterization analytical data was pending were labelled as “hazardous waste pending analysis.”
- Management of the 2 hazardous-waste bins (DB1694 and 6122) and the 161 hazardous-waste-pending-analysis bins was modified to comply with the requirements of 40 CFR 262.17. NMED was notified of the change in waste management for the MDPH project by both voicemail and email on December 17, 2021 (Reference 3).
- Bins DB1694 and 6122 were shipped off-site for disposal as mixed low-level radioactive waste (MLLW) on December 22, 2021.
- Waste characterization analysis was conducted on the remaining 161 staged containers. Through this analysis, three additional bins (5410, 5959 and DB1152) were determined to meet the criteria for hazardous waste. In each case, notification to NMED was made upon review of determinant analytical results.
 - ❖ On February 3, 2022, NMED was notified that bin 5410 met the criteria for hazardous waste based on TCLP results for mercury. This bin had an accumulation start date of October 18, 2021, and was shipped off-site for disposal as MLLW on February 9, 2022.
 - ❖ On February 11, 2022, NMED was notified that bin 5959 met the criteria for hazardous waste based on TCLP results for cadmium. This bin had an accumulation start date of September 7, 2021, and was shipped off-site for disposal as MLLW on February 22, 2022.
 - ❖ On February 17, 2022, NMED was notified that bin DB1152 met the criteria for hazardous waste based on TCLP results for cadmium. This bin had an accumulation start date of August 24, 2021, and was shipped off-site for disposal as MLLW on February 24, 2022.

In a letter to the Permittees dated December 28, 2021, NMED issued a request for information (RFI) pertaining to the MDPH waste management approach (Reference 4). The Permittees met with NMED on January 20, 2022, to discuss the RFI request, and on January 27, 2022, the Permittees submitted “Response to Request for Information Regarding Middle DP Road Waste Management Approach Changes” (Reference 5).

Corrective Actions

N3B implemented an internal causal analysis that systematically considered M DPR project problems and causes, and recommended appropriate corrective actions to prevent recurrence of similar issues. N3B implemented the following corrective actions as a result of this analysis:

- All N3B waste personnel supporting N3B Environmental Remediation projects were trained on acceptable knowledge determinations and documentation.
- All N3B waste personnel supporting N3B Environmental Remediation projects were trained on RCRA regulations; procedure N3B-P409-0, “N3B Waste Management”; the preparation of WCSFs; and RCRA storage requirements and time limits.
- N3B project managers, field execution team leads, and others in project leadership roles were provided an overview of RCRA regulations, procedure N3B-P409-0, WCSF preparation, RCRA storage requirements, and time limits.
- N3B waste management personnel and Environmental Remediation personnel were re-trained on applicable N3B procedures regarding waste management and roles, responsibilities, authorities and accountabilities.
- N3B project managers, field execution team leads, and others in project leadership roles were provided an overview of the importance and priority of waste sampling.
- In addition, apart from the causal analysis undertaken to address the M DPR problems, N3B has modified the project planning and regulatory review process and documentation to emphasize performing appropriate planning for project-related wastes early in the project development.

Penalty

N3B hereby submits payment, in the amount of \$214,500 (Enclosure), in response to the New Mexico Environment Department’s (NMED’s) letter dated September 9, 2022, and received October 17, 2022 (Reference 6). This payment, along with corrective actions described above, is provided as settlement for N3B violation of the New Mexico Hazardous Waste Act and the Hazardous Waste Management Regulations cited by NMED (Reference 1).

If you have any questions, please contact Christian Maupin at (505)-695-4281 (christian.maupin@em-la.doe.gov) or M. Lee Bishop at (702) 218-4460 (lee.bishop@em.doe.gov).

Sincerely,



Robert Macfarlane
Program Manager
Environment, Safety, Health and Quality
N3B-Los Alamos

Sincerely,



Digitally signed by
BRIAN HARCEK
Date: 2022.11.09
06:19:07 -07'00'

M. Lee Bishop, Director For
Office of Quality and Regulatory Compliance
U.S. Department of Energy
Environmental Management
Los Alamos Field Office

Enclosure(s): Check for Payment for Assessed Penalties (Check No. 3960 [EM2022-0762])

cc (letter emailed):

Laurie King, EPA Region 6, Dallas, TX

Steve Yanicak, NMED-DOE-OB

Neelam Dhawan, NMED-HWB

Chris Catechis, NMED-RP

Jennifer Payne, LANL

Stephen Hoffman, NA-LA

Arturo Duran, EM-LA

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