



**Michelle Lujan Grisham**  
Governor

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**NEW MEXICO  
ENVIRONMENT DEPARTMENT**

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**James C. Kenney**  
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**Jennifer J. Pruett**  
Deputy Secretary

**CERTIFIED MAIL - RETURN RECEIPT REQUESTED**

Kirk Lachman, Manager  
Department of Energy-EM-LA  
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Los Alamos, NM 87545

Elizabeth Lowes, Program Manager  
Environment, Safety and Health  
Newport News Nuclear BWXT-Los Alamos  
1200 Trinity Drive, Suite 150  
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**RE: APPROVAL  
CLASS 1 PERMIT MODIFICATION REQUEST REQUIRING PRIOR APPROVAL  
TREATMENT IN CONTAINERS AT TA-54, PAD 9, DOME 231  
LOS ALAMOS NATIONAL LABORATORY  
EPA ID#NM0890010515  
HWB-LANL-19-032**

Dear Mr. Lachman and Ms. Lowes:

The New Mexico Environment Department (NMED) has received the United States Department of Energy (DOE) and the Newport New Nuclear BWXT-Los Alamos (N3B) (collectively the Permittees) *Class 1 Permit Modification Request Requiring Prior Approval for Treatment in Containers for Los Alamos National Laboratory Hazardous Waste Facility Permit* (PMR) dated and received January 27, 2020, and referenced by N3B-20-0007.

The Permittees have submitted this PMR to add treatment processes necessary to treat hazardous waste which are restricted from land disposal at Technical Area (TA) 54, Area G, Pad 9, Dome 231 in accordance with 40 Code of Federal Regulations (CFR) 270.42 Appendix I, item F.1.c requiring prior approval by NMED. The PMR updates the text and figures in Permit Part 7, Attachments A, B, C, E, G.10, J, and N.

NMED met with the Permittees on February 25, 2020 to discuss the PMR. In addition to the changes request, NMED has made typographical corrections and minor changes to Permit Part 7, Attachments A, C and E; please see Enclosure 1 for more information.

An electronic version of the Permit that incorporates the modifications is enclosed with this letter. The modified Permit is also available on the NMED's Hazardous Waste Bureau website at: <https://www.env.nm.gov/hazardous-waste/lanl-permit/>

If you have any questions regarding this letter, please contact Siona Briley of my staff at (505) 476-6049.

Sincerely,

Kevin M. Pierard, Chief  
Hazardous Waste Bureau

Enclosure:

1) Table 1

cc:

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File: 2020 LANL Permit, Approval, Class 1\* PMR to add Treatment at Technical Area 54, Pad 9, Dome 231  
LANL-19-032

## Enclosure 1: Table 1, NMED Modification to the Class 1 Permit Modification Request

Location(s)	Originally Requested Text	NMED Modifications in red, Permittees Modifications in blue	Rationale
Permit Part 7, Sections 7.1 and 7.4; and Attachments A.4.2.1, C.3.2.4,	at TA 54, Area G, Pad 9 within TA 54-0231  TA-50-0069	at TA 54, Area G, Pad 9, <b>Dome 231, Perma-Con</b>  <b>TA-50-69</b>	To be consistent throughout the document
Permit Part 7.3(3) and Attachment A.4.2.1	[blank]	In cases where there is insufficient volume of liquid waste, the neutralization step of the treatment process won't be performed and these minute quantities of liquids will be stabilized with zeolite or a WIPP-approved absorbent only.	Permittees requested on April 10, 2020 that this paragraph be added to clarify how small volumes of liquid waste will be handled by waste operators
Attachment A.4.2.1,	repacking process:	repacking processes	Fixed typographical error
Attachment A.4.2.1,	fire detection system	a fire detection system	Fixed typographical error
Attachment A.4.2.1,	meet decision criteria	meet a specific decision criterion	Clarified
Attachment A.4.2.1		The Permittees will evaluate the waste matrix complexity, which in this instance refers to the ability of the Permittees to treat, process, and repackage waste with or without manipulation of the waste inside the drum. When manipulation of the waste inside the drum is not needed for the retrieval of a prohibited item, waste consolidation, and/or sort, segregate, and size reduction activities then the waste will be processed outside of the glove bag but inside the confines of the Permacon. If the Permittees determine that the	Permittees provided additional detail of process as directed by NMED

		<p>retrieval or resolution of a prohibited item will require the manipulation of the waste inside the drum, this retrieval, resolution or treatment, will take place inside a glove bag. The Permittees will utilize RTR informational scans to make the determination if a prohibited item removal or if waste consolidation is possible. If a prohibited item is present, then it will be removed and necessary activities such as: sort, segregate, or size reduction will be conducted as necessary for repacking or waste consolidation purposes inside of the glove bag or outside of the glove bag but inside of the Perma-Con.</p>	
<p>Attachments A.4.2.1, and C.3.2.4.1</p>	<p>Additionally, N3B will generally follow EPA Method 9040C-pH Electrometric Measurement of pH Testing. However, because of the need for “real-time” pH screening results at the time of waste processing, strict adherence to all aspects of EPA Method 9040C are not possible.</p>	<p><del>Additionally, N3B the</del> Permittees will generally follow EPA Method 9040C-(as updated) pH Electrometric Measurement of pH Testing. However, because of the need for “real-time” pH screening results at the time of waste processing, strict adherence to all aspects of EPA Method 9040C or an equivalent method, if approved by NMED in advance will be followed observed.</p>	<p>Replaced N3B with the Permittees, to reduce future changes in the permit due to changes in contractors.</p> <p>Added ‘as updated’ to allow for updated EPA methods to be used.</p> <p>Discussed changes to pH Electrometric Measurement method, and the change in language was agreed to by Permittees on February 25, 2020. If an equivalent method is proposed to be used, it will be provided to NMED as supplemental</p>

			information.
Attachment C, List of Tables, C-20	Description of Stabilization Waste Streams at Area 50, Building 69	Description of Stabilization Waste Streams at <b>Technical Area 50, Building 69, and Technical Area 54, Dome 231</b>	Changed to be consistent with new table title.
Attachment C.3.2.4	<p>Treatment of cemented sludge waste will occur within glove bags located Permitted Unit, at in TA-54-0231. Treatment activities include neutralization of liquids, and stabilization of liquids using zeolite or another WIPP-approved absorbent.</p> <p>Table C-20 provides a description of the waste streams associated with the stabilization (including absorption) and neutralization inside a glove bag located within a Perma-Con in TA-54-0231; and identifies their potentially applicable EPA Hazardous Waste Numbers prior to treatment.</p> <p>After treatment, only the EPA HWNs D001 and D002 will be removed. To remove the D003, aerosol cans will be removed/segreated from the waste stream and sent off-site for treatment and disposal. All other HWNs will still apply to the waste.</p>	<p>Treatment of cemented sludge waste will occur within glove bags located <b>inside the</b> Permitted Unit, a <b>Perma-Con</b>, in TA-54-0231. Treatment activities includes neutralization of liquids, and stabilization of liquids using zeolite or another WIPP-approved absorbent.</p> <p>Table C-20 provides a description of the waste streams associated with the stabilization (including absorption) and neutralization inside a glove bag located within a Perma-Con in TA-54-0231; and identifies their potentially applicable EPA Hazardous Waste Numbers (<b>HWNs</b>) prior to treatment.</p> <p>After treatment, only the EPA HWNs D001 and D002 will be removed <b>from the treated waste</b>. To remove the D003 <b>HWN</b>, aerosol cans will be removed/segreated from the waste stream and sent off-site for treatment and disposal. All other HWNs <b>that have not been removed by treatment or segregation</b> will still apply to the <b>treated</b> waste.</p>	<p>Fixed typographical errors</p> <p>Included HWN abbreviation since it is used later in paragraph.</p> <p>Made edits for consistency and to clarify that the approved treatment methods only remove the D001, D002 and D003 waste codes.</p>

Attachments E.3.1 and E.3.1	cementation unit	stabilization unit	Fixed typographical error