



Department of Energy

Carlsbad Field Office
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July 26, 2022

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

Subject: Class 1 Permit Modification Notifications, Waste Isolation Pilot Plant Hazardous Waste Facility Permit Number: NM4890139088-TSDF

Dear Mr. Shean:

Enclosed is a Class 1 Permit Modification Notification for the following items:

- Correction to Table E-1 in Permit Attachment E
- Correction to Permit Attachment H1

We certify under penalty of law that this document and enclosure were prepared under our direction or supervision according to a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on our 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 our knowledge and belief, true, accurate, and complete. We are aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

If you have any questions, please contact Mr. Michael Gerle at (575) 988-5372.

Sincerely,

Reinhard Knerr
Manager
Carlsbad Field Office

SEAN DUNAGAN
(Affiliate)

Digitally signed by SEAN
DUNAGAN (Affiliate)
Date: 2022.07.25
15:54:25 -06'00'

Sean Dunagan
President and Project Manager
Nuclear Waste Partnership LLC

Enclosure

cc: w/enclosure
R. Maestas, NMED *ED
D. Biswell, NMED ED
M. McLean, NMED ED
CBFO M&RC
*ED denotes electronic distribution

Class 1 Permit Modification Notifications

- 1. Correction to Table E-1 in Permit Attachment E**
- 2. Correction to Permit Attachment H1**

**Waste Isolation Pilot Plant
Carlsbad, New Mexico**

WIPP Permit Number - NM4890139088-TSDF

July 2022

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Acronyms and Abbreviations

CFR	Code of Federal Regulations
DOE	U.S. Department of Energy
LWA	Land Withdrawal Act
NMAC	New Mexico Administrative Code
NMED	New Mexico Environment Department
Permit	Waste Isolation Pilot Plant Hazardous Waste Facility Permit
Permittees	U.S. Department of Energy and Nuclear Waste Partnership LLC
PMNs	Permit Modification Notifications
RCRA	Resource Conservation and Recovery Act
TRU	transuranic
WIPP	Waste Isolation Pilot Plant

Overview of the Permit Modification Notifications

This document contains two Class 1 Permit Modification Notifications (**PMNs**) for the Waste Isolation Pilot Plant (**WIPP**) Hazardous Waste Facility Permit (**Permit**) Number NM4890139088-TSDF.

These PMNs are being submitted by the U.S. Department of Energy (**DOE**) and Nuclear Waste Partnership LLC, collectively referred to as the Permittees, in accordance with Permit Part 1, Section 1.3.1. (20.4.1.900 New Mexico Administrative Code (**NMAC**) incorporating Title 40 Code of Federal Regulations (**CFR**) §270.42(a)). The PMNs in this document are necessary to notify the New Mexico Environment Department (**NMED**) of changes which impact the Permit. These changes do not reduce the ability of the Permittees to provide continued protection to human health and the environment.

The requested modifications to the Permit and any related supporting documents are provided in these PMNs. The proposed modifications to the text of the Permit have been identified using red text and double underline and a ~~strikeout~~ font for deleted information. All direct quotations are indicated by italicized text.

Attachment A
Description of the Class 1 Permit Modification Notifications

Table 1. Class 1 Hazardous Waste Facility Permit Modification Notifications

Item No.	Affected Permit Section	Change Description	Category
1	Attachment E, Table E-1, <i>Inspection Schedule/Procedures</i>	This change corrects Permit Attachment E Table E-1, <i>Inspection Schedule/Procedures</i> to insert the word "and" after "Leaks/Spills," and remove ", and main drain test" from the Monthly and Quarterly sections of the <i>Procedure Number and Inspection Criteria</i> column for the Fire Sprinkler System Inspections.	A.2
2	Attachment H1, <i>Active Institutional Control During Post-Closure, Introduction</i>	This modification revises Permit Attachment H1 with the following change: <ul style="list-style-type: none"> • Permit Attachment H1, <i>Active Institutional Control During Post-Closure, Introduction</i> <ul style="list-style-type: none"> ○ Changed "175,588" to "175,564." 	A.1

Item 1

Description

This change corrected Permit Attachment E, Table E-1, *Inspection Schedule/Procedures*, by inserting the word “and” after “Leaks/Spills,” and removing “, and main drain test” from the Monthly and Quarterly sections of the “Procedure Number and Inspection Criteria” column for the Fire Sprinkler System Inspections.

Basis

This change is classified as a "Correction of typographical errors" pursuant to 20.4.1.900 NMAC (incorporating 40 CFR §270.42 Appendix 1, A.2) and is, therefore, a Class 1 modification.

Discussion

This change is needed to correct Permit Attachment E, Table E-1, *Inspection Schedule/Procedures*. In a Class 1 PMN, dated January 31, 2022, the Permittees revised Permit Attachment E, Table E-1, *Inspection Schedule/Procedures*, to separate the Fire Sprinkler Systems inspection procedures by frequency into three inspection procedures (e.g., Monthly, Quarterly and Annually). The Permittees did not remove “...and main drain test” language from the Monthly and Quarterly inspections listed in the Permit Attachment E, Table E-1 red line strikeout of the PMN. The main drain test is only required annually in accordance with applicable National Fire Protection Association standards, previous facility practice, and the Permit prior to January 31, 2022. This modification is needed to correct the typographical error the Permittees made in the January 31, 2022, Class 1 PMN.

As noted in the initial Class 1 PMN on January 31, 2022, this change does not reduce the inspection criteria for the fire sprinkler system inspection. The criteria for the Monthly and Quarterly inspections are only being changed to correct the typographical error.

Proposed Revised Permit Text:

**Table E-1
Inspection Schedule/Procedures**

System/Equipment Name	Responsible Organization	Inspection^a Frequency	Procedure Number and Inspection Criteria^b
Fire Pumps	Fire Protection Engineering	Weekly	WP 12-FP0026 Inspecting for Deterioration ^b , Leaks/Spills, fire water valve position(s), and panel light status
		Annually (Electric Pump)	WP 12-FP5113 Inspecting for Deterioration ^b , operability, flow, discharge pressure, suction pressure, and pump speed
		Annually (Diesel Pump)	WP 12-FP5114 Inspecting for Deterioration ^b , operability, flow, discharge pressure, suction pressure, and pump speed
Fire Sprinkler Systems	Fire Protection Engineering	Monthly	WP 12-FP0023, WP 12-FP0063, and WP 12-FP0064 Inspecting for Deterioration ^b , Leaks/Spills, <u>and</u> water pressures, and main drain test
		Quarterly	WP 12-FP0024, WP 12-FP0063, and WP 12-FP0064 Inspecting for Deterioration ^b , Leaks/Spills, <u>and</u> water pressures, and main drain test
		Annually	WP 12-FP0025, WP 12-FP0063, and WP 12-FP0064 Inspecting for Deterioration ^b , Leaks/Spills, water pressures, and main drain test
Fire and Emergency Response Vehicles (Fire Trucks, Fire Suppression Cart, and Rescue Cart/Truck)	Fire Department	Weekly	WP 12-FP0033 Inspecting for Mechanical Operability ^m , Deterioration ^b , Leaks/Spills, and Required Equipment ⁿ

Item 2

Description

This modification revises Permit Attachment H1 with the following change:

- Permit Attachment H1, *Active Institutional Control During Post-Closure, Introduction*
 - Changed “175,588” to “175,564.”

Basis

This change is classified as an “Administrative and informational change” and is, therefore, a Class 1 modification pursuant to 20.4.1.900 NMAC (incorporating 40 CFR §270.42, Appendix I, A.1).

Discussion

This modification is needed to correct the final volume of waste listed in cubic meters and make it consistent with the other volumes listed in the Permit.

In the Class 3 Permit Modification Request, *Clarification of TRU Mixed Waste Disposal Volume Reporting*, dated January 31, 2018, the Permittees did not update the Land Withdrawal Act Volume text in Permit Attachment H1. Since this change was not incorporated, an inconsistency was created which differed from the rest of the TRU waste volume changes made in the Permit. The TRU waste volume currently listed in Permit Attachment H1 is inconsistent with the following:

- Permit Part 1, Section 1.5.22, *Land Withdrawal Act TRU Waste Volume*
- Permit Part 4, Section 4.1.1.2, *Disposal Locations and Quantities*
- Permit Attachment B, *Hazardous Waste Permit Application Part A*
- Permit Attachment G, Section G-1c, *Maximum Waste Inventory*

Proposed Revised Permit Text:

Introduction

Upon receipt of the necessary certifications and permits from the EPA and the New Mexico Environment Department, the Permittees will begin disposal of contact-handled (**CH**) and remote-handled (**RH**) TRU and TRU mixed waste in the WIPP. This waste emplacement and disposal phase will continue until the initiation of final facility closure when the HWDUs have received the final volume of waste or when the 6.2 million cubic feet (ft³) (~~175,588~~ 175,564 cubic meters (m³)) of LWA TRU waste volume has been reached, and as long as the Permittees comply with the requirements of the Permit. For the purposes of this Permit Attachment, this time period is assumed to be 25 years. The waste will be shipped from DOE facilities across the country in specially designed transportation containers certified by the Nuclear Regulatory Commission. The transportation routes from these facilities to the WIPP have been predetermined. The CH TRU mixed waste will be packaged in 55-gallon (208-liter), 85-gallon (322-liter), 100-gallon (379-liter) steel drums, standard waste boxes (**SWBs**), ten drum overpacks (**TDOPs**), and/or standard large box 2s (**SLB2s**). An SWB is a steel container having a free volume of 66.3 cubic feet (1.88 cubic meters). Figure H1-2 shows the general arrangement of a seven-pack of drums and an SWB as received in a Contact-Handled Package. RH TRU mixed waste inside a Remote-Handled Package is contained in one or more of the allowable containers described in Permit Attachment A1. Some RH TRU mixed waste may arrive in shielded containers as described in Permit Attachment A1.