

Department of Energy

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AUG 1 7 2015

Mr. John E. Kieling, Chief Hazardous Waste Bureau New Mexico Environment Department 2905 Rodeo Park Drive East, Building 1 Santa Fe, New Mexico 87505-6303

Subject: Class 1 Permit Modification Notification to the Waste Isolation Pilot Plant Hazardous

Waste Facility Permit Number: NM4890139088-TSDF

Dear Mr. Kieling:

Enclosed is a Notification of Class 1 Permit Modifications covering the following items:

- Update Figure C-1
- Revise a Procedure Number in Table E-1
- Editorial Change in Permit Part 4
- Editorial Change in Attachment C3

We certify under penalty of law that this document and all attachments 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. George T. Basabilvazo at (575) 234-7488.

Sincerely.

Original Signatures on File

Dana C. Brysen, Acting Manager Carlsbad Field Office

Philip J. Breidenbach, Project Manager Nuclear Waste Partnership LLC

Enclosure

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Class 1 Permit Modification Notifications

Update Figure C-1
Revise a Procedure Number in Table E-1
Editorial Change in Permit Part 4
Editorial Change in Attachment C3

Waste Isolation Pilot Plant Carlsbad, New Mexico

WIPP Permit Number - NM4890139088-TSDF

August 2015

Table of Contents

Transmittal Letter

Table of Contents	
Overview of the Permit Modification Notifications	1
Attachment A Description of the Class 1 Permit Modification Notifications Table 1. Class 1 Hazardous Waste Facility Permit Modification Notifications	
Item 1 Description Basis Discussion Proposed Revised Permit Text:	A-3 A-3 A-3
Item 2 Description Basis Discussion Proposed Revised Permit Text:	A-6 A-6 A-6
Item 3 Description Basis Discussion Proposed Revised Permit Text:	A-13 A-13 A-13
Item 4 Description Basis Discussion Proposed Revised Permit Text:	A-15 A-15 A-15

Overview of the Permit Modification Notifications

This document contains four (4) 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 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 of the 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 <u>double underline</u> and a <u>strikeout</u> font for deleted information. 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 C, Figure C-1	This modification updates Attachment C, Figure C-1, Waste Stream Profile Form (Example Only), to the most current version of CCP-TP-002 Reconciliation of DQOs and Reporting Characterization Data. There are two changes that are being made to Attachment C, Figure C-1 Waste Stream Profile Form (Example Only); as listed below:	A.1
		 Change "check one" to "check all that apply" in the defense activity section 	
		 Added "Waste characterization procedures used (procedure number, revision number, date):" 	
2.	Attachment E, Table E-1	This modification revises a security procedure document number listed in Attachment E, Table E-1 for line item "Perimeter Fence, Gates, Signs" under the System/Equipment Name column. The Security implementing procedure will be revised from "PF0-010" to "PF0-008." The frequency of this inspection will continue to be daily and all requirements will remain the same.	A.1
3.	Part 4, Section 4.5.2.2	This modification changes the section number in Permit Part 4, Section 4.5.2.2 from "1.5.11" to "1.7.11.2."	A.1
4.	Attachment C3, Section C3-6b(1)	This modification changes the language used in Attachment C3, Section C3-6b(1) Waste Stream Profile Form (WSPF), to replace the word "reference" with "revision number" in the second to last bullet concerning waste characterization procedures.	A.1

Description

This modification updates Attachment C, Figure C-1, Waste Stream Profile Form (Example Only), to the most current version of CCP-TP-002, Reconciliation of DQOs and Reporting Characterization Data. There are two changes that are being made to Attachment C, Figure C-1 Waste Stream Profile Form (Example Only); as listed below:

- Change "check one" to "check all that apply" in the defense activity section
- Added "Waste characterization procedures used (procedure number, revision number, date)"

Basis

The 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

These changes are needed to update Attachment C, Figure C-1, WIPP Waste Stream Profile Form (Example Only). These two changes will align Attachment C, Figure C-1 with procedure CCP-TP-002 Reconciliation of DQOs and Reporting Characterization Data. The justifications for the changes to Figure C-1 are as follows:

- Change "check one" to "check all that apply" in the defense activity section
 - This change is needed because there is often more than one defense activity which generates the waste that belongs to a waste stream. Identifying only one defense activity limits the amount of information that can be listed in the Waste Stream Profile Form (WSPF).
- Added "Waste characterization procedures used (procedure number, revision number, date)" section
 - This section is required by the Permit Attachment C3, Section C3-6b(1), to include the waste characterization procedures which were used to characterize the waste. This change to Attachment C, Figure C-1, is consistent with the requirement in Attachment C3, Section C3-6b(1). Currently, this information is being added to generator\storage site WSPFs as a comment because it is not included in Figure C-1.

No additional changes are being made to Attachment C, Figure C-1.

Page 1 of 2

WASTE STREAM PROFILE FORM

Waste Stream Profile Number:	_
Generator Site Name:	Technical Contract:
Generator Site EPA ID: Date of audit report approved by NMED:	Technical Contact Phone Number:
Date of audit report approved by NMED:	
Title, version number and date of documents used for WAP C	ertification
Did your facility generate this waste? ☐ Yes ☐ No	
If no, provide the name and EPA ID of the original generator:	
WIDD ID:	ary Category Group
WIPP ID: Summa Waste Stream Name:	ary Category Group
Description from the WTWBIR:	
Description from the WTWBIK.	
Defense Waste: ☐ Yes ☐ No Check one: ☐ CH ☐ RH	
Number of SWBs Number of Drums	
Batch Data Report numbers supporting this waste stream cha	racterization:
List applicable EPA Hazardous Waste Numbers (2)	Table 112 all of 11.
Applicable TRUCON Content Numbers:	
Acceptable Knowledge Information (1)	
(for the following, enter supporting documentation used (i.e., r	eferences and dates))
Required Program Information	
NA C 16	
Facility mission description:	
Facility mission description:	
Waste Identification/categorization schemes:	
Types and quantities of waste generated:	
Correlation of waste streams generated from the same buildin	g and process, as applicable
Waste certification procedures:	
Required Waste Stream Information	
Area(s) and building(s) from which waste stream was generate	ed:
Waste stream volume and time period of generation:	
Waste generating process description for each building:	
Waste process flow diagrams:	
Material inputs or other information identifying chemical/radior	nuclide content and physical waste form:
Waste material parameter estimates per unit of waste:	
Which Defense Activity generated the waste (check onecheck	
☐ Weapons activities including defense inertial confi	nement fusion
☐ Naval reactors development	
☐ Verification and control technology	
☐ Defense research and development	
☐ Defense nuclear waste and material by products n	nanagement
☐ Defense nuclear material production	
☐ Defense nuclear waste and materials security and	sateguards and security investigations

Figure C-1
WIPP Waste Stream Profile Form (Example Only)

WASTE STREAM PROFILE FORM

Supplemental Documentation		
Process design documents:		
Standard operating procedures:		
Safety Analysis Reports:		
Waste packaging logs:		
Test plans/research project reports:		
Site data bases:		
Information from site personnel:		
Standard industry documents:		
Meterial actatu data abasta		
Material safety data sheets:	rrogate waste:	
Laboratory notebooks.		
Confirmation Information ⁽²⁾		
(for the following, when applicable, enter procedu	ure title(a) number(a) and date(a))	
(for the following, when applicable, enter procedu	are title(s), number(s), and date(s))	
Radiography:		
VISUAI EXAITIIIIAUOII.		
Wasta sharastarization procedures used (proced	lure number, revision number, date):	
waste characterization procedures used (procedures	die number, revision number, date).	
Waste Stream Profile Form Certification		
Lhereby certify that I have reviewed the information	in this Waste Stream Profile Form, and it is complete	and accurate to
	formation will be made available to regulatory agencies	
	tion, including the possibility of fines and imprisonmen	
violations.	non, moraamig and possisms, or most and miphosimism	
Signature of Site Project Manager	Printed Name and Title	Date
orginature of Oite i roject Manager	i into traine and the	Date
NOTE: (1) Use back of sheet or continuation		
	on were used to confirm EPA Hazardous Waste Numb	ers, attach
signed Characterization Informat	tion Summary documenting this determination.	

Figure C-1
WIPP Waste Stream Profile Form (Example Only – Continued)

Description

This modification revises a security procedure document number listed in Attachment E, Table E-1 for line item "Perimeter Fence, Gates, Signs" under the System/Equipment Name column. The Security implementing procedure will be revised from "PF0-010" to "PF0-008." The frequency of this inspection will continue to be daily, and all requirements will remain the same.

Basis

The 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 change is needed to update the security procedure number in Attachment E, Table E-1 for "Perimeter Fence, Gates, Signs" from "PF0-010" to "PFO-008." This change was made as an update to the inspection procedure. No substantial change was made to the inspection forms included in the procedure. The frequency of this inspection will continue to be daily, and all requirements will remain the same.

Table E-1 Inspection Schedule/Procedures

System/Equipment Name Air Intake Shaft Hoist	Responsible Organization Underground	Inspection a Frequency and Job Title of Personnel Normally Making Inspection Preoperational ^c See	Procedure Number and Inspection Criteria
All make offact floist	Operations	Lists 1b and c	Inspecting for Deterioration ^b , Safety Equipment, Communication Systems, and Mechanical Operability ^m in accordance with Mine Safety and Health Administration (MSHA) requirements
Ambulances (Surface and Underground) and related emergency supplies and equipment	Emergency Services	Weekly See List 11	12-FP0030 Inspecting for Mechanical Operability ^m , Deterioration ^b , and Required Equipment ⁿ
Adjustable Center of Gravity Lift Fixture	Waste Handling	Preoperational See List 8	WP 05-WH1410 Inspecting for Mechanical Operability ^m and Deterioration ^b
Backup Power Supply Diesel Generators	Facility Operations	Monthly See List 3	WP 04-ED1301 Inspecting for Mechanical Operability ^m and Leaks/Spills by starting and operating both generators. Results of this inspection are logged in accordance with WP 04-AD3008.
Facility Inspections (Water Diversion Berms)	Facility Engineering	Annually See List 4	WP 10-WC3008 Inspecting for Damage, Impediments to water flow, and Deterioration ^b
Central Monitoring Systems (CMS)	Facility Operations	Continuous See List 3	Automatic Self-Checking
Contact-Handled (CH) TRU Underground Transporter	Waste Handling	Preoperational See List 8	WP 05-WH1603 Inspecting for Mechanical Operability ^m , Deterioration ^b , and area around transporter clear of obstacles
Conveyance Loading Car	Waste Handling	Preoperational See List 8	WP 05-WH1406 Inspecting for Mechanical Operability ^m , Deterioration ^b , path clear of obstacles, and guards in the proper place

System/Equipment Name	Responsible Organization	Inspection a Frequency and Job Title of Personnel Normally Making Inspection	Procedure Number and Inspection Criteria
Facility Transfer Vehicle	Waste Handling	Preoperational	WP 05-WH1204
		See List 8	Inspecting for Mechanical Operability ^m , Deterioration ^b , path clear of obstacles, and guards in the proper place
Exhaust Shaft	Underground	Quarterly	PM041099
	Operations	See List 1a	Inspecting for Deterioration ^b and Leaks/Spills
Eye Wash and Shower	Equipment	Weekly	WP 12-IS1832
Equipment	Custodian	See List 5	Inspecting for Deterioration ^b
		Semi-annually	WP 12-IS1832
		See List 2a	Inspecting for Deterioration ^b and Fluid Levels-Replace as Required
Fire Detection and Alarm	Emergency	Semiannually	12-FP0027
System	Services	See List 11	Inspecting for Deterioration ^b , Operability of indicator lights and, underground fuel station dry chemical suppression system. Inspection is per NFPA 17
Fire Extinguishers ^j	Emergency	Monthly	12-FP0036
	Services	See List 11	Inspecting for Deterioration ^b , Leaks/Spills, Expiration, seals, fullness, and pressure
Fire Hoses	Emergency Services	Annually (minimum) See List 11	12-FP0031Inspecting for Deterioration ^b and Leaks/Spills
Fire Hydrants	Emergency	Semi-annual/ annually	12-FP0034
	Services	See List 11	Inspecting for Deterioration ^b and Leaks/Spills
Fire Pumps	Emergency	Weekly/annually	WP 12-FP0026
	Services	See List 11	Inspecting for Deterioration ^b , Leaks/Spills, valves, and panel lights
Fire Sprinkler Systems	Emergency	Monthly/ quarterly	WP 12-FP0025
	Services	See List 11	Inspecting for Deterioration ^b , Leaks/Spills, static pressures, and removable strainers
Fire and Emergency	Emergency	Weekly	12-FP0033
Response Trucks (Seagrave Fire Apparatus, Emergency One Apparatus, and Underground Rescue Truck)	Services	See List 11	Inspecting for Mechanical Operability ^m , Deterioration ^b , Leaks/Spills, and Required Equipment ⁿ

System/Equipment Name	Responsible Organization	Inspection a Frequency and Job Title of Personnel Normally Making Inspection	Procedure Number and Inspection Criteria
Forklifts Used for Waste Handling (Electric and Diesel forklifts, Push-Pull Attachment)	Waste Handling	Preoperational See List 8	WP 05-WH1201, WP 05-WH1207, WP 05-WH1401, WP 05-WH1402, WP 05-WH1403, and WP 05- WH1412
			Inspecting for Mechanical Operability ^m , Deterioration ^b , and On board fire suppression system
Hazardous Material Response Equipment	Emergency Services	Weekly See List 11	12-FP0033Inspecting for Mechanical Operability ^m , Deterioration ^b , and Required Equipment ⁿ
Miners First Aid Station	Emergency Services	Quarterly See List 11	12-FP0035Inspecting for Required Equipment ⁿ
Mine Pager Phones (between surface and underground)	Facility Operations	Monthly See List 3	WP 04-PC3017 Testing of PA and Underground Alarms and Mine Page Phones at essential locations
MSHA Air Quality Monitor	Maintenance/ Underground Operations	Daily ^l See Lists 1 and 10	WP 12-IH1828 Inspecting for Air Quality Monitoring Equipment Functional Check
Perimeter Fence, Gates,	Security	Daily	PF0-010PFO-008
Signs		See List 6	Inspecting for Deterioration ^b and Posted Warnings
Personal Protective Equipment (not otherwise contained in emergency vehicles or issued to individuals): —Self-Contained Breathing Apparatus	Emergency Services	Weekly See List 11	12-FP0029Inspecting for Deterioration ^b and Pressure
Public Address (and	Facility	Monthly	WP 04-PC3017
Intercom System)	Operations	See List 3	Testing of PA and Underground Alarms and Mine Page Phones at essential locations Systems operated in test mode
Radio Equipment	Facility Operations	Daily ⁱ See List 3	Radios are operated daily and are repaired upon failure
Rescue Truck (Surface and Underground)	Emergency Services	Weekly See List 11	12-FP0030 and 12-FP0033 Inspecting for Mechanical Operability ^m , Deterioration ^b , Leaks/Spills, and Required Equipment ⁿ

System/Equipment Name	Responsible Organization	Inspection a Frequency and Job Title of Personnel Normally Making Inspection	Procedure Number and Inspection Criteria
Salt Handling Shaft Hoist	Underground Operations	Preoperational See List 1b and c	WP 04-HO1002 Inspecting for Deterioration ^b , Safety Equipment, Communication Systems, and Mechanical Operability ^m in accordance with MSHA requirements
Self-Rescuers	Underground Operations	Quarterly See List 1c	WP 04-AU1026 Inspecting for Deterioration ^b and Functionality in accordance with MSHA requirements
Surface TRU Mixed Waste Handling Area ^k	Waste Handling	Preoperational or Weekly ^e See List 8	WP 05-WH1101 Inspecting for Deterioration ^b , Leaks/Spills, Required Aisle Space, Posted Warnings, Communication Systems, Container Condition, and Floor coating integrity
TRU Mixed Waste Decontamination Equipment	Waste Handling	Annually See List 8	WP 05-WH1101 Inspecting for Required Equipment ⁿ
Underground Openings— Roof Bolts and Travelways	Underground Operations	Weekly See List 1a	WP 04-AU1007 Inspecting for Deterioration ^b
Underground— Geomechanical Instrumentation System (GIS)	Geotechnical Engineering	Monthly See List 9	WP 07-EU1301 Inspecting for Deterioration ^b
Underground TRU Mixed Waste Disposal Area	Waste Handling	Preoperational See List 8	WP 05-WH1810 Inspecting for Deterioration ^b , Leaks/Spills, mine pager phones, equipment, unobstructed access, signs, debris, and ventilation
Uninterruptible Power Supply (Central UPS)	Facility Operations	Daily See List 3	WP 04-ED1542 Inspecting for Mechanical Operability ^m and Deterioration ^b with no malfunction alarms. Results of this inspection are logged in accordance with WP 04- AD3008.
TDOP Upender	Waste Handling	Preoperational See List 8	WP 05-WH1010 Inspecting for Mechanical Operability ^m and Deterioration ^b
Vehicle Siren	Emergency Services	Weekly See List 11	Functional Test included with inspection of the Ambulances, Fire Trucks, and Rescue Trucks

System/Equipment Name	Responsible Organization	Inspection a Frequency and Job Title of Personnel Normally Making Inspection	Procedure Number and Inspection Criteria
Ventilation Exhaust	Maintenance Operations	Quarterly See List 10	IC041098 Check for Deterioration ^b and Calibration of Mine Ventilation Rate Monitoring Equipment
Waste Handling Cranes	Waste Handling	Preoperational See List 8	WP 05-WH1407 Inspecting for Mechanical Operability ^m , Deterioration ^b , and Leaks/Spills
Waste Hoist	Underground Operations	Preoperational See List 1b and c	WP 04-HO1003 Inspecting for Deterioration ^b , Safety Equipment, Communication Systems, and Mechanical Operability ^m , Leaks/Spills, in accordance with MSHA requirements
Water Tank Level	Facility Operations	Daily See List 3	SDD-WD00 Inspecting for Deterioration ^b , and water levels. Results of this inspection are logged in accordance with WP 04-AD3008.
Push-Pull Attachment	Waste Handling	Preoperational See List 8	WP 05-WH1401 Inspecting for Damage and Deterioration ^b
Trailer Jockey	Waste Handling	Preoperational See List 8	WP 05-WH1405 Inspecting for Mechanical Operability ^m and Deterioration ^b
Explosion-Isolation Walls	Underground Operations	Quarterly See List 1	Integrity and Deterioration ^b of Accessible Areas
Bulkhead in Filled Panels	Underground Operations	Monthly See List 1	Integrity and Deterioration ^b of Accessible Areas
Bolting Robot	Waste Handling	Preoperational See List 8	WP 05-WH1203 Mechanical Operability ^m
Yard Transfer Vehicle	Waste Handling	Preoperational See List 8	WP 05-WH1205 Mechanical Operability ^m , Deterioration ^b , Path clear of obstacles and Guards in proper place
Payload Transfer Station	Waste Handling	Preoperational See List 8	WP 05-WH1208 Mechanical Operability ^m , Deterioration ^b , and Guards in proper place
Monorail Hoist	Waste Handling	Preoperational See List 8	WP 05-WH1202 Mechanical Operability ^m , Deterioration ^b , and leaks/spills

System/Equipment Name	Responsible Organization	Inspection a Frequency and Job Title of Personnel Normally Making Inspection	Procedure Number and Inspection Criteria
Bolting Station	Waste Handling	Preoperational See List 8	WP 05-WH1203 Mechanical Operability ^m , Deterioration ^b , and Guards in proper place

Description

This modification changes the section number in Permit Part 4, Section 4.5.2.2 from "1.5.11" to "1.7.11.2."

Basis

The 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 change is needed to correct the section number in Permit Part 4, Section 4.5.2.2. from "1.5.11" to "1.7.11.2." The correct reference for certification requirements is Section 1.7.11.2., "Reporting Anticipated Noncompliance," not section 1.5.11., "Waste Characterization."

4.5.2.2. <u>Notification Requirements</u>

At least 30 calendar days prior to the projected start date of excavation of each Underground HWDU, the Permittees shall provide written notification to the Secretary stating the projected start date of excavation, along with supporting rationale (e.g., projected waste receipt rate, etc.). The Permittees shall post a link to the notification transmittal letter on the WIPP Home Page and inform those on the e-mail notification list as specified in Permit Section 1.11.

Prior to disposal of TRU mixed waste in a newly constructed Underground HWDU, the Permittees shall comply with the certification requirements specified in Permit Section 1.5.111.7.11.2.

Description

This modification changes the language used in Attachment C3, Section C3-6b(1) Waste Stream Profile Form, to replace the word "reference" with "revision number" in the second to last bullet concerning waste characterization procedures.

Basis

The 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 change is needed to correct the language in Attachment C3, section C3-6b(1). In the second to last bullet of the list of Waste Stream Profile Form (WSPF) requirements, the appropriate "revision number" not the "reference" should be used. This change is needed to clarify that the revision number of the waste characterization procedure(s) used should also be listed in the WSPF. This change is consistent with the changes made to Attachment C, Figure C-1 Waste Stream Profile Form (Example Only).

C3-6b(1) Waste Stream Profile Form

The Waste Stream Profile Form (WSPF, Figure C-1) shall include the following information:

- Generator/storage site name
- Generator/storage site EPA ID
- Date of audit report approval by NMED (if obtained)
- Original generator of waste stream
- Whether waste is Contact-Handled or Remote-Handled
- The Waste Stream WIPP Identification Number
- Summary Category Group
- Waste Matrix Code Group
- Waste Material Parameter Weight Estimates per unit of waste
- Waste stream name
- A description of the waste stream
- Applicable EPA hazardous waste numbers
- Applicable TRUCON codes
- A listing of acceptable knowledge documentation used to identify the waste stream
- The waste characterization procedures used and the reference revision number and date of the procedure
- Certification signature of Site Project Manager, name, title, and date signed