Class 1 Permit Modification Notification

Revise Closure Dates
Revise B6 Checklist
Allow Use of Pallet Stands

Waste Isolation Pilot Plant
Carlsbad, New Mexico

WIPP Permit Number NM4890139088-TSDF

February 2009

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Acronyms and Abbreviations

CFR	Code of Federal Regulations
CH	Contact-Handled
DOE	Department of Energy
FTV	Facility Transfer Vehicle
HWDU	Hazardous Waste Disposal Unit
NMAC	New Mexico Administrative Code
NMED	New Mexico Environment Department
PMN	Permit Modification Notification
Permit	Hazardous Waste Facility Permit
QAO	Quality Assurance Objective
VE	Visual Examination
WHB	Waste Handling Building
WIPP	Waste Isolation Pilot Plant
WTS	Washington TRU Solutions

Overview of the Permit Modification Notification

This document contains a Class 1 Permit Modification Notification (**PMN**) to the Hazardous Waste Facility Permit (**Permit**) at the Waste Isolation Pilot Plant (**WIPP**), Permit Number NM4890139088-TSDF, hereinafter referred to as the Permit.

This PMN is being submitted by the U.S. Department of Energy (**DOE**) and Washington TRU Solutions LLC (**WTS**), collectively referred to as the Permittees, in accordance with the Permit Condition I.B.1 (20.4.1.900 New Mexico Administrative Code (**NMAC**) incorporating Title 40 of the Code of Federal Regulations 40 (**CFR**) §270.42(a)). This PMN is necessary to notify the New Mexico Environment Department (**NMED**) of several changes which impact both WIPP and the generator/storage sites. These changes do not reduce the ability of the Permittees to provide continued protection to human health and the environment.

The requested changes to the Permit and any related supporting documents are provided in this PMN. The proposed changes to the text of the Permit have been identified using red text and double underline, and a ~~strikeout~~ font for deleted information. Direct quotations are indicated by italicized text.

Attachment A

Description of the Class 1 Permit Modification Notification

Table 1. Class 1 Hazardous Waste Facility Permit Modification Notification

Affected Permit Section	Change Description	Category	Attachment A Page #
1. Table I-1	Revise Table I-1 to indicate the actual dates that partial closure occurred.	A.1	A-3
2. Attachment B6	Add two new items on the Attachment B6 checklist regarding requirements for quality assurance objectives for visual examination.	A.1	A-5
3. Attachments D, and M1	Revise language to allow the use of pallet stands.	A.3	A-7, A-9

Item 1

Description:

Revise Table I-1 to include actual dates that waste emplacement was started, was completed, closure began and partial closure ended in Panels 1, 2, 3 and 4.

Basis:

The change is classified as "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:

At a permit renewal meeting it was suggested by the stakeholders that Table I-1 be updated to indicate the actual dates for the completed activities listed in this table. This modification changes those dates to comply with the stakeholders request.

Revised Permit Text:

a.1. Attachment I, Table I-1

TABLE I-1
ANTICIPATED EARLIEST CLOSURE DATES FOR
THE UNDERGROUND HWDUs

HWDU	OPERATIONS START	OPERATIONS END	CLOSURE START	CLOSURE END
PANEL 1	3/99*	~~2/03~~ 03/03*	3/03*	~~9/03~~7/03* SEE NOTE 5
PANEL 2	3/03*	~~6/05~~ 10/05*	~~7/05~~ 10/05*	~~1/06~~ 3/06* SEE NOTE 5
PANEL 3	~~7/05~~ 4/05*	~~1/07~~ 2/07*	2/07*	2/07* SEE NOTE 6
PANEL 4	1/07*	1/09	2/09	8/09 SEE NOTE 6
PANEL 5	1/09	1/11	2/11	8/11 SEE NOTE 6
PANEL 6	1/11	1/13	2/13	8/13 SEE NOTE 6

HWDU	OPERATIONS START	OPERATIONS END	CLOSURE START	CLOSURE END
PANEL 7	1/13	1/15	2/15	8/15 SEE NOTE 6
PANEL 8	1/15	1/17	2/17	8/17
PANEL 9	1/17	1/28	2/28	SEE NOTE 4
PANEL 10	1/28	9/30	10/30	SEE NOTE 4

*Actual date

NOTE 1: Only Panels 1 to 4 will be closed under the initial term of this permit. Closure schedules for Panels 5 through 10 are projected assuming new permits will be issued in 2009 and 2019.

NOTE 2: The point of closure start is defined as sixty (60) days following notification to the NMED of closure.

NOTE 3: The point of closure end is defined as one hundred eighty (180) days following placement of final waste in the panel.

NOTE 4: The time to close these areas may be extended depending on the nature and extent of the disturbed rock zone. The excavations that constitute these panels will have been opened for as many as forty (40) years so that the preparation for closure may take longer than the time allotted in Figure I-2. If this extension is needed, it will be requested as an amendment to the Closure Plan.

NOTE 5: The anticipated closure end date for Panels 1 and 2 is for installation of the 12-foot explosion-isolation wall. Final closure of Panels 1 and 2 will be completed as specified in this Permit no later than January 31, 2016.

NOTE 6: The anticipated closure end date for Panels 3 through 7 is for initially blocking ventilation through the filled panel. Final closure of Panels 3 through 7 will be completed as specified in this Permit no later than January 31, 2016.

Item 2

Description:

Revise Attachment B6 checklist to include quality assurance objectives (**QAOs**) for visual examination which were omitted from the B6 checklist.

Basis:

The change is classified as "An administrative and informational change", and is therefore a Class 1 notification pursuant to 20.4.1.900 NMAC (incorporating 40 CFR §270.42, Appendix I, B.1.a). This classification is used because the QAOs are already in Permit Attachment B3-4b and are not being added to the Permit. They were, however, left out of the B6 checklist.

Discussion:

At the Savannah River Site recertification audit in October 2008, the NMED requested that quality assurance objectives relative to precision, accuracy, completeness and comparability for visual examination which are in Permit Attachment B3-4b. be added to the Attachment B6 checklist in the Permit. These are identified as items 314 and 314a. This modification incorporates the guidance suggested by the NMED.

Revised Permit Text:

a.1. Attachment B6

314 Are process procedures in place to meet the following Quality Assurance Objectives?:

Precision

Precision is maintained by reconciling any discrepancies between the operator and the independent technical reviewer with regard to identification of waste matrix code, liquids in excess of TSDF-WAC limits, and compressed gases.

Accuracy

Accuracy is maintained by requiring operators to pass a comprehensive examination and demonstrate satisfactory performance in the presence of the VE expert during their initial qualification and subsequent requalification.

(Section B3-4b)

314a Completeness

A validated VE data form will be obtained for 100 percent of the waste containers subject to VE.

Comparability

The comparability of VE data from different operators shall be enhanced by using standardized VE procedures and operator qualifications.

(Section B3-4b)

Item 3

Description:

Revise the Permit to make the following changes regarding the Facility Transfer Vehicle (**FTV**):

1. add an additional FTV inspection procedure to Table D-1;
2. allow facility pallets to be stored on either the floor of the Waste Handling Building (**WHB**) or on facility pallet stands;
3. revise the FTV description; and
4. increase the capacity of the FTVs from 26,000 pounds to 30,000 pounds.

Basis:

The change is classified as "Equipment replacement or upgrading with functionally equivalent equipment" and is therefore a Class 1 notification pursuant to 20.4.1.900 NMAC (incorporating 40 CFR §270.42, Appendix I, A.3).

Discussion:

On May 7, 2004, the NMED approved a Class 2 permit modification which allowed the WIPP to use FTVs to move contact-handled waste in the WHB. The FTV is a generic term which includes vehicles which are either track mounted or operate with an on-board guidance system. The Permittees are making changes to the description of the FTV in the Permit to accommodate the final design and capacity.

On November 20, 2008, the Permittees submitted a Notification of Planned Alteration to the Permitted Facility to the NMED regarding the installation of pallet stands associated with the use of FTV's with on-board guidance systems. The first phase of this activity has been completed and was certified by a New Mexico registered Professional Engineer and submitted to the NMED on January 30, 2009. The Permit change described in this item adds these pallet stands to the Permit and adds a figure showing the configuration of those stands.

Revised Permit Text:

a.1. Attachment D, Table D-1

TABLE D-1
INSPECTION SCHEDULE/PROCEDURES

System/Equipment Name	Responsible Organization	Inspection [a] Frequency and Job Title of Personnel Normally Making Inspection	Procedure Number and Inspection Criteria
Air Intake Shaft Hoist	Underground Operations	Preoperational [c] See Lists 1b and c	WP 04-HO1004 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	PM000030 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
Facility Transfer Vehicle	Waste Handling	Preoperational See List 8	WP 05-WH1406 and WP 05-WH1408 Inspecting for Mechanical Operability[m], Deterioration[b], path clear of obstacles, and guards in the proper place
Exhaust Shaft	Underground Operations	Quarterly See List 1a	PM041099 Inspecting for Deterioration[b] and Leaks/Spills
Eye Wash and Shower Equipment	Equipment Custodian	Weekly See List 5	WP 12-IS1832 Inspecting for Deterioration[b]
		Semi-annually See List 2a	WP 12-IS1832 Inspecting for Deterioration[b] and Fluid Levels–Replace as Required
Fire Detection and Alarm System	Emergency Services	Semiannually See List 11	PM000027 Inspecting for Deterioration[b], Operability of indicator lights and, underground fuel station dry chemical suppression system. Inspection is per NFPA 72

b.1 Attachment M1, Section M1-1c(1)

Facility Transfer Vehicle

The facility transfer vehicle is a battery or electric powered automated vehicle that either operates on tracks or has an on-board guidance system that allows the vehicle to operate on the floor of the WHB. ~~An integrated or removable roller bed will be used to move pallets on and off the vehicle.~~ It is designed with a flat bed that has adjustable height capability and ~~will~~ may transfer waste payloads on facility pallets ~~to the storage areas be used to transfer the facility pallets on~~ or off the facility pallet ~~support~~ stands in the CH Bay storage area, and on and off ~~in~~ the waste shaft conveyance by raising and lowering the bed (see Figure M1-11).

c.1 Attachment M1, Table M1-2

CAPACITIES FOR EQUIPMENT	
CH Bay overhead bridge crane	12,000 lbs.
CH Bay forklifts	26,000 lbs.
Facility Pallet	25,000 lbs.
Adjustable center-of-gravity lift fixture	10,000 lbs.
Facility Transfer Vehicle	~~26~~ 30,000 lbs.
MAXIMUM GROSS WEIGHTS OF CONTAINERS	
Seven-pack of 55-gallon drums	7,000 lbs.
Four-pack of 85-gallon drums	4,500 lbs.
Three-pack of 100-gallon drums	3,000 lbs.
Ten-drum overpack	6,700 lbs.
Standard waste box	4,000 lbs.

d.1

Figure M1-33, Typical Pallet Stand - see Attachment B.

Attachment B

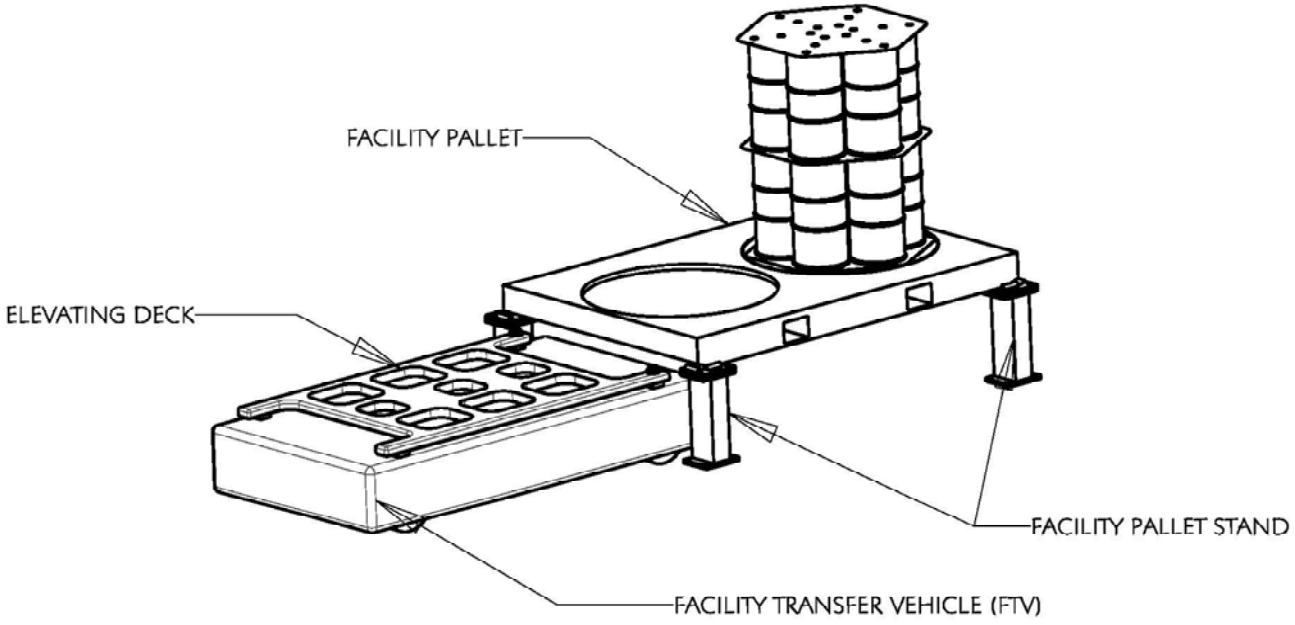

Figure M1-33
Typical Pallet Stand