



**Department of Energy**  
Carlsbad Field Office  
P. O. Box 3090  
Carlsbad, New Mexico 88221

**AUG 08 2011**

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

Subject: Notification of Class 1 Permit Modifications to the Hazardous Waste Facility  
Permit, Permit Number: NM4890139088-TSDF

Dear Mr. Kieling:

Enclosed is a Class 1 Permit Modification Notification to accomplish the following:

- Revise Table 4.1.1
- Revise Table G-1

We certify under penalty of law that this document and the enclosure were prepared under our direction or supervision in accordance with 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 George T. Basabilvazo at (575) 234-7488.

Sincerely,

Original Signatures on File

Edward Ziemianski, Acting Manager  
Carlsbad Field Office

M. F. Sharif, General Manager  
Washington TRU Solutions LLC

Enclosure

cc: w/enclosure  
B. Tongate, NMED \*ED  
T. Hall, NMED ED  
C. Walker, Trinity Engineering ED  
CBFO M&RC

\*ED denotes electronic distribution

**Class 1 Permit Modification Notifications**

**Revise Table 4.1.1  
Revise Table G-1**

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

**WIPP Permit Number - NM4890139088-TSDF**

**August 2011**

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## Overview of the Permit Modification Notifications

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

These PMNs are 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 Permit Part 1.3.1 (20.4.1.900 New Mexico Administrative Code (**NMAC**) incorporating Title 40 of the Code of Federal Regulations (40 **CFR**) §270.42(a)). The PMNs in this document are necessary to notify the New Mexico Environment Department (**NMED**) of a change which impacts the WIPP facility. The 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 has 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**

<b>Affected Permit Section</b>	<b>Change Description</b>	<b>Category</b>	<b>Attachment A Page #</b>
Permit Part 4, Table 4.1.1	Revise Table 4.1.1 to indicate final waste volume in Panel 5	A.1 A-4	
Attachment G, Table G-1	Revise Table G-1 to reflect the actual operations end and closure start dates and estimated closure end date for Panel 5. Revise the actual operations start date of Panel 6.	A.1 A-6	

## Item 1

### **Description:**

This modification will add the final waste volume to Panel 5 which is now filled.

### **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, A.1).

### **Discussion:**

Table 4.1.1 requires the final waste volume to be listed for all filled panels. Panel 5 is now full and that volume needs to be added to the Permit. This notice provides the written notification required by Permit Part 6.10.1.

### **Revised Permit Text:**

- a.1 Permit Part 4, Table 4.1.1

<b>Table 4.1.1 - Underground HWDUs</b>				
<b>Description<sup>1</sup></b>	<b>Waste Type</b>	<b>Maximum Capacity<sup>2</sup></b>	<b>Container Equivalent</b>	<b>Final Waste Volume</b>
Panel 1	CH TRU	636,000 ft <sup>3</sup> (18,000 m <sup>3</sup> )	370,800	ft <sup>3</sup> (10,500 m <sup>3</sup> )
Panel 2	CH TRU	636,000 ft <sup>3</sup> (18,000 m <sup>3</sup> )	635,600	ft <sup>3</sup> (17,998 m <sup>3</sup> )
Panel 3	CH TRU	662,150 ft <sup>3</sup> (18,750 m <sup>3</sup> )	603,600	ft <sup>3</sup> (17,092 m <sup>3</sup> )
Panel 4	CH TRU	662,150 ft <sup>3</sup> (18,750 m <sup>3</sup> )	503,500	ft <sup>3</sup> (14,258 m <sup>3</sup> )
	RH TRU	12,570 ft <sup>3</sup> (356 m <sup>3</sup> )	400 RH TRU Canisters	6,200 ft <sup>3</sup> (176 m <sup>3</sup> )
Panel 5	CH TRU	662,150 ft <sup>3</sup> (18,750 m <sup>3</sup> )		<u>562,457 ft<sup>3</sup></u> <u>(15,927 m<sup>3</sup>)</u>
	RH TRU	15,720 ft <sup>3</sup> (445 m <sup>3</sup> )	500 RH TRU Canisters	<u>5,403 ft<sup>3</sup></u> <u>(153 m<sup>3</sup>)</u>
Panel 6	CH TRU	662,150 ft <sup>3</sup> (18,750 m <sup>3</sup> )		
	RH TRU	18,860 ft <sup>3</sup> (534 m <sup>3</sup> )	600 RH TRU Canisters	
Panel 7	CH TRU	662,150 ft <sup>3</sup> (18,750 m <sup>3</sup> )		
	RH TRU	22,950 ft <sup>3</sup> (650 m <sup>3</sup> )	730 RH TRU Canisters	
Panel 8	CH TRU	662,150 ft <sup>3</sup> (18,750 m <sup>3</sup> )		
	RH TRU	22,950 ft <sup>3</sup> (650 m <sup>3</sup> )	730 RH TRU Canisters	
<b>Total</b>	<b>CH TRU</b>	<b>5,244,900 ft<sup>3</sup></b> <b>(148,500 m<sup>3</sup>)</b>		
	<b>RH TRU</b>	<b>93,050 ft<sup>3</sup></b> <b>(2,635 m<sup>3</sup>)</b>	<b>2960 RH TRU</b> <b>Canisters</b>	

<sup>1</sup> The area of each panel is approximately 124,150 ft<sup>2</sup> (11,533 m<sup>2</sup>).

<sup>2</sup> "Maximum Capacity" is the maximum volume of TRU mixed waste that may be emplaced in each panel. The maximum repository capacity of "6.2 million cubic feet of transuranic waste" is specified in the WIPP Land Withdrawal Act (Pub. L. 102-579, as amended)

## Item 2

### **Description:**

Revise Table G-1 to reflect the actual operations, and closure start dates and projected closure end date for Panel 5 and actual operations start date of Panel 6.

### **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, A.1).

### **Discussion:**

In Panel 5, operations ended on July 7, 2011 and the closure start date was July 7, 2011. In Panel 6, the operations start date was March 11, 2011. The projected closure end date is January 2012 (180 days following placement of final waste in Panel 5). These changes will be reflected in Table G-1.

### **Revised Permit Text:**

- a.1. Attachment G, Table G-1

**Table G-1  
Anticipated Earliest Closure Dates for the Underground HWDUs**

HWDU	OPERATIONS START	OPERATIONS END	CLOSURE START	CLOSURE END
PANEL 1	3/99*	3/03*	3/03*	7/03* SEE NOTE 5
PANEL 2	3/03*	10/05*	10/05*	3/06* SEE NOTE 5
PANEL 3	4/05*	2/07*	2/07*	2/07* SEE NOTE 6
PANEL 4	1/07*	5/09*	5/09*	8/09* SEE NOTE 6
PANEL 5	3/09*	<del>7</del> 4/11	<del>7</del> 2/11	<del>1</del> 12/8/44 SEE NOTE 5
PANEL 6	<del>3</del> 4/11 1/13		2/13	8/13
PANEL 7	1/13	1/15	2/15	8/15
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 60 days following notification to the NMED of closure.

NOTE 3: The point of closure end is defined as 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 40 years so that the preparation for closure may take longer than the time allotted in Figure G-2. If this extension is needed, it will be requested as an amendment to the Closure Plan.

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

NOTE 6: Final closure of Panels 3 and 4 will be completed as specified in this Permit no later than January 31, 2016.