

Department of Energy

Carlsbad Field Office P. O. Box 3090 Carlsbad, New Mexico 88221

Mr. Ricardo Maestas, Acting Bureau 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. Maestas:

Enclosed are Class 1 Permit Modification Notifications for the following items:

- Update Attachments A2, B, D, G, and K to Address Panel 7 Closure;
- Update Permit Attachment B, Appendix B1, Other Environmental Permits; and
- Update Permit Attachment D, Resource Conservation and Recovery Act Contingency Plan.

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. Michael Gerle at (575) 988-5372.

Sincerely,

Signatures on File

Mark Bollinger Manager Carlsbad Field Office Ken Harrawood Program Manager Salado Isolation Mining Contractors

Enclosure

cc: w/enclosure	
D. Biswell, NMED	*ED
A. Donahue, NMED	ED
M. McLean, NMED	ED
*ED denotes electronic distribution	

Class 1 Permit Modification Notifications

1. Update Attachments A2, B, D, G, and K to Address Panel 7 Closure

2. Update Permit Attachment B, Appendix B1, *Other Environmental Permits* and Permit Attachment G, *Closure Plan*

3. Update Permit Attachment D, RCRA Contingency Plan

Waste Isolation Pilot Plant Carlsbad, New Mexico

WIPP Permit Number - NM4890139088-TSDF

August 2023

Table of Contents

Table of Contents	i
Acronyms and Abbreviations	ii
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 Revised Permit Text:	A-7 A-8 A-8
Item 2 Description Basis Discussion Revised Permit Text:	A-31 A-31 A-31
Item 3 Description Basis Discussion Revised Permit Text:	A-41 A-41 A-41

Acronyms and Abbreviations

CFR	Code of Federal Regulations
NMAC NMED	New Mexico Administrative Code New Mexico Environment Department
Permit Permittees PMNs PMR	Waste Isolation Pilot Plant Hazardous Waste Facility Permit U.S. Department of Energy and Salado Isolation Mining Contractors LLC Permit Modification Notifications Permit Modification Request
RCRA	Resource Conservation and Recovery Act
WIPP	Waste Isolation Pilot Plant

Overview of the Permit Modification Notifications

This document contains three 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 Salado Isolation Mining Contractors 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 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

ltem No.	Affected Permit Section	Change Description	Category
Attachr Applica Attachr Attachr	ment A2, Geologic Repository Figure A2-1, Repository Horizon Figure A2-2-S#5, Spatial View of the Miscellaneous Unit and Waste Handling Facility (with S#5) ment B, Hazardous Waste Permit ation Part A Figure B3-1-S#5, Spatial View of the WIPP Facility (with S#5) Figure B3-2, Repository Horizon ment D, RCRA Contingency Plan Figure D-2-S#5, Spatial View of the WIPP Facility (with S#5) Figure D-2-S#5, Spatial View of the WIPP Facility (with S#5) Figure D-4, Underground Escape and Evacuation Map Figure D-7, Designated Underground Assembly Areas ment G, Closure Plan Section G-1e(1), Panel Closure Figure G-1, Location of Underground HWDUs and Anticipated WPC Locations Figure G-6, Approximate Locations of Boreholes in Relation to the WIPP Underground HWDUs ment K, Solid Waste Management WMU) and Area of Concern (AOC) Table K-4, Hazardous Waste Management Units	 This modification revises the Permit to address closure of Panel 7. In addition, the Permittees are making various editorial changes. These changes are described below: Permit Attachment A2, <i>Geologic Repository</i> Figure A2-1, <i>Repository Horizon</i> Revised the closure markers for Panel 7 from future to existing panel closures. Figure A2-2-S#5, <i>Spatial View of the Miscellaneous Unit and Waste Handling Facility (with S#5)</i> Changed "WASTE HOIST HEADFRAME OF THE WASTE HANDLING BUILDING" to "WASTE SHAFT CONVEYANCE HEADFRAME OF THE WASTE HANDLING BUILDING." Changed "2150" to "2,150." Changed "PANELS 1 THROUGH 10 (HAZARDOUS WASTE MANAGEMENT UNITS)" to "PANELS 1 THROUGH 10 (HAZARDOUS WASTE DISPOSAL UNITS)." Deleted "EXPERIMENTAL AREA (DEACTIVATED, SEPTEMBER 1996)." Deleted "PANEL Deleted "PANEL CLOSURE AREAS (TYPICAL)." Deleted the outline around the experimental area. Permit Attachment B, <i>Hazardous Waste Permit Application Part A</i> Figure B3-1-S#5, <i>Spatial View of the WIPP Facility (with S#5)</i> Changed "WASTE HOIST HEADFRAME OF THE WASTE HANDLING BUILDING" to "WASTE SHAFT CONVEYANCE HEADFRAME OF THE WASTE HANDLING BUILDING To "WASTE SHAFT CONVEYANCE HEADFRAME OF THE WASTE HANDLING BUILDING TO "WASTE SHAFT CONVEYANCE HEADFRAME OF THE WASTE HANDLING BUILDING," 	A.1

ltem No.	Affected Permit Section	Change Description	Category
		 Changed "2150" to "2,150." Changed "PANELS 1 THROUGH 10 (HAZARDOUS WASTE MANAGEMENT UNITS)" to "PANELS 1 THROUGH 10 (HAZARDOUS WASTE DISPOSAL UNITS)." 	
		 Deleted "EXPERIMENTAL AREA (DEACTIVATED, SEPTEMBER 1996)." Deleted "PANEL CLOSURE AREAS (TYPICAL)." 	
		 Deleted the outline around the experimental area. o Figure B3-2, <i>Repository Horizon</i> Revised the closure markers for Panel 7 from future to existing panel closures. 	
		 Permit Attachment D, RCRA Contingency Plan Figure D-2-S#5, Spatial View of the WIPP Facility (with S#5) 	
		 Changed "WASTE HOIST HEADFRAME OF THE WASTE HANDLING BUILDING" to "WASTE SHAFT CONVEYANCE HEADFRAME OF THE WASTE HANDLING BUILDING." 	
		 Changed "2150" to "2,150." Changed "PANELS 1 THROUGH 10 (HAZARDOUS WASTE MANAGEMENT UNITS)" to "PANELS 1 THROUGH 10 (HAZARDOUS WASTE DISPOSAL UNITS)." 	
		 Deleted "EXPERIMENTAL AREA (DEACTIVATED, SEPTEMBER 1996)." Deleted "PANEL 	
		 CLOSURE AREAS (TYPICAL)." Deleted the outline around the experimental area. 	
		 Figure D-4, Underground Escape and Evacuation Map 	

ltem No.	Affected Permit Section	Change Description	Category
		 Updated with the most current map from the Underground Escape and Evacuation Plan on file at the WIPP facility, which indicates the closure of Panel 7. 	
		 Figure D-7 Designated Underground Assembly Areas 	
		 Revised the closure markers for Panel 7 from future to existing panel closures. 	
		• Permit Attachment G, Closure Plan	
		• Section G-1e(1), Panel Closure	
		 Deleted "s 7 and" 	
		 Added "Substantial barriers were installed in Panel 7." 	
		 Figure G-1, Location of Underground HWDUs and Anticipated WPC Locations 	
		 Revised the closure markers for Panel 7 from future to existing panel closures. 	
		 Figure G-6, Approximate Locations of Boreholes in Relation to the WIPP Underground 	
		 Revised the closure markers for Panel 7 from future to existing panel closures. 	
		 Table G-1, Anticipated Earliest Closure Dates for the Underground HWDUs 	
		 Changed "7/21" to "10/22*" in the Operations End column to reflect the end date of operations in Panel 7. 	
		 Changed "8/21" to "10/22*" in the Closure Start column to reflect the start date of closure in Panel 7. 	
		 Changed "1/22" to "2/23*" in the Closure End column to reflect the actual end date of closure in Panel 7. 	
		 Changed "7/21" to "11/22*" in the Operations Start column to reflect the start date of waste 	

ltem No.	Affected Permit Section	Change Description	Category
		 emplacement operations in Panel 8. Changed "8/24" to "4/26" in the Operations End column to reflect the anticipated end date of waste emplacement operations in Panel 8. Changed "9/24" to "4/26" in the Closure Start column to reflect the anticipated commencement date of closure in Panel 8. Changed "2/25" to "10/26" in the Closure End column to reflect the anticipated end date of closure in Panel 8. Permit Attachment K, Solid Waste Management Unit (SWMU) and Area of Concern (AOC) Tables Table K-4, Hazardous Waste Management Units Added "This HWDU was closed February 2023." to Comments column for 	
2	Attachment B, Hazardous Waste Permit Application Part A, Appendix B1, Other Environmental Permits, Active Environmental Permits and Approvals for the Waste Isolation Pilot Plant as of January 2022 Attachment G, Closure Plan, Figure G-6, Approximate Locations of Boreholes in Relation to the WIPP Underground	SWMU 013i. This modification updates Permit Attachment B, Hazardous Waste Permit Application Part A, Appendix B1, Other Environmental Permits, Active Environmental Permits and Approvals for the Waste Isolation Pilot Plant as of January 2022, with the following changes: Changed the date in the title from "January 2022" to "August 2023." Line 4: Changed "07/03/86" to "08/04/11." Line 13: Changed "Active" to "Expired." Line 16: Deleted line Line 17: Changed "12/30/2021" to "01/28/22" and "12/30/2026" to "01/27/27." Line 19: Changed "2179" to "2008." Line 19: Changed "07/01/21" to "07/01/23" and "06/30/22" to "06/30/24." Line 30: Deleted line. Line 65: Changed "03/19/23" to "9/30/23" and added "Renewal in Process." Line 66: Changed "0" to "2", "05/21/20" to "04/01/23" and "03/31/23" to "03/31/26." Line 67: Changed "07/20/18" to "08/22/22" and "08/21/22" to "08/21/27."	

ltem No.	Affected Permit Section	Change Description	
		 Line 94: Changed "07/20/18" to "08/22/22" and "08/21/22" to "08/21/27." 	
		 Renumbered lines 17 through 96 to 16 through 94. 	
		This modification also updates Permit Attachment G, <i>Closure Plan,</i> Figure G-6, <i>Approximate Locations of</i> <i>Boreholes in Relation to the WIPP Underground</i> with the following changes:	
		 Changed the markers for WIPP-19 and ERDA-9 Boreholes from a circle to a triangle. 	
		 Added a triangle and "BOREHOLE (PLUGGED)" to the legend. 	
3	Attachment D, Table D-2, <i>Emergency</i> <i>Equipment Maintained at the Waste</i> <i>Isolation Plant</i>	This modification revises Permit Attachment D, <i>RCRA Contingency Plan</i> with the following changes:	B.6.b
	Attachment D, Figure D-4, Underground Escape and Evacuation Map	Table D-2, Emergency Equipment Maintained at the Waste Isolation Pilot Plant	
	Attachment D, Figure D-7, <i>Designated</i> <i>Underground Assembly Areas</i>	 Changed "S1000" to "S700" and "S1950" to "S1600" in the Location column of the Mine Pager Phones and Miners First Aid Station rows. 	
		 Added "E300 Maintenance Shop" in the Location column of the Mine Pager Phones row. 	
		Figure D-4, Underground Escape and Evacuation Map	
		 Updated with the most current map from the Underground Escape and Evacuation Plan on file at the WIPP facility. 	
		 Figure D-7, Designated Underground Assembly Areas 	
		 Moved underground assembly areas from S1000 to S700 and S1950 to S1600. 	
		 Added an underground assembly area to E300. 	

Item 1

Description

This modification revises the Permit to address closure of Panel 7. In addition, the Permittees are making various editorial changes. These changes are described below:

- Permit Attachment A2, *Geologic Repository*
 - Figure A2-1, *Repository Horizon*
 - Revised the closure markers for Panel 7 from future to existing panel closures.
 - Figure A2-2-S#5, Spatial View of the Miscellaneous Unit and Waste Handling Facility (with S#5)
 - Changed "WASTE HOIST HEADFRAME OF THE WASTE HANDLING BUILDING" to "WASTE SHAFT CONVEYANCE HEADFRAME OF THE WASTE HANDLING BUILDING."
 - Changed "2150" to "2,150."
 - Changed "PANELS 1 THROUGH 10 (HAZARDOUS WASTE MANAGEMENT UNITS)" to "PANELS 1 THROUGH 10 (HAZARDOUS WASTE DISPOSAL UNITS)."
 - Deleted "EXPERIMENTAL AREA (DEACTIVATED, SEPTEMBER 1996)."
 - Deleted "PANEL CLOSURE AREAS (TYPICAL)."
 - Deleted the outline around the experimental area.
- Permit Attachment B, Hazardous Waste Permit Application Part A
 - Figure B3-1-S#5, Spatial View of the WIPP Facility (with S#5)
 - Changed "WASTE HOIST HEADFRAME OF THE WASTE HANDLING BUILDING" to "WASTE SHAFT CONVEYANCE HEADFRAME OF THE WASTE HANDLING BUILDING."
 - Changed "2150" to "2,150."
 - Changed "PANELS 1 THROUGH 10 (HAZARDOUS WASTE MANAGEMENT UNITS)" to "PANELS 1 THROUGH 10 (HAZARDOUS WASTE DISPOSAL UNITS)."
 - Deleted "EXPERIMENTAL AREA (DEACTIVATED, SEPTEMBER 1996)."
 - Deleted "PANEL CLOSURE AREAS (TYPICAL)."
 - Deleted the outline around the experimental area.
 - Figure B3-2, *Repository Horizon*
 - Revised the closure markers for Panel 7 from future to existing panel closures.
- Permit Attachment D, RCRA Contingency Plan
 - Figure D-2-S#5, Spatial View of the WIPP Facility (with S#5)
 - Changed "WASTE HOIST HEADFRAME OF THE WASTE HANDLING BUILDING" to "WASTE SHAFT CONVEYANCE HEADFRAME OF THE WASTE HANDLING BUILDING."
 - Changed "2150" to "2,150."
 - Changed "PANELS 1 THROUGH 10 (HAZARDOUS WASTE MANAGEMENT UNITS)" to "PANELS 1 THROUGH 10 (HAZARDOUS WASTE DISPOSAL UNITS)."
 - Deleted "EXPERIMENTAL AREA (DEACTIVATED, SEPTEMBER 1996)."
 - Deleted "PANEL CLOSURE AREAS (TYPICAL)."
 - Deleted the outline around the experimental area.
 - Figure D-4, *Underground Escape and Evacuation Map*

- Updated with the most current map from the Underground Escape and Evacuation Plan on file at the WIPP facility, which indicates the closure of Panel 7.
- Figure D-7, *Designated Underground Assembly Areas*
 - Revised the closure markers for Panel 7 from future to existing panel closures.
- Permit Attachment G, *Closure Plan*
 - Section G-1e(1), *Panel Closure*
 - Deleted "s 7 and"
 - Added "Substantial barriers were installed in Panel 7."
 - Figure G-1, Location of Underground HWDUs and Anticipated WPC Locations
 - Revised the closure markers for Panel 7 from future to existing panel closures.
 - Figure G-6, Approximate Locations of Boreholes in Relation to the WIPP Underground
 - Revised the closure markers for Panel 7 from future to existing panel closures.
 - Table G-1, Anticipated Earliest Closure Dates for the Underground HWDUs
 - Changed "7/21" to "10/22*" in the Operations End column to reflect the end date of operations in Panel 7.
 - Changed "8/21" to "10/22*" in the Closure Start column to reflect the start date of closure in Panel 7.
 - Changed "1/22" to "2/23*" in the Closure End column to reflect the actual end date of closure in Panel 7.
 - Changed "7/21" to "11/22*" in the Operations Start column to reflect the start date of waste emplacement operations in Panel 8.
 - Changed "8/24" to "4/26" in the Operations End column to reflect the anticipated end date of waste emplacement operations in Panel 8.
 - Changed "9/24" to "4/26" in the Closure Start column to reflect the anticipated commencement date of closure in Panel 8.
 - Changed "2/25" to "10/26" in the Closure End column to reflect the anticipated end date of closure in Panel 8.
- Permit Attachment K, Solid Waste Management Unit (SWMU) and Area of Concern (AOC) Tables
 - Table K-4, Hazardous Waste Management Units
 - Added "This HWDU was closed February 2023." to Comments column for SWMU 013i.

Basis

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

Discussion

The Permittees are updating the Permit with current information relative to the closure of Panel 7. The Panel was closed on February 11, 2023, in accordance with Permit Attachment G, *Closure Plan,* and Permit Attachment G1, *WIPP Panel Closure Design Description and Specifications*.

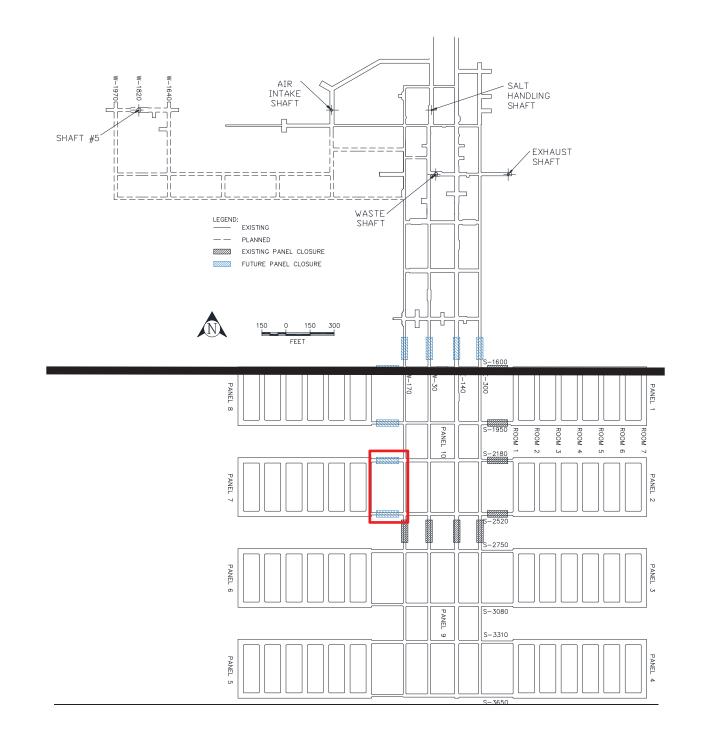
The Permittees are updating applicable Permit figures to reflect the change from future panel closure locations to existing panel closure locations, remove unnecessary panel closure labels, and make editorial changes. Additionally, Permit text is being updated to reflect the closure of Panel 7 and the start of operations in Panel 8.

Figures A2-1, B3-2, D-4, D-7, G-1 and G-6 are being updated with the current closure configuration for Panel 7. The Permittees are making editorial changes to remove unnecessary labels from Figures A2-2-S#5, B3-1-S#5, and D-2-S#5; the changes being made to these figures will ensure consistency with the changes made to related figures in the Class 1 PMN, *Update Panel Closure Information*, dated December 12, 2019, which modified the Permit to reflect the closure of Panels 3 through 6. The figures with "-S#5" in the title were added to the Permit via a Class 3 Permit Modification Request (**PMR**), *Excavation of a New Shaft and Associated Connecting Drifts*, dated August 15, 2019. Since the Class 1 PMN was submitted after the submittal of the Class 3 PMR, and prior to its approval, inconsistencies were created regarding the format of Permit figures with "-S#5" versions. This PMN corrects those inconsistencies. For clarity, red boxes are provided on the versions of the figures being replaced to depict the exact areas where changes are being made with the exception of Figure D-4 since that figure was updated in its entirety.

Permit Attachment G, Table G-1, *Anticipated Earliest Closure Dates for the Underground HWDUs*, and Permit Attachment K, Table K-4, *Hazardous Waste Management Units*, are being updated to reflect the actual closure end date for Panel 7. Permit Attachment G, Table G-1, is also being revised to reflect the actual operations end and closure start dates for Panel 7 as well as the actual operations start date and anticipated operations end, closure start, and closure end dates for Panel 8. A minor revision was made to Permit Attachment G, Section G-1e(1), *Panel Closure*, to indicate that the substantial barriers were installed in Panel 7.

These changes are needed to update the Permit to reflect the closure of Panel 7 and ensure the Permit figures are consistent. These changes ensure the accuracy of the Permit and that consistency is maintained with Permit figures.

Revised Permit Text:



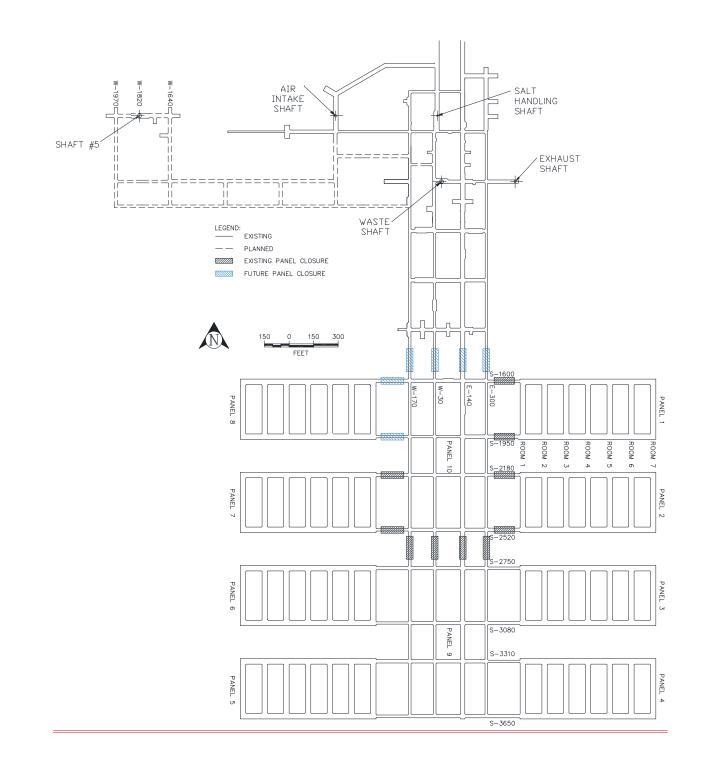
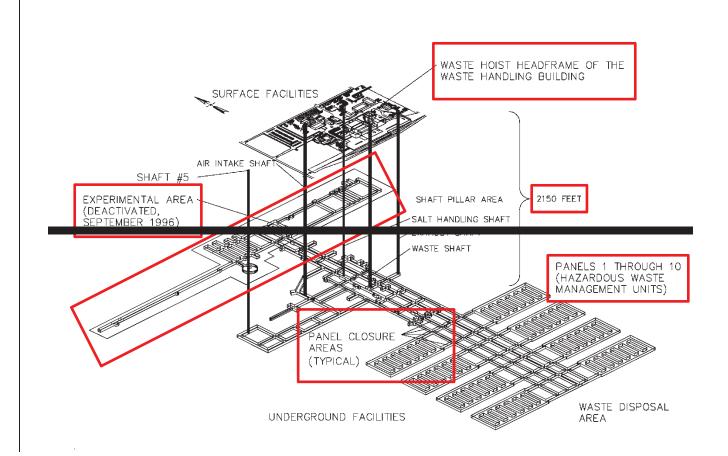


Figure A2-1 Repository Horizon



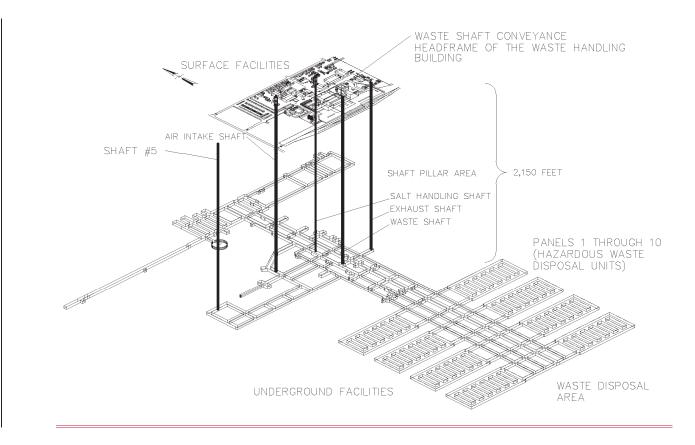
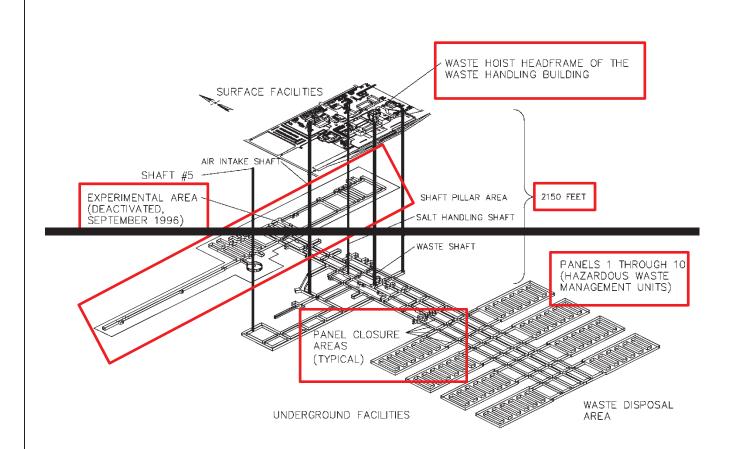


Figure A2-2-S#5 Spatial View of the Miscellaneous Unit and Waste Handling Facility (with S#5)



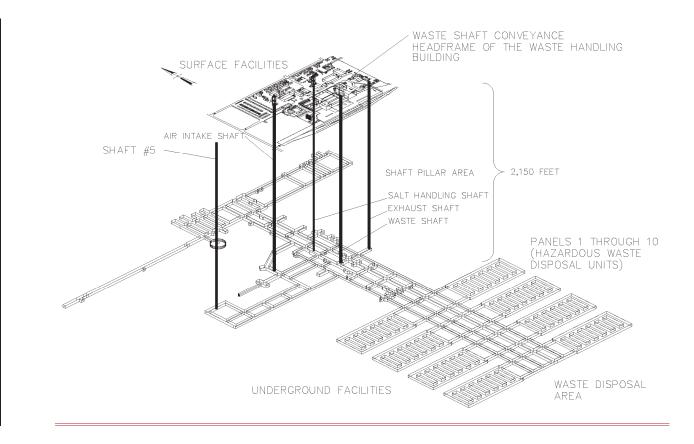
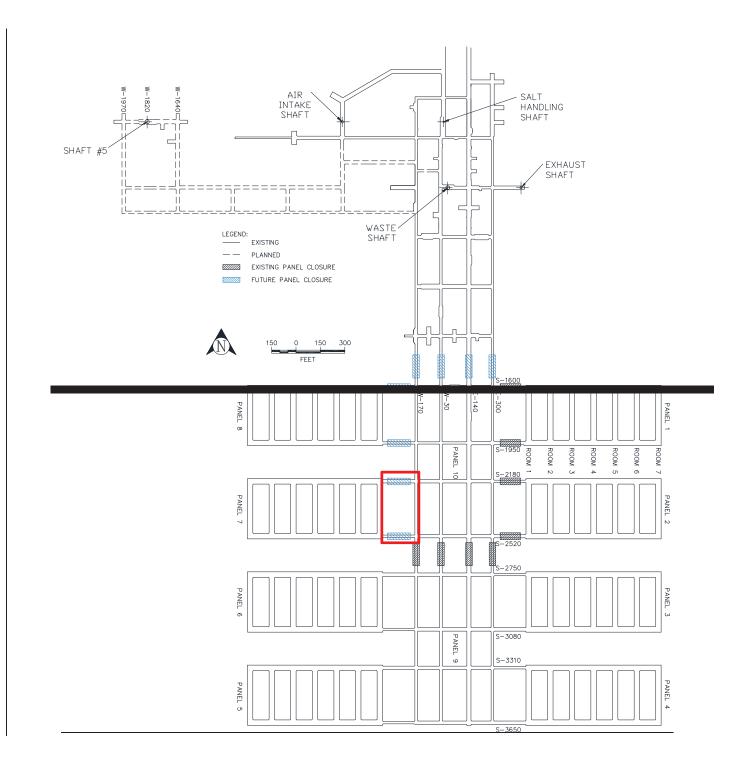


Figure B3-1-S#5 Spatial View of the WIPP Facility (with S#5)



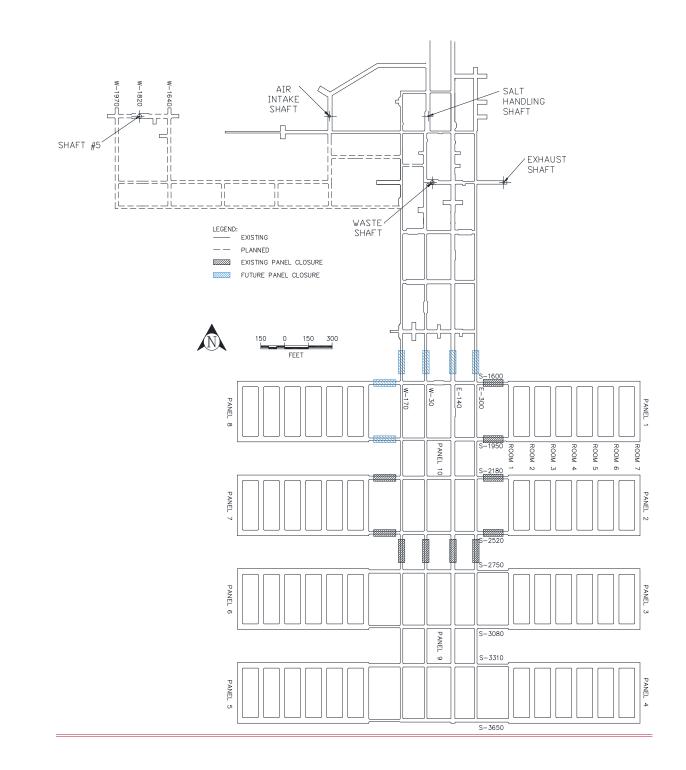
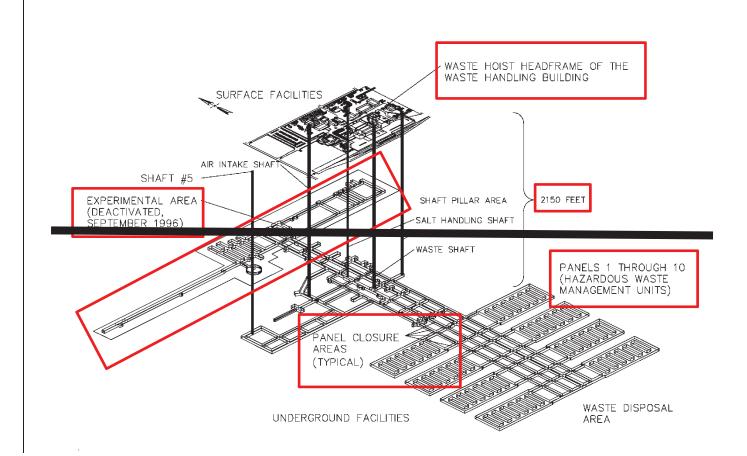


Figure B3-2 Repository Horizon



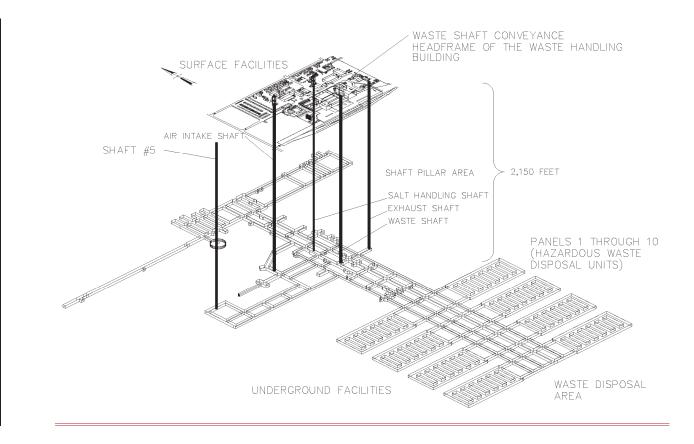
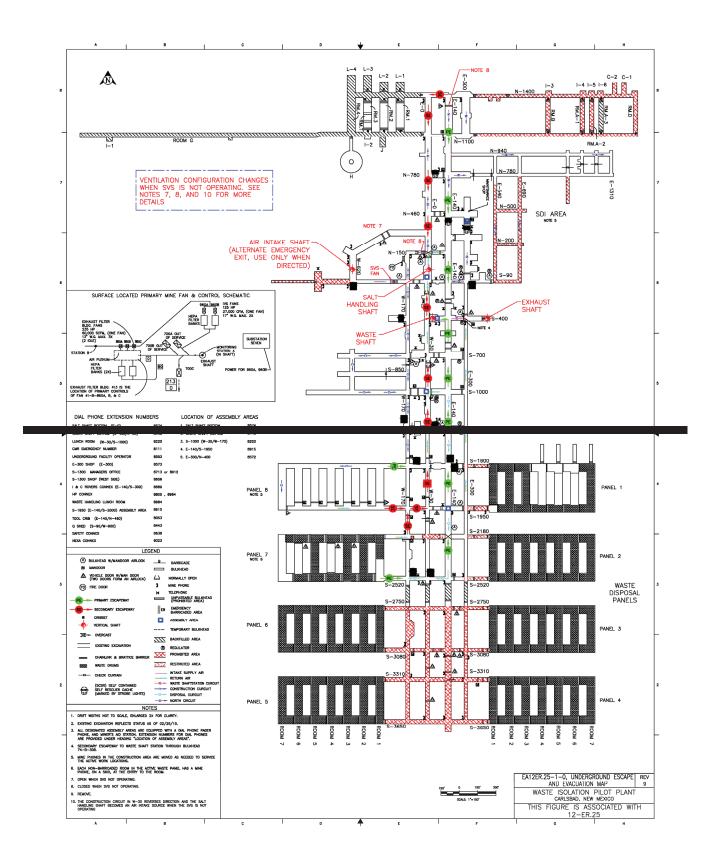


Figure D-2-S#5 Spatial View of the WIPP Facility (with S#5)



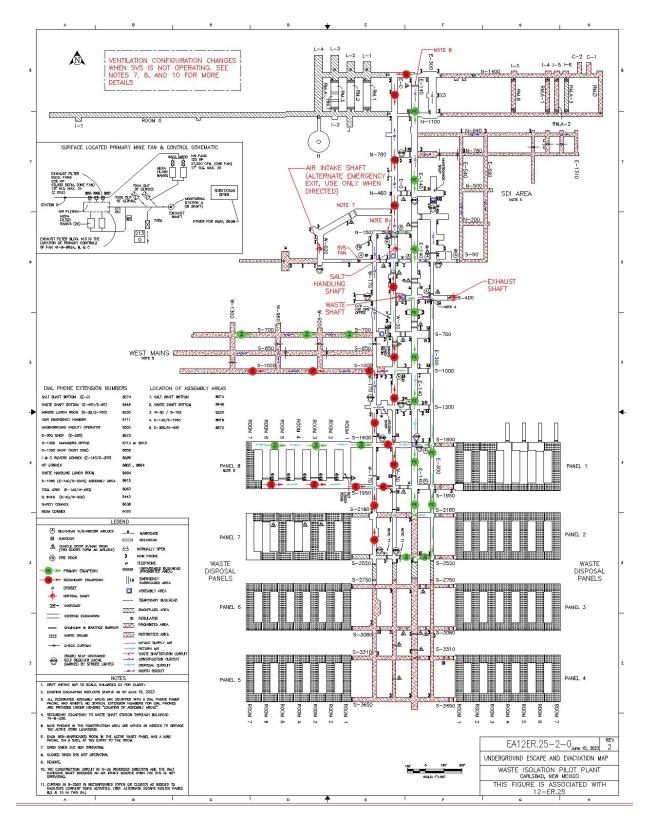
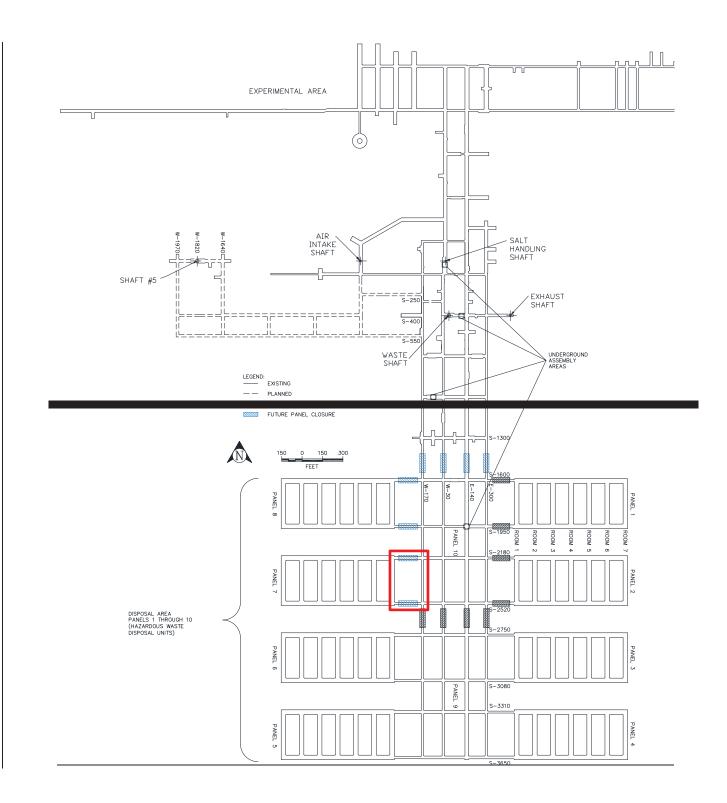


Figure D-4 Underground Escape and Evacuation Map



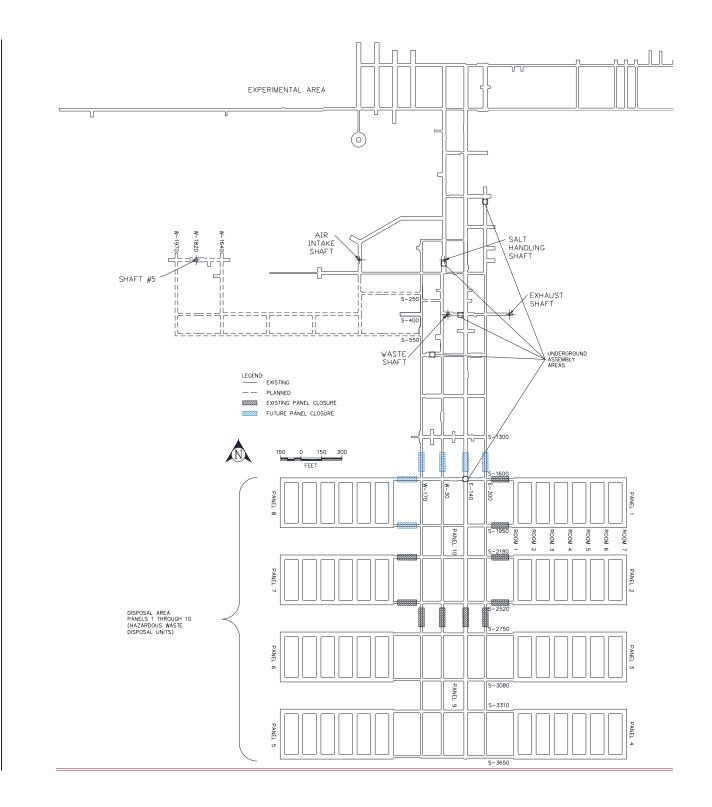
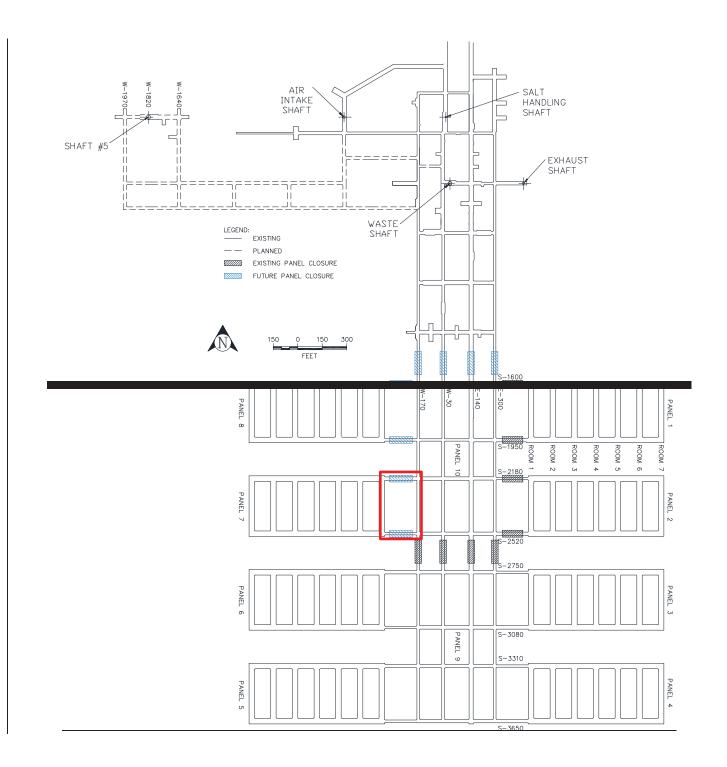


Figure D-7 Designated Underground Assembly Areas

G-1e(1) Panel Closure

Figures G-4, G-4a, and G-5 show diagrams of the panel closure design, the substantial barrier, and installation envelopes. Permit Attachment G1 provides the detailed design and the design analysis for the panel closure system. The Permittees shall use bulkheads as specified in Attachment G1 for the closure of filled panels. A run-of-mine (**ROM**) salt component will be included in the closure for Panel 9 and Panel 10. The substantial barrier in Figure G-4a will be installed in Panels 7 and 8. Substantial barriers were installed in Panel 7.



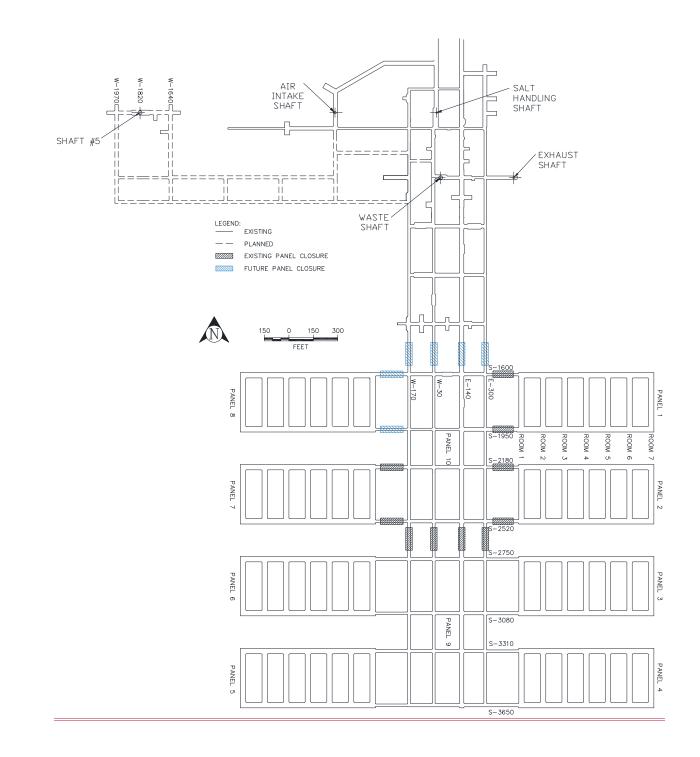
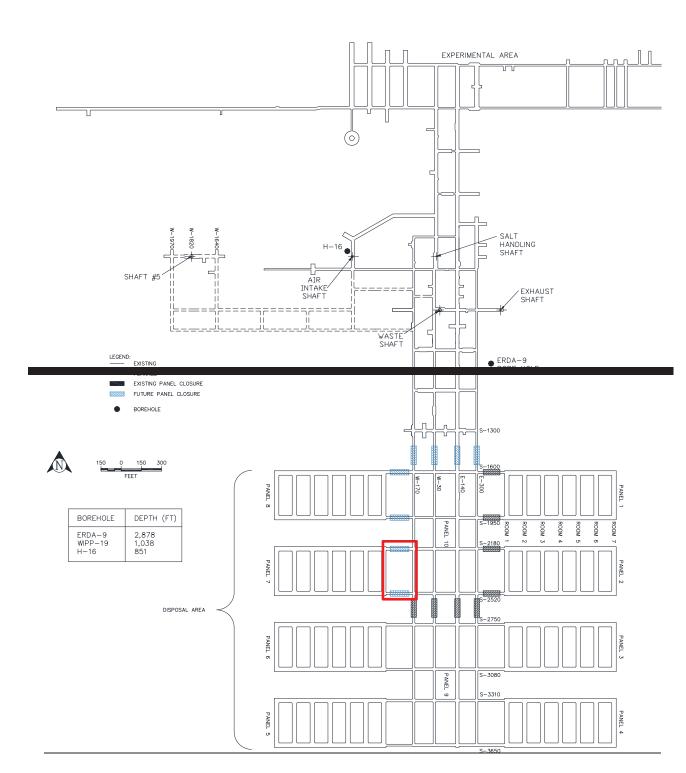


Figure G-1 Location of Underground HWDUs and Anticipated Closure Locations





▲ WIPP-19

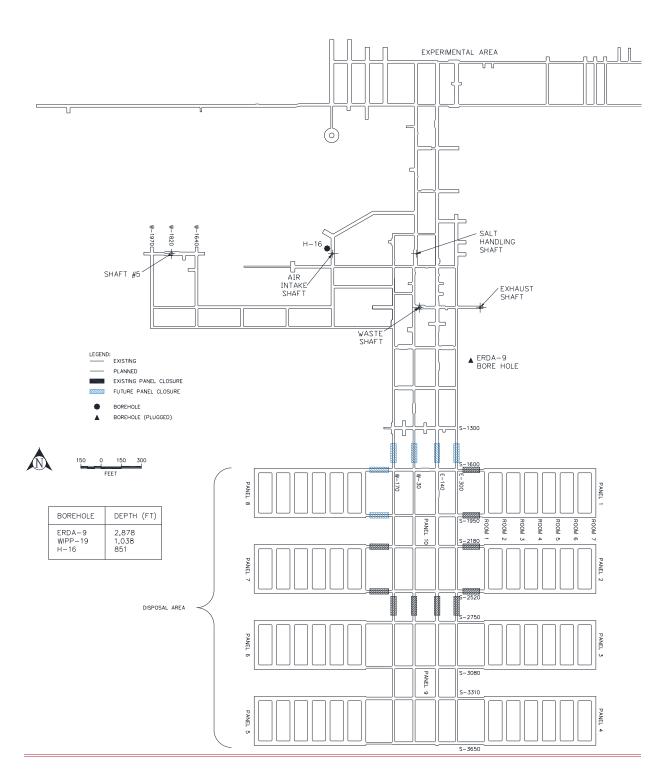


Figure G-6 Approximate Locations of Boreholes in Relation to the WIPP Underground

HWDU	OPERATIONS START	OPERATIONS END	CLOSURE START ^a	CLOSURE END ^b
PANEL 1	3/99*	3/03*	3/03*	5/20*
PANEL 2	3/03*	10/05*	10/05*	5/20*
PANEL 3	4/05*	2/07*	2/07*	8/19*
PANEL 4	1/07*	5/09*	5/09*	8/19*
PANEL 5	3/09*	7/11*	7/11*	8/19*
PANEL 6	3/11*	1/14*	1/14*	8/19*
PANEL 7	9/13*	<u>10/22*</u> 7/21	<u>10/22*</u> 8/21	<u>2/23*</u> 1/22
PANEL 8	<u>11/22*</u> 7/21	<u>4/26</u> 8/24	<u>4/26</u> 9/24	<u>10/26</u> 2/25
PANEL 9**	N/A	N/A	N/A	N/A
PANEL 10	1/28	9/30	10/30	SEE NOTE 1

 Table G-1

 Anticipated Earliest Closure Dates for the Underground HWDUs

* Actual month and year

**Panel 9 was not used for TRU mixed waste disposal. Closures for Panels 3, 4, 5 and 6 were placed in the northsouth mains (E-300, E-140, W-30 and W-170), as shown in Figure G-1, pursuant to Section G-1e(1).

^a The point of closure start is defined as 60 days following notification to the NMED of closure.

^b The point of closure end is defined as 180 days following placement of final waste in the panel.

NOTE 1: 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.

N/A--Not Applicable

Unit ID Number	Unit Description	Comments
SWMU 013a	Waste Handling Building Unit	
SWMU 013b	Parking Area Unit	
SWMU 013c	Underground Hazardous Waste Disposal Unit (HWDU) - Panel 1	This HWDU was closed May 2020.
SWMU 013d	Underground HWDU – Panel 2	This HWDU was closed May 2020.
SWMU 013e	Underground HWDU – Panel 3	This HWDU was closed Augus 2019.
SWMU 013f	Underground HWDU – Panel 4	This HWDU was closed Augus 2019.
SWMU 013g	Underground HWDU – Panel 5	This HWDU was closed Augus 2019.
SWMU 013h	Underground HWDU – Panel 6	This HWDU was closed Augus 2019.
SWMU 013i	Underground HWDU – Panel 7	This HWDU was closed Februa 2023.
SWMU 013j	Underground HWDU – Panel 8	

Table K-4 Hazardous Waste Management Units

Item 2

Description

This modification updates Permit Attachment B, *Hazardous Waste Permit Application Part A*, Appendix B1, *Other Environmental Permits, Active Environmental Permits and Approvals for the Waste Isolation Pilot Plant as of January 2022,* with the following changes:

- Changed the date in the title from "January 2022" to "August 2023."
- Line 4: Changed "07/03/86" to "08/04/11."
- Line 13: Changed "Active" to "Expired."
- Line 16: Deleted line.
- o Line 17: Changed "12/30/2021" to "01/28/22" and "12/30/2026" to "01/27/27."
- Line 19: Changed "2179" to "2008."
- Line 19: Changed "07/01/21" to "07/01/23" and "06/30/22" to "06/30/24."
- Line 30: Deleted line.
- Line 65: Changed "03/19/23" to "09/30/23" and added "Renewal in Process."
- Line 66: Changed "0" to "2", "05/21/20" to "04/01/23" and "03/31/23" to "03/31/26."
- Line 67: Changed "03/02/20" to "12/16/22" and "12/31/22" to "12/31/25."
- Line 93: Changed "07/20/18" to "08/22/22" and "08/21/22" to "08/21/27."
- Line 94: Changed "07/20/18" to "08/22/22" and "08/21/22" to "08/21/27."
- Renumbered lines 17 through 96 to 16 through 94.

This modification also updates Permit Attachment G, *Closure Plan*, Figure G-6, *Approximate Locations of Boreholes in Relation to the WIPP Underground* with the following changes:

- Changed the markers for WIPP-19 and ERDA-9 Boreholes from a circle to a triangle.
- Added a triangle and "BOREHOLE (PLUGGED)" to the legend.

Basis

This change is classified as "Administrative and informational changes" 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 updates Permit Attachment B, Appendix B1 with the most current information regarding the list of other environmental permits. The Permittees are updating the date in the table title. Lines 4, 19, 65, 66, 67, 93, and 94 are being updated with respective renewed permit information. Line 13 is being updated to show the permit is expired; the Permittees are in the process of obtaining a renewal for this permit. Line 16 is being deleted since this permit has been relinquished. Line 17 is being updated with the current permit issuance date. Since there was a delay in publishing the permit on line 17, the date is being updated with the date on the published permit. The original date was based on the date of the approval letter from the NMED. Line 30 is being removed since the well has been plugged and abandoned and is, therefore, no longer active. Line numbers have been renumbered to reflect the deletion of lines 16 and 30. Figure G-6 was also updated since the ERDA-9 and WIPP-19 boreholes have been plugged and abandoned. These changes are needed to keep the Permit current and ensure accuracy of the Permit text.

Revised Permit Text:

APPENDIX B1 OTHER ENVIRONMENTAL PERMITS

Active Environmental Permits and Approvals for the Waste Isolation Pilot Plant as of <u>August 2023</u>January 2022

	Granting Agency	Type of Permit	Permit/Right of Way Number	Granted/ Submitted *	Expiration	Current Permit Status
1.	Department of the Interior, Bureau of Land Management	Right-of-Way for Domestic Water Pipeline	NM053809	05/15/06 (City of Carlsbad, NM)	In Perpetuity	Active
2.	Department of the Interior, Bureau of Land Management	Right-of-Way for the North Access Road	NM055676	08/23/83	In Perpetuity	Active
3.	Department of the Interior, Bureau of Land Management	Right-of-Way for WIPP Railroad Spur and Maintenance Road	NM055699	09/27/83	In Perpetuity	Active
4.	Department of the Interior, Bureau of Land Management	Right-of-Way for Dosimetry and Aerosol Sampling Sites	NM063136	<u>08/04/11</u> 07/03/ 86	12/31/40	Active
5.	Department of the Interior, Bureau of Land Management	Right-of-Way for Seven Subsidence Monuments	NM065801	11/07/86	None	Active
6.	Department of the Interior, Bureau of Land Management	Right-of-Way for telephone cable	NM046092	09/04/81 (Valor Telecom)	12/31/40	Active
7.	Department of the Interior, Bureau of Land Management	Right-of-Way for 115 KV Electric Transmission Line	NM043203	10/19/81 (Xcel Energy)	12/31/40	Active
8.	Department of the Interior, Bureau of Land Management	Right-of-Way for South Access Road (includes Rally Point)	NM123703	01/27/10	12/31/39	Active
9.	Department of the Interior, Bureau of Land Management	Right-of-Way for Mosaic (Duval Mine Site-Nash Draw) telephone line	NM060174	03/08/85 (Valor Telecom)	03/08/35	Active
10.	Department of the Interior, Bureau of Land Management	Right-of-Way for groundwater monitor wells/pads	NM108365	08/30/02	08/30/32	Active
11.	Department of the Interior, Bureau of Land Management	Right-of-Way for Monitoring Well C-2664 (Cabin Baby)	NM107944	04/23/02	04/23/32	Active

	Granting Agency	Type of Permit	Permit/Right of Way Number	Granted/ Submitted *	Expiration	Current Permit Status
12.	Department of the Interior, Bureau of Land Management	Right-of-Way for Wells C-2725 (H- 4A), C-2775 (H-4B), & C-2776 (H- 4C)	NM-6-5 Cooperative Agreement	04/27/78	None	Active
13.	New Mexico State Land Office Commissioner of Public Lands	Right-of-Way easement for accessing state trust lands in Eddy & Lea Counties	RW-25430	09/28/04	10/31/18	ExpiredActive Renewal in Process
14.	Department of Interior, Bureau of Land Management	Right of Way for Buried Fiber Optics Line	NM113339	08/09/05 (Valor Telecom)	12/31/34	Active
15.	Department of Interior, Bureau of Land Management	Right of Way for South Access Road Fence	NM094304	03/15/95	None	Active
16.	New Mexico State Land Office Commissioner of Public Lands	Right of Way for Dosimetry and Aerosol Sampling Sites, Angel Ranch	RW 22789	10/03/85	10/03/20	Active Renewal in Process
<u>16</u> 17.	New Mexico Environment Department Groundwater Quality Bureau	Discharge Permit	DP-831	<u>01/28/22</u> 1 2/30/ 202 1	<u>01/27/27</u> 12/30/20 26	Active
<u>17</u> 18.	New Mexico Environment Department Air Quality Bureau	Operating Permit for two backup diesel generators	310-M-2	12/07/93	None	Active
<u>18</u> 19.	New Mexico Environment Department Petroleum Storage Tank Bureau	Petroleum Storage Tank Registration Certificate	Registration Number <u>2008</u> 2179 Facility Number 31539	<u>07/02/23</u> 07/01/ 21	<u>06/30/24</u> 06/30/22	Active
<u>19</u> 20.	Office of New Mexico State Engineer	Monitoring Well C-2811	C-2811	03/02/01	None	Active
<u>20</u> 21.	Office of New Mexico State Engineer	WQSP-1 Well	C-2413	10/21/96	None	Active
<u>21</u> 22.	Office of New Mexico State Engineer	WQSP-2 Well	C-2414	10/21/96	None	Active
<u>22</u> 23.	Office of New Mexico State Engineer	WQSP-3 Well	C-2415	10/21/96	None	Active
<u>23</u> 24.	Office of New Mexico State Engineer	WQSP-4 Well	C-2416	10/21/96	None	Active
<u>24</u> 25.	Office of New Mexico State Engineer	WQSP-5 Well	C-2417	10/21/96	None	Active

	Granting Agency	Type of Permit	Permit/Right of Way Number	Granted/ Submitted *	Expiration	Current Permi Status
<u>25</u> 26.	Office of New Mexico State Engineer	WQSP-6 Well	C-2418	10/21/96	None	Active
<u>26</u> 27.	Office of New Mexico State Engineer	WQSP-6a Well	C-2419	10/21/96	None	Active
<u>27</u> 28.	Office of New Mexico State Engineer	Monitoring Well CB-1	C-2664	07/30/99	None	Active
<u>28</u> 29.	Office of New Mexico State Engineer	Monitoring Well DOE-2	C-2682	04/17/00	None	Active
30.	Office of New Mexico State Engineer	Monitoring Well ERDA-9	C-2752	11/06/00	None	Active
<u>29</u> 31.	Office of New Mexico State Engineer	Monitoring Well H-2b1	C-2758	11/06/00	None	Active
<u>30</u> 32.	Office of New Mexico State Engineer	Monitoring Well H-3b1	C-2764	11/06/00	None	Active
<u>31</u> 33.	Office of New Mexico State Engineer	Monitoring Well H-3d	C-3207	11/06/00	None	Active
<u>32</u> 34.	Office of New Mexico State Engineer	Monitoring Well H-4c	C-2776	11/06/00	None	Active
<u>33</u> 35.	Office of New Mexico State Engineer	Monitoring Well H-5bR	C-2745-POD2	02/07/19	None	Active
<u>34</u> 36.	Office of New Mexico State Engineer	Monitoring Well H-6c	C-2750	11/06/00	None	Active
<u>35</u> 37.	Office of New Mexico State Engineer	Monitoring Well H-8a	C-2780	11/06/00	None	Active
<u>36</u> 38.	Office of New Mexico State Engineer	Monitoring Well H-9c	C-2784	11/06/00	None	Active
<u>37</u> 39.	Office of New Mexico State Engineer	Monitoring Well H-10a	C-2779	11/06/00	None	Active
<u>38</u> 40.	Office of New Mexico State Engineer	Monitoring Well H-11b2	C-2687	04/17/00	None	Active
<u>39</u> 41.	Office of New Mexico State Engineer	Monitoring Well H-14	C-2766	11/06/00	None	Active
<u>40</u> 4 2 .	Office of New Mexico State Engineer	Monitoring Well H-15	C-2685	04/17/00	None	Active

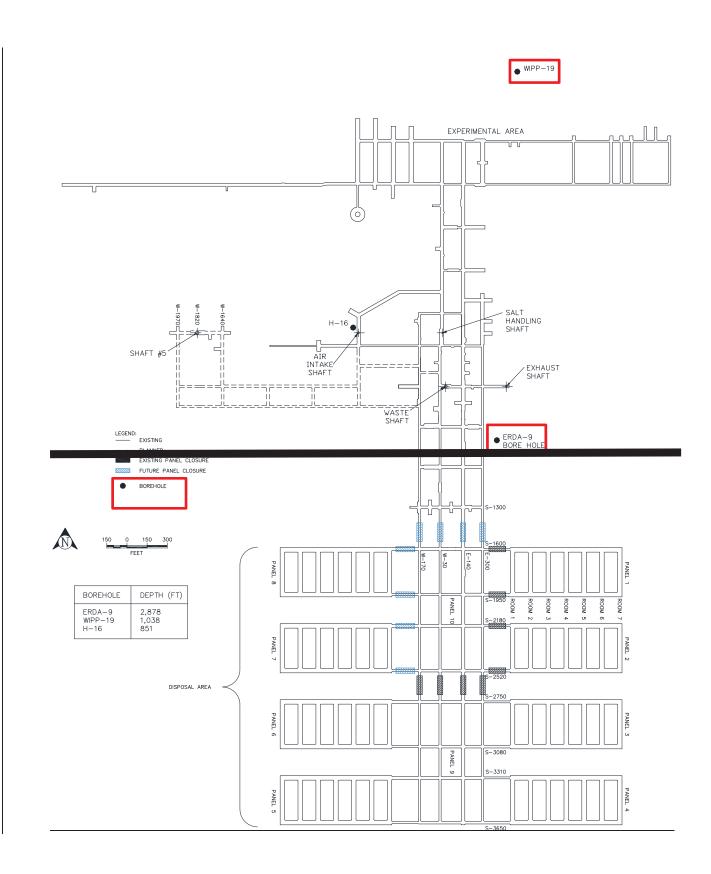
	Granting Agency	Type of Permit	Permit/Right of Way Number	Granted/ Submitted *	Expiration	Current Permi Status
<u>41</u> 4 3 .	Office of New Mexico State Engineer	Monitoring Well H-16	C-2753	11/06/00	None	Active
<u>42</u> 44.	Office of New Mexico State Engineer	Monitoring Well H-18	C-2683	04/17/00	None	Active
<u>43</u> 45.	Office of New Mexico State Engineer	Monitoring Well H-19b0	C-2420	01/25/95	None	Active
<u>44</u> 4 6 .	Office of New Mexico State Engineer	Monitoring Well H-19b2	C-2421	01/25/95	None	Active
<u>45</u> 47.	Office of New Mexico State Engineer	Monitoring Well H-19b3	C-2422	01/25/95	None	Active
<u>46</u> 48.	Office of New Mexico State Engineer	Monitoring Well H-19b4	C-2423	01/25/95	None	Active
<u>47</u> 4 9 .	Office of New Mexico State Engineer	Monitoring Well H-19b5	C-2424	01/25/95	None	Active
<u>48</u> 50.	Office of New Mexico State Engineer	Monitoring Well H-19b6	C-2425	01/25/95	None	Active
<u>49</u> 51.	Office of New Mexico State Engineer	Monitoring Well H-19b7	C-2426	01/25/95	None	Active
<u>50</u> 52.	Office of New Mexico State Engineer	Monitoring Well WIPP-18	C-2684	04/17/00	None	Active
<u>51</u> 53.	Office of New Mexico State Engineer	Monitoring Well H-6bR	C-3362	12/27/07	None	Active
<u>52</u> 54.	Office of New Mexico State Engineer	Monitoring Well H-15R	C-3361	12/27/07	None	Active
<u>53</u> 55.	Office of New Mexico State Engineer	Monitoring Well SNL-2	C-2948	02/14/03	None	Active
<u>54</u> 56.	Office of New Mexico State Engineer	Monitoring Well SNL-9	C-2950	02/14/03	None	Active
<u>55</u> 57.	Office of New Mexico State Engineer	Monitoring Well SNL-12	C-2954	02/25/03	None	Active
<u>56</u> 58.	Office of New Mexico State Engineer	Monitoring Well SNL-1	C-2953	02/25/03	None	Active
<u>57</u> 59.	Office of New Mexico State Engineer	Monitoring Well SNL-3	C-2949	02/14/03	None	Active

_	Granting Agency	Type of Permit	Permit/Right of Way Number	Granted/ Submitted *	Expiration	Current Permit Status
<u>58</u> 60.	Office of New Mexico State Engineer	Monitoring Well SNL-5	C-3002	10/01/03	None	Active
<u>59</u> 61.	Office of New Mexico State Engineer	Monitoring Well IMC-461	C-3015	11/25/03	None	Active
<u>60</u> 62.	Office of New Mexico State Engineer	Monitoring Well SNL-10	C-3221	07/26/05	None	Active
<u>61</u> 63.	Office of New Mexico State Engineer	Monitoring Well SNL-16	C-3220	07/26/05	None	Active
<u>62</u> 64.	Office of New Mexico State Engineer	Monitoring Well SNL-17	C-3222	07/26/05	None	Active
<u>63</u> 65.	US Environmental Protection Agency Region 6	Conditions of Approval for Disposal of PCB/TRU and PCB/TRU Mixed Waste at the US Department of Energy (DOE) Waste Isolation Pilot Plant (WIPP) Carlsbad, New Mexico	N/A	03/19/18	<u>09/30/23</u> 03/19/23	Active <u>Renewal</u> <u>Process</u>
<u>64</u> 66.	US Fish and Wildlife Service	Special Purpose – Relocate	MB155189- <mark>2</mark> 0	<u>04/01/23</u> 05/21/ 20	<u>03/31/26</u> 03/31/23	Active
<u>65</u> 67.	New Mexico Department of Game and Fish	Biotic Collection Permit	Authorization # 3293	<u>12/16/22</u> 03/02/ 20	<u>12/31/25</u> 12/31/22	Active
<u>66</u> 68.	Office of New Mexico State Engineer	Monitoring Well H-4bR	C-3404	01/13/09	None	Active
<u>67</u> 69.	Office of New Mexico State Engineer	Monitoring Well H-9bR	C-2783-POD2	07/14/10	None	Active
<u>68</u> 70.	Office of New Mexico State Engineer	Monitoring Well C-2737	C-2737	09/27/00	None	Active
<u>69</u> 71.	Office of New Mexico State Engineer	Monitoring Well WIPP-11R	C3112-POD2	02/07/19	None	Active
<u>70</u> 72.	Office of New Mexico State Engineer	Monitoring Well SNL-6	C-3151	02/10/05	None	Active
<u>71</u> 73.	Office of New Mexico State Engineer	Monitoring Well SNL-8	C-3150	02/10/05	None	Active
<u>72</u> 74.	Office of New Mexico State Engineer	Monitoring Well SNL-13	C-3139	12/17/04	None	Active

	Granting Agency	Type of Permit	Permit/Right of Way Number	Granted/ Submitted *	Expiration	Current Permi Status
<u>73</u> 75.	Office of New Mexico State Engineer	Monitoring Well SNL-14	C-3140	12/17/04	None	Active
<u>74</u> 76.	Office of New Mexico State Engineer	Monitoring Well SNL-15	C-3152	02/10/05	None	Active
<u>75</u> 77.	Office of New Mexico State Engineer	Monitoring Well SNL-18	C-3233	10/06/05	None	Active
<u>76</u> 78.	Office of New Mexico State Engineer	Monitoring Well SNL-19	C-3234	10/06/05	None	Active
<u>77</u> 79.	Department of the Interior, Bureau of Land Management	Right-of-Way grant for SNL-18 and SNL-19 well pads	NM115315	03/21/06	12/31/35	Active
<u>78</u> 80.	Department of the Interior, Bureau of Land Management	Right-of-Way grant for SNL-11 and SNL-5 well pads and road access	NM110735	10/16/03	10/16/33	Active
<u>79</u> 81.	Department of the Interior, Bureau of Land Management	Right-of-Way grant for SNL-12 well pad	NM109176	04/15/03	04/15/33	Active
<u>80</u> 82.	Department of the Interior, Bureau of Land Management	Right-of-Way grant for SNL-9 well pad	NM109175	04/15/03	04/15/33	Active
<u>81</u> 83.	Department of the Interior, Bureau of Land Management	Right-of-Way grant for SNL-2 well pad	NM109174	04/15/03	04/15/33	Active
<u>82</u> 84.	Department of the Interior, Bureau of Land Management	Right-of-Way grant for SNL-1 Access Road	NM109177	06/17/03	06/17/33	Active
<u>83</u> 85.	Department of the Interior, Bureau of Land Management	Right-of-Way for 69KV Electric Distribution Line	NM091163	02/16/94 (Xcel Energy)	02/15/24	Active
<u>84</u> 86.	Office of New Mexico State Engineer	Monitoring Well H-11b4R	C-2769-POD2	05/16/11	None	Active
<u>85</u> 87.	Office of New Mexico State Engineer	Monitoring Well AEC-7R	C-3635-POD1	04/24/13	None	Active
<u>86</u> 88.	New Mexico State Land Office Commissioner of Public Lands	Right-of-Way easement for SNL-1 Access Road and well pad	RW-28535	08/27/03	08/27/38	Active
<u>87</u> 89.	New Mexico State Land Office Commissioner of Public Lands	Right-of-Way easement for SNL-3 Access Road and well pad	RW-28537	08/27/03	08/27/38	Active
<u>88</u> 90.	Office of New Mexico State Engineer	Monitoring Well H-12R	C-3749 POD1	06/24/14	None	Active
<u>89</u> 91.	Department of the Interior, Bureau of Land Management	Right-of-Way grant for H-12R Access Road and well pad	NM-131916	06/19/14	12/31/43	Active

	Granting Agency	Type of Permit	Permit/Right of Way Number	Granted/ Submitted *	Expiration	Current Permit Status
<u>90</u> 92.	Office of New Mexico State Engineer	Monitoring Well H-10cR	C-3851-POD1	07/09/15	None	Active
<u>91</u> 93.	New Mexico State Land Office	Water Monitoring Easement for SNL-1	WM-120	<u>08/22/22</u> 07/20/ 18	<u>08/21/27</u> 08/21/22	Active
<u>92</u> 94.	New Mexico State Land Office	Water Monitoring Easement for SNL-3	WM-119	<u>08/22/22</u> 07/20/ 18	<u>08/21/27</u> 08/21/22	Active
<u>93</u> 95.	U.S. Department of the Interior, Bureau of Land Management	Seismic Monitoring Stations	NM-120413	07/10/08	12/31/37	Active
<u>94</u> 96.	New Mexico Environment Department	NSR Streamline, Level 1, Minor Source, Air Permit	310-M3	07/12/19	None	Active

*Non DOE grantee is noted



▲ WIPP-19

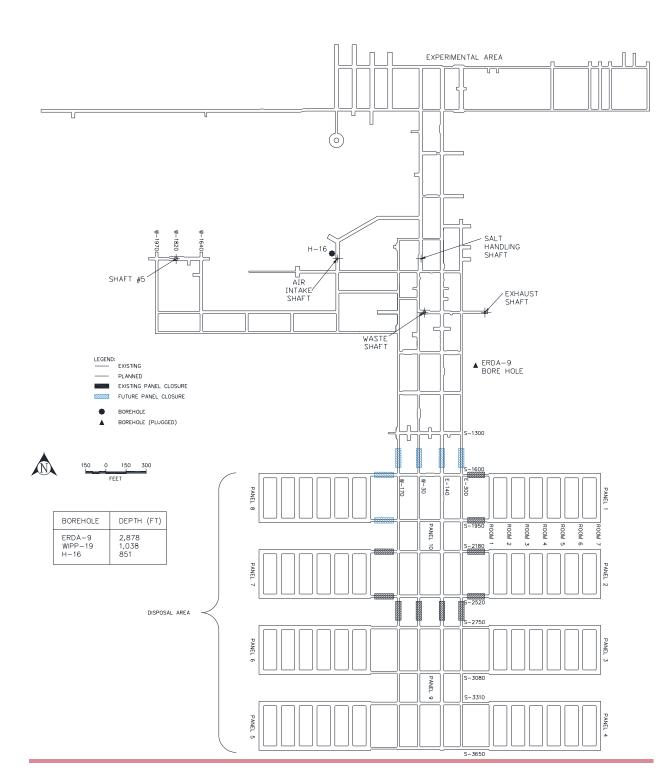


Figure G-6 Approximate Locations of Boreholes in Relation to the WIPP Underground

Item 3

Description

This modification updates underground assembly areas, emergency equipment locations and the underground escape and evacuation map in Permit Attachment D, *RCRA Contingency Plan* with the changes described below:

- Table D-2, Emergency Equipment Maintained at the Waste Isolation Pilot Plant
 - Changed "S1000" to "S700" and "S1950" to "S1600" in the Location column of the Mine Pager Phones and Miners First Aid Station rows.
 - Added "E300 Maintenance Shop" in the Location column of the Mine Pager Phones row.
- Figure D-4, Underground Escape and Evacuation Map
 - Updated with the most current map from the Underground Escape and Evacuation Plan on file at the WIPP facility.
- Figure D-7, Designated Underground Assembly Areas
 - Moved underground assembly areas from S1000 to S700 and S1950 to S1600.
 - Added an underground assembly area to E300.

Basis

This change is classified as "Replacement with functionally equivalent equipment, upgrade, or relocate emergency equipment listed" pursuant to 20.4.1.900 NMAC (incorporating 40 CFR §270.42 Appendix I, B.6.b) and is, therefore, a Class 1 modification.

Discussion

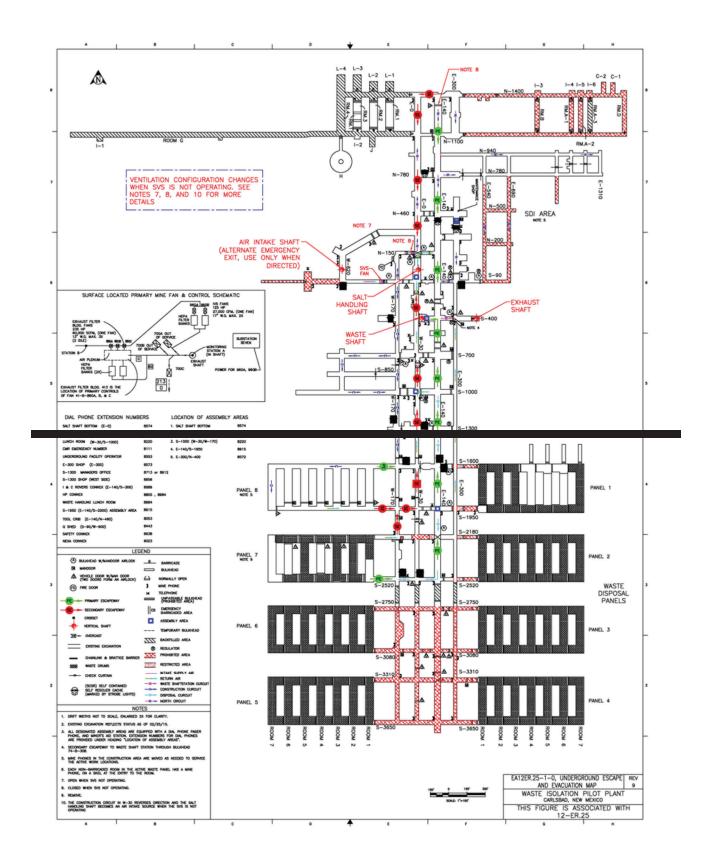
These changes are needed to update the Permit text and figures with the current configuration of the facility. Table D-2, *Emergency Equipment Maintained at the Waste Isolation Pilot Plant*, Figure D-4, *Underground Escape and Evacuation Map*, and Figure D-7, *Designated Underground Assembly Areas* are being updated to reflect changes in the locations of underground assembly areas. Table D-2 has been updated to add the E300 Maintenance Shop, change S1000 to S700 and change S1950 to S1600. The change from S1900 to S700 is due to a change in the underground lunchroom location. The change from S1950 to S1600 is due to a change in underground configuration related to commencement of waste emplacement in Panel 8. Figure D-4 was updated to reflect the most current version of the map on file at the facility. Figure D-7 was updated to add the E300 Maintenance Shop assembly area at S1950 to S1600. For clarity, red boxes are provided on the versions of the figures being replaced to depict the exact areas where changes are being made with the exception of Figure D-4 since that figure was updated in its entirety.

Revised Permit Text:

Equipment	Description and Capabilities	Location				
	Communications					
Mine Pager Phones	Battery-operated paging system	Underground at <u>E300</u> <u>Maintenance</u> <u>Shop.</u> S550/W30, S <u>700</u> 4000/W30, S <u>1600</u> 4950/E140, SH Shaft Collar and Underground Station Waste Shaft Collar and Underground Station; – surface at Support Building (Building 451, FSM desk, CMR, lamproom), Safety and Emergency Services Facility (Building 452, Fire Department workstation area, Mine Rescue Room)				
Portable Radios	Two-way, portable; transmits and monitors information to/from other transmitters	Issued to individuals				
Plant Base Radios	Two-way, stationary; transmits and monitors information to/from other transmitters	Safety and Emergency Services Facility (Building 452), Guard and Security Building (Building 458), Support Building (Building 451, CMR, FSM desk)				
Mobile Phones	Provide communications link between emergency response personnel, as needed	Issued to individuals plus emergency vehicles				
	Spill Response Equipment and Materials					
HAZMAT Equipment	Spill response equipment and supplies, PPE, and decontamination supplies stored and maintained in accordance with NFPA 1901 and as documented in WIPP facility files	Surface, in designated areas near Safety and Emergency Services Facility (Building 452)				
Absorbent Materials	Containment or cleanup of spills, including: Pressurized spill-response gun; Absorbent sheets and/or dikes for containment or cleanup of spills of oil, petroleum-based chemicals, and general liquids; Spill-control material for solvents and neutralizing absorbents and for acids/caustics	Surface, in designated areas near Safety and Emergency Services Facility (Building 452)				
	Medical Resources					
Ambulance	A minimum of one ambulance, maintained and equipped in accordance with the New Mexico Ambulance Standard, 18.3.14 NMAC, and as documented in WIPP facility files	Surface at Safety and Emergency Services Facility (Building 452, Vehicle Bay)				
Medical Cart	A minimum of one medical cart, equipped to provide basic life support operations, as documented in WIPP facility files	Underground (Emergency Vehicle Parking/Charging Area at S700/E140)				

Table D-2Emergency Equipment Maintained at the Waste Isolation Pilot Plant

Equipment	Description and Capabilities	Location
Miners First Aid Stations	Equipped per 30 CFR 57.15001	Underground (Salt Shaft Area, Waste Shaft Area, E300 Maintenance Shop, and at S <u>7001000</u> /W30, S1300/W30, and S <u>16001950</u> /E140)



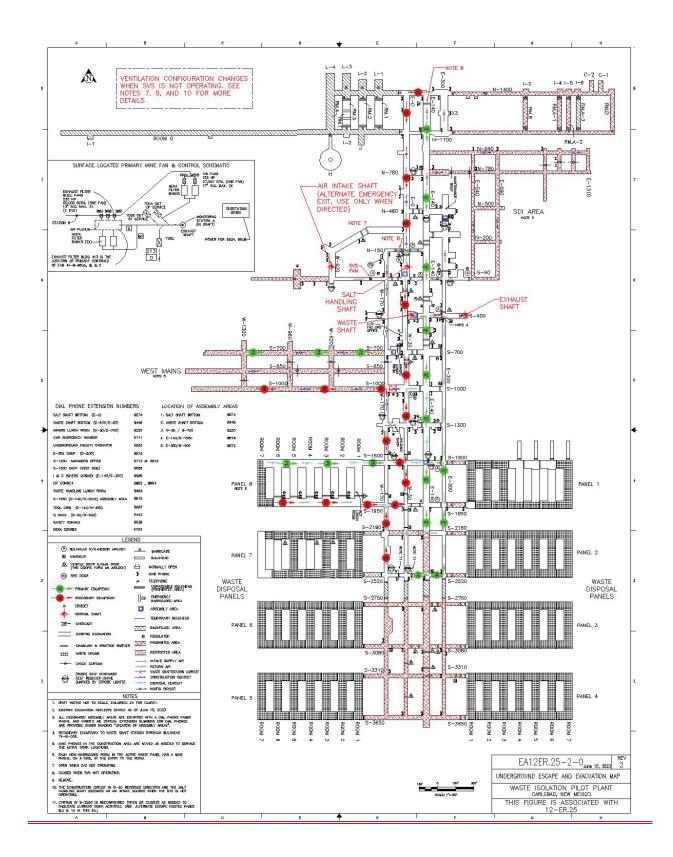
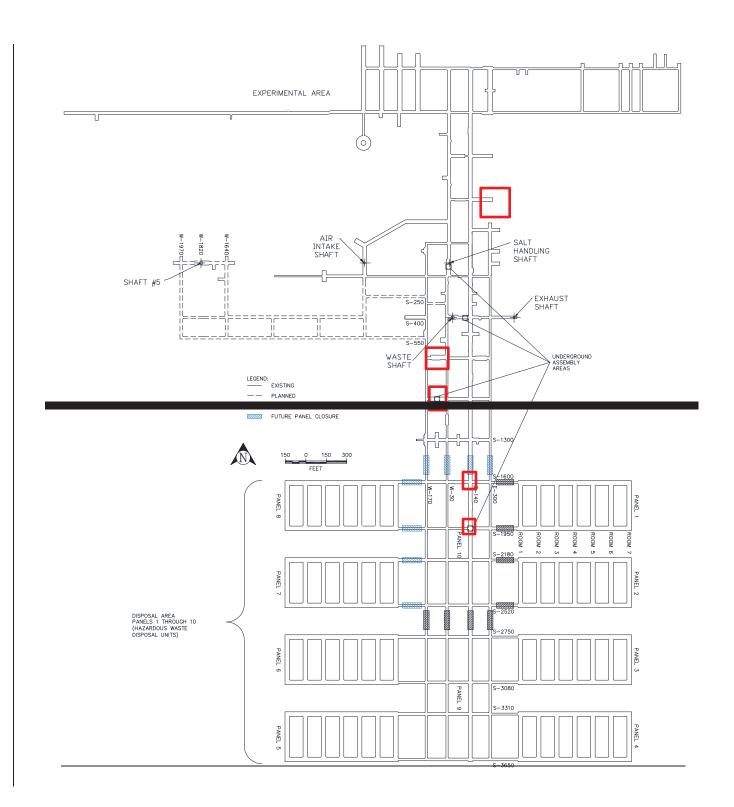


Figure D-4 Underground Escape and Evacuation Map



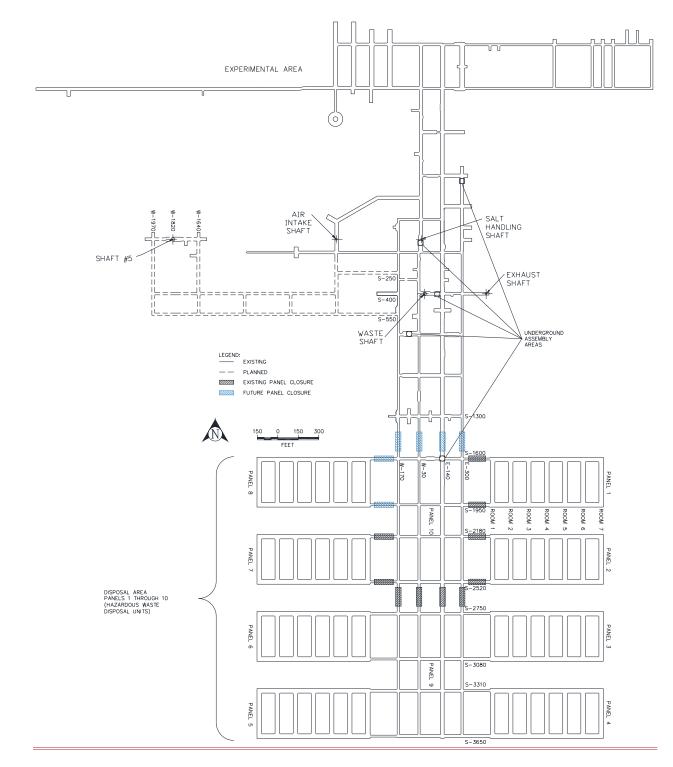


Figure D-7 Designated Underground Assembly Areas