

#### **Department of Energy**

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

April 29, 2024

Mr. Ricardo Maestas, Bureau Chief Hazardous Waste Bureau New Mexico Environment Department 2905 Rodeo Park Drive East, Building 1 Santa Fe, NM 87508-6303

Subject: Class 1 Permit Modification Notifications, Waste Isolation Pilot Plant Hazardous

Waste Facility Permit Number: NM4890139088-TSDF

Dear Mr. Maestas:

The purpose of this letter is to provide you with the Class 1 Permit Modification Notifications for the following items:

- Update Permit Attachments D and E with some upgrades to the New Fire Water Distribution System Description
- Update Permit Part 3 and Attachments A3, B, D, and M with the Current Facility layout

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.

\*ED

Sincerely,

#### Signatures on File

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

#### Enclosure

cc: w/ enclosure M. McLean, NMED

A. Donahue, NMED ED
\*ED denotes electronic distribution

#### **Class 1 Permit Modification Notifications**

- 1. Update Permit Attachments D and E with Some Upgrades to the New Fire Water Distribution System Description
- 2. Update Permit Part 3 and Attachments A3, B, D, and M with the Current Facility Layout

Waste Isolation Pilot Plant Carlsbad, New Mexico

WIPP Permit Number - NM4890139088-TSDF

April 2024

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### **Acronyms and Abbreviations**

CFR Code of Federal Regulations

DOE U.S. Department of Energy

FWDS Fire Water Distribution System

NMAC New Mexico Administrative Code NMED New Mexico Environment Department

Permit Waste Isolation Pilot Plant Hazardous Waste Facility Permit

Permittees U.S. Department of Energy and Salado Isolation Mining Contractors LLC

PMNs Permit Modification Notifications

PPA Property Protection Area

SSCVS Safety Significant Confinement Ventilation System

WIPP Waste Isolation Pilot Plant

#### **Overview of the Permit Modification Notifications**

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

These PMNs are being submitted by the U.S. Department of Energy (**DOE**) and 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 of 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. All direct quotations are indicated by italicized text.

Attachment A
Description of the Class 1 Permit Modification Notifications

**Table 1. Class 1 Hazardous Waste Facility Permit Modification Notifications** 

Item No.	Affected Permit Section	Change Description	Category
1	Attachment D, RCRA Contingency Plan	This change updates the Permit text to remove the fire alarm transmitter.	B.6.b
	Attachment E, Inspection Schedule, Process and Forms		
2	Part 3, Container Storage Attachment A3, Traffic Patterns Attachment B, Hazardous Waste Permit Application Part A	This change updates the Permit text and figures to reflect facility changes such as changes to Property Protection Area ( <b>PPA</b> ) fence lines, gates, and changes resulting from construction activities.	A.1
	Attachment D, RCRA Contingency Plan		
	Attachment M, Figures		

#### Item 1

#### **Description**

This change updates the Permit text to remove the fire alarm transmitter.

Permit Attachments D and E are updated with the following changes:

- Permit Attachment D, RCRA Contingency Plan
  - o Table D-2, Emergency Equipment Maintained at the Waste Isolation Pilot Plant
    - Building Fire Alarms
      - Deleted ", fire alarm transmitter" from the Descriptions and Capabilities column.
    - Underground Fire Alarms
      - Deleted ", fire alarm transmitter," from the Descriptions and Capabilities column.
- Permit Attachment E, Inspection Schedule, Process and Forms
  - Table E-1, Inspection Schedule/Procedures
    - Fire Detection and Alarm System
      - Deleted "and transmitter" from the Semi-annually/Annually inspection criteria in the Procedure Number and Inspection Criteria column.
      - Deleted "and transmitter" from the Monthly/Quarterly/Annually inspection criteria in the Procedure Number and Inspection Criteria column.

#### **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 Permit information pertaining to the fire alarm panels. To reflect the upgrades made to the fire alarm panels, the Permittees are removing text related to the inspection of fire alarm transmitters. Transmitters are no longer used since the upgraded system is connected with fiber optic cables. The fiber optic cabling is newer technology and provides a direct, faster, and more reliable signal connection to the Central Monitoring System.

The Permittees submitted a notification of planned change on January 15, 2019<sup>1</sup>, describing the upgrades being made to the Fire Water Distribution System (**FWDS**). This is one of the upgrades included in Phase 4 of the new FWDS.

<sup>&</sup>lt;sup>1</sup> U.S. Department of Energy and Nuclear Waste Partnership LLC. 2019. Letter from T. Shrader and B. Covert. Notification of Planned Change to the Permitted Facility Regarding the New Fire Water Distribution System, Hazardous Waste Facility Permit, Number: NM4890139088-TSDF. January 15, 2019. AR/Index Number: 190107.

## **Revised Permit Text:**

# **ATTACHMENT D**

# **RCRA CONTINGENCY PLAN**

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

Equipment	Description and Capabilities	Location		
Communications				
Building Fire Alarms	Fire alarm panels, fire alarm transmitter, audible alarm devices (e.g., horns, bells, tones) that provide notification of fires; transmitted to the CMR	Guard and Security Building (Building 458), Water Pumphouse (Building 456), Warehouse/Shops Building (Building 453), Exhaust Shaft Filter Building (Building 413), New Filter Building (NFB) (Building 416), Salt Reduction Building (SRB) (Building 417), Support Building (Building 451), CMR/Computer Room, Waste Handling Building (Building 411), TRUPACT Maintenance Building (Building 412), Salt Handling (SH) Shaft Hoisthouse (Building 384), Auxiliary Warehouse Building (Building 455), Engineering Building (Building 486), Training Building (Building 489), Safety and Emergency Services Facility (Building 452), and CAAs (Buildings 474A and 474B)		
Underground Fire Alarms	Fire alarm panels <del>, fire alarm transmitter,</del> and audible/visual alarm devices (e.g., horns, bells, strobes) that provide notification of fires; transmitted to the CMR	Fire detection and control panel locations: Waste Shaft Underground Station, SH Shaft Underground Station, Between E-140 and E-300 in S-2180 Drift, Fuel Station (N150/W170)		

# **ATTACHMENT E**

# INSPECTION SCHEDULE, PROCESS AND FORMS

# Table E-1 Inspection Schedule/Procedures

System/Equipment Name	Responsible Organization	Inspection <sup>a</sup> Frequency	Procedure Number and Inspection Criteria <sup>h</sup>
Fire Detection and Alarm	Fire Protection	Semi-annually/Annually	WP 12-FP0027
System	Engineering		Inspecting for Deterioration <sup>b</sup> and Operability of underground fuel station fire suppression system in accordance with NFPA 17 (semi-annual inspection); Inspecting for Deterioration <sup>b</sup> and Operability of the alarm panel and transmitter, audible/visual alarm devices, detectors, and pull stations in accordance with NFPA 72 (annual inspection)
	Monthly/Quarterly/Annually	WP 12-FP0028	
			Inspecting for Deterioration <sup>b</sup> , and Operability of the alarm panel-and transmitter, audible/visual alarm devices, detectors, and pull stations in accordance with NFPA 72

#### Item 2

#### **Description**

This change updates the Permit text and figures to reflect facility changes.

Specifically, this modification updates Permit Part 3 and Permit Attachments A3, B, D, and M with the following changes:

- Permit Part 3, Container Storage
  - Section 3.1.2, Parking Area Container Storage Unit
    - Replaced "extending from north of the rail sidings to the WHB" with "which extends south from the WHB to the chain-link security fence."
- Permit Attachment A3, Traffic Patterns
  - Section A3-2, Facility Access and Traffic
    - Deleted "After passing through security, access for large equipment may be provided through the east gate."
    - Deleted the "s" on "Figures" to read "Figure."
    - Deleted "and M-59."
    - Added an "s" to "show" to read "shows."
- Permit Attachment B, Hazardous Waste Permit Application Part A
  - o Figure B2-3, Planimetric Map-WIPP Facility Boundaries
    - Replaced this figure with a new figure which depicts the updated PPA fence line and nearby public accessible roads.
  - o Figure B3-1, Spatial View of the WIPP Facility
    - Updated the figure with the Shaft #5 and the Safety Significant Confinement Ventilation System (SSCVS). Updates were also made to the buildings and structures to ensure consistency with other figures in the Permit that show the surface structures and to ensure consistency with the current layout of the facility.
  - Figure B3-3, Parking Area Unit TRU Mixed Waste Container Storage and Surge Areas
    - Updated figure to remove the rail sidings (tracks), updated southeast fence line, and extended shading on the figure to the fence line.
- Permit Attachment D, RCRA Contingency Plan
  - List of Figures
    - Deleted "Figure D-1-NFB WIPP Surface Structures with Building 416."
  - Section D-8a, Surface Evacuation On-site and Off-site Staging Areas
    - Deleted the "s" on "Figures" to read "Figure."
    - Deleted "/Figure D-1-NFB."
    - Added an "s" to "show" to read "shows."
    - Replaced "The north gate has a single-person gate and a large gate that" with "Other gates."
    - Replaced "the primary staging area" with "alternate evacuation route exit points."

- Deleted "Alternative evacuation route exit points are located at the east and south gates. The east and south gates are turnstile gates."
- Deleted "/Figure D-1-NFB."
- o Figure D-1, WIPP Surface Structures
  - Updated figure with the new fire water pump house (Building 490) and storage tanks (Tanks 491E and 491W) located in the north east corner of the PPA, removed the rail tracks, moved the northeast and southeast fence lines, updated the parking lot layout, modified label for gate markers, added gate markers, added an additional assembly area for potentially contaminated personnel, moved the existing assembly area for potentially contaminated personnel to the south, and added the north and south access road designations. Made other updates to the buildings and structures to ensure consistency with other figures in the Permit that show the surface structures and to ensure consistency with the current layout of the facility. Information from Figure D-1-NFB was moved to this figure and the Shaft #5 area was added. Shading has been added over areas that are currently under construction (i.e., Shaft #5 and the SSCVS).
- o Figure D-1-NFB, WIPP Surface Structures with Building 416
  - Deleted figure.
- Figure D-2, Spatial View of the WIPP Facility
  - Updated figure with the Shaft #5 and the SSCVS. Made other updates to the building and structures to ensure consistency with other figures in the Permit that show the surface structures and to ensure consistency with the current layout of the facility.
- Figure D-4, Fire-Water Distribution System
  - Updated figure with the new fire water pump house (Building 490) and storage tanks (Tanks 491E and 491W) located in the northeast corner of the PPA, removed the rail tracks, moved the northeast and southeast fence lines. Made other updates to the buildings and structures to ensure consistency with other figures in the Permit that show the surface structures and to ensure consistency with the current layout of the facility.
- Figure D-4-NFB, Fire-Water Distribution System with Building 416
  - Updated figure with the new fire water pump house (Building 490) and storage tanks (Tanks 491E and 491W) located in the northeast corner of the PPA, removed the rail tracks, moved the northeast fence line. The southeast fence line was not updated since the figure shows the future layout of the facility, and the southeast fence line change is temporary. Made other updates to the buildings and structures to ensure consistency with other figures in the Permit that show the surface structures and to ensure consistency with the current layout of the facility.
- Permit Attachment M, Figures
  - List of Figures
    - Changed figure title from "WIPP Traffic Flow Diagram with Building 416" to "Reserved."
  - Figure M-2, Parking Area Unit TRU Mixed Waste Container Storage and Surge Areas

- Updated figure to remove the rail tracks, update southeast fence line, and extended shading on the figure to the fence line.
- o Figure M-44, Spatial View of the Miscellaneous Unit and Waste Handling Facility
  - Updated figure with the Shaft #5 and the SSCVS. Made other updates to the buildings and structures to ensure consistency with other figures in the Permit that show the surface structures and to ensure consistency with the current layout of the facility.
- Figure M-58, WIPP Traffic Flow Diagram
  - Updated figure with the new fire water pump house (Building 490) and storage tanks (Tanks 491E and 491W), removed the rail tracks, moved the northeast and southeast fence lines, updated the parking lot layout. Portions of this figure have been updated to be consistent with Figure D-1 such as the depiction of the Interim Ventilation System at the east of the facility, added building labels for Building 254.3 and the water tanks and hazardous material storage area, updated lines around Building 311 and within the Parking Area Container Storage Unit, and moved the north direction arrow. Information from Figure M-59 was moved to this figure and the Shaft #5 area was added. Shading has been added over areas that are currently under construction (i.e., Shaft #5 and the SSCVS).
- o Figure M-59, WIPP Traffic Flow Diagram with Building 416
  - Deleted the figure and changed the figure title from "WIPP Traffic Flow Diagram with Building 416" to "Reserved."
- Figure M-66, WIPP Facility Boundaries Showing 16-square-Mile Land Withdrawal Boundary
  - Replaced with a new figure that depicts the updated PPA and nearby public accessible roads.
- o Figure M-70, Detection Monitoring Well Locations
  - Updated the PPA fence line.
- Figure M-77, Groundwater Level Surveillance Wells (inset represents the Groundwater Level Surveillance Wells within the WIPP Land Withdrawal Area)
  - Updated the PPA fence line.
- Figure M-78, Repository VOC Monitoring Locations
  - Deleted "and Figure D-1a."
  - Removed the rail tracks.
  - Updated the PPA fence line.

#### **Basis**

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

#### **Discussion**

Permit Part 3, Section 3.1.2, has been updated to remove the reference to rail tracks. Figures B3-3 and M-2 have been updated to remove the rail tracks and extend the shading to the southern fence line. These changes are needed since the rail tracks are not being used and have been removed. These changes ensure the text and figures are consistent with the text in Permit Attachment A, Section A-4, and Permit Attachment A1, Section A1-4, which describe the

Parking Area Container Storage Unit as the area extending south from the Waste Handling Building to the chain-link security fence.

Permit Attachment A3, Section A3-2, has been updated to remove the reference to the east gate since it has been removed as a result of the southeast fence line change. This change is needed since the southeast fence line has been moved to accommodate ongoing construction of the SSCVS and the east gate is no longer needed.

Permit Attachment B, Figure B2-3, and Permit Attachment M, Figure M-66, have been replaced with a figure that more appropriately depicts the facility boundaries. The railway and private roads have been removed from these figures. The Permittees have no plans to use the railway and removing the private roads ensures that only roads that could be accessed by the public are depicted. These changes are needed to ensure the information in the figures are current and consistent.

Permit Attachment B, Figure B3-1, Permit Attachment D, Figure D-2, and Permit Attachment M, Figure M-44, have been replaced with a figure that includes the Shaft #5 and SSCVS areas and updated other areas to ensure consistency with other figures that depict the surface and underground facilities and ensure consistency with the current layout of the facility. Construction of the new FWDS pump house (Building 490) and tanks (Tanks 491E and 491W) are complete, therefore these structures have been added to these figures.

Permit Attachment D, Section D-8a, has been updated to be consistent with the changes to Permit Attachment D, Figure D-1. The text has been updated to be more general regarding the description of alternate evacuation route exit points. Since the Permittees added more site exit point markers to Figure D-1, the corresponding text has been updated. These exit points are not new; markers were added to the existing gates for completeness. Furthermore, this text was updated since the north single-person gate was removed from the Permit figures in a Class 1 PMN, dated April 12, 2022<sup>2</sup>, and the south gate is a double panel gate and not a turnstile gate. These changes are needed to ensure the Permit text is consistent with the Permit figures.

Permit Attachment D, Figure D-1, has been replaced with a figure that includes the Shaft #5 and SSCVS areas and Figure D-1-NFB has been removed since this information is now shown in Figure D-1. Permit Attachment M, Figure M-58, has been replaced with a figure that includes the Shaft #5 and SSCVS areas and Permit Attachment M, Figure M-59, has been removed since this information is now shown in Figure M-58. In addition, Permit Attachment D, Figures D-1, D-4, D-4-NFB, and Permit Attachment M, Figure M-58, have been updated to ensure consistency with the current layout of the WIPP facility and consistency between figures. For example, the new fire water pump house (Building 490) and tanks (Tanks 491E and 491W) have been added, the rail tracks have been removed, the parking lot configuration has been updated, and the southeast fence line has been moved to reflect the current layout at the facility. Other updates to these figures have been made to ensure they are consistent with each other (e.g., labeling, line placement, marker placement, etc.). These changes are needed to update the Permit with the current layout of the facility and to streamline figures.

Since Permit Attachment D, Figure D-1-NFB, was removed, text references to Figure D-1-NFB have been removed from Permit Attachment D, Section D-8a. Since Permit Attachment M, Figure M-59 was removed, the text reference to Figure M-59 in Permit Attachment A3, Section A3-2. has been removed.

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<sup>&</sup>lt;sup>2</sup> U.S. Department of Energy and Nuclear Waste Partnership LLC. 2022. Letter from R. Knerr and S. Dunagan. Class 1 Permit Modification Notifications to the Waste Isolation Pilot Plant Hazardous Waste Facility Permit Number: NM4890139088-TSDF. April 12, 2022. AR/Index Number: 220412.

Permit Attachment M, Figures M-70 and M-77 have been updated to show the change to the PPA fence line. Permit Attachment M, Figure M-78, has been updated to remove an outdated reference to Permit Attachment D, Figure D-1a. Figure D-1a was combined with Figure D-1 in the 2020 Renewal Application. In addition, this figure has been updated to remove the rail tracks and the southeast fence line. These changes are needed to update the Permit with the current layout of the facility and to streamline Permit text and figures.

#### **Proposed Revised Permit Text:**

#### **PART 3 - CONTAINER STORAGE**

#### 3.1.2 Parking Area Container Storage Unit

The Parking Area Container Storage Unit (**Parking Area Unit**) is an asphalt and concrete surface which extends south from the WHB to the chain-link security fence extending from north of the rail sidings to the WHB, within the Controlled Area. The Parking Area Unit shall be enclosed by chain link fence. The Parking Area Unit shall comprise a surface area of no more than 137,050 ft² (12,730 m²), as depicted in Permit Attachment M, Figure M-2.

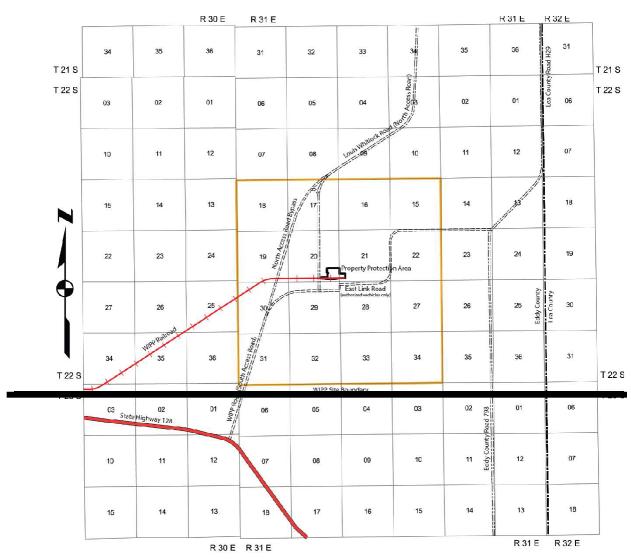
#### **ATTACHMENT A3**

#### TRAFFIC PATTERNS

#### A3-2 Facility Access and Traffic

Access to the WIPP facility for personnel, visitors, and trucks carrying supplies and TRU mixed waste is provided through a security checkpoint (vehicle trap). After passing through the security checkpoint, TRU mixed waste transport trucks normally turn right (south) before reaching the Support Building and then left (east) to park in the Parking Area Container Storage Unit (PAU) just east of the air locks (Figure M-58). Outgoing trucks depart the same way they arrived, normally out of the west end of the PAU, north through the fence gate and out through the vehicle trap. An alternate inbound route is to continue straight ahead (east) from the security checkpoint to the second road and to turn south to enter the PAU. The alternate outbound route is also the reverse of this route. Salt transport trucks, which remove mined salt from the Salt Handling Shaft area, do not cross paths with TRU mixed waste transporters; instead, they proceed from the Salt Handling Shaft northward to the salt pile. After passing through security, access for large equipment may be provided through the east gate. Figures M-58 and M-59 shows surface traffic flow at the WIPP facility.

ATTACHMENT B
HAZARDOUS WASTE PERMIT APPLICATION PART A



# **LEGEND**



----- Railroad

—— State Highway

---- Other Roads

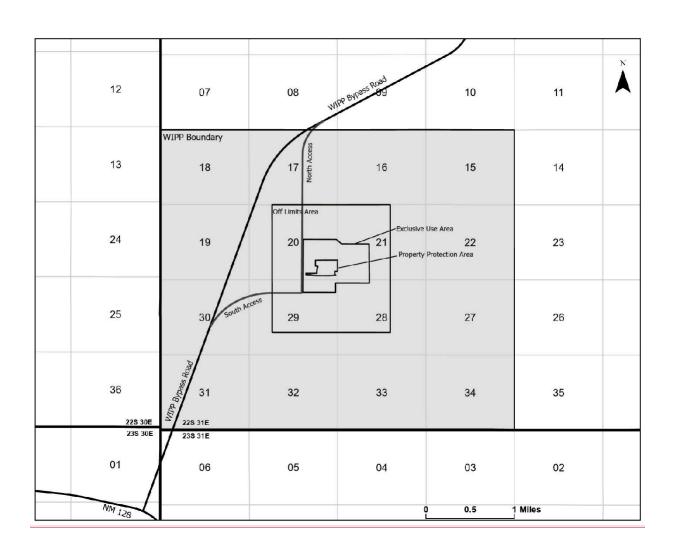
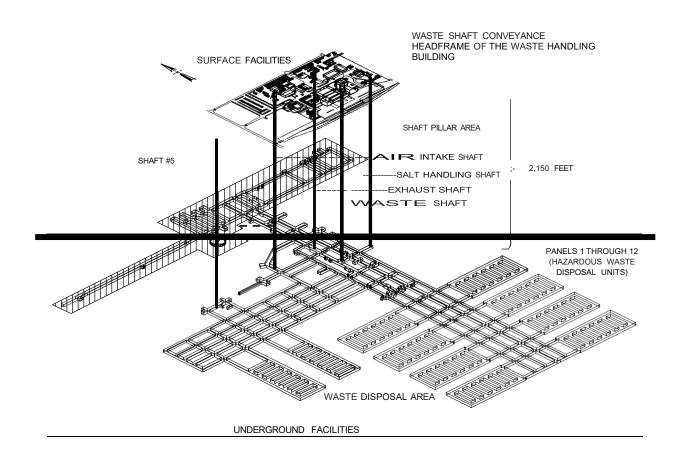


Figure B2-3
Planimetric - Map-WIPP Facility Boundaries



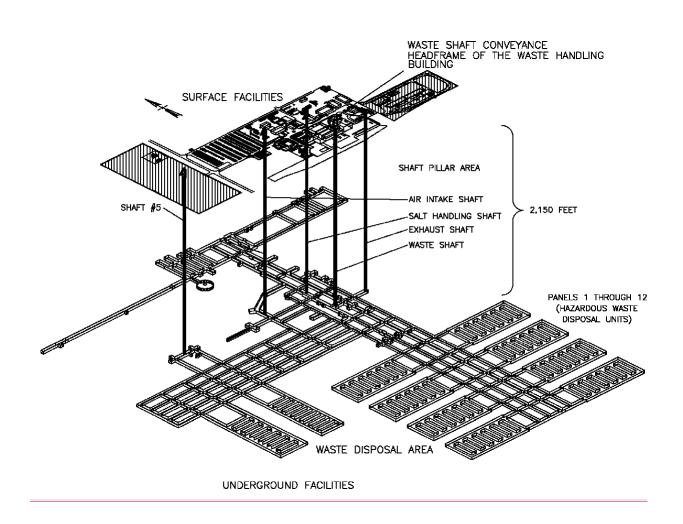
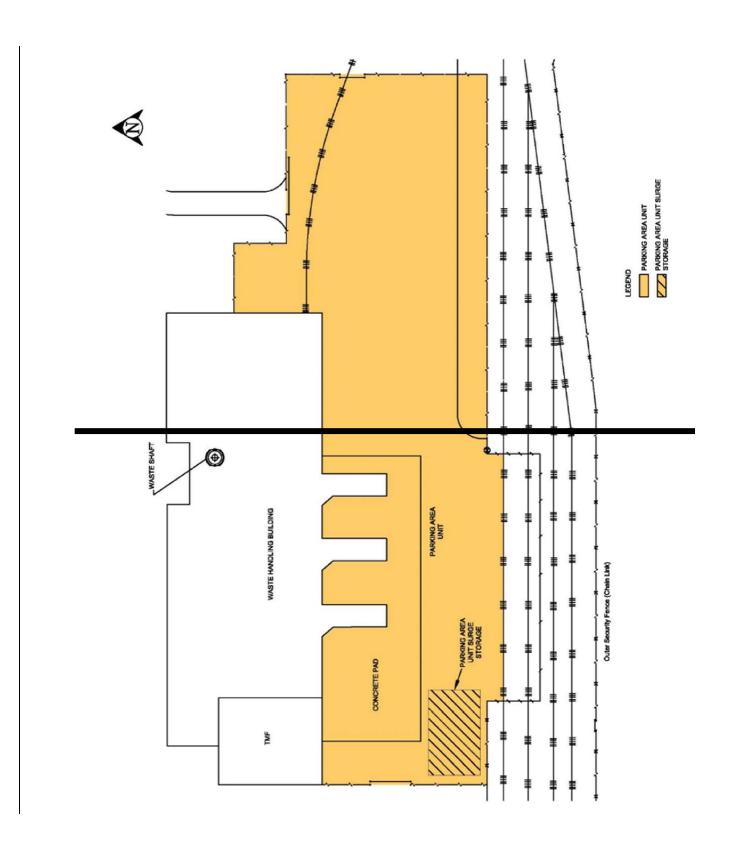


Figure B3-1 Spatial View of the WIPP Facility



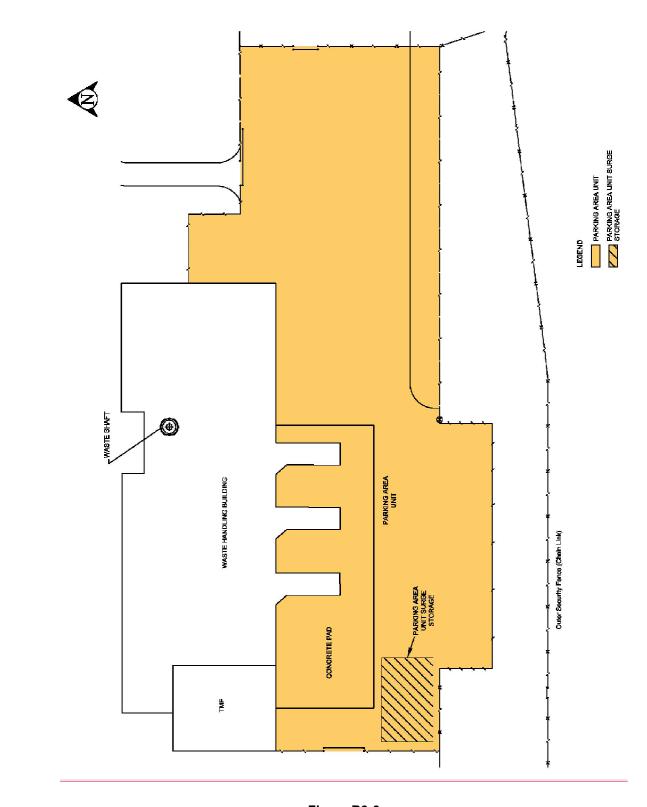


Figure B3-3
Parking Area Unit - TRU Mixed Waste Container Storage and Surge Areas

#### ATTACHMENT D

#### RCRA CONTINGENCY PLAN

#### **LIST OF FIGURES**

Figure Title

Figure D-1 WIPP Surface Structures

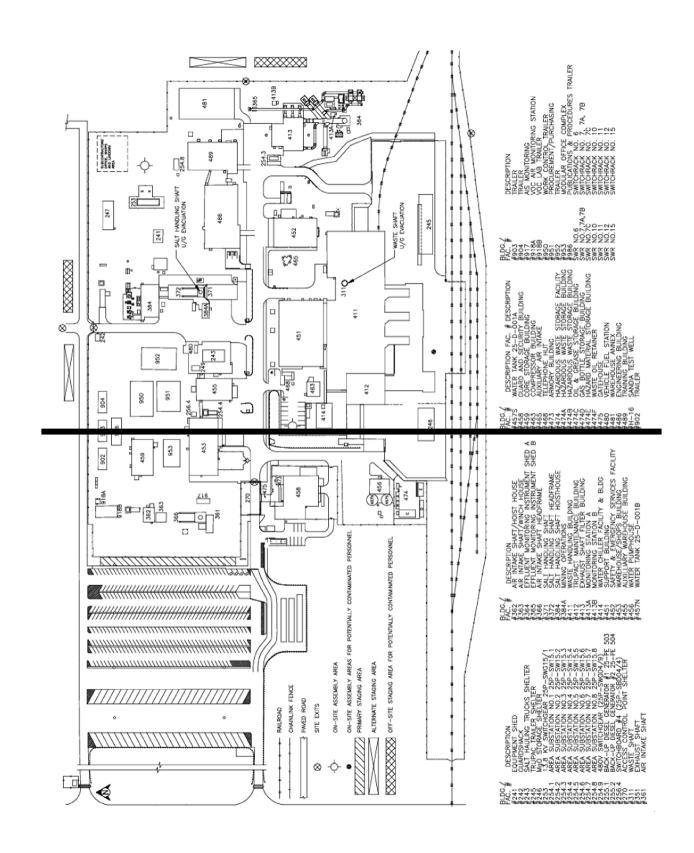
Figure D-1-NFB WIPP Surface Structures with Building 416

Figure D-2 Spatial View of the WIPP Facility

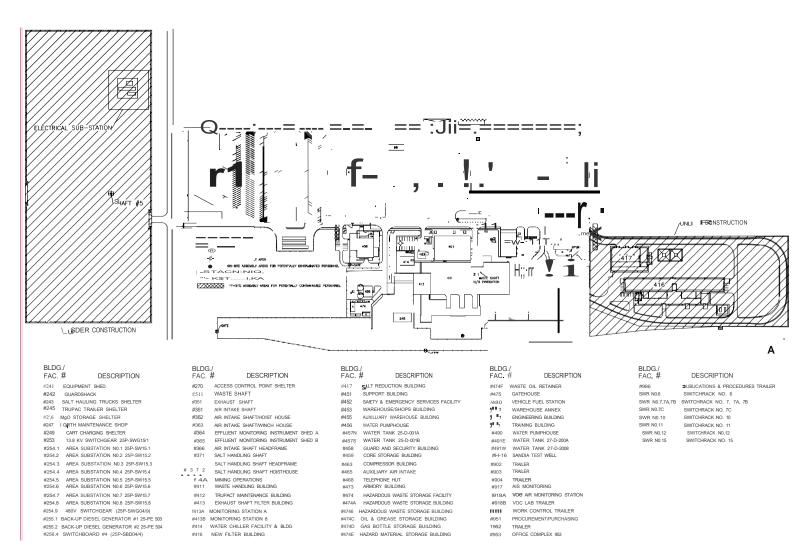
#### <u>D-8a</u> Surface Evacuation On-site and Off-site Staging Areas

Figures D-1/Figure D-1 NFB shows the surface assembly and staging areas and the evacuation gates. Security officers remain at the WIPP facility main gate 24 hours a day, and the vehicle trap is opened for personnel during emergency evacuations. Other gates The north gate has a single-person gate and a large gate that can be opened, similar to the main gate, for alternate evacuation route exit points the primary staging area. Alternative evacuation route exit points are located at the east and south gates. The east and south gates are turnstile gates. Upon notification, security personnel will respond, open gates, and facilitate egress for evacuation.

Personnel report to the designated assembly or staging area where accountability is conducted (Figure D-1/Figure D-1-NFB). Personnel who are working in a contaminated area when site evacuation is announced will assemble at specific staging areas for potentially contaminated personnel in order to minimize contact with other personnel during the evacuation.



# Figure D-1 WIPP Surface Structures



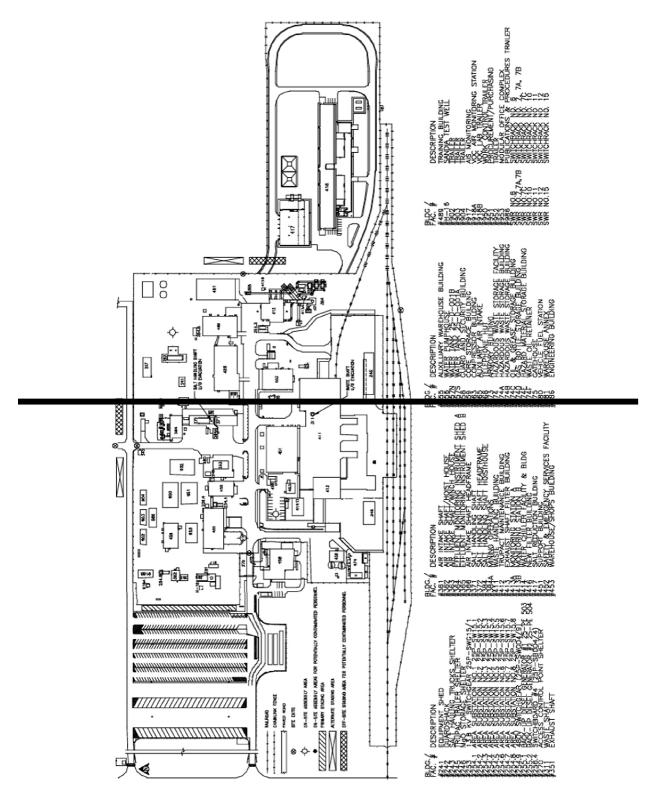
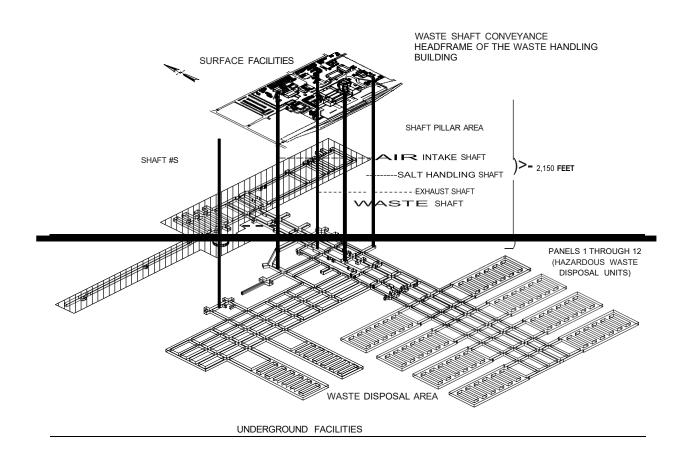


Figure D-1-NFB
WIPP Surface Structures with Building 416



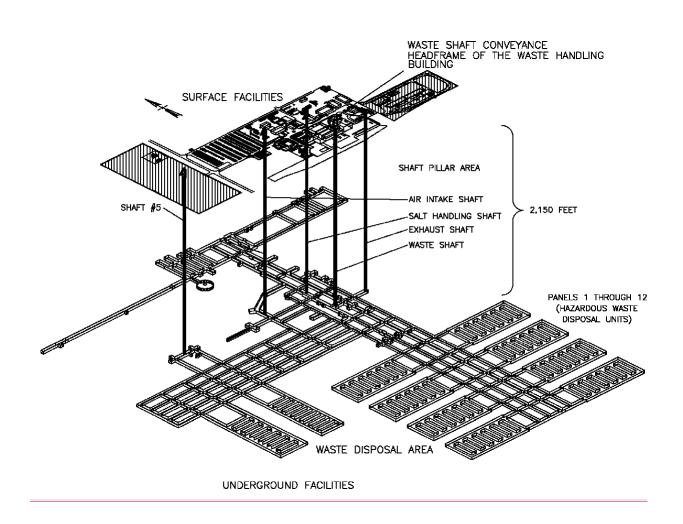
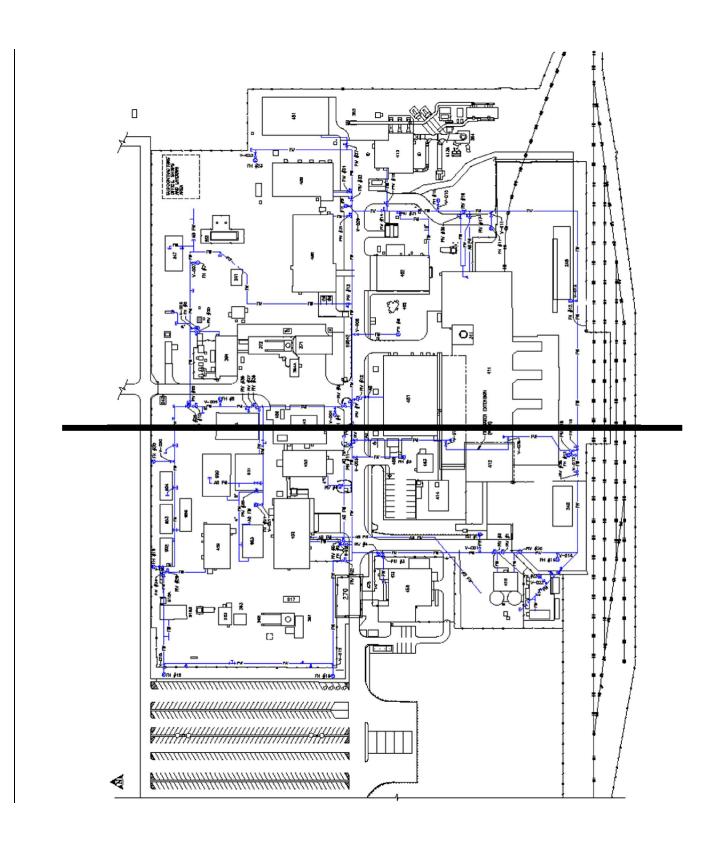


Figure D-2 Spatial View of the WIPP Facility



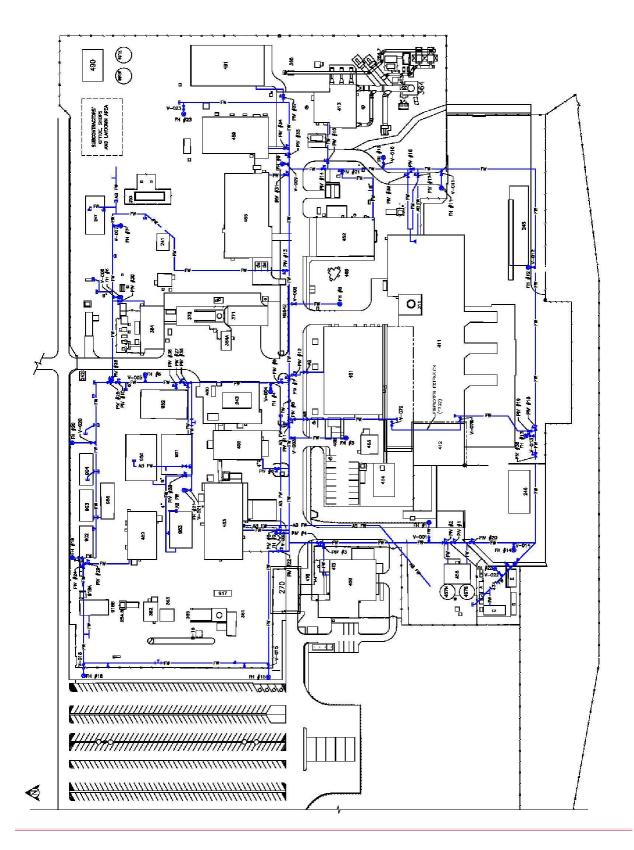
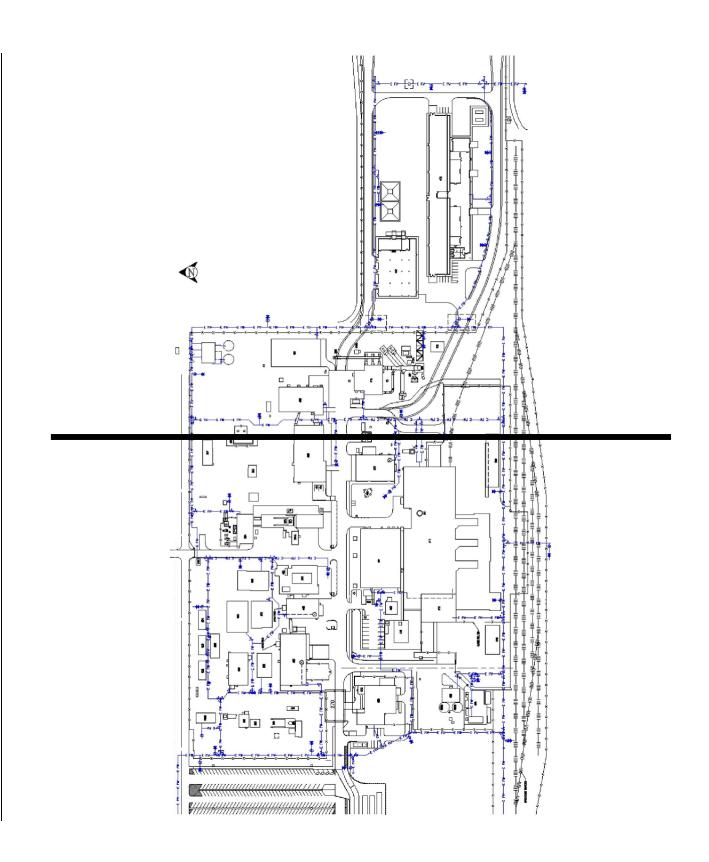


Figure D-4
Fire-Water Distribution System



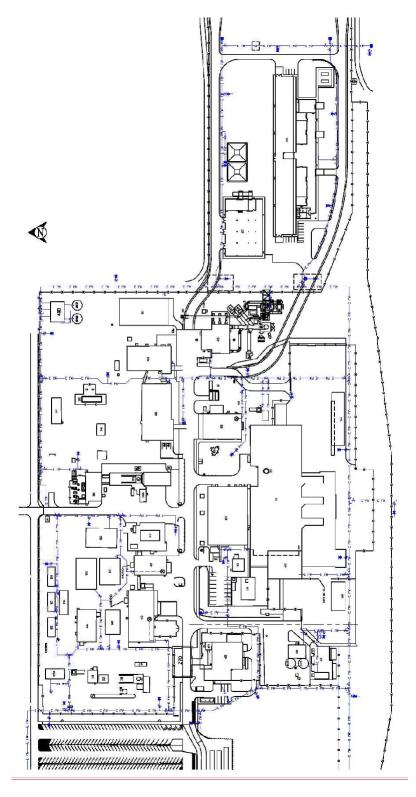


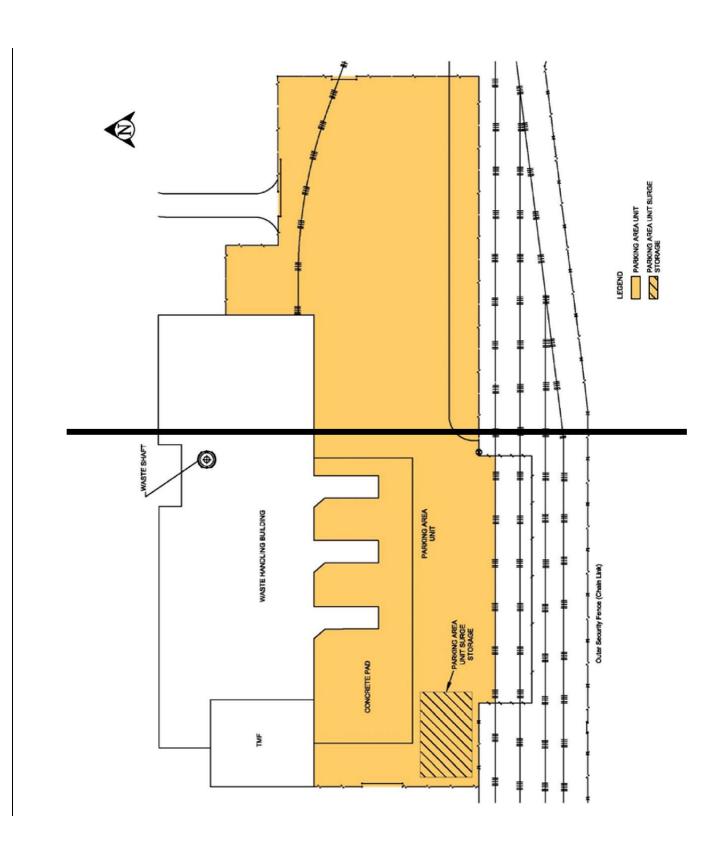
Figure D-4-NFB
Fire-Water Distribution System with Building 416

# **ATTACHMENT M**

# **FIGURES**

## **LIST OF FIGURES**

Figure M-59 Reserved WIPP	Traffic Flow Diagram with Building 416	64
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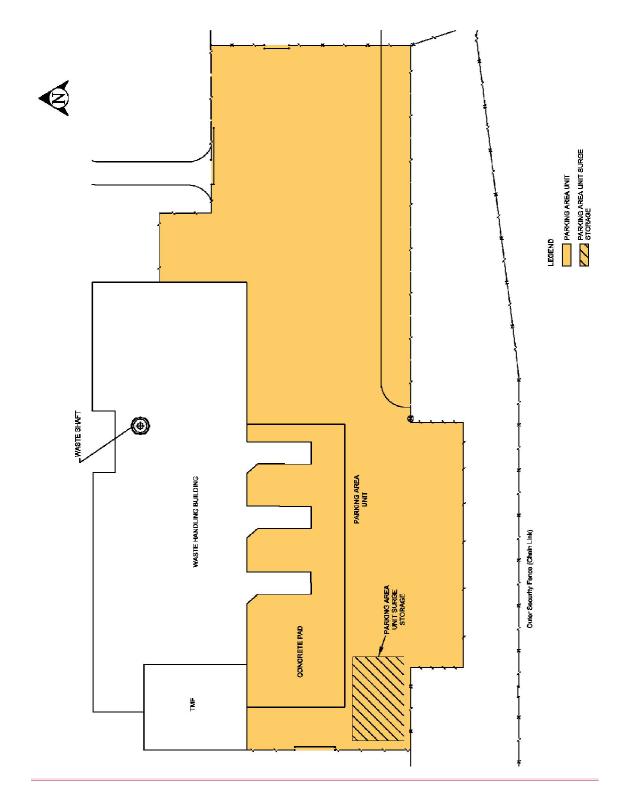
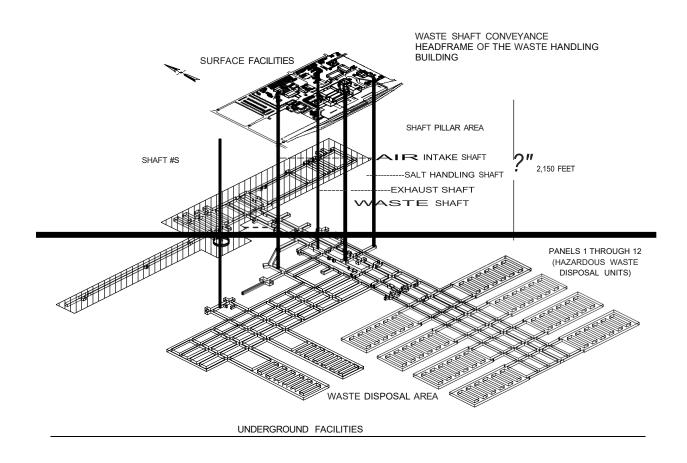


Figure M-2
Parking Area Unit – TRU Mixed Waste Container Storage and Surge Areas



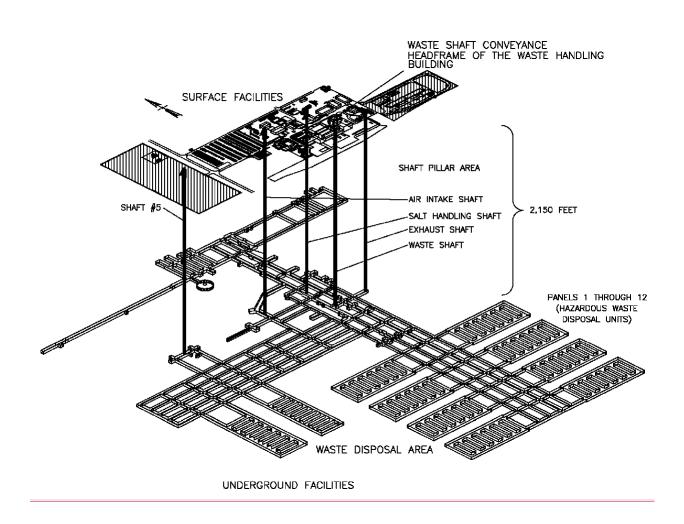
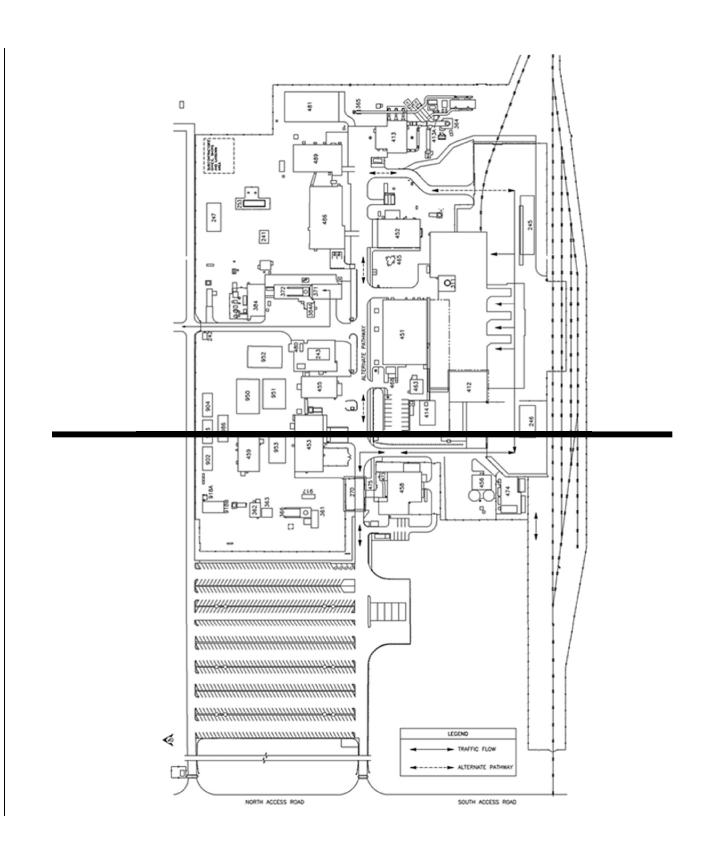


Figure M-44
Spatial View of the Miscellaneous Unit and Waste Handling Facility



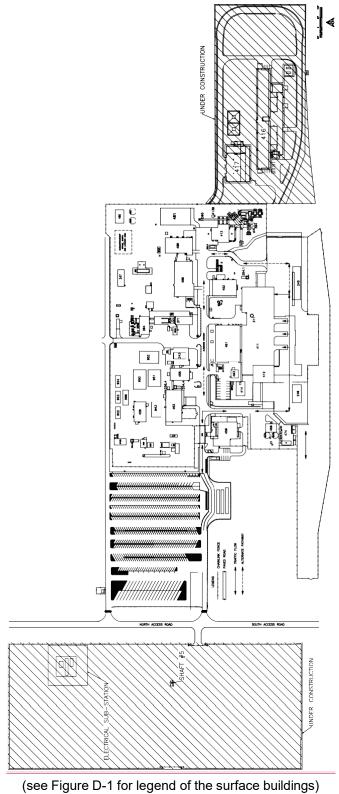
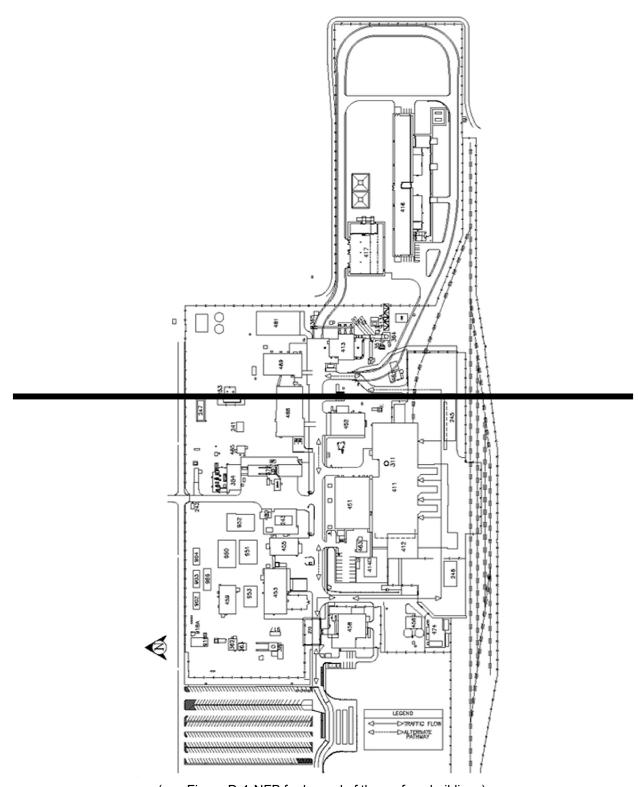


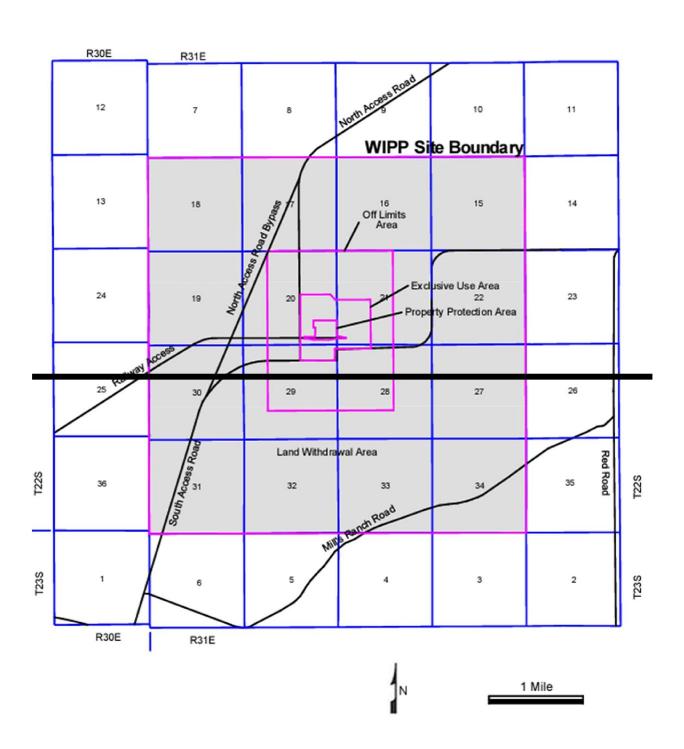
Figure M-58 WIPP Traffic Flow Diagram



(see Figure D-1-NFB for legend of the surface buildings)

Figure M-59

<u>Reserved</u>WIPP Traffic Flow Diagram with Building 416



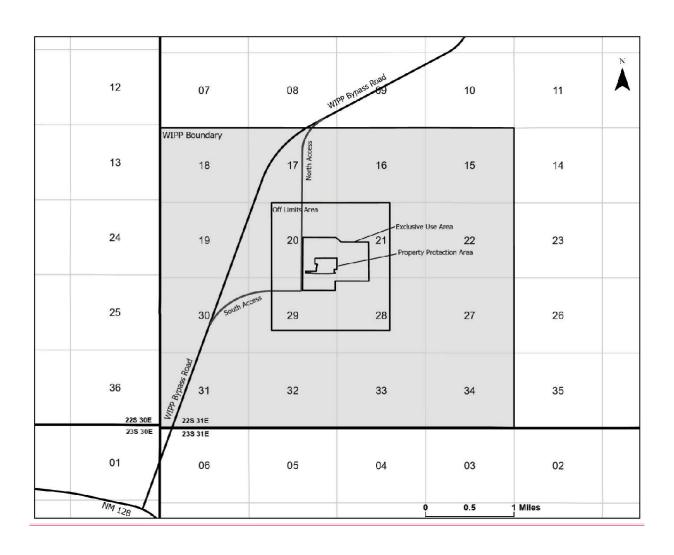
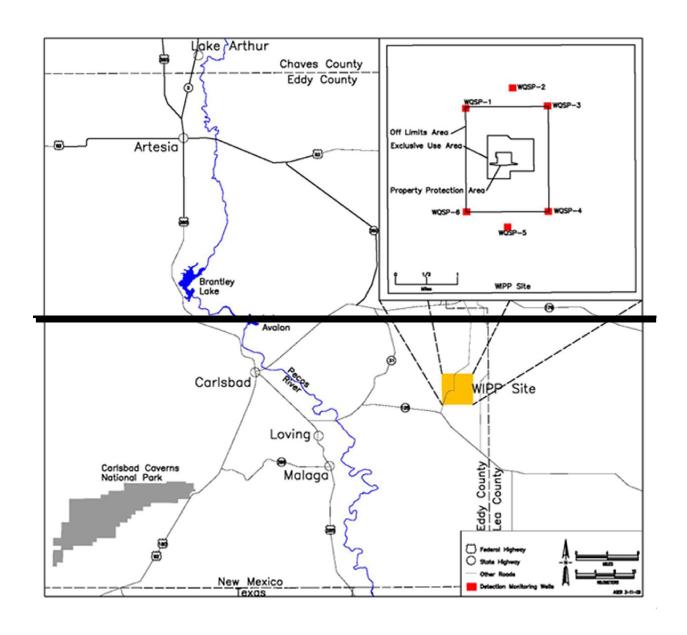


Figure M-66
WIPP Facility Boundaries Showing 16-square-Mile Land Withdrawal Boundary



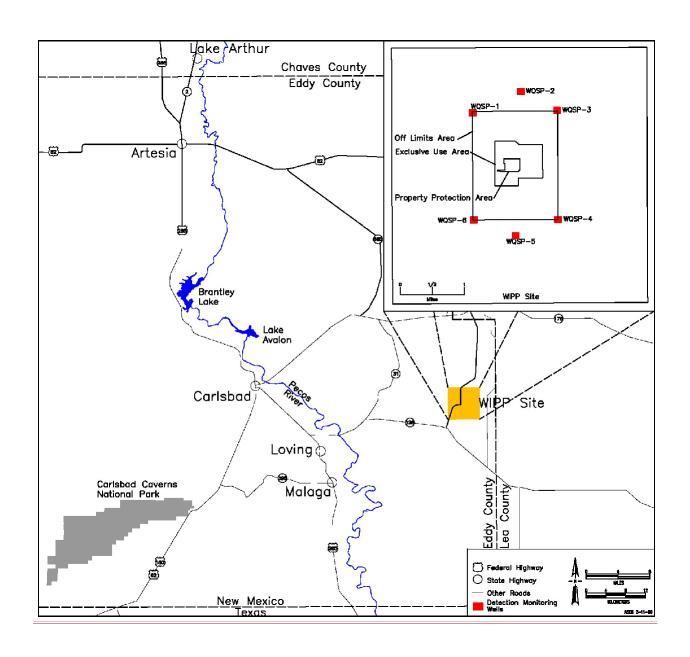
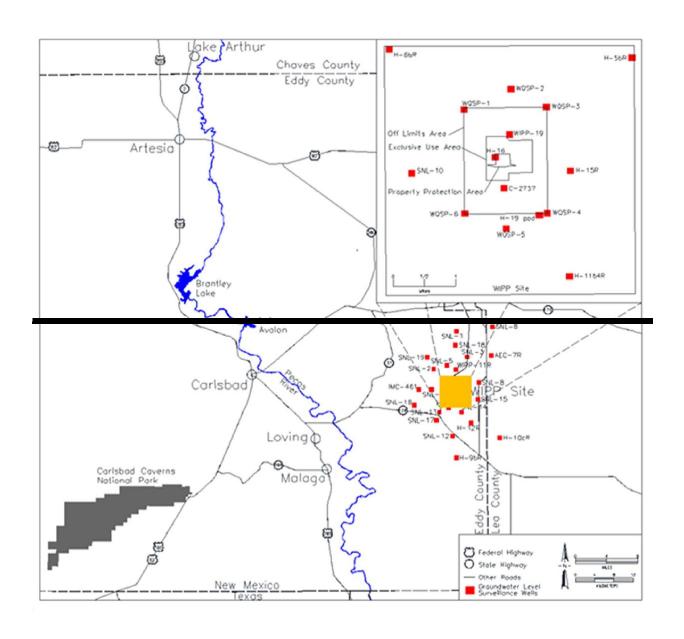


Figure M-70
Detection Monitoring Well Locations



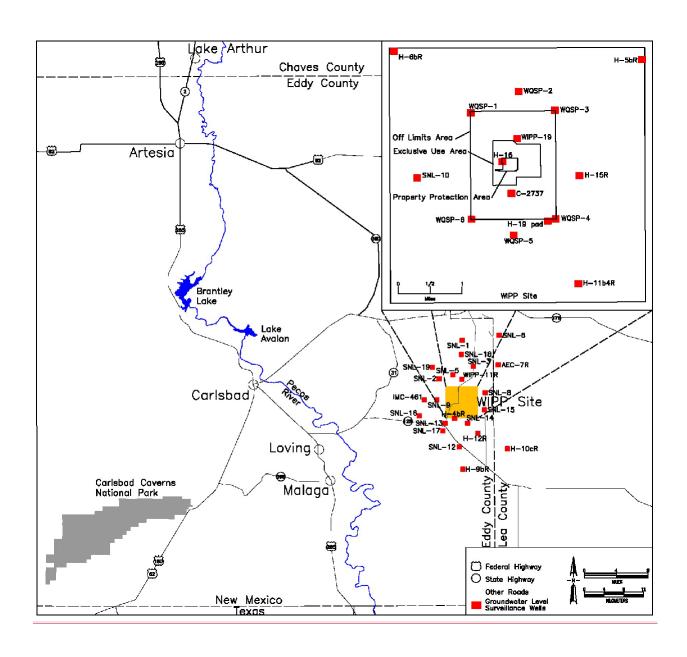
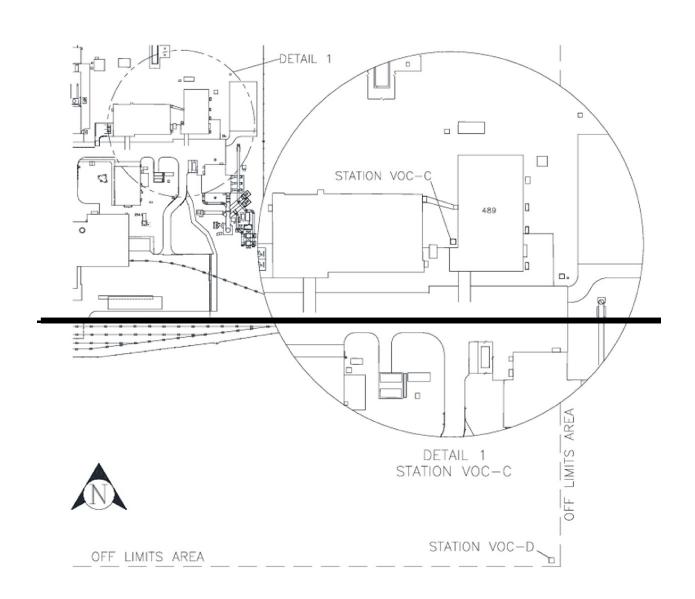
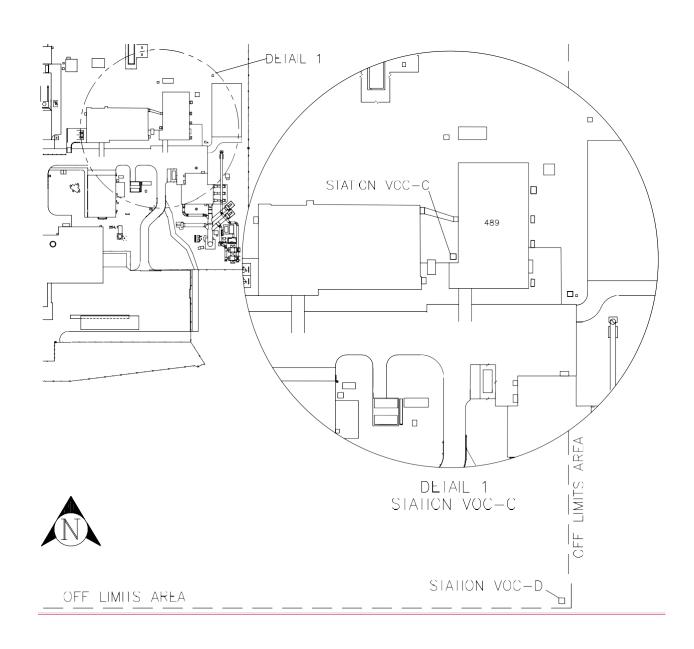


Figure M-77
Groundwater Level Surveillance Wells
(inset represents the Groundwater Level Surveillance Wells within the WIPP Land Withdrawal Area)





(see Figure D-1 and Figure D-1a-for a detailed map and legend of the suface buildings)

Figure M-78
Repository VOC Monitoring Locations