

**ATTACHMENT D**  
**RCRA CONTINGENCY PLAN**

(This page intentionally blank)

**ATTACHMENT D**  
**RCRA CONTINGENCY PLAN**

**TABLE OF CONTENTS**

Introduction .....	1
D-1 Scope and Applicability .....	1
D-2 Emergency Response Personnel and Training.....	2
D-2a Emergency Response Personnel.....	2
D-2b Emergency Response Training.....	4
D-3 Criteria for Implementation of the <i>RCRA Contingency Plan</i> .....	4
D-4 Emergency Response Method .....	7
D-4a Immediate Notifications.....	7
D-4a(1) Initial Emergency Response and Alerting the RCRA Emergency Coordinator .....	7
D-4a(2) Communication of Emergency Conditions to Facility Employees.....	8
D-4b Identification of Released Materials and Assessment of the Extent of the Emergency.....	9
D-4c Assessment of the Potential Hazards.....	10
D-4d Post-Assessment Notifications.....	10
D-4e Control and Containment of the Emergency.....	11
D-4e(1) Fires .....	13
D-4e(2) Explosions.....	14
D-4e(3) Unplanned Sudden/Non-Sudden Releases .....	15
D-4e(4) Other Occurrences .....	16
D-4f Post-Emergency Activities .....	17
D-4f(1) Management and Containment of Released Material and Waste .....	18
D-4f(2) Incompatible Waste .....	18
D-4f(3) Cleaning and Restoration of Equipment .....	18
D-5 Required Reporting .....	19
D-6 Emergency Equipment .....	19
D-7 Agreements with Local Emergency Response Agencies.....	19
D-8 Evacuation Plan .....	20
D-8a Surface Evacuation On-site and Off-site Staging Areas .....	21
D-8b Underground Assembly Areas and Egress Hoist Stations.....	21
D-8c Plan for Surface Evacuation.....	21
D-8d Plan for Underground Evacuation .....	22
D-8e Further Site Evacuation.....	22
D-9 Location of the <i>RCRA Contingency Plan</i> and Plan Revision.....	23

## LIST OF TABLES

Table	Title
Table D-1	Resource Conservation and Recovery Act Emergency Coordinators
Table D-2	Emergency Equipment Maintained at the Waste Isolation Pilot Plant

## LIST OF FIGURES

Figure	Title
Figure D-1	WIPP Surface Structures
<del>Figure D-1-NFB</del>	<del>WIPP Surface Structures with Building 416</del>
Figure D-1a	Legend to Figure D-1
<del>Figure D-1a-NFB</del>	<del>Legend to Figure D-1-NFB (Building 416)</del>
Figure D-2	Spatial View of the WIPP Facility
Figure D-3	WIPP Underground Facilities
Figure D-4	Underground Escapeways/Evacuation Routes
Figure D-5	Fire-Water Distribution System
<del>Figure D-5-NFB</del>	<del>Fire-Water Distribution System with Building 416</del>
Figure D-6	WIPP On-Site Assembly Areas and Off-Site Staging Areas
<del>Figure D-6-NFB</del>	<del>WIPP On-Site Assembly Areas and Off-Site Staging Areas with Building 416</del>
Figure D-6a	RH Bay Evacuation Routes
Figure D-6b	RH Bay Hot Cell Evacuation Route
Figure D-6c	Evacuation Routes in the Waste Handling Building
Figure D-7	Designated Underground Assembly Areas
Figure D-8	WIPP Site Evacuation Routes

(This page intentionally blank)



## ATTACHMENT D

### RCRA CONTINGENCY PLAN

#### Introduction

This attachment contains the *RCRA Contingency Plan* prepared in accordance with the Resource Conservation and Recovery Act (**RCRA**) requirements codified in 20.4.1.500 New Mexico Administrative Code (**NMAC**) (incorporating 40 CFR Part 264, Subpart D), “Contingency Plan and Emergency Procedures.” The purpose of this document is to define responsibilities and to describe the coordination of activities necessary to minimize hazards to human health and the environment from fires, explosions, or any sudden or non-sudden release of hazardous waste, or hazardous waste constituents to air, soil, or surface water (20.4.1.500 NMAC (incorporating 40 CFR §264.51 [a])). This plan consists of descriptions of emergency responses specific to contact-handled (**CH**) and remote-handled (**RH**) transuranic (**TRU**) mixed waste and site-generated hazardous waste handled at the WIPP facility.

#### D-1 Scope and Applicability

The regulated units at the WIPP facility subject to this permit include the hazardous waste management units (**HWMUs**) including the Waste Handling Building (**WHB**) Container Storage Unit (i.e., **WHB Unit**) and the Parking Area Container Storage Unit (i.e., **Parking Area Unit**), , and the hazardous waste disposal units (**HWDUs**) in the underground disposal panels.

Pursuant to 20.4.1.500 NMAC (incorporating 40 CFR §264.51(b)), owners/operators of treatment, storage, and disposal facilities are required to have formal contingency plans in place that describe actions that facility personnel will take in response to any fire, explosion, or release of hazardous waste or hazardous waste constituents which could threaten human health or the environment. The contingency plan must meet the requirements of NMAC 20.4.1.500 NMAC (incorporating 40 CFR Part 264, Subpart D). The provisions of the *RCRA Contingency Plan* apply to HWDUs in the underground waste disposal panels, HWMUs in the WHB Unit and the Parking Area Unit, the Waste Shaft, and supporting TRU mixed waste handling areas. These areas are shown in Figures D-1 through D-3.

The WIPP facility is a large quantity generator of hazardous waste pursuant to 20.4.1.300 NMAC (incorporating 40 CFR Part 262, “Standards for Generators of Hazardous Waste”). 20.4.1.300 NMAC (incorporating 40 CFR §262.34(a)(4), which references 40 CFR Part 265, Subpart D) requires that a contingency plan be in place that describes actions that facility personnel will take in response to any fire, explosion, or release of hazardous waste or hazardous waste constituents which could threaten human health or the environment. The provisions of the *RCRA Contingency Plan* also apply to the Hazardous Waste Staging Areas for site-generated hazardous waste, which are located in Buildings 474A and 474B on the surface, as shown in Figure D-1, and in the underground at S550/E140.

Wastes may also be generated at the WIPP facility as a direct result of managing the TRU and TRU mixed wastes received from the off-site generators. Throughout the remainder of this plan, this waste is referred to as “derived waste.” Derived waste will be placed in the rooms in HWDUs along with the TRU mixed waste for disposal. Every reasonable effort to minimize the amount of derived waste, while providing for the health and safety of personnel, will be made.

1 Wastes generated as a result of emergency response actions will be categorized into one of  
2 three groups and disposed of accordingly. These are: 1) nonhazardous wastes to be disposed  
3 of at an appropriate disposal facility (e.g., low-level waste facility or approved landfill), 2)  
4 hazardous nonradioactive wastes (site-generated hazardous waste) to be disposed of at an off-  
5 site RCRA permitted facility, and 3) derived waste to be disposed of in the underground HWDUs  
6 as TRU mixed waste. Hazardous liquid wastes that may be generated as a result of emergency  
7 response actions will be managed as follows:

- 8 • Non-Mixed - Accumulated liquids contaminated only with hazardous constituents  
9 will be placed into containers and managed in accordance with 20.4.1.300 NMAC  
10 (incorporating 40 CFR §262.34) requirements. The waste will be shipped to an  
11 approved off-site treatment, storage, or disposal facility.
- 12 • Mixed – Accumulated liquids contaminated with TRU mixed waste will be solidified  
13 and the solidified materials will be disposed of in the underground WIPP repository  
14 as TRU mixed waste.

15 Waste containing liquid in excess of treatment, storage, or disposal facility Waste Acceptance  
16 Criteria (**TSDF-WAC**) limits shall not be emplaced in the underground HWDUs (See Permit  
17 Attachment C, Section C-1c).

18 Off-site waste managed and disposed of at the WIPP facility is radioactive mixed waste, and as  
19 a result, response to emergencies must consider the dual hazard associated with this waste. In  
20 responding to emergencies involving TRU mixed waste, the actions necessary to protect human  
21 health and the environment from the effects of radioactivity may be similar to those actions  
22 necessary to provide protection from hazardous waste and hazardous waste constituents. Such  
23 responses may require the use of equipment and processes specific to events resulting in  
24 radiological contamination (e.g., continuous air monitors, decontamination shower equipment,  
25 HEPA vacuums, paint/fixatives) and are not included in the *RCRA Contingency Plan*.  
26 Furthermore, the *RCRA Contingency Plan* may require additional actions to be taken to mitigate  
27 the hazards associated with the hazardous component of the waste. These measures are not  
28 intended to replace actions required to protect human health and the environment in response  
29 to radiological emergencies. In this manner, the *RCRA Contingency Plan* complements the  
30 radiological response activities.

## 31 D-2 Emergency Response Personnel and Training

### 32 D-2a Emergency Response Personnel

33 A RCRA Emergency Coordinator will be on-site at the WIPP facility 24 hours a day, seven days  
34 a week, with the responsibility for coordinating emergency response measures. In accordance  
35 with 20.4.1.500 NMAC (incorporating 40 CFR §264.52(d)), qualified RCRA Emergency  
36 Coordinators are listed in Table D-1 and are trained to the requirements found in Permit  
37 Attachment F4, under "~~RCRA~~ Emergency Coordinator".

38 In addition, persons qualified to act as the RCRA Emergency Coordinator have the authority to  
39 commit the necessary resources to implement this *RCRA Contingency Plan*.

40 During emergencies, the RCRA Emergency Coordinator has three primary responsibilities:

- 1           • **Assess the Situation**—The RCRA Emergency Coordinator shall gather information  
2 relevant to the incident, such as the type of event, quantity and type of released  
3 waste, and existing or potential hazards to human health and the environment.
  
- 4           • **Protect Personnel**—The RCRA Emergency Coordinator shall take reasonable  
5 measures to ensure the safety of personnel, such as ensuring that alarms have  
6 been activated, personnel have been accounted for, any injuries have been  
7 attended to, and evacuation of personnel has occurred, if necessary.
  
- 8           • **Contain the Release**—The RCRA Emergency Coordinator shall take reasonable  
9 measures to ensure that fires, explosions, or releases of hazardous waste or  
10 hazardous waste constituents do not occur, recur, or spread.

11 In addition to the RCRA Emergency Coordinator, the following individuals, groups, and  
12 organizations have specified responsibilities during any WIPP facility emergency:

- 13           • **WIPP Fire Department**—The primary providers of fire suppression, technical  
14 rescue, Emergency Medical Services (EMS), and hazardous materials response  
15 for the protection of personnel in both surface and underground facilities.
  
- 16           • **Facility Shift Manager (FSM)**—A member of the Facility Operations organization  
17 who is in charge of plant operations and is the senior shift representative  
18 responsible for maintaining the facility in a safe configuration during normal and  
19 abnormal conditions. The FSM can concurrently serve as the RCRA Emergency  
20 Coordinator, if trained to the requirements of Permit Attachment F4(Facility  
21 Personnel Permit Training Program), or provide support to the qualified RCRA  
22 Emergency Coordinator on shift. ~~Since the FSM provides support to the RCRA~~  
23 ~~Emergency Coordinator relative to the safety of the WIPP facility, no specific~~  
24 ~~RCRA training is required.~~
  
- 25           • **Central Monitoring Room Operator (CMRO)**—An on-shift operator responsible for  
26 Central Monitoring Room (CMR) operations, including coordination of facility  
27 communications. The CMRO documents these activities (e.g., communications,  
28 notifications) in a facility log. The CMRO is a member of Facility Operations, and  
29 during emergencies, the CMRO supports the RCRA Emergency Coordinator.
  
- 30           • **Emergency Response Team (ERT)** — WIPP facility personnel who serve as an  
31 Industrial Fire Brigade and are trained to respond to surface and underground  
32 emergencies on site, including fires, medical emergencies, and releases of  
33 hazardous materials. The ERT members supplement WIPP Fire Department  
34 response capabilities. The ERT member assigned to the underground will not  
35 perform any coordinated firefighting underground and will only respond to incipient-  
36 stage fires that threaten TRU mixed waste, if it is safe to do so.
  
- 37           • **Firefighter**—A WIPP Fire Department member who serves as a primary responder  
38 to surface and underground emergencies, including fires, medical emergencies,  
39 and releases of hazardous materials. Firefighters assigned to the underground will  
40 not perform any coordinated firefighting underground and will only respond to  
41 incipient-stage fires that threaten TRU mixed waste, if it is safe to do so.

- 1 • Fire Department Incident Commander—Upon delegation by the RCRA Emergency  
2 Coordinator, and once incident command has been established, the Incident  
3 Commander is responsible for direction and supervision of emergency responders  
4 during an incident resulting in implementation of the *RCRA Contingency Plan*. The  
5 Incident Commander will be a member of the WIPP Fire Department. For security-  
6 related incidents that invoke implementation of the *RCRA Contingency Plan*, the  
7 Fire Department Incident Commander will establish a unified command with the  
8 WIPP Protective Force.
  
- 9 • Mine Rescue Team (MRT)— The MRT is responsible for emergency rescue and  
10 recovery of trapped or missing personnel in the underground, conducting mine  
11 facility assessments, and underground firefighting once the underground has been  
12 evacuated and only if needed to rescue unaccounted personnel.
  
- 13 • Emergency Operations Center (EOC) Staff- Upon activation, the EOC supports the  
14 RCRA Emergency Coordinator and Incident Commander with emergency  
15 management decision-making and associated notifications. Since EOC staff  
16 performs duties similar to their normal job functions during an emergency response  
17 and provides support related to their area(s) of expertise, no specific RCRA  
18 training is required.

#### 19 D-2b Emergency Response Training

20 The WIPP Fire Department personnel are trained in accordance with the *WIPP Fire Department*  
21 *Training Plan*, which is kept on file at the WIPP facility. The training plan incorporates current  
22 National Fire Protection Association (**NFPA**) standards for training Firefighters and ERT  
23 members.

24 Fire Department Incident Commanders are also trained in accordance with the *WIPP Fire*  
25 *Department Training Plan*, which incorporates the Federal Emergency Management Agency  
26 (**FEMA**), Incident Command System (**ICS**), and the National Incident Management System  
27 (**NIMS**) standards.

28 WIPP personnel who perform EMS duties are licensed through the State of New Mexico  
29 Emergency Medical Systems Bureau. Licensure requirements for training, continuing education,  
30 and skills maintenance are set forth through state requirements. Licenses are maintained by  
31 attending training seminars or conferences.

32 As described above, emergency response training is conducted in accordance with the *WIPP*  
33 *Fire Department Training Plan*, which is updated whenever the applicable standards are  
34 revised. In addition to the emergency response training, WIPP Fire Department personnel are  
35 required to complete applicable site-specific training, which is described in Permit Attachment F,  
36 *Facility Personnel Permit Training Program; Attachment F1, RCRA Hazardous Waste*  
37 *Management and Emergency Response Job Titles and Descriptions; and Attachment F2,*  
38 *Training Course and Qualification Card Outlines.*

#### 39 D-3 Criteria for Implementation of the RCRA Contingency Plan

40 The provisions of the *RCRA Contingency Plan* shall be implemented immediately whenever  
41 there is a fire, an explosion, or a release of hazardous wastes or hazardous waste constituents

1 that could threaten human health or the environment, or whenever the potential for such an  
2 event exists as determined by the RCRA Emergency Coordinator, as required under 20.4.1.500  
3 NMAC (incorporating 40 CFR §264.51(b)).

4 There may be situations which do not readily lend themselves to an immediate assessment of  
5 the possible hazards to human health and the environment. In these cases, the RCRA  
6 Emergency Coordinator will implement the *RCRA Contingency Plan* as a precautionary  
7 measure, regardless of the emergency situation or occurrence, if the RCRA Emergency  
8 Coordinator has reason to believe that a fire, explosion, or release of hazardous waste or  
9 hazardous waste constituents has occurred that could threaten human health or the  
10 environment.

11 In accordance with 20.4.1.500 NMAC (incorporating 40 CFR §264.56(i)), the RCRA Emergency  
12 Coordinator, on behalf of the Permittees, will record the time, date, and details of the incident  
13 that required implementation of the *RCRA Contingency Plan*. The Secretary of the NMED will  
14 be immediately notified by the Permittees. Additionally, the Permittees shall submit a written  
15 report to the NMED within 15 days of the incident, as specified in Section D-5. The following  
16 emergency situations, as they pertain to TRU mixed waste and generated hazardous wastes,  
17 warrant immediate implementation of the *RCRA Contingency Plan* by the RCRA Emergency  
18 Coordinator in accordance with standard operating procedures on file at the WIPP facility:

19 • Fires

- 20 - If a fire involving TRU mixed waste or site-generated hazardous waste occurs
- 21 - If a fire (e.g., building, grass, nonhazardous waste fire) occurs within or near the  
22 Hazardous Waste Staging Areas that threatens to involve site-generated hazardous  
23 waste
- 24 - If a fire (e.g., building, grass, nonhazardous waste fire) occurs within or near the  
25 permitted HWMUs that threatens to involve TRU mixed waste
- 26 - If a fire occurs in underground that results in immediate personnel evacuation or  
27 prevents normal personnel access to the underground

28 For any fire which does not meet the above criteria, the RCRA Emergency Coordinator shall  
29 document the rationale for not implementing the *RCRA Contingency Plan* (e.g., there is no  
30 threat to human health or the environment).

31 • Explosions

- 32 - If an explosion involving TRU mixed waste or site-generated hazardous waste occurs
- 33 - If an explosion occurs within or near the Hazardous Waste Staging Areas which  
34 threatens to involve site-generated hazardous waste
- 35 - If an explosion occurs within or near the permitted HWMUs which threatens to involve  
36 TRU mixed waste
- 37 - If an explosion occurs in the underground that results in immediate personnel evacuation  
38 or prevents normal personnel access to the underground

- 1 - If there is an imminent danger of an explosion occurring (e.g., gas leak with an ignition  
2 source nearby) which could involve TRU mixed or site-generated hazardous waste

3 For any explosion which does not meet the above criteria, the RCRA Emergency Coordinator  
4 shall document the rationale for not implementing the *RCRA Contingency Plan* (e.g., there is  
5 no threat to human health or the environment).

6 • **Unplanned Sudden/Non-Sudden Releases**

- 7 - If, prior to waste emplacement, one or more containers of TRU mixed waste has spilled  
8 or been breached due to dropping, puncturing, container failure or degradation, or any  
9 other physical or chemical means, resulting in a release

- 10 - If, after waste emplacement, one or more containers of TRU mixed waste in an active  
11 room has been breached

- 12 - If a continuous air monitor confirms a release of radioactive particulates to the ambient  
13 atmosphere, indicating a possible release of TRU mixed waste constituents from the  
14 permitted facility

- 15 - If a spill of site-generated hazardous waste occurs in a Hazardous Waste Staging Area  
16 and cannot be contained with secondary containment methods or absorbents, thereby  
17 threatening a release to air, soil, or surface water

- 18 - If a site-generated hazardous waste spill occurs in a Hazardous Waste Staging Area and  
19 results in the release of potentially flammable material, thereby threatening to create a  
20 fire or explosion hazard

- 21 - If a site-generated hazardous waste spill occurs in a Hazardous Waste Staging Area and  
22 results in the release of potentially toxic fumes that would threaten human health

23 For any release of hazardous waste or hazardous waste constituents that does not meet the  
24 above criteria, the RCRA Emergency Coordinator shall document the rationale for not  
25 implementing the *RCRA Contingency Plan* (e.g., there is no threat to human health or the  
26 environment).

27 • **Other Occurrences**

- 28 - If a natural phenomenon (e.g., earthquake, flood, lightning strike, tornado) occurs that  
29 involves TRU mixed waste or site-generated hazardous waste or threatens to involve  
30 TRU mixed waste or site-generated hazardous waste

- 31 - If an underground structural integrity emergency (e.g., roof fall in an active room) occurs  
32 that involves TRU mixed waste, threatens to involve TRU mixed waste results in  
33 immediate personnel evacuation, or prevents normal personnel access to the  
34 underground

35 For any natural phenomenon or underground structural emergency that does not meet the  
36 above criteria, the RCRA Emergency Coordinator shall document the rationale for not

1 implementing the *RCRA Contingency Plan* (e.g., there is no threat to human health or the  
2 environment).

### 3 D-4 Emergency Response Method

4 Methods that describe implementation of the *RCRA Contingency Plan* cover the following six  
5 areas:

- 6 1. *Immediate Notifications* (Section D-4a)
- 7
- 8 2. *Identification of Released Materials and Assessment of Extent of Emergency* (Section  
9 D-4b)
- 10
- 11 3. *Assessment of the Potential Hazards* (Section D-4c)
- 12
- 13 4. *Post-Assessment Notifications* (Section D-4d)
- 14
- 15 5. *Control and Containment of the Emergency* (Section D-4e)
- 16
- 17 6. *Post-Emergency Activities* (Section D-4f)
- 18

#### 19 D-4a Immediate Notifications

20 Notification requirements in the event of implementation of the *RCRA Contingency Plan* are  
21 defined by 20.4.1.500 NMAC (incorporating 40 CFR §§264.56(a). Personnel at the WIPP facility  
22 are trained to respond to emergency notifications.

23 Whenever an emergency situation occurs that warrants implementation of this *RCRA*  
24 *Contingency Plan*, as described in Section D-3, the Permittees will immediately notify the  
25 Secretary of the NMED.

#### 26 D-4a(1) Initial Emergency Response and Alerting the RCRA Emergency Coordinator

27 The first person to become aware of an incident shall immediately report the situation to the  
28 CMRO and, as requested by the CMRO, provide the relevant information. Facility personnel are  
29 trained in the process for notifying the CMRO as part of General Employee Training (**GET**).

30 In addition to receiving incident reports from facility personnel, the CMRO continuously monitors  
31 (24 hours a day) the status of alarms, takes telephone calls and radio messages, initiates calls  
32 to emergency staff, and initiates emergency response procedures regarding evacuation, if  
33 needed.

34 Once the CMRO is notified of a fire, explosion, or a release anywhere in the facility (either by  
35 eyewitness notification or an alarm), the RCRA Emergency Coordinator is immediately notified.  
36 The RCRA Emergency Coordinator ensures that the emergency responders, including the  
37 WIPP Fire Department, the ERT, and the MRT, have been notified, as needed. Once incident  
38 command has been established, the RCRA Emergency Coordinator has the authority to  
39 delegate the responsibilities for mitigation of the incident to the Incident Commander.

1 The response to an unplanned event will be performed in accordance with standard operating  
2 procedures and guides based on the applicable Federal, State, or local regulations and/or  
3 guidelines for that response. These include DOE Order 151.1C, *Comprehensive Emergency*  
4 *Management System*; the U.S. Mine Safety and Health Administration (**MSHA**); NMAC;  
5 Comprehensive Environmental Response, Compensation, and Liability Act; Chapter 74, Article  
6 4B, New Mexico Statutes Annotated 1978; and the New Mexico Emergency Management Act.

7 If needed, the RCRA Emergency Coordinator will immediately notify the appropriate State and  
8 local agencies, listed in Section D-7, with designated response roles.

9 Depending on the emergency, the EOC may be activated for additional support. In the event  
10 that the EOC is activated, decision-making responsibilities related to emergency management  
11 and associated notifications may be delegated to the EOC by the RCRA Emergency  
12 Coordinator. The EOC will assist in the mitigation of the incident with the use of appropriate  
13 communications equipment and technical expertise from available resources. During the  
14 emergency, the RCRA Emergency Coordinator will remain in contact with and advise the EOC  
15 of the known hazards.

16 The EOC staff assesses opportunities for coordination and the use of mutual-aid agreements  
17 with local agencies making additional emergency personnel and equipment available (Section  
18 D-7), as well as the use of specialized response teams available through various State and  
19 Federal agencies. Because the WIPP facility is a DOE-owned facility, the Permittees may also  
20 use the resources available from the *National Response Framework*.

#### 21 D-4a(2) Communication of Emergency Conditions to Facility Employees

22 Procedures for immediately notifying facility personnel of emergencies are as follows:

- 23 • Local Fire Alarms

24 The local fire alarms sound an audible tone and may be activated automatically or  
25 manually in the event of a fire.

- 26 • Surface Evacuation Signal

27 The evacuation signal is a yelp tone and is manually activated by the CMRO when  
28 needed. The CMRO follows the evacuation signal with verbal instructions and ensure  
29 the Site Notification System has been activated.

- 30 • Underground Evacuation Warning System

31 The underground evacuation signal is a yelp tone and flashing strobe light. In the  
32 event of an evacuation signal, underground personnel will follow escape routes to  
33 egress hoist stations. Underground personnel are trained to report to the underground  
34 assembly areas and await further instruction if all power fails or if ventilation stops. If  
35 evacuation of underground personnel is required, this will be done using the backup  
36 electric generators and in accordance with the applicable requirements of MSHA.

37 WIPP facility personnel are trained and given instruction during GET to recognize the various  
38 alarm signals and the significance of each alarm. WIPP facility employees and site visitors are

1 required to comply with directions from emergency personnel and alarm system notifications  
2 and to follow instructions concerning emergency equipment, shutdown procedures, and  
3 emergency evacuation routes and exits.

4  
5 D-4b Identification of Released Materials and Assessment of the Extent of the Emergency

6 The identification of hazardous wastes or hazardous waste constituents involved in a fire, an  
7 explosion, or a release to the environment is a necessary part of the RCRA Emergency  
8 Coordinator's assessment of an incident, as described in 20.4.1.500 NMAC (incorporating 40  
9 CFR §264.56(b)). Immediately after alarms have been activated and required notifications have  
10 been made, the RCRA Emergency Coordinator shall direct an investigation to determine  
11 pertinent information relevant to the actual or potential threat posed to human health or the  
12 environment. The information will include the character, exact source, amount, and areal extent  
13 of any released material. This may be done by observation or review of facility records or  
14 manifests and, if necessary, by chemical analysis.

15 The identification of the character and source of released materials at any location is enhanced  
16 because hazardous wastes are stored, managed, or disposed at specified locations throughout  
17 the WIPP facility.

18 Sources of information available to identify the hazardous wastes involved in a fire, an  
19 explosion, or a release at the WIPP facility include operator/supervisor knowledge of their work  
20 areas, materials used, and work activities underway; the WIPP Waste Information System  
21 (**WWIS**), which identifies the location within the facility of emplaced TRU mixed waste, including  
22 emplaced derived waste; and waste manifests and other waste characterization information in  
23 the operating record. The WWIS also includes information on wastes that are in the waste  
24 handling process. Also available are Safety Data Sheets (SDSs) for hazardous materials in the  
25 various user areas throughout the facility, waste acceptance records, and materials inventories  
26 for buildings and operating groups at the WIPP facility. Information or data from the derived  
27 waste accumulation areas, the Hazardous Waste Staging Areas, satellite staging areas, and  
28 nonregulated waste accumulation areas are included. It is anticipated that this information is  
29 sufficient for identifying the nature and extent of the released materials. The RCRA Emergency  
30 Coordinator has access to this information when needed.

31 The waste received at the WIPP facility must meet TSDF-WAC (e.g., no more than one percent  
32 liquid), which minimizes the possibility of waste container degradation and liquid spills. Should a  
33 spill or release occur from a container of site-generated hazardous or TRU mixed waste,  
34 following an initial assessment of the event, the RCRA Emergency Coordinator will ensure that  
35 the following actions are immediately taken, consistent with radiological control procedures, in  
36 compliance with 20.4.1.500 NMAC (incorporating 40 CFR §264.52(a) and §264.171):

- 37
- 38 • Assemble the required response equipment, such as protective clothing and gear, heavy  
equipment, empty drums, overpack drums, hand tools, and absorbent materials
  - 39 • Transfer the released material to a container that is in good condition and patch or  
40 overpack the leaking container into another container that is in good condition

- Once the release has been contained, determine the areal extent of the release and proceed with appropriate cleanup action, such as chemical neutralization, vacuuming, or excavation

#### D-4c Assessment of the Potential Hazards

Concurrent with the actions described in Sections D-4a and D-4b, and in accordance with 20.4.1.500 NMAC (incorporating 40 CFR §264.56(c)), the RCRA Emergency Coordinator shall assess possible hazards to human health or the environment that may result from the release, fire, or explosion. This assessment will consider both direct and indirect effects of the release, fire, or explosion (e.g., the effects of any toxic, irritating, or asphyxiating gases that are generated, or the effects of any hazardous surface water run-off from water or chemical agents used to control fire and heat-induced explosions). The RCRA Emergency Coordinator will be responsible for identifying and responding to immediate and potential hazards, using the services of trained personnel.

After the materials involved in an emergency are identified, the specific information (e.g., associated hazards, appropriate personal protective equipment (**PPE**), decontamination) may be obtained from SDSs and from appropriate chemical reference materials at the same location. These information sources are available to the RCRA Emergency Coordinator or may be accessed through several WIPP facility organizations.

If, upon completion of the hazards assessment, the RCRA Emergency Coordinator determines that there are no actual or potential hazards to human health or the environment present, this *RCRA Contingency Plan* may be terminated. The RCRA Emergency Coordinator will record the time, date, and details of the incident in the operating record, and the Permittees will ensure that the reporting requirements of Section D-5 are fulfilled.

#### D-4d Post-Assessment Notifications

Upon *RCRA Contingency Plan* implementation, post-assessment notifications may be necessary in order to satisfy 20.4.1.500 NMAC (incorporating 40 CFR §264.56(d)). If it has been determined that the facility has had a fire, an explosion, or a release of hazardous waste or hazardous waste constituents that could threaten human health or the environment outside the facility (i.e., outside the Land Withdrawal Boundary), the RCRA Emergency Coordinator, after consultation with the DOE as the owner of the facility, will ensure that the appropriate local authorities are immediately notified by telephone and/or radio in the event that evacuation is needed. The following notifications satisfy the requirements of 20.4.1.500 NMAC (incorporating 40 CFR §264.56(d)(1)):

- New Mexico Department of Homeland Security and Emergency Management (telephone number: (505) 476-9635)
- Eddy County via the Regional Emergency Dispatch Authority (telephone number: (575) 616-7155)
- Lea County via the Regional Emergency Dispatch Authority (telephone number: (575) 397-9265)

1 The RCRA Emergency Coordinator must be available to help appropriate officials decide  
2 whether local areas should be evacuated.

3 After local authorities are notified, the RCRA Emergency Coordinator must immediately notify  
4 either the government official designated as the on-scene coordinator for that geographical  
5 area, or the National Response Center. For the purposes of the *RCRA Contingency Plan*, the  
6 following notifications satisfy the requirements of 20.4.1.500 NMAC (incorporating 40 CFR  
7 §264.56(d)(2)):

- 8 • New Mexico Environment Department (NMED)  
9 Department of Public Safety  
10 24-Hour Emergency Reporting Telephone Number: (505) 827-9329  
11 FAX number: (505) 827-9368  
12
- 13 • National Response Center  
14 Telephone number: 1-800-424-8802  
15 FAX number: (202) 479-7181

16 This notification shall include the following information:

- 17 • The name and phone number of the reporter
- 18 • The name and address of the facility
- 19 • The type of incident (fire, explosion, or release)
- 20 • The date and time of the incident
- 21 • The name and quantity of material(s) involved, to the extent known
- 22 • The extent of injuries, if any
- 23 • Possible hazards to human health and the environment (air, soil, water, wildlife, etc.)  
24 outside the facility

25 Communications beyond those required by the *RCRA Contingency Plan* are the responsibility of  
26 the Permittees in accordance with plans and policies on file at the WIPP facility.

27 D-4e Control and Containment of the Emergency

28 The RCRA Emergency Coordinator is required to ensure control of an emergency and to  
29 minimize the potential for the occurrence, recurrence, or spread of releases due to the  
30 emergency situation, as described in 20.4.1.500 NMAC (incorporating 40 CFR §264.56 (e) and  
31 (f)). Standard operating procedures and guides are used to implement initial response  
32 measures with priority being control of the emergency, and those actions necessary to ensure  
33 confinement and containment in the early, critical stages of a spill or leak. The RCRA  
34 Emergency Coordinator, in conjunction with the Incident Commander, is responsible for  
35 implementing the following measures:

- 36 • Stopping processes and operations

- 1 • Collecting and containing released wastes and materials
- 2 • Removing or isolating containers of hazardous waste posing a threat
- 3 • Ensuring that wastes managed during an emergency are handled, stored, or treated with  
4 due consideration for compatibility with other wastes and materials on site and with  
5 containers utilized (Section D-4f(2))
- 6 • Restricting personnel not needed for response activities from the scene of the incident
- 7 • Evacuating the area
- 8 • Curtailing nonessential activities in the area
- 9 • Conducting preliminary inspections of adjacent facilities and equipment to assess  
10 damage
- 11 • Maintaining fire equipment on standby at the incident site in cases where ignitable  
12 liquids have been or may be released and ensuring that ignition sources are kept out of  
13 the area. Ignitable liquids will be segregated, contained, confined, diluted, or otherwise  
14 controlled to preclude inadvertent explosion or detonation.

15 No operation that has been shut down in response to the incident will be restarted until  
16 authorized by the RCRA Emergency Coordinator. If a release occurs that involves radioactivity,  
17 the RCRA Emergency Coordinator actions will be consistent with radiation control policies and  
18 practices.

19 The standard operating procedures for emergency response may include, but are not limited to,  
20 the following actions appropriate for control of releases:

- 21 1. Isolating the area from unauthorized entry by fences, barricades, warning signs, or  
22 other security and site control precautions. Isolation and evacuation distances vary,  
23 depending upon the chemical/product, fire, and weather situations.
- 24 2. Establishing drainage controls.
- 25 3. Stabilizing physical controls (such as dikes or impoundment[s]).
- 26 4. Capping contaminated soils to reduce migration.
- 27 5. Using chemicals and other materials to retard the spread of the release or to mitigate  
28 its effects.
- 29 6. Excavating, consolidating, or removing contaminated soils.
- 30 7. Removing wastes containers to reduce exposure risk during situations such as fires.

31 If the facility stops operations in response to a fire, explosion, or release, the RCRA Emergency  
32 Coordinator shall ensure continued monitoring for leaks, pressure buildup, gas generation, or  
33 ruptures in valves, pipes, or other equipment, wherever appropriate.

1 Natural and/or synthetic methods will be employed to limit the releases of hazardous wastes or  
2 hazardous waste constituents so that effective recovery and treatment can be accomplished  
3 with minimal additional risk to human health or the environment.

4 Emergency response actions taken to mitigate releases may include, but are not limited to, the  
5 following:

- 6 1. Physical methods of control may involve any of several processes to reduce the area  
7 of the spill/leak, or other release mechanism (such as fire suppression).
  - 8 a. Absorption (e.g., absorbent sheets; spill control bucket materials specifically for  
9 solvents, neutralization, or acids/caustics; and absorbent socks for general liquids  
10 or oils)
  - 11 b. Dikes or Diversions (e.g., absorbent socks or earth)
  - 12 c. Overpacking
  - 13 d. Plug and Patch
  - 14 e. Transfers from leaking container to new container f. Vapor Suppression (e.g.,  
15 aqueous foam blanket)
- 16 2. Chemical methods of mitigation may include the following:
  - 17 a. Neutralization
  - 18 b. Solidification

19 Once the Incident Commander informs the RCRA Emergency Coordinator that the emergency  
20 scene is stable, the release has been stopped, any reactions have been controlled, the released  
21 hazardous materials have been contained within a localized area, and the area of contamination  
22 has been secured from unauthorized entry, the field emergency response activity can be  
23 terminated.

#### 24 D-4e(1) Fires

25 In the event of a fire that involves or threatens TRU mixed waste or site-generated hazardous  
26 waste, emergency response actions may include, but are not limited to, the following:

- 27 1. The RCRA Emergency Coordinator will remain in contact with and advise the Incident  
28 Commander of the known hazards.
- 29 2. The Incident Commander will maintain overall control of the emergency and may  
30 accept and evaluate the advice of WIPP facility personnel and emergency response  
31 organization members, but retains overall responsibility until the emergency is  
32 terminated.
- 33 3. Only fire extinguishing materials that are compatible with the materials involved in the  
34 fire will be used to extinguish fires. Water and dry chemical materials have been  
35 determined to be compatible with all components of the TRU mixed waste.

- 1           4. In order to ensure that storm drains and/or sewers do not receive potentially  
2           hazardous runoff, dikes will be built around storm drains to control discharge as  
3           needed. Collected waste will be sampled and analyzed for hazardous constituents,  
4           and appropriately disposed.
- 5           5. The RCRA Emergency Coordinator will ensure that measures are taken to shut down  
6           operational units (e.g., process equipment and ventilation equipment) that have been  
7           affected directly or indirectly by the fire.
- 8           6. Fire suppression materials used in response to incidents will be retained on-scene,  
9           where an evaluation will be performed to determine appropriate recovery and disposal  
10          methods.
- 11          7. Upon underground evacuation due to a fire in the underground that involves or  
12          threatens to involve TRU mixed waste, a response plan will be developed depending  
13          on the status of the fire. The plan may include ventilation control, barrier erection, and  
14          waiting for the fire to self-extinguish or implement active ventilation.

15    D-4e(2) Explosions

16    In the event of an explosion that involves or threatens TRU mixed waste or site-generated  
17    hazardous waste, emergency response actions may include, but are not limited to, the following:

- 18          1. The RCRA Emergency Coordinator will remain in contact with and advise the Incident  
19          Commander of the known hazards.
- 20          2. The Incident Commander will maintain overall control of the emergency and may  
21          accept and evaluate the advice of WIPP facility personnel and emergency response  
22          organization members, but retains overall responsibility until the emergency is  
23          terminated.
- 24          3. The RCRA Emergency Coordinator will ensure measures are taken to shut down  
25          operational units (e.g., process equipment and ventilation equipment) that have been  
26          affected directly or indirectly by the explosion.
- 27          4. If, following an explosion, there is an ensuing fire, see Section D-4e(1).
- 28          5. If, following an explosion, there is an underground structural integrity emergency, see  
29          Section D-4e(4).

1 D-4e(3) \_\_\_\_\_ Unplanned Sudden/Non-Sudden Releases

2 Spills of Site-Generated Hazardous Waste

3 If a spill of site-generated hazardous waste has occurred, and 1) the spill cannot be contained  
4 with secondary containment methods or absorbents, 2) the spill causes a release of flammable  
5 material, or 3) the spill results in toxic fumes, the RCRA Emergency Coordinator will ensure  
6 implementation of measures that may include, but are not limited to, the following actions:

- 7 1. The RCRA Emergency Coordinator will remain in contact with and advise the Incident  
8 Commander of the known hazards.
- 9 2. The Incident Commander will maintain overall control of the emergency and may  
10 accept and evaluate the advice of WIPP facility personnel and emergency response  
11 organization members, but retains overall responsibility until the emergency is  
12 terminated.
- 13 3. The immediate area will be evacuated.
- 14 4. The source of the release will be mitigated, if possible.
- 15 5. A dike to contain runoff will be built, if necessary.
- 16 6. Dikes around storm drains to control discharge will be built, as needed, to ensure that  
17 storm drains and/or sewers do not receive potentially hazardous runoff.
- 18 7. Fire equipment will be maintained on standby at the incident site in cases where  
19 ignitable liquids have been or may be released, and ignition sources will be kept out of  
20 the area of ignitable liquids.
- 21 8. Released waste and contaminated media will be collected and placed into drums or  
22 other appropriate containers.

23 Releases of TRU Mixed Waste

24 If a release of TRU mixed waste has occurred, the emergency will be managed as a potential  
25 radiological release, and radiological control measures will determine the activities that can be  
26 performed safely, which may include the following:

- 27 1. The RCRA Emergency Coordinator will remain in contact with and advise the Incident  
28 Commander of the known hazards.
- 29 2. The Incident Commander will maintain overall control of the emergency and may  
30 accept and evaluate the advice of WIPP facility personnel and emergency response  
31 organization members, but retains overall responsibility until the emergency is  
32 terminated.
- 33 3. Prior to the re-entry following an event involving containers that are managed as TRU  
34 mixed waste, a Radiological Work Permit (**RWP**) will be prepared.

- 1 4. During the re-entry phase, the extent of radiological contamination will be determined.  
2 This information is used by the RCRA Emergency Coordinator to determine an  
3 appropriate course of action to recover the area.
- 4 5. During the recovery phase, the necessary resources to conduct decontamination  
5 and/or overpacking operations will be used as needed.
- 6 6. Prior to returning the affected area and/or equipment to normal activities, the RCRA  
7 Emergency Coordinator will determine if additional measures are required by the  
8 *RCRA Contingency Plan* (e.g., characterization and disposal of contaminated media).
- 9 7. The recovery phase will include activities (e.g., placing the waste material in another  
10 container, vacuuming the waste material, overpacking or plugging/patching the  
11 affected waste container(s), decontaminating or covering the affected area), as  
12 specified in the RWP, to minimize the spread of contamination to other areas.
- 13 8. The RWPs and other administrative controls will provide protective measures to help  
14 ensure that new hazardous constituents will not be added during decontamination  
15 activities.

#### 16 D-4e(4) Other Occurrences

#### 17 Natural Phenomena

18 In the event of a natural phenomenon (e.g., earthquake, flood, lightning strike, tornado) that  
19 involves hazardous waste or has threatened to cause a release of hazardous waste or  
20 hazardous waste constituents, emergency response actions may include, but are not limited to,  
21 the following:

- 22 1. The RCRA Emergency Coordinator will remain in contact with and advise the Incident  
23 Commander of the known hazards.
- 24 2. The Incident Commander will maintain overall control of the emergency and may  
25 accept and evaluate the advice of WIPP facility personnel and emergency response  
26 organization members, but retains overall responsibility until the emergency is  
27 terminated.
- 28 3. Containers which have not been disposed will be inspected for signs of leakage or  
29 damage, and containment systems will be inspected for deterioration.
- 30 4. Affected equipment or areas associated with hazardous waste management activities  
31 will be inspected, and the operability of monitoring systems will be ensured.
- 32 5. Affected electrical equipment and lines will be inspected for damage.
- 33 6. Affected buildings and fencing directly related to hazardous waste management  
34 activities will be inspected for damage.
- 35 7. A general survey of the site will be conducted to check for signs of physical damage.

- 1           8. The RCRA Emergency Coordinator will ensure that measures are taken to shut down  
2           operational units (e.g., process equipment and ventilation equipment) that have been  
3           affected by the natural phenomenon.

4    Underground Structural Integrity Emergencies

5    In the event of an underground structural integrity emergency that involves or threatens TRU  
6    mixed waste (i.e., occurs in an active disposal room), the emergency will be managed as a  
7    potential radiological release, and radiological control measures will determine the activities that  
8    can be performed safely, and may include the following:

- 9           1. The RCRA Emergency Coordinator will remain in contact with and advise the Incident  
10          Commander of the known hazards.
- 11          2. The Incident Commander will maintain overall control of the emergency and may  
12          accept and evaluate the advice of WIPP facility personnel and emergency response  
13          organization members, but retains overall responsibility until the emergency is  
14          terminated.
- 15          3. The RCRA Emergency Coordinator will ascertain whether the roof conditions allow for  
16          safe entry and if the waste container or containers in question are accessible.
- 17          4. The RCRA Emergency Coordinator may recommend closing the entire panel, or the  
18          affected room of waste containers, based on the location of the event and the stability  
19          of the roof and walls in the panel as a method to ensure that measures are taken to  
20          shut down affected operational units.
- 21          5. Access to the ventilation flow path downstream of the incident will be restricted, as  
22          appropriate.
- 23          6. Ventilation to the affected room will be restricted to ensure that there is no spread of  
24          contamination that may have been released, as appropriate.
- 25          7. Accessible containers will be inspected for signs of leakage or damage.
- 26          8. The spill area will be covered with material (e.g., plastic, fabric sheets) in a manner  
27          that safely isolates the contamination in the area.
- 28          9. The RCRA Emergency Coordinator will determine if the covered spill area safely  
29          allows for continued waste disposal operations or whether further action is required to  
30          reinitiate operations.

31    D-4f Post-Emergency Activities

32    Immediately after the emergency, and once initial release or spill control and containment have  
33    been completed, the RCRA Emergency Coordinator will ensure that necessary decontamination  
34    occurs and that recovered hazardous waste is properly managed, stored, and/or disposed, as  
35    required by 20.4.1.500 NMAC (incorporating 40 CFR §264.56(g)). As required by 20.4.1.500  
36    NMAC (incorporating 40 CFR §264.56(h)), the RCRA Emergency Coordinator will ensure that  
37    incompatibility of waste and restoration of emergency equipment are addressed.

1 D-4f(1) Management and Disposition of Released Material

2 When a release of TRU mixed waste has occurred, priority is given to actions required to  
3 minimize radiological exposure to workers and the public. In most cases, these actions are  
4 sufficient to mitigate any health effects associated with contamination by hazardous waste or  
5 hazardous waste constituents.

6 If a release of site-generated hazardous waste occurs, the contaminated surface will be  
7 cleaned, and decontamination materials will be placed in containers and dispositioned  
8 appropriately. If the release is TRU mixed waste, decontamination and disposition will be in  
9 accordance with the RWP.

10 If radioactive contamination is detected on equipment or on structures, radiological cleanup  
11 standards will be used to determine the effectiveness of decontamination efforts and/or the final  
12 disposition of the equipment or structures. Many types of equipment are difficult to  
13 decontaminate and may have to be discarded as derived waste. Fixatives (e.g., paint) may be  
14 used on contaminated structures if the contamination cannot be safely removed.

15 Following decontamination, the RCRA Emergency Coordinator will ensure that nonradioactive  
16 hazardous waste resulting from the cleanup of a fire, an explosion, or a release involving a  
17 nonradioactive hazardous waste at the WIPP facility will be contained and managed as a  
18 hazardous waste until such time as the waste is disposed of, or determined to be  
19 nonhazardous, as defined in 20.4.1.200 NMAC (incorporating 40 CFR Part 261, Subparts C and  
20 D). In most cases, knowledge of the material inventories for the various buildings and areas at  
21 the facility will allow a hazardous waste determination for the material resulting from the cleanup  
22 of a release. When knowledge of the material inventories is not sufficient, samples of the waste  
23 will be collected and analyzed using U.S. Environmental Protection Agency (**EPA**)-approved  
24 methods to determine the presence of any hazardous characteristics and/or hazardous waste  
25 constituents.

26 D-4f(2) Incompatible Waste

27 The RCRA Emergency Coordinator will ensure, in accordance with 20.4.1.500 NMAC  
28 (incorporating 40 CFR §264.56(h)(1)), that in the affected area(s) of the facility, no waste that  
29 may be incompatible with the released material is treated, stored, or disposed of until cleanup  
30 has been completed. The RCRA Emergency Coordinator will not allow hazardous or TRU mixed  
31 waste operations to resume in a building or area in which incompatible materials have been  
32 released prior to completion of necessary post-emergency cleanup operations to remove  
33 potentially incompatible materials. In making the determination of compatibility, the RCRA  
34 Emergency Coordinator will have available the resources and information described in Section  
35 D-4b, *Identification of Released Materials and Assessment of the Extent of the Emergency*.

36 D-4f(3) Cleaning and Restoration of Equipment

37 The RCRA Emergency Coordinator will take measures to ensure, in accordance with 20.4.1.500  
38 NMAC (incorporating 40 CFR §264.56(h)(2)), that in the affected area(s) of the facility,  
39 emergency equipment listed in the *RCRA Contingency Plan*, and used in the emergency  
40 response, is cleaned and fit for its intended use or replaced before operations are resumed.

1 Any equipment that cannot be decontaminated will be discarded as waste (e.g., hazardous,  
2 mixed, solid), as appropriate. After the equipment has been cleaned, repaired, or replaced, a  
3 post-emergency facility and equipment inspection will be performed, and the results will be  
4 documented.

#### 5 D-5 Required Reporting

6 The RCRA Emergency Coordinator, on behalf of the Permittees, will note in the operating  
7 record the time, date, and details of the incident that required implementation of the *RCRA*  
8 *Contingency Plan*. In compliance with 20.4.1.500 NMAC (incorporating 40 CFR §264.56(i)),  
9 within 15 days after the incident, the Permittees will ensure that a written report on the incident  
10 will be submitted to the Secretary of the NMED and the EPA Region VI Administrator. The  
11 report will include:

- 12 • The name, address, and telephone number of the Owner/Operator
- 13 • The name, address, and telephone number of the facility
- 14 • The date, time, and type of incident (e.g., fire, explosion, or release)
- 15 • The name and quantity of material(s) involved
- 16 • The extent of injuries, if any
- 17 • An assessment of actual or potential hazards to human health or the environment,  
18 where this is applicable
- 19 • The estimated quantity and disposition of recovered material that resulted from the  
20 incident

#### 21 D-6 Emergency Equipment

22 A variety of equipment is available at the facility for emergency response, containment, and  
23 cleanup operations in the surface HWMUs, the underground HWDUs, and the WIPP facility in  
24 general. This includes equipment for spill control, fire control, personnel protection, monitoring,  
25 first aid and medical attention, communications, and alarms. This equipment is immediately  
26 available to emergency response personnel. A listing of major emergency equipment available  
27 at the WIPP facility, as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.52(e)), is  
28 shown in Table D-2. Table D-2 also includes the location and a physical description of each item  
29 on the list along with a brief outline of its capabilities. The fire-water distribution system map is  
30 shown in Figure D-5. Equipment specified at the locations listed in Table D-2 are inspected in  
31 accordance with the inspection schedule specified in Attachment E, Table E-1, as required by  
32 20.4.1.500 NMAC (incorporating 40 CFR §264.52(e)).

#### 33 D-7 Agreements with Local Emergency Response Agencies

34 The Permittees have established agreements with local emergency response agencies for  
35 firefighting, medical assistance, hazardous materials response, and law enforcement. In the  
36 event that on-site response resources are unable to provide the needed response actions  
37 during a medical, fire, hazardous materials, or security emergency, the RCRA Emergency  
38 Coordinator will notify appropriate response agencies and request assistance. Once on site,

1 local emergency response agency personnel will perform emergency response activities under  
2 the direction of the Incident Commander.

3 The agreements with local agencies for emergency response capabilities are on file at the WIPP  
4 facility. Additional agreements may be established when needed. A description of the  
5 agreements with State and local agencies and mining operations in the vicinity of the WIPP  
6 facility, as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.37 and §264.52(c)),  
7 include, but is not limited to, the following:

- 8 • Agreements with local mining companies, including Intrepid Potash NM LLC and Mosaic  
9 Potash Carlsbad Inc. provide for mutual aid and assistance, in the form of MRTs, in the  
10 event of a mine disaster or other circumstance at either of the facilities. This provision  
11 ensures that the WIPP MOC will have two MRTs available at all times when miners are  
12 underground.
- 13 • An agreement with the U.S. Department of Interior (**DOI**), represented by the Bureau of  
14 Land Management (**BLM**), Roswell District, for wildland firefighting support within the  
15 WIPP Land Withdrawal Area.
- 16 • Agreements for mutual-aid firefighting with Eddy County, the City of Hobbs, and the City  
17 of Carlsbad for assistance, including equipment and personnel.
- 18 • A mutual-aid Agreements with the City of Hobbs and the City of Carlsbad for mutual  
19 ambulance, medical, rescue, and hazardous material response services; for use of  
20 WIPP facility radio frequencies during emergencies; and for mutual security and law  
21 enforcement services, within the appropriate jurisdiction limits of each party.
- 22 • Agreements with the Lea Regional Medical Center and the Carlsbad Medical Center for  
23 the treatment of persons with radiological contamination who have incurred injuries  
24 beyond the treatment capabilities at the WIPP site. The WIPP facility provides transport  
25 of the patient(s) to the medical center.
- 26 • Agreements with the Sheriff of Eddy County and the Sheriff of Lea County for mutual law  
27 enforcement services support.
- 28 • An agreement with the New Mexico Department of Homeland Security and Emergency  
29 Management for mutual emergency management support, access to state law  
30 enforcement, public works, and transportation assets.

#### 31 D-8 Evacuation Plan

32 If it becomes necessary to evacuate all or part of the WIPP facility, on-site assembly and off-site  
33 staging areas have been established. The off-site staging areas are outside the security fence.  
34 The Permittees have plans and implementation procedures for both surface and underground  
35 evacuations. Drills are performed on these procedures at the WIPP facility at least annually. The  
36 following sections describe the evacuation plan for the WIPP facility, as required under  
37 20.4.1.500 NMAC (incorporating 40 CFR §264.52(f)).

1 D-8a Surface Evacuation On-site and Off-site Staging Areas

2 Figure D-6 shows the surface assembly and staging areas. Security officers remain at the  
3 primary staging area gate 24 hours a day, and the vehicle trap is opened for personnel during  
4 emergency evacuations. The north gate has a single-person gate and a large gate which can be  
5 opened, similar to the main gates for the primary staging area. The east gate is a turnstile gate.  
6 Upon notification, security personnel will respond, open gates, and facilitate egress for  
7 evacuation.

8 If a building or area evacuation is necessary, the RCRA Emergency Coordinator, in conjunction  
9 with the Incident Commander, will determine which assembly area is to be used and will  
10 communicate the selection to facility personnel. The preferred evacuation route is determined  
11 based on the nature of the event, prevailing weather conditions, and actual or potential  
12 radiological release. If site evacuation is necessary, the RCRA Emergency Coordinator, in  
13 conjunction with the Incident Commander, will decide which staging area is to be used and will  
14 communicate the selection to facility personnel. The WIPP site evacuation routes are shown in  
15 Figure D-8. The surface evacuation alarm and public address system are used to direct  
16 personnel evacuation. Persons responsible for surface accountability will direct personnel to the  
17 selected staging area outside the security fence.

18 Personnel report to the designated assembly or staging area where accountability is conducted  
19 (Figure D-6). Personnel who are working in a contaminated area when site evacuation is  
20 announced will assemble at specific staging areas for potentially contaminated personnel in  
21 order to minimize contact with other personnel during the evacuation.

22 D-8b Underground Assembly Areas and Egress Hoist Stations

23 Depending upon the type of emergency and level of response, it may be necessary for  
24 personnel in the underground to shelter in place, report to designated assembly areas (Figure  
25 D-7), or to evacuate the underground. Underground personnel are trained to immediately report  
26 to assembly areas under specific circumstances (i.e., loss of underground power or ventilation).  
27 Underground accountability is taken when the underground is sheltered in place or evacuated.  
28 The Underground Controller is responsible for underground personnel accountability. Each  
29 assembly area contains a mine page phone, miner's aid station, and evacuation maps.

30 In accordance with 30 CFR §57.11050, the mine maintains two escapeways. These  
31 escapeways are designated as Egress Hoist Stations. When the need for an underground  
32 evacuation has been determined, underground personnel report to the Egress Hoist Stations.

33 Decontamination of underground personnel will be conducted the same way as described for  
34 surface decontamination. Contaminated personnel are trained to remain segregated from other  
35 personnel until radiological contamination control personnel can respond.

36 D-8c Plan for Surface Evacuation

37 Surface evacuation notification is initiated by the CMRO, as directed by the RCRA Emergency  
38 Coordinator, via sounding of the surface evacuation alarm and providing incident information  
39 via the public address system. The persons responsible for surface accountability assist  
40 personnel in evacuation from their areas. Egress routes from buildings and site evacuation  
41 routes and instructions are posted in designated areas throughout the site. Egress routes from  
42 the WHB Unit are shown in Figures D-6a, D-6b, and D-6c.

1 If the ERT members have been notified to respond to an identified area, these members will not  
2 depart the site during an evacuation, but will report to the Incident Commander for instructions  
3 and accountability. The ERT members will not evacuate until released by the Incident  
4 Commander.

#### 5 D-8d Plan for Underground Evacuation

6 Notification for underground evacuation will be made using the underground evacuation alarm  
7 and strobe light signals.

8 Personnel will evacuate to the nearest Egress Hoist Station. Primary underground escape  
9 routes (identified by green reflectors on the rib) will be used, if possible. Secondary underground  
10 escape routes (identified by red reflectors on the rib) will be used if necessary (Figure D-4).  
11 Detailed descriptions of escapeways and an underground escape map are included in the  
12 *Underground Escape and Evacuation Plan* on file at the WIPP facility, as required by MSHA, 30  
13 CFR §57.11053, for underground mining situations. The MSHA required map takes precedence  
14 over Figure D-4, *Underground Escape/Evacuation Routes*, should an underground mine related  
15 event occur necessitating a change to the evacuation routes. The Underground Controller is  
16 responsible for underground personnel accountability and for reporting accountability to the  
17 RCRA Emergency Coordinator.

18 Upon reaching the surface, personnel will report to their on-site surface assembly or off-site  
19 staging area, as directed, to receive further instructions.

20 Members of the WIPP Fire Department and the MRT who may be underground, will assist in the  
21 evacuation of the underground when an underground evacuation is called for. A reentry by the  
22 MRT will be performed according to 30 CFR Part 49 and MSHA regulations for reentry into a  
23 mine. The two MRTs are trained in compliance with 30 CFR Part 49 in mine mapping, mine  
24 gases, ventilation, exploration, mine fires, rescue, and recovery.

#### 25 D-8e Further Site Evacuation

26 In the event of an evacuation involving the need to transport employees, the following  
27 transportation will be available:

- 28 • Buses/vans—WIPP facility buses/vans will be available for evacuation of personnel. The  
29 buses/vans are stationed in the employee parking lot.
- 30 • Privately Owned Vehicles—Because many employees drive to work in their own  
31 vehicles, these vehicles may be used in an emergency. Personnel will be provided  
32 routes to be taken when leaving the facility.

33 These vehicles may be used to transport personnel who have been released from the site by  
34 the RCRA Emergency Coordinator.

35 The primary evacuation routes for the WIPP facility are the main DOE north/south access road,  
36 which connects to U.S. Highways 62/180 (north) and State Highway 128 (south). Alternate  
37 evacuation routes from the facility are provided at the south side and the east side of the facility  
38 (Figure D-8).

1 D-9 Location of the RCRA Contingency Plan and Plan Revision

2 In accordance with 20.4.1.500 NMAC (incorporating 40 CFR §264.53(a)), the owner/operator of  
3 the WIPP facility will ensure that copies of this *RCRA Contingency Plan* are maintained at the  
4 WIPP facility and are available to the emergency personnel and organizations described in  
5 Section D-2. When the *RCRA Contingency Plan* is revised, updated copies are distributed  
6 (electronically or via site mail) or hand delivered to applicable WIPP facility emergency  
7 personnel and Emergency Operations Centers. In addition, the Permittees will make copies  
8 available to the following State and local agencies, as required by 20.4.1.500 NMAC  
9 (incorporating 40 CFR §264.53(b)):

- 10 • Intrepid Potash New Mexico LLC
- 11 • Mosaic Potash Carlsbad Inc.
- 12 • City of Carlsbad
- 13 • Carlsbad Medical Center, Carlsbad
- 14 • Lea Regional Medical Center, Hobbs
- 15 • City of Hobbs
- 16 • BLM, Carlsbad
- 17 • New Mexico State Police
- 18 • New Mexico Department of Homeland Security and Emergency Management
- 19 • Eddy County Commission
- 20 • Sheriff of Eddy County
- 21 • Sheriff of Lea County

22 In accordance with 20.4.1.500 NMAC (incorporating 40 CFR §264.54), the Permittees will  
23 ensure that this plan is reviewed and amended whenever:

- 24 • The Permit for the WIPP facility is revised in any way that would affect the *RCRA*  
25 *Contingency Plan*;
- 26 • This plan fails in an emergency;
- 27 • The WIPP facility design, construction, operation, maintenance, or other circumstances  
28 change in a way that materially increases the potential for fires, explosions, or releases  
29 of hazardous waste or hazardous constituents or change the response necessary in an  
30 emergency;
- 31 • The list of RCRA Emergency Coordinators change; or
- 32 • The list of WIPP facility emergency equipment changes.

1  
2

(This page intentionally blank)

1

## TABLES

2

1  
2

(This page intentionally blank)

1  
2

**Table D-1**  
**Resource Conservation and Recovery Act Emergency Coordinators<sup>1</sup>**

<b>Name</b>	<b>Address*</b>	<b>Office Phone</b>	<b>Personal Phone*</b>
R. C. (Russ) Stroble		234-8276 or 234-8554	
J. E. (Joseph) Bealler		234-8276 or 234-8916	
M. G. (Mike) Proctor		234-8276 or 234-8143	
G. L. (Gary) Kessler		234-8326	
P. J. (Paul) Paneral		234-8498	
J. B. (James) Wheeler		234-8273	
M. L. (Mark) Long		234-8170	
A.C. (Andy) Cooper		234-8197	

\* NOTE: Personal information (home addresses and personal phone numbers) has been removed from informational copies of this Permit.

<sup>1</sup> For every shift, one qualified RCRA Emergency Coordinator serves as the primary, and a second qualified RCRA Emergency Coordinator is available to serve as the alternate.

1  
2

**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), <u>New Filter Building (NFB) (Building 416)</u> , <u>Salt Reduction Building (SRB) (Building 417)</u> , 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 surface Hazardous Waste Staging Areas (Buildings 474A and 474B)
Underground Fire Alarms	Fire alarm panels, fire alarm transmitter, 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)
Site Notification System; Underground Evacuation Alarm System	For surface, alarms and notifications transmitted over paging channel of the public address system, manually initiated; for underground, audible alarm	Site-wide
Public Address System	Includes intercom phones; handset stations and loudspeaker assemblies	Site-wide

<b>Equipment</b>	<b>Description and Capabilities</b>	<b>Location</b>
Mine Pager Phones	Battery-operated paging system	Underground at S550/W30, S1000/W30, S1950/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
<b>Spill Response Equipment and Materials</b>		
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)
<b>Medical Resources</b>		
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)
Miners First Aid Stations	Equipped per 30 CFR 57.15001	Underground (Salt Shaft Area, Waste Shaft Area, E300 Maintenance Shop, and at S1000/W30, S1300/W30, and S1950/E140)

Equipment	Description and Capabilities	Location
<b>Fire Detection and Fire Suppression Equipment</b>		
Building Smoke, Thermal Detectors, or Manual Pull Stations	Devices that trigger an alarm and/or fire suppression system	Guard and Security Building (Building 458), Warehouse/Shops Building (Building 453), Support Building (Building 451, CMR/Computer Room), Waste Handling Building (Building 411), TRUPACT Maintenance Building (Building 412), Underground Fuel Station (N150/W170), SH Shaft Hoisthouse (Building 384), Engineering Building (Building 486), Safety and Emergency Services Facility (Building 452), and Training Building (Building 489)
Fire Trucks	A minimum of two fire trucks to assist in fighting fires; firefighter equipped in accordance with NFPA 1901 and/or 1906 and as documented in WIPP facility files	Surface at Safety and Emergency Services Facility (Building 452, Vehicle Bay)
Rescue Cart/Truck	A minimum of two special-purpose vehicles, one on the surface and one in the underground; light rescue units, equipped in accordance with the NFPA 1901 and as documented in WIPP facility files	Surface at Safety and Emergency Services Facility (Building 452, Vehicle Bay) and Underground (Emergency Vehicle Parking/Charging Area at S700/E140)
Fire Suppression Cart	A minimum of one special-purpose electric cart to assist in fighting fires; equipped with a minimum of one fire extinguisher	Underground (Emergency Vehicle Parking/Charging Area at S700/E140)
Fire Extinguishers	Hand-held fire extinguishers; located throughout the facility in accordance with NFPA-10	Surface and underground locations used for hazardous waste management, as documented in WIPP facility files
Automatic Dry Chemical Extinguishing Systems	Automatic; actuated by thermal detectors or by manual pull stations	Underground fuel station (N150/W170)
Automatic Fire Suppression Systems on liquid fueled vehicles	Individual automatic fire suppression systems installed on applicable liquid-fueled vehicles, as determined by a fire risk assessment performed in accordance with NFPA 122	Surface and underground locations used for hazardous waste management, as documented in WIPP facility files

Equipment	Description and Capabilities	Location
Sprinkler Systems	NFPA water-based fire suppression systems	Water Pumphouse (Building 456), Guard and Security Building (Building 458), Waste Handling Building (Building 411, CH Bay, RH Bay, and Overpack Repair Areas only), TRUPACT Maintenance Building (Building 412), Exhaust Shaft Filter Building (Building 413), <u>NFB (Building 416)</u> , <u>SRB (Building 417)</u> , and surface Hazardous Waste Staging Areas (Buildings 474A and 474B)
Water Tanks, Hydrants	Fire suppression water supply; one 180,000-gallon capacity tank, plus a second tank with 100,000-gallon reserve	Tanks are at southwestern edge of WIPP facility; pipelines and hydrants are throughout the surface
Fire Water Pumps	Fire suppression water supply; pumps are minimally rated at 125 pounds per square inch, 1,500 gallons per minute centrifugal pump, one with electric motor drive, the other with diesel engine; pressure maintenance jockey pump	Water Pumphouse (Building 456)
<b>Personal Protection Equipment</b>		
Head Lamps	Mounted on hard hat; battery operated	Each person underground
Underground Self-Rescuer Units	Short-term self-rescue devices per 30 CFR 57.15030	Each person underground
Self-Contained Self-Rescuer	Air supply; a minimum of 12 caches in the underground; self-contained rescue units shall be adequate to protect an individual for one hour or longer or, alternatively, sufficient to allow the employee time to reach an additional self-contained self-rescue device in the underground per NMSA 69-8-16	Cached throughout the underground
Mine Rescue Self-Contained Breathing Apparatus (SCBA)	Oxygen supply; 4-hour closed circuit units consistent with 30 CFR 49.6; a minimum of 12 units, one for each Mine Rescue Team member	Safety and Emergency Services Facility (Building 452, Mine Rescue Training Room)
Fire Department Self-Contained Breathing Apparatus (SCBA)	Air supply; a minimum of 12 units; SCBAs shall meet the minimum requirements established per NFPA 1981	Surface Fire Trucks and Rescue Truck; Underground Rescue Cart
<b>General Plant Emergency Equipment</b>		
Emergency Lighting	For employee evacuation, and fire/spill containment; linked to main power supply, and selectively linked to back up diesel power supply and/or battery-backed power supply	Waste Handling Building (Building 411); TRUPACT Maintenance Building (Building 412), <del>and</del> Exhaust Shaft Filter Building (Building 413) <u>NFB (Building 416)</u> , and <u>SRB (Building 417)</u>

Equipment	Description and Capabilities	Location
Backup Power Sources	A minimum of two diesel generators, and battery-powered uninterruptible power supply (UPS)	<del>Generators are east of Safety and Emergency Services Facility (Building 452);</del> <u>Generators are located on the surface.</u> UPS is located at the essential loads
Emergency Hoist	Hoist in Air Intake Shaft	Air Intake Shaft (Building 361)
Emergency Showers	For emergency flushing of chemical contact or injury	Waste Handling Building (Building 411) is served by the decontamination shower trailer located north of Building 411, in front of Building 952, between Buildings 243 and 455; and surface Hazardous Waste Staging Areas (Building 474A)
Emergency Eyewash Equipment	For emergency flushing of affected eyes	Waste Handling Building (Building 411, RH Bay, Site Derived Waste Area, Waste Shaft Collar, and Room 108 TRUPACT III only), TRUPACT Maintenance Building (Building 412), Exhaust Shaft Filter Building (Building 413), <u>NFB (Building 416), SRB (Building 417),</u> surface, Hazardous Waste Staging Areas (Building 474A , Waste Oil Retainer Area), and the underground Hazardous Waste Staging Area (S550/E140)
Overpack containers for TRU Mixed Waste	85 Gallon drums SWBs TDOP	Warehouse Annex (Building 481)
Aquaset or Cement	Material for solidification of liquid waste generated as a result of fire fighting water or decontamination solutions	Surface Connex A, located south of Waste Handling Building (Building 411)
TDOP Upender	Upender facilitates overpacking standard waste boxes	Waste Handling Building (Building 411)
Non hazardous Decontaminating Agents	For decontamination of surfaces, equipment, and personnel	Waste Handling Building (Building 411); Surface Connex A, located south of Building 411

## FIGURES

(This page intentionally blank)

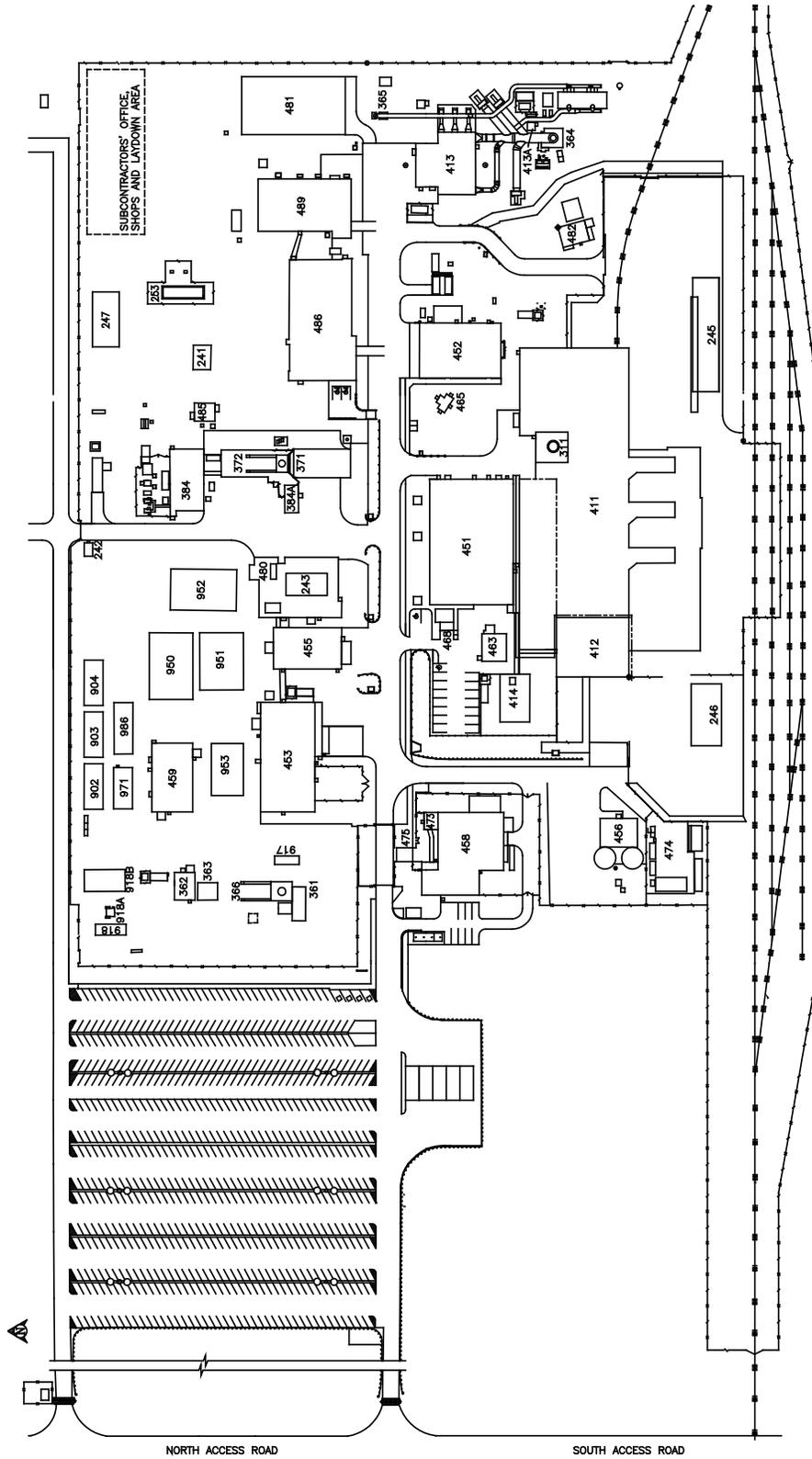
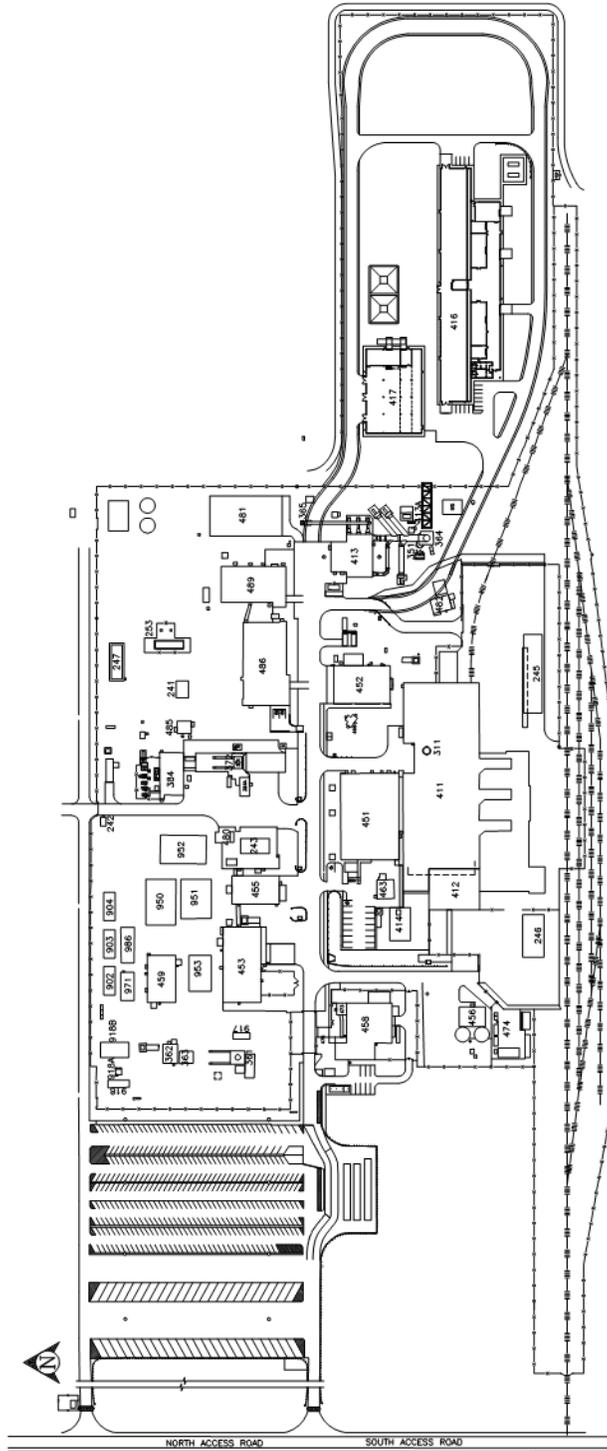


Figure D-1  
WIPP Surface Structures

Waste Isolation Pilot Plant  
 Hazardous Waste Permit  
 March 2018 ~~September 2017~~

BLDG./ FAC.#	DESCRIPTION	BLDG./ FAC.#	DESCRIPTION	BLDG./ FAC.#	DESCRIPTION
#241	EQUIPMENT SHED	#384	SALT HANDLING SHAFT HOISTHOUSE	#475	GATEHOUSE
#242	GUARDSHACK	#384A	MINING OPERATIONS	#480	VEHICLE FUEL STATION
#243	SALT HAULING TRUCKS SHELTER	#411	WASTE HANDLING BUILDING	#481	WAREHOUSE ANNEX
#245	TRUPACT TRAILER SHELTER	#412	TRUPACT MAINTENANCE BUILDING	#482	EXHAUST SHAFT HOIST EQUIP. WAREHOUSE
#246	MgO STORAGE SHELTER	#413	EXHAUST SHAFT FILTER BUILDING	#485	SULLAIR COMPRESSOR BUILDING
#253	13.8 KV SWITCHGEAR 25P-SWG15/1	#413A	MONITORING STATION A	#486	ENGINEERING BUILDING
#254.1	AREA SUBSTATION NO. 1 25P-SW15.1	#413B	MONITORING STATION B	#489	TRAINING BUILDING
#254.2	AREA SUBSTATION NO. 2 25P-SW15.2	#414	WATER CHILLER FACILITY & BLDG	#H-16	SANDIA TEST WELL
#254.3	AREA SUBSTATION NO. 3 25P-SW15.3	#451	SUPPORT BUILDING	#917	AIS MONITORING
#254.4	AREA SUBSTATION NO. 4 25P-SW15.4	#452	SAFETY & EMERGENCY SERVICES FACILITY	#918	VOC TRAILER
#254.5	AREA SUBSTATION NO. 5 25P-SW15.5	#453	WAREHOUSE/SHOPS BUILDING	#918A	VOC AIR MONITORING STATION
#254.6	AREA SUBSTATION NO. 6 25P-SW15.6	#455	AUXILIARY WAREHOUSE BUILDING	#918B	VOC LAB TRAILER
#254.7	AREA SUBSTATION NO. 7 25P-SW15.7	#456	WATER PUMPHOUSE	#950	WORK CONTROL TRAILER
#254.8	AREA SUBSTATION NO. 8 25P-SW15.8	#457N	WATER TANK 25-D-001B	#951	PROCUREMENT/PURCHASING
#254.9	480V SWITCHGEAR (25P-SWGO4/6)	#457S	WATER TANK 25-D-001A	#952	TRAILER
#255.1	BACK-UP DIESEL GENERATOR #1 25-PE 503	#458	GUARD AND SECURITY BUILDING	#953	MODULAR OFFICE COMPLEX
#255.2	BACK-UP DIESEL GENERATOR #2 25-PE 504	#459	CORE STORAGE BUILDING	#971	HUMAN RESOURCES TRAILER
#256.4	SWITCHBOARD #4 (25P-SBD04/4)	#463	COMPRESSOR BUILDING	#966	PUBLICATIONS & PROCEDURES TRAILER
#311	WASTE SHAFT	#465	AUXILIARY AIR INTAKE	SWR NO. 6	SWITCHRACK NO. 6
#351	EXHAUST SHAFT	#468	TELEPHONE HUT	SWR NO. 7	7A, 7B SWITCHRACK NO. 7, 7A, 7B
#361	AIR INTAKE SHAFT	#473	ARMORY BUILDING	SWR NO. 7C	SWITCHRACK NO. 7C
#362	AIR INTAKE SHAFT/HOIST HOUSE	#474	HAZARDOUS WASTE STORAGE FACILITY	SWR NO. 10	SWITCHRACK NO. 10
#363	AIR INTAKE SHAFT/WINCH HOUSE	#474A	HAZARDOUS WASTE STORAGE BUILDING	SWR NO. 11	SWITCHRACK NO. 11
#364	EFFLUENT MONITORING INSTRUMENT SHED A	#474B	HAZARDOUS WASTE STORAGE BUILDING	SWR NO. 12	SWITCHRACK NO. 12
#365	EFFLUENT MONITORING INSTRUMENT SHED B	#474C	OIL & GREASE STORAGE BUILDING	SWR NO. 15	SWITCHRACK NO. 15
#366	AIR INTAKE SHAFT HEADFRAME	#474D	GAS BOTTLE STORAGE BUILDING		
#371	SALT HANDLING SHAFT	#474E	HAZARD MATERIAL STORAGE BUILDING		
#372	SALT HANDLING SHAFT HEADFRAME	#474F	WASTE OIL RETAINER		

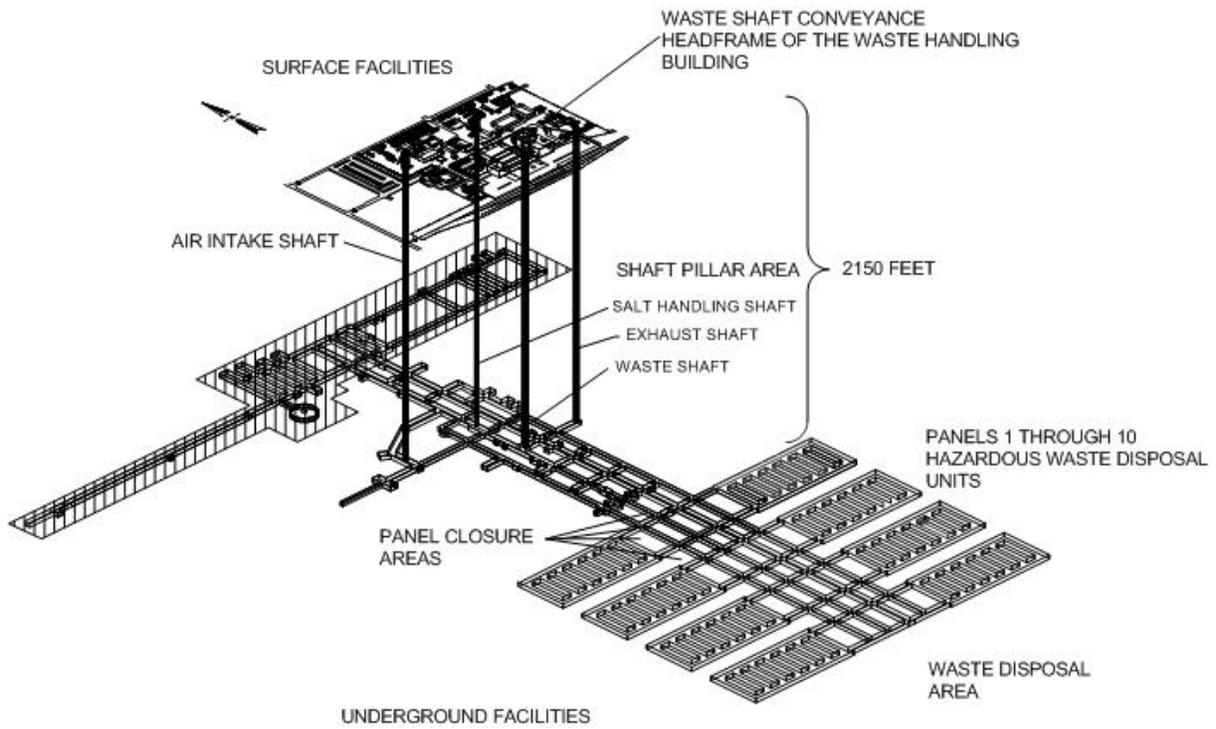
Figure D-1a  
 Legend to Figure D-1



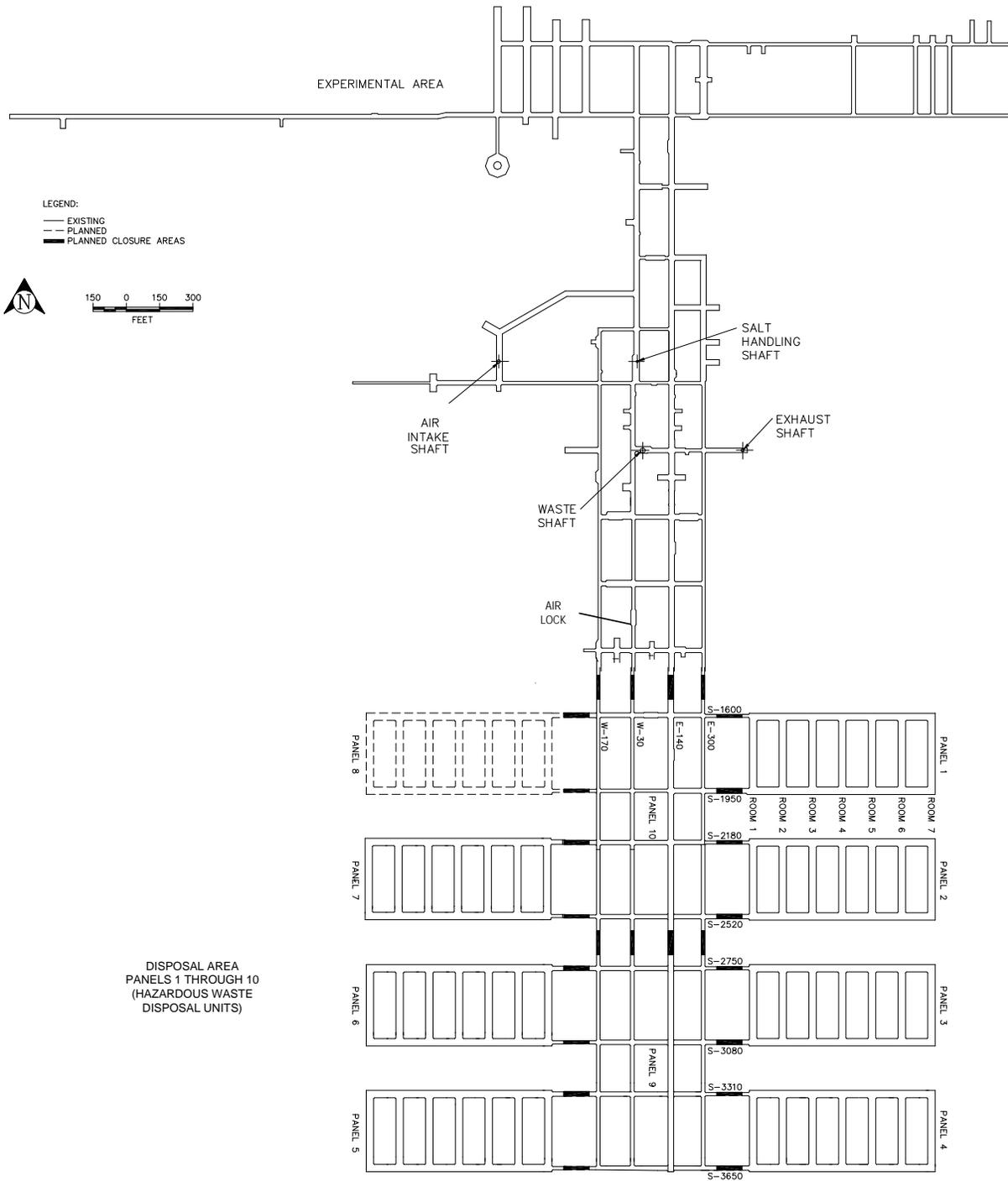
**Figure D-1-NFB**  
**WIPP Surface Structures with Building 416**

---

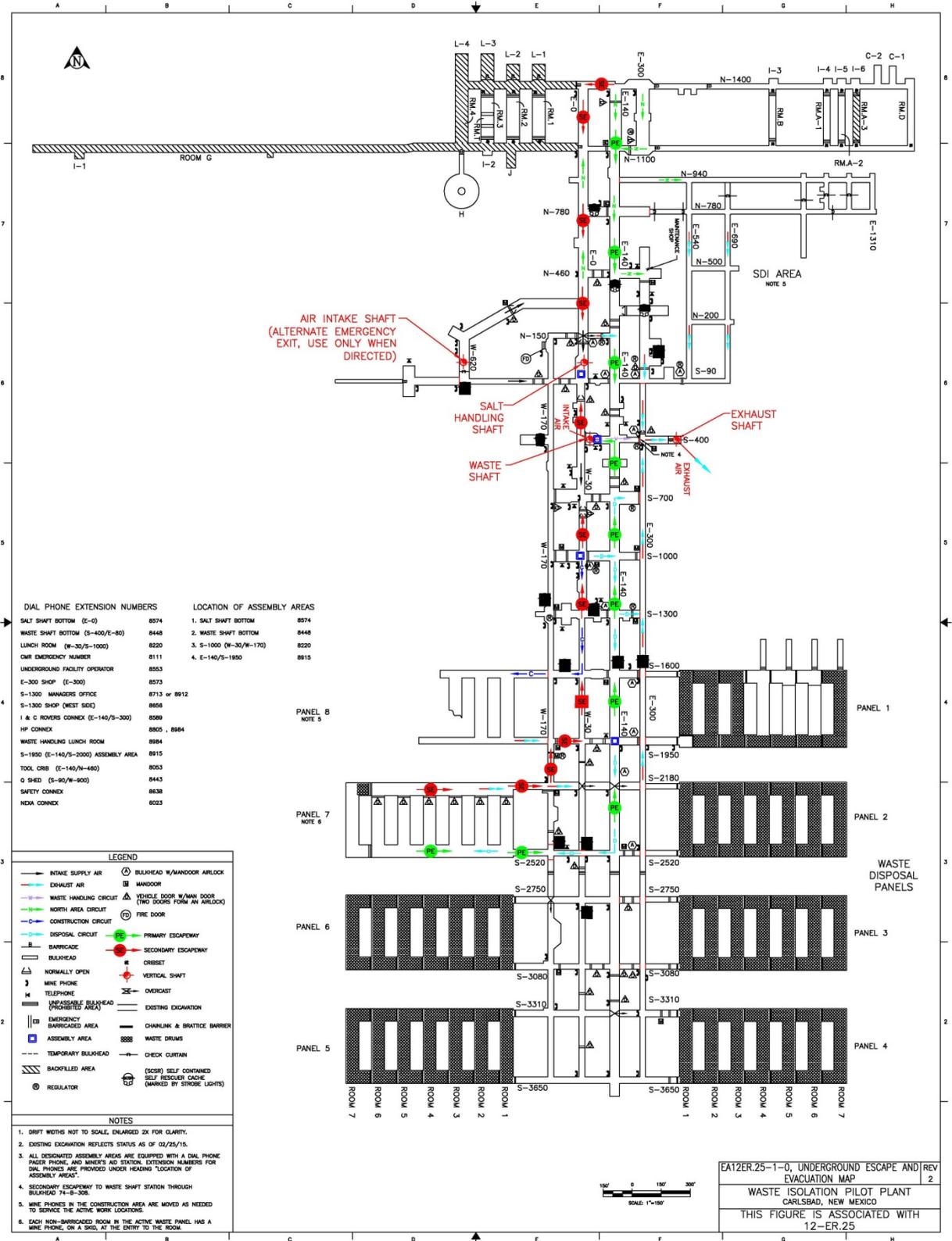
Figure D-1a-NFB  
Legend to Figure D-1-NFB (Building 416)



**Figure D-2**  
**Spatial View of the WIPP Facility**



**Figure D-3**  
**WIPP Underground Facilities**



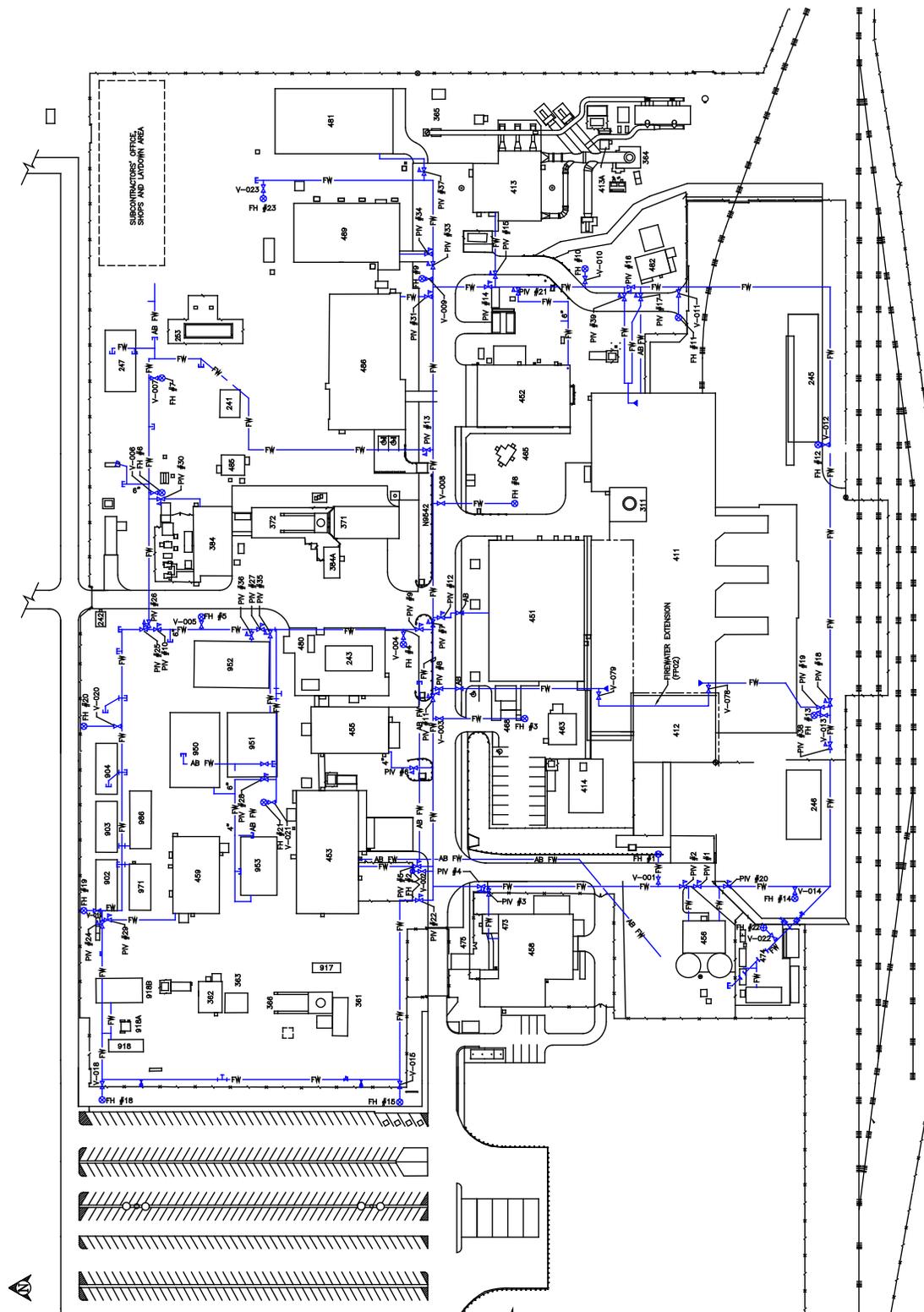
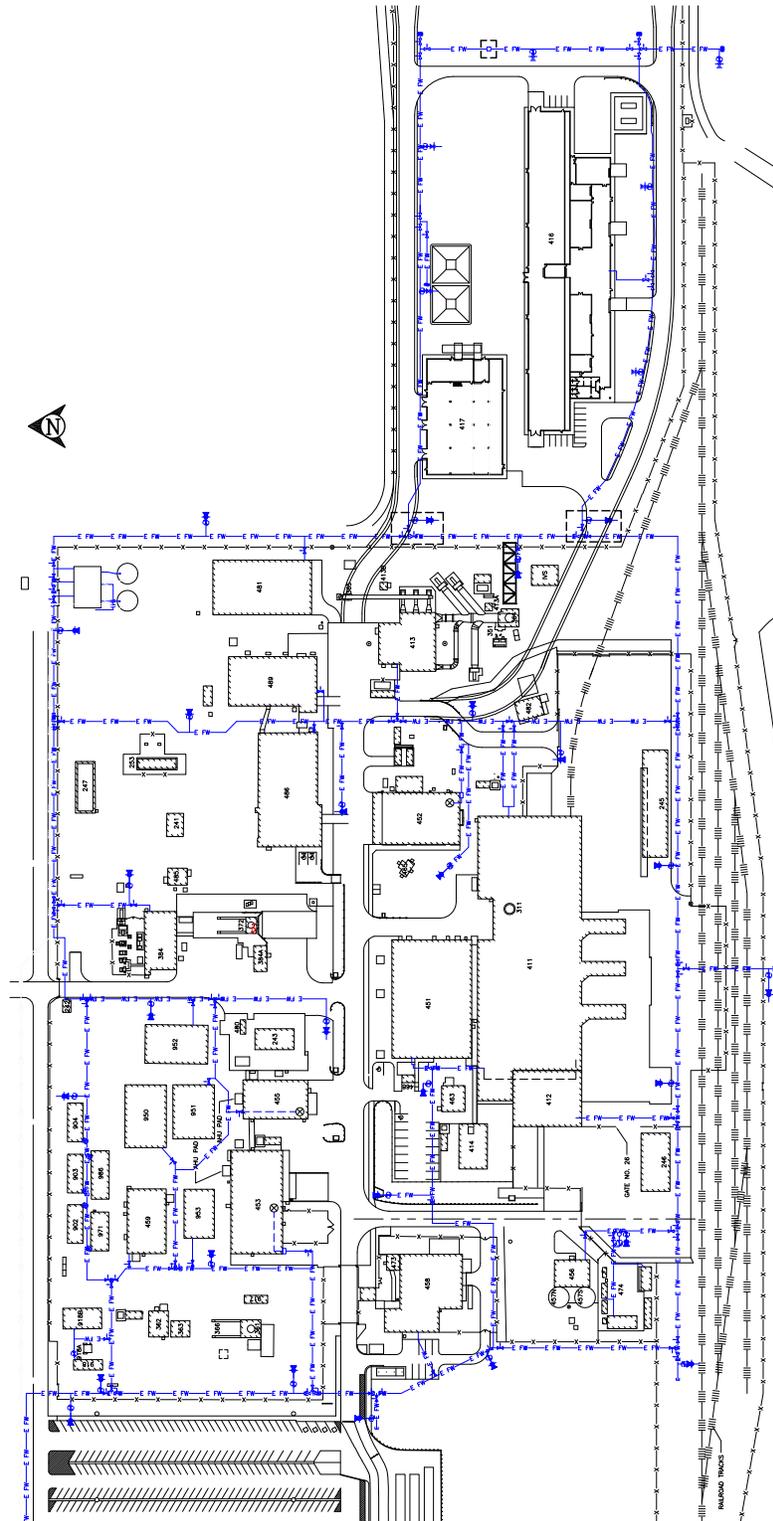
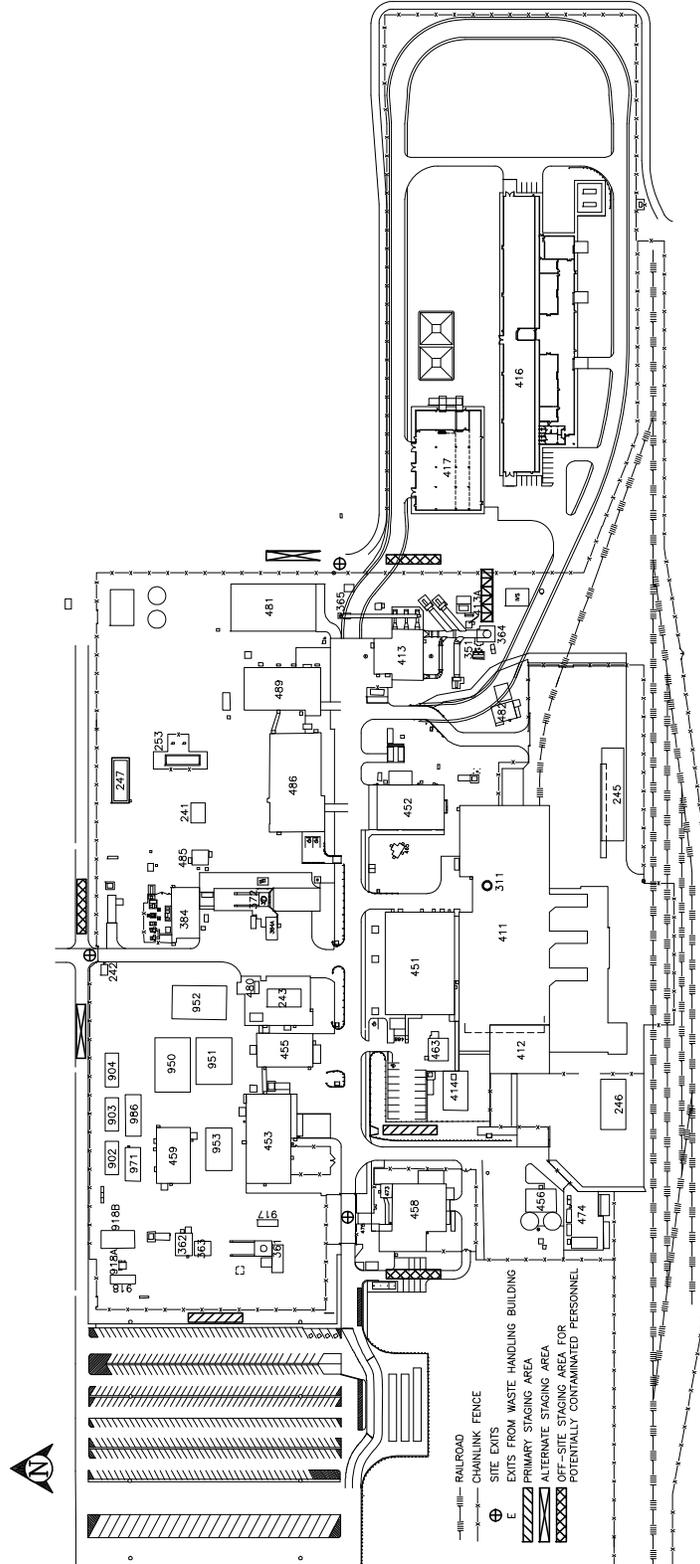


Figure D-5  
Fire-Water Distribution System

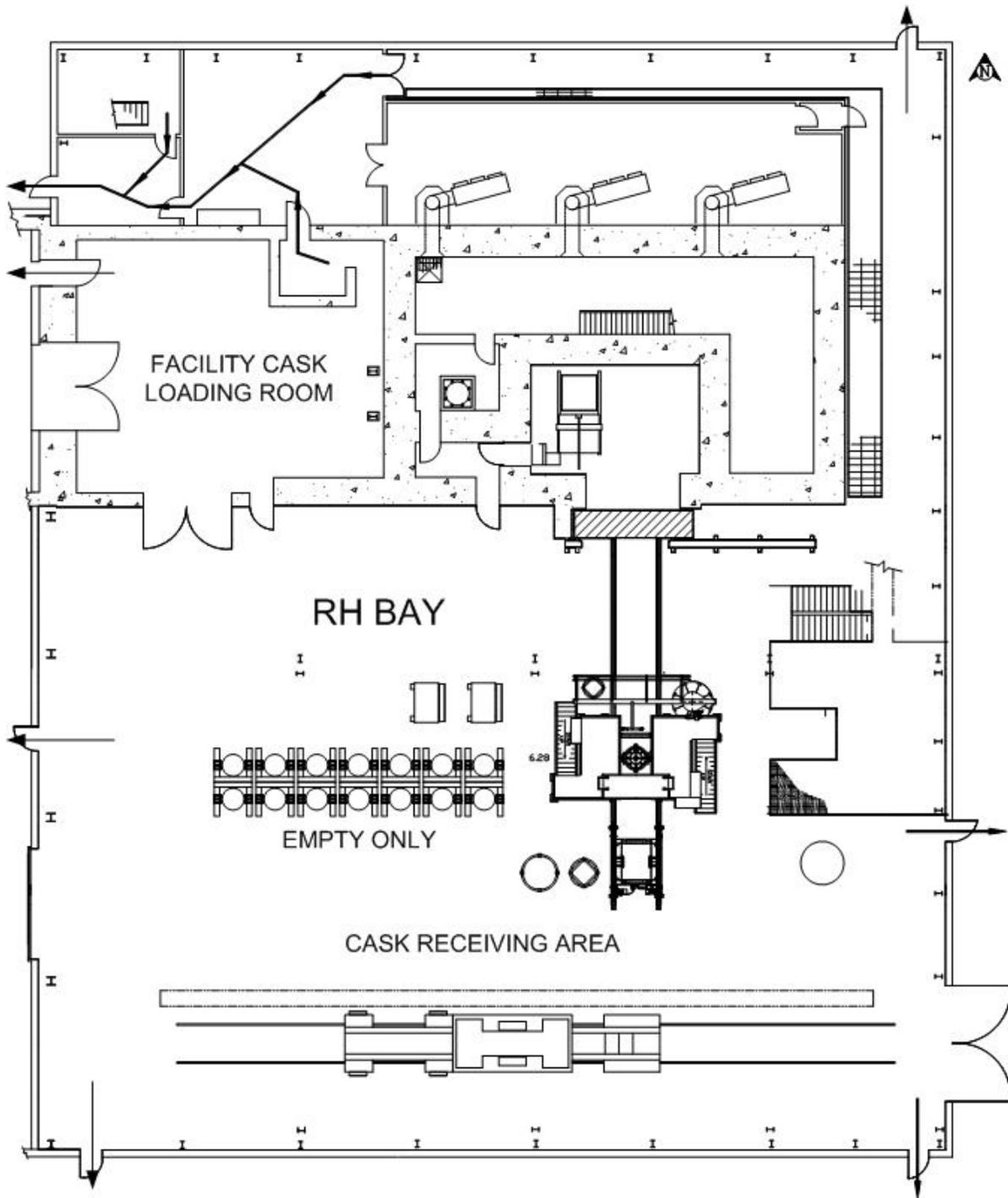


**Figure D-5-NFB**  
**Fire-Water Distribution System with Building 416**



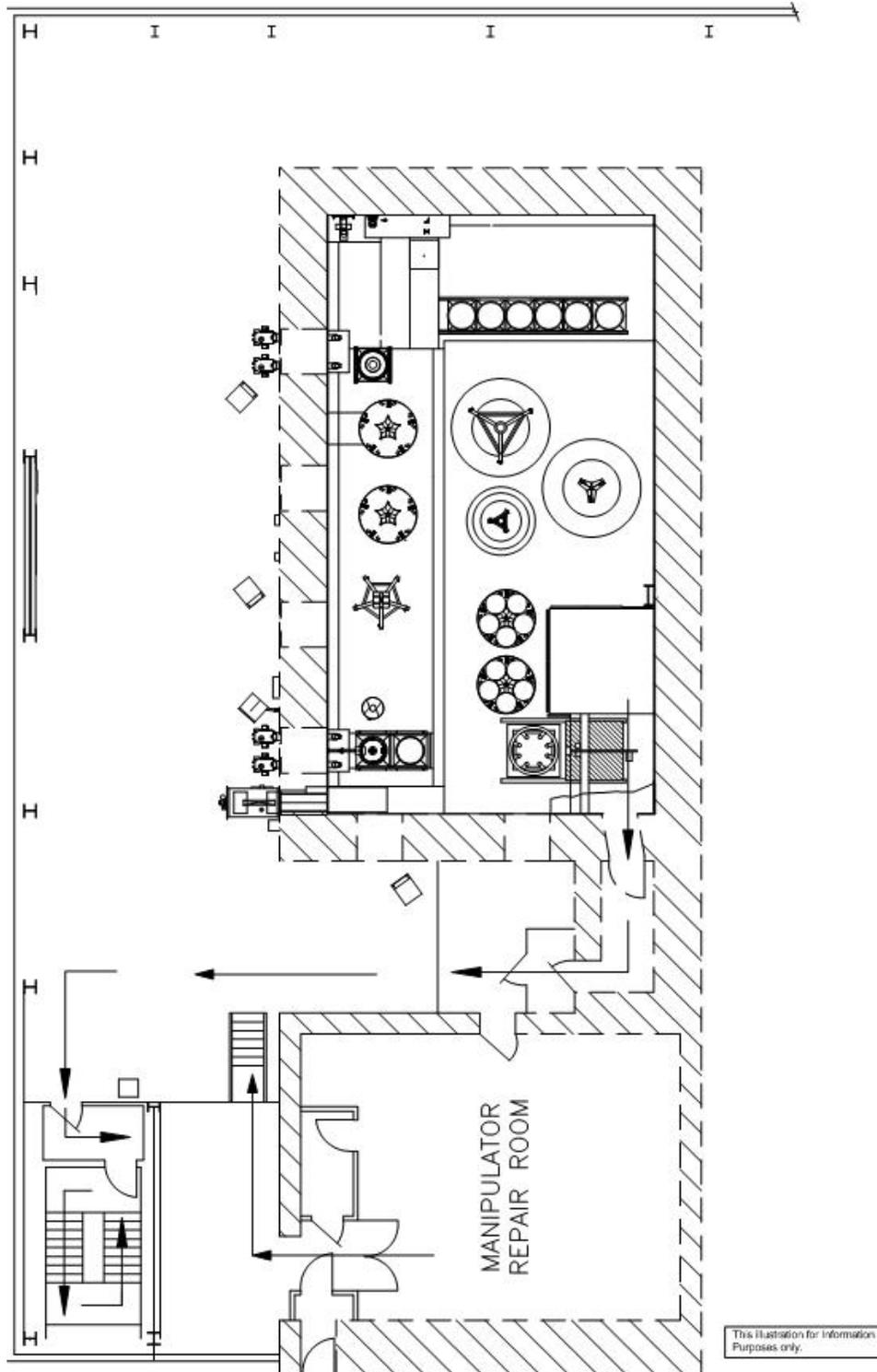


**Figure D-6-NFB**  
**WIPP On-Site Assembly Areas and Off-Site Staging Areas with Building 416**

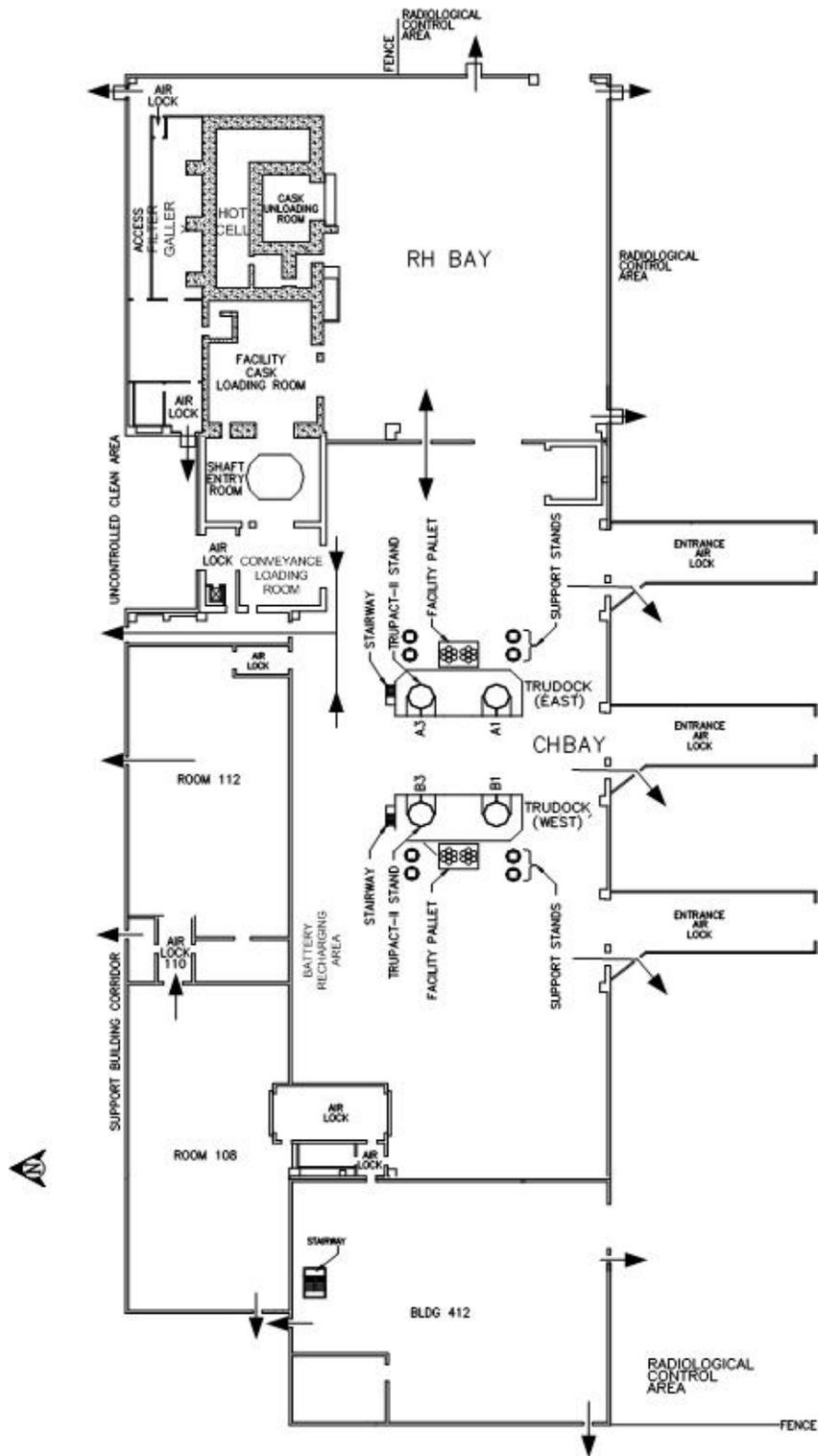


This illustration for  
Information Purposes Only.

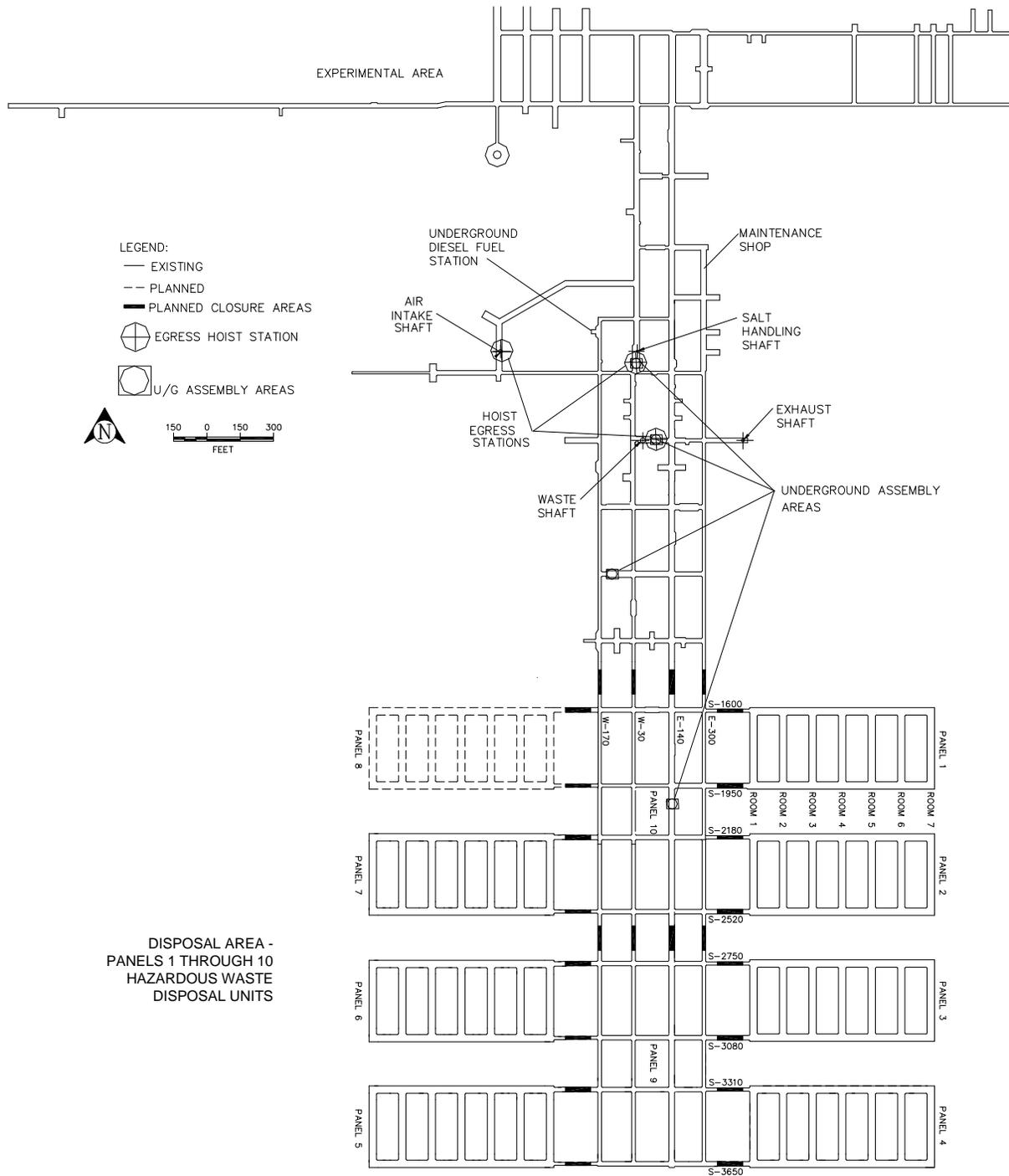
**Figure D-6a**  
**RH Bay Evacuation Routes**



**Figure D-6b**  
**RH Bay Hot Cell Evacuation Route**



**Figure D-6c**  
**Evacuation Routes in the Waste Handling Building**



**Figure D-7**  
**Designated Underground Assembly Areas**

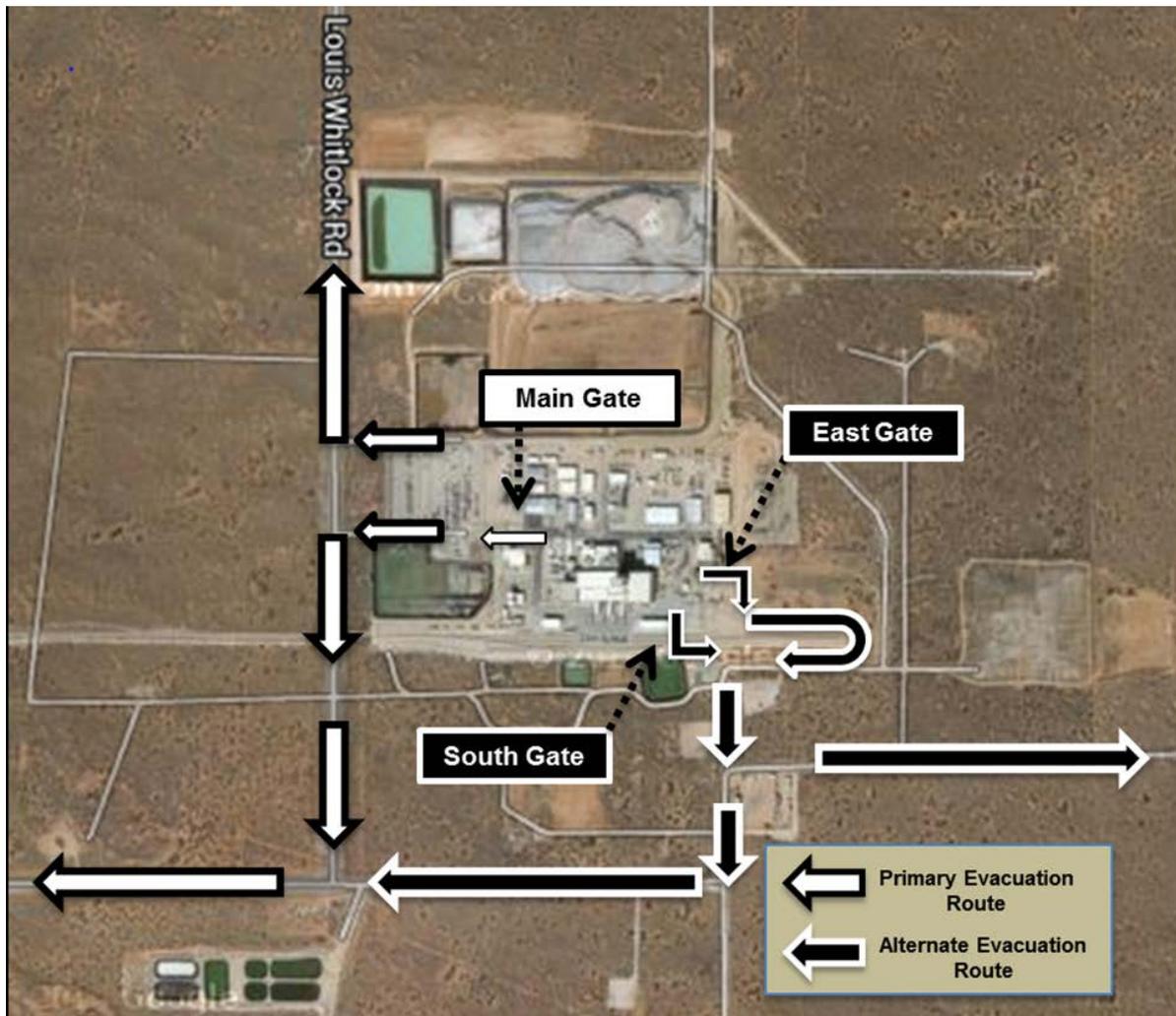


Figure D-8  
WIPP Site Evacuation Routes