

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

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## 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 will  
9 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 and  
13 the solidified materials will be disposed of in the underground WIPP repository as TRU  
14 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 Attachment  
37 F1, 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*.



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

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

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

- 14 • **WIPP Fire Department**—The primary providers of fire suppression, technical rescue,  
15 Emergency Medical Services (EMS), and hazardous materials response for the  
16 protection of personnel in both surface and underground facilities.
- 17 • **Facility Shift Manager (FSM)**—A member of the Facility Operations organization who  
18 is in charge of plant operations and is the senior shift representative responsible for  
19 maintaining the facility in a safe configuration during normal and abnormal conditions.  
20 The FSM can concurrently serve as the RCRA Emergency Coordinator, if trained to  
21 the requirements of Attachment F1, 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 RCRA  
24 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 hazardous  
33 materials. The ERT members supplement WIPP Fire Department response  
34 capabilities. The ERT member assigned to the underground will not perform any  
35 coordinated firefighting underground and will only respond to incipient-stage fires that  
36 threaten TRU mixed waste, if it is safe to do so.
- 37 • **Firefighter**—A WIPP Fire Department member who serves as a primary responder to  
38 surface and underground emergencies, including fires, medical emergencies, and  
39 releases of hazardous materials. Firefighters assigned to the underground will not  
40 perform any coordinated firefighting underground and will only respond to incipient-  
41 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 Fire  
7 Department Incident Commander will establish a unified command with the WIPP  
8 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 facility  
11 assessments, and underground firefighting once the underground has been evacuated  
12 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 performs  
16 duties similar to their normal job functions during an emergency response and  
17 provides support related to their area(s) of expertise, no specific RCRA training is  
18 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 Attachment F,  
36 *Personnel Training*; Attachment F1, *RCRA Hazardous Waste Management and Emergency*  
37 *Response Job Titles and Descriptions*; and Attachment F2, *Training Course and Qualification*  
38 *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  
23 hazardous 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  
33 occurs
- 34 – If an explosion occurs within or near the Hazardous Waste Staging Areas which  
35 threatens to involve site-generated hazardous waste
- 36 – If an explosion occurs within or near the permitted HWMUs which threatens to  
37 involve TRU mixed waste

- 1           – If an explosion occurs in the underground that results in immediate personnel  
2           evacuation or prevents normal personnel access to the underground
- 3           – If there is an imminent danger of an explosion occurring (e.g., gas leak with an  
4           ignition source nearby) which could involve TRU mixed or site-generated  
5           hazardous waste

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

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

- 10          – If, prior to waste emplacement, one or more containers of TRU mixed waste has  
11          spilled or been breached due to dropping, puncturing, container failure or  
12          degradation, or any other physical or chemical means, resulting in a release
- 13          – If, after waste emplacement, one or more containers of TRU mixed waste in an  
14          active room has been breached
- 15          – If a continuous air monitor confirms a release of radioactive particulates to the  
16          ambient atmosphere, indicating a possible release of TRU mixed waste  
17          constituents from the permitted facility
- 18          – If a spill of site-generated hazardous waste occurs in a Hazardous Waste Staging  
19          Area and cannot be contained with secondary containment methods or absorbents,  
20          thereby threatening a release to air, soil, or surface water
- 21          – If a site-generated hazardous waste spill occurs in a Hazardous Waste Staging  
22          Area and results in the release of potentially flammable material, thereby  
23          threatening to create a fire or explosion hazard
- 24          – If a site-generated hazardous waste spill occurs in a Hazardous Waste Staging  
25          Area and results in the release of potentially toxic fumes that would threaten  
26          human health

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

31          • **Other Occurrences**

- 32          – If a natural phenomenon (e.g., earthquake, flood, lightning strike, tornado) occurs  
33          that involves TRU mixed waste or site-generated hazardous waste or threatens to  
34          involve TRU mixed waste or site-generated hazardous waste
- 35          – If an underground structural integrity emergency (e.g., roof fall in an active room)  
36          occurs that involves TRU mixed waste, threatens to involve TRU mixed waste  
37          results in immediate personnel evacuation, or prevents normal personnel access to  
38          the underground

1 For any natural phenomenon or underground structural emergency that does not meet the  
2 above criteria, the RCRA Emergency Coordinator shall document the rationale for not  
3 implementing the *RCRA Contingency Plan* (e.g., there is no threat to human health or the  
4 environment)..

#### 5 D-4 Emergency Response Method

6 Methods that describe implementation of the *RCRA Contingency Plan* cover the following six  
7 areas:

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

#### 15 D-4a Immediate Notifications

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

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

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

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

26 In addition to receiving incident reports from facility personnel, the CMRO continuously monitors  
27 (24 hours a day) the status of alarms, takes telephone calls and radio messages, initiates calls  
28 to emergency staff, and initiates emergency response procedures regarding evacuation, if  
29 needed.

30 Once the CMRO is notified of a fire, explosion, or a release anywhere in the facility (either by  
31 eyewitness notification or an alarm), the RCRA Emergency Coordinator is immediately notified.  
32 The RCRA Emergency Coordinator ensures that the emergency responders, including the  
33 WIPP Fire Department, the ERT, and the MRT, have been notified, as needed. Once incident  
34 command has been established, the RCRA Emergency Coordinator has the authority to  
35 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  
39 required to comply with directions from emergency personnel and alarm system notifications

1 and to follow instructions concerning emergency equipment, shutdown procedures, and  
2 emergency evacuation routes and exits.

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

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

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

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

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

- 35 • Assemble the required response equipment, such as protective clothing and gear,  
36 heavy equipment, empty drums, overpack drums, hand tools, and absorbent materials
- 37 • Transfer the released material to a container that is in good condition and patch or  
38 overpack the leaking container into another container that is in good condition
- 39 • Once the release has been contained, determine the areal extent of the release and  
40 proceed with appropriate cleanup action, such as chemical neutralization, vacuuming,  
41 or excavation

1 D-4c Assessment of the Potential Hazards

2 Concurrent with the actions described in Sections D-4a and D-4b, and in accordance with  
3 20.4.1.500 NMAC (incorporating 40 CFR §264.56(c)), the RCRA Emergency Coordinator shall  
4 assess possible hazards to human health or the environment that may result from the release,  
5 fire, or explosion. This assessment will consider both direct and indirect effects of the release,  
6 fire, or explosion (e.g., the effects of any toxic, irritating, or asphyxiating gases that are  
7 generated, or the effects of any hazardous surface water run-off from water or chemical agents  
8 used to control fire and heat-induced explosions). The RCRA Emergency Coordinator will be  
9 responsible for identifying and responding to immediate and potential hazards, using the  
10 services of trained personnel.

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

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

21 D-4d Post-Assessment Notifications

22 Upon *RCRA Contingency Plan* implementation, post-assessment notifications may be  
23 necessary in order to satisfy 20.4.1.500 NMAC (incorporating 40 CFR §264.56(d)). If it has been  
24 determined that the facility has had a fire, an explosion, or a release of hazardous waste or  
25 hazardous waste constituents that could threaten human health or the environment outside the  
26 facility (i.e., outside the Land Withdrawal Boundary), the RCRA Emergency Coordinator, after  
27 consultation with the DOE as the owner of the facility, will ensure that the appropriate local  
28 authorities are immediately notified by telephone and/or radio in the event that evacuation is  
29 needed. The following notifications satisfy the requirements of 20.4.1.500 NMAC (incorporating  
30 40 CFR §264.56(d)(1)):

- 31 • New Mexico Department of Homeland Security and Emergency Management  
32 (telephone number: (505) 476-9635)
- 33 • Eddy County via the Regional Emergency Dispatch Authority (telephone number:  
34 (575) 616-7155)
- 35 • Lea County via the Regional Emergency Dispatch Authority (telephone number: (575)  
36 397-9265)

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

39 After local authorities are notified, the RCRA Emergency Coordinator must immediately notify  
40 either the government official designated as the on-scene coordinator for that geographical  
41 area, or the National Response Center. For the purposes of the *RCRA Contingency Plan*, the



1 following notifications satisfy the requirements of 20.4.1.500 NMAC (incorporating 40 CFR  
2 §264.56(d)(2)):

- 3 • New Mexico Environment Department (NMED)  
4 Department of Public Safety  
5 24-Hour Emergency Reporting Telephone Number: (505) 827-9329  
6 FAX number: (505) 827-9368
- 7 • National Response Center  
8 Telephone number: 1-800-424-8802  
9 FAX number: (202) 479-7181

10 This notification shall include the following information:

- 11 • The name and phone number of the reporter
- 12 • The name and address of the facility
- 13 • The type of incident (fire, explosion, or release)
- 14 • The date and time of the incident
- 15 • The name and quantity of material(s) involved, to the extent known
- 16 • The extent of injuries, if any
- 17 • Possible hazards to human health and the environment (air, soil, water, wildlife, etc.)  
18 outside the facility

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

21 D-4e Control and Containment of the Emergency

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

- 30 • Stopping processes and operations
- 31 • Collecting and containing released wastes and materials
- 32 • Removing or isolating containers of hazardous waste posing a threat

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

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

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

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

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

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

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

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

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

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

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

- 24 1. The RCRA Emergency Coordinator will remain in contact with and advise the Incident  
25 Commander of the known hazards.
- 26 2. The Incident Commander will maintain overall control of the emergency and may  
27 accept and evaluate the advice of WIPP facility personnel and emergency response  
28 organization members, but retains overall responsibility until the emergency is  
29 terminated.
- 30 3. Only fire extinguishing materials that are compatible with the materials involved in the  
31 fire will be used to extinguish fires. Water and dry chemical materials have been  
32 determined to be compatible with all components of the TRU mixed waste.
- 33 4. In order to ensure that storm drains and/or sewers do not receive potentially  
34 hazardous runoff, dikes will be built around storm drains to control discharge as  
35 needed. Collected waste will be sampled and analyzed for hazardous constituents,  
36 and appropriately disposed.

- 1           5. 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 directly or indirectly by the fire.
  
- 4           6. Fire suppression materials used in response to incidents will be retained on-scene,  
5           where an evaluation will be performed to determine appropriate recovery and disposal  
6           methods.
  
- 7           7. Upon underground evacuation due to a fire in the underground that involves or  
8           threatens to involve TRU mixed waste, a response plan will be developed depending  
9           on the status of the fire. The plan may include ventilation control, barrier erection, and  
10          waiting for the fire to self-extinguish or implement active ventilation.

#### 11 D-4e(2) Explosions

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

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

#### 26 D-4e(3) Unplanned Sudden/Non-Sudden Releases

##### 27 Spills of Site-Generated Hazardous Waste

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

- 32           1. The RCRA Emergency Coordinator will remain in contact with and advise the Incident  
33           Commander of the known hazards.
  
- 34           2. The Incident Commander will maintain overall control of the emergency and may  
35           accept and evaluate the advice of WIPP facility personnel and emergency response  
36           organization members, but retains overall responsibility until the emergency is  
37           terminated.

- 1           3. The immediate area will be evacuated.
- 2           4. The source of the release will be mitigated, if possible.
- 3           5. A dike to contain runoff will be built, if necessary.
- 4           6. Dikes around storm drains to control discharge will be built, as needed, to ensure that  
5           storm drains and/or sewers do not receive potentially hazardous runoff.
- 6           7. Fire equipment will be maintained on standby at the incident site in cases where  
7           ignitable liquids have been or may be released, and ignition sources will be kept out of  
8           the area of ignitable liquids.
- 9           8. Released waste and contaminated media will be collected and placed into drums or  
10          other appropriate containers.

### 11   Releases of TRU Mixed Waste

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

- 15           1. The RCRA Emergency Coordinator will remain in contact with and advise the Incident  
16           Commander of the known hazards.
- 17           2. The Incident Commander will maintain overall control of the emergency and may  
18           accept and evaluate the advice of WIPP facility personnel and emergency response  
19           organization members, but retains overall responsibility until the emergency is  
20           terminated.
- 21           3. Prior to the re-entry following an event involving containers that are managed as TRU  
22           mixed waste, a Radiological Work Permit (**RWP**) will be prepared.
- 23           4. During the re-entry phase, the extent of radiological contamination will be determined.  
24           This information is used by the RCRA Emergency Coordinator to determine an  
25           appropriate course of action to recover the area.
- 26           5. During the recovery phase, the necessary resources to conduct decontamination  
27           and/or overpacking operations will be used as needed.
- 28           6. Prior to returning the affected area and/or equipment to normal activities, the RCRA  
29           Emergency Coordinator will determine if additional measures are required by the  
30           *RCRA Contingency Plan* (e.g., characterization and disposal of contaminated media).
- 31           7. The recovery phase will include activities (e.g., placing the waste material in another  
32           container, vacuuming the waste material, overpacking or plugging/patching the  
33           affected waste container(s), decontaminating or covering the affected area), as  
34           specified in the RWP, to minimize the spread of contamination to other areas.

1           8. The RWPs and other administrative controls will provide protective measures to help  
2           ensure that new hazardous constituents will not be added during decontamination  
3           activities.

4    D-4e(4) Other Occurrences

5    Natural Phenomena

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

- 10           1. The RCRA Emergency Coordinator will remain in contact with and advise the Incident  
11           Commander of the known hazards.
- 12           2. The Incident Commander will maintain overall control of the emergency and may  
13           accept and evaluate the advice of WIPP facility personnel and emergency response  
14           organization members, but retains overall responsibility until the emergency is  
15           terminated.
- 16           3. Containers which have not been disposed will be inspected for signs of leakage or  
17           damage, and containment systems will be inspected for deterioration.
- 18           4. Affected equipment or areas associated with hazardous waste management activities  
19           will be inspected, and the operability of monitoring systems will be ensured.
- 20           5. Affected electrical equipment and lines will be inspected for damage.
- 21           6. Affected buildings and fencing directly related to hazardous waste management  
22           activities will be inspected for damage.
- 23           7. A general survey of the site will be conducted to check for signs of physical damage.
- 24           8. The RCRA Emergency Coordinator will ensure that measures are taken to shut down  
25           operational units (e.g., process equipment and ventilation equipment) that have been  
26           affected by the natural phenomenon.

27    Underground Structural Integrity Emergencies

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

- 32           1. The RCRA Emergency Coordinator will remain in contact with and advise the Incident  
33           Commander of the known hazards.
- 34           2. The Incident Commander will maintain overall control of the emergency and may  
35           accept and evaluate the advice of WIPP facility personnel and emergency response

1 organization members, but retains overall responsibility until the emergency is  
2 terminated.

- 3 3. The RCRA Emergency Coordinator will ascertain whether the roof conditions allow for  
4 safe entry and if the waste container or containers in question are accessible.
- 5 4. The RCRA Emergency Coordinator may recommend closing the entire panel, or the  
6 affected room of waste containers, based on the location of the event and the stability  
7 of the roof and walls in the panel as a method to ensure that measures are taken to  
8 shut down affected operational units.
- 9 5. Access to the ventilation flow path downstream of the incident will be restricted, as  
10 appropriate.
- 11 6. Ventilation to the affected room will be restricted to ensure that there is no spread of  
12 contamination that may have been released, as appropriate.
- 13 7. Accessible containers will be inspected for signs of leakage or damage.
- 14 8. The spill area will be covered with material (e.g., plastic, fabric sheets) in a manner  
15 that safely isolates the contamination in the area.
- 16 9. The RCRA Emergency Coordinator will determine if the covered spill area safely  
17 allows for continued waste disposal operations or whether further action is required to  
18 reinstate operations.

#### 19 D-4f Post-Emergency Activities

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

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

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

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

35 If radioactive contamination is detected on equipment or on structures, radiological cleanup  
36 standards will be used to determine the effectiveness of decontamination efforts and/or the final  
37 disposition of the equipment or structures. Many types of equipment are difficult to  
38 decontaminate and may have to be discarded as derived waste. Fixatives (e.g., paint or water

1 spray on salt in the underground) may be used on contaminated structures if the contamination  
2 cannot be safely removed.

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

#### 14 D-4f(2) Incompatible Waste

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

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

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

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

#### 33 D-5 Required Reporting

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

- 40 • The name, address, and telephone number of the Owner/Operator
- 41 • The name, address, and telephone number of the facility



- 1       • The date, time, and type of incident (e.g., fire, explosion, or release)
- 2       • The name and quantity of material(s) involved
- 3       • The extent of injuries, if any
- 4       • An assessment of actual or potential hazards to human health or the environment,  
5       where this is applicable
- 6       • The estimated quantity and disposition of recovered material that resulted from the  
7       incident

#### 8    D-6 Emergency Equipment

9    A variety of equipment is available at the facility for emergency response, containment, and  
10   cleanup operations in the surface HWMUs, the underground HWDUs, and the WIPP facility in  
11   general. This includes equipment for spill control, fire control, personnel protection, monitoring,  
12   first aid and medical attention, communications, and alarms. This equipment is immediately  
13   available to emergency response personnel. A listing of major emergency equipment available  
14   at the WIPP facility, as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.52(e)), is  
15   shown in Table D-2. Table D-2 also includes the location and a physical description of each item  
16   on the list along with a brief outline of its capabilities. The fire-water distribution system map is  
17   shown in Figure D-5. Equipment specified at the locations listed in Table D-2 are inspected in  
18   accordance with the inspection schedule specified in Attachment E, Table E-1, as required by  
19   20.4.1.500 NMAC (incorporating 40 CFR §264.52(e)).

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

21   The Permittees have established agreements with local emergency response agencies for  
22   firefighting, medical assistance, hazardous materials response, and law enforcement. In the  
23   event that on-site response resources are unable to provide the needed response actions  
24   during a medical, fire, hazardous materials, or security emergency, the RCRA Emergency  
25   Coordinator will notify appropriate response agencies and request assistance. Once on site,  
26   local emergency response agency personnel will perform emergency response activities under  
27   the direction of the Incident Commander.

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

- 33       • Agreements with local mining companies, including Intrepid Potash NM LLC and  
34       Mosaic Potash Carlsbad Inc. provide for mutual aid and assistance, in the form of  
35       MRTs, in the event of a mine disaster or other circumstance at either of the facilities.  
36       This provision ensures that the WIPP MOC will have two MRTs available at all times  
37       when miners are underground.
- 38       • An agreement with the U.S. Department of Interior (**DOI**), represented by the Bureau  
39       of Land Management (**BLM**), Roswell District, for wildland firefighting support within  
40       the WIPP Land Withdrawal Area.

- 1           • Agreements for mutual-aid firefighting with Eddy County, the City of Hobbs, and the  
2           City of Carlsbad for assistance, including equipment and personnel.
  
- 3           • A mutual-aid Agreements with the City of Hobbs and the City of Carlsbad for mutual  
4           ambulance, medical, rescue, and hazardous material response services; for use of  
5           WIPP facility radio frequencies during emergencies; and for mutual security and law  
6           enforcement services, within the appropriate jurisdiction limits of each party.
  
- 7           • Agreements with the Lea Regional Medical Center and the Carlsbad Medical Center  
8           for the treatment of persons with radiological contamination who have incurred injuries  
9           beyond the treatment capabilities at the WIPP site. The WIPP facility provides  
10          transport of the patient(s) to the medical center.
  
- 11          • Agreements with the Sheriff of Eddy County and the Sheriff of Lea County for mutual  
12          law enforcement services support.
  
- 13          • An agreement with the New Mexico Department of Homeland Security and Emergency  
14          Management for mutual emergency management support, access to state law  
15          enforcement, public works, and transportation assets.

#### 16    D-8 Evacuation Plan

17    If it becomes necessary to evacuate all or part of the WIPP facility, on-site assembly and off-site  
18    staging areas have been established. The off-site staging areas are outside the security fence.  
19    The Permittees have plans and implementation procedures for both surface and underground  
20    evacuations. Drills are performed on these procedures at the WIPP facility at least annually. The  
21    following sections describe the evacuation plan for the WIPP facility, as required under  
22    20.4.1.500 NMAC (incorporating 40 CFR §264.52(f)).

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

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

30    If a building or area evacuation is necessary, the RCRA Emergency Coordinator, in conjunction  
31    with the Incident Commander, will determine which assembly area is to be used and will  
32    communicate the selection to facility personnel. The preferred evacuation route is determined  
33    based on the nature of the event, prevailing weather conditions, and actual or potential  
34    radiological release. If site evacuation is necessary, the RCRA Emergency Coordinator, in  
35    conjunction with the Incident Commander, will decide which staging area is to be used and will  
36    communicate the selection to facility personnel. The WIPP site evacuation routes are shown in  
37    Figure D-8. The surface evacuation alarm and public address system are used to direct  
38    personnel evacuation. Persons responsible for surface accountability will direct personnel to the  
39    selected staging area outside the security fence.

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

#### 5 D-8b Underground Assembly Areas and Egress Hoist Stations

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

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

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

#### 19 D-8c Plan for Surface Evacuation

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

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

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

31 Notification for underground evacuation will be made using the underground evacuation alarm  
32 and strobe light signals.

33 Personnel will evacuate to the nearest Egress Hoist Station. Primary underground escape  
34 routes (identified by green reflectors on the rib) will be used, if possible. Secondary underground  
35 escape routes (identified by red reflectors on the rib) will be used if necessary (Figure D-4).  
36 Detailed descriptions of escapeways and an underground escape map are included in the  
37 *Underground Escape and Evacuation Plan* on file at the WIPP facility, as required by MSHA, 30  
38 CFR §57.11053, for underground mining situations. The MSHA required map takes precedence  
39 over Figure D-4, *Underground Escape/Evacuation Routes*, should an underground mine related  
40 event occur necessitating a change to the evacuation routes. The Underground Controller is

1 responsible for underground personnel accountability and for reporting accountability to the  
2 RCRA Emergency Coordinator.

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

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

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

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

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

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

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

#### 24 D-9 Location of the RCRA Contingency Plan and Plan Revision

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

- 33 • Intrepid Potash New Mexico LLC
- 34 • Mosaic Potash Carlsbad Inc.
- 35 • City of Carlsbad
- 36 • Carlsbad Medical Center, Carlsbad
- 37 • Lea Regional Medical Center, Hobbs
- 38 • City of Hobbs
- 39 • BLM, Carlsbad

- 1       • New Mexico State Police
- 2       • New Mexico Department of Homeland Security and Emergency Management
- 3       • Eddy County Commission
- 4       • Sheriff of Eddy County
- 5       • Sheriff of Lea County

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

- 8       • The Permit for the WIPP facility is revised in any way that would affect the *RCRA*  
9        *Contingency Plan*;
- 10      • This plan fails in an emergency;
- 11      • The WIPP facility design, construction, operation, maintenance, or other  
12        circumstances change in a way that materially increases the potential for fires,  
13        explosions, or releases of hazardous waste or hazardous constituents or change the  
14        response necessary in an emergency;
- 15      • The list of RCRA Emergency Coordinators change; or
- 16      • The list of WIPP facility emergency equipment changes.

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## TABLES

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**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.

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**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), 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
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)

<b>Equipment</b>	<b>Description and Capabilities</b>	<b>Location</b>
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

<b>Equipment</b>	<b>Description and Capabilities</b>	<b>Location</b>
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), 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), and Exhaust Shaft Filter Building (Building 413)
Backup Power Sources	A minimum of two diesel generators, and battery-powered uninterruptible power supply (UPS)	Generators are east of Safety and Emergency Services Facility (Building 452); UPS is located at the essential loads
Emergency Hoist	Hoist in Air Intake Shaft	Air Intake Shaft (Building 361)

Equipment	Description and Capabilities	Location
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), 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

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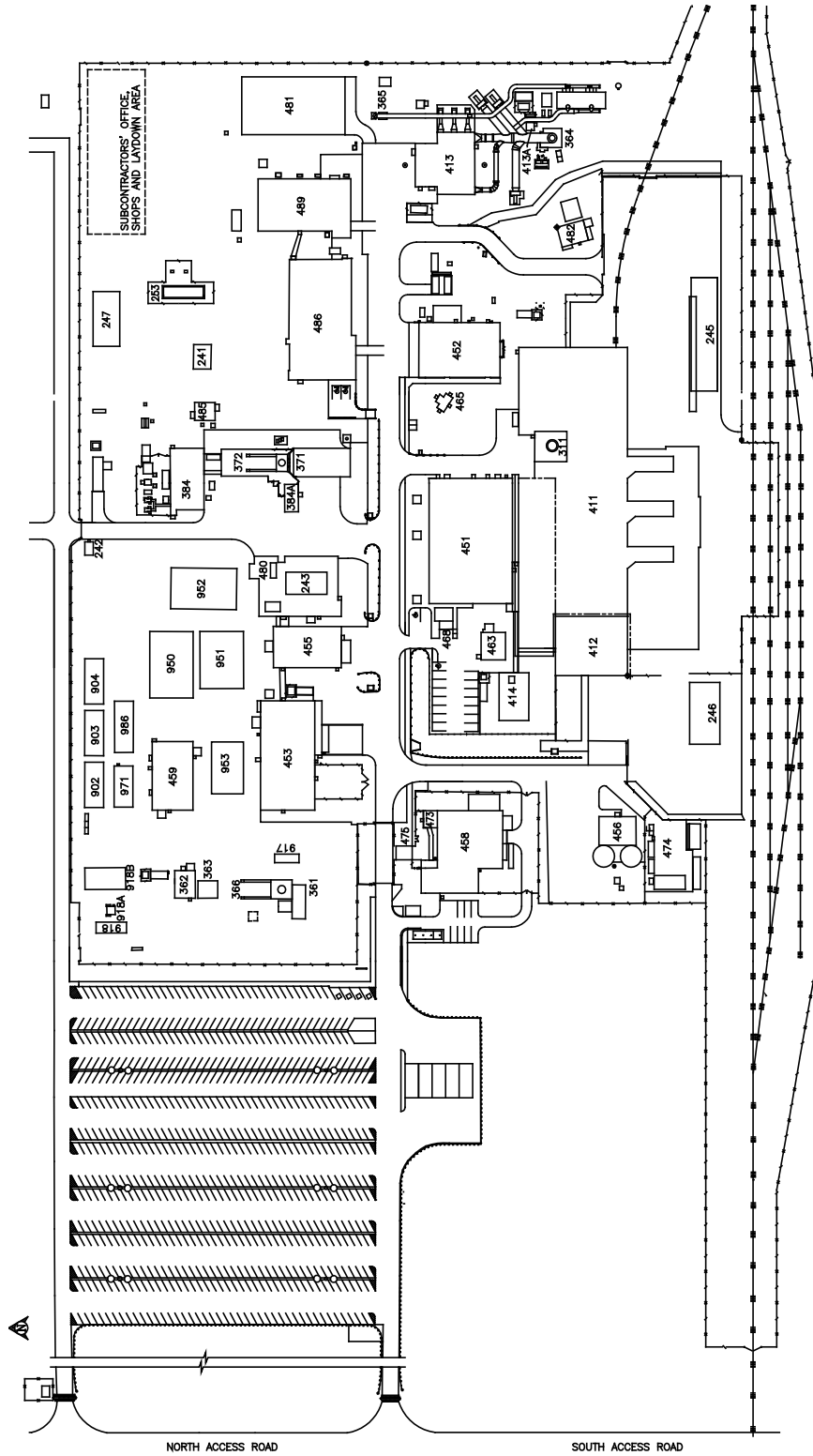
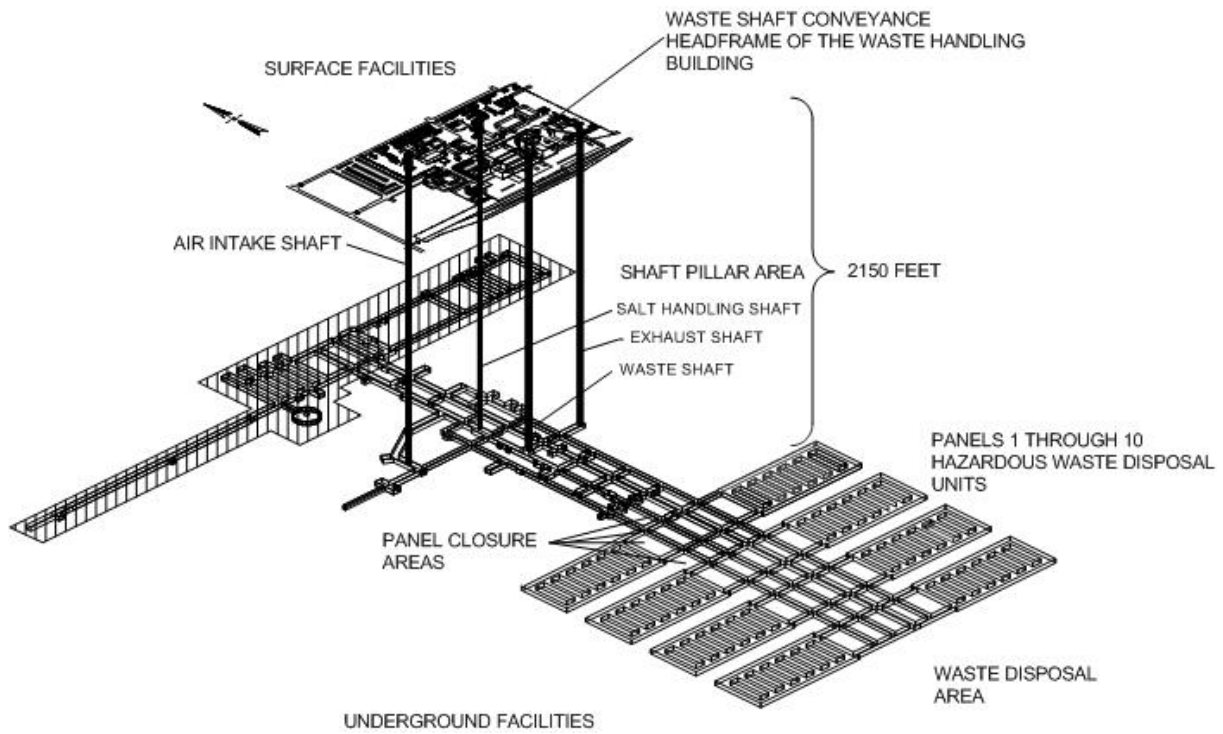


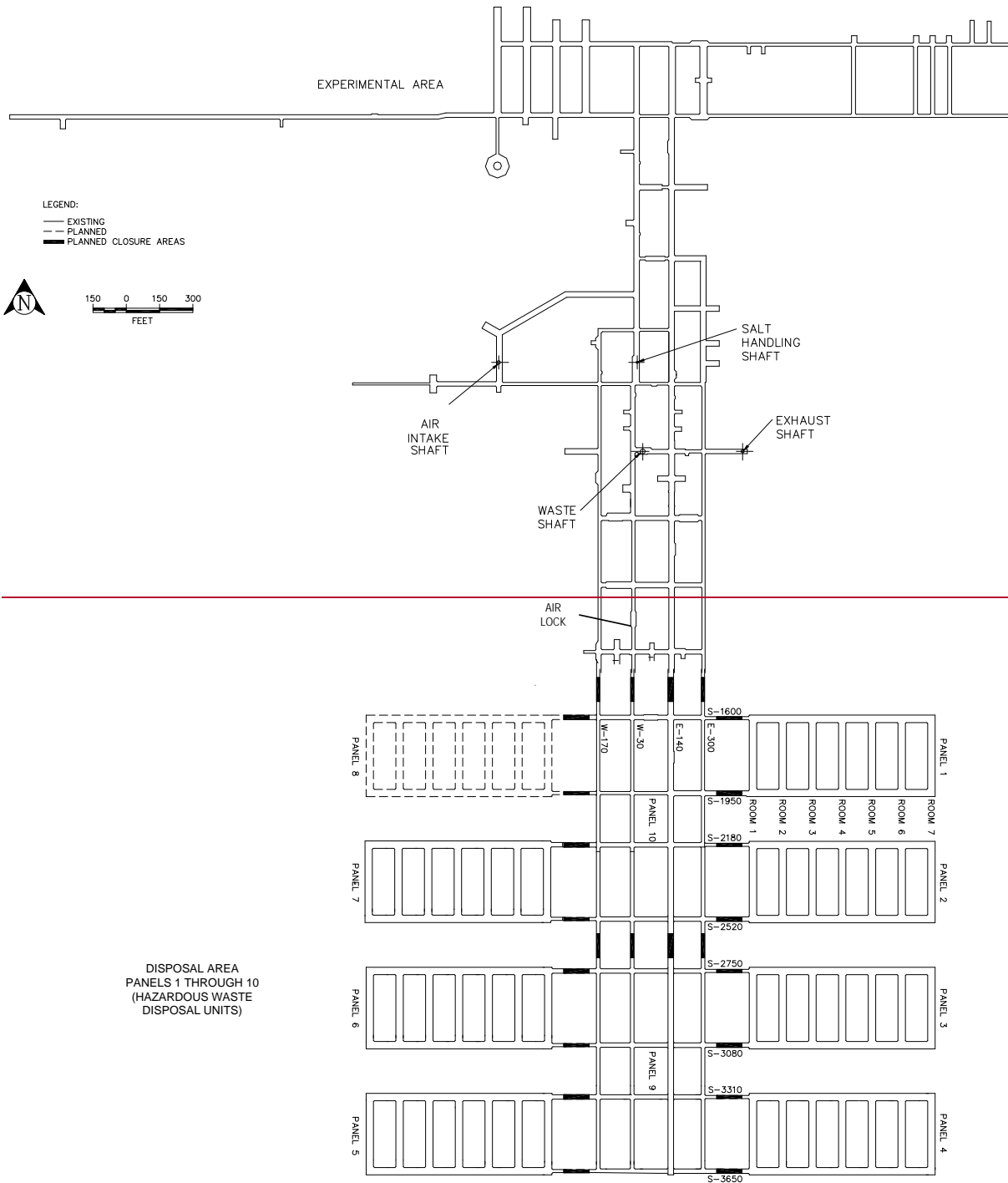
Figure D-1  
WIPP Surface Structures

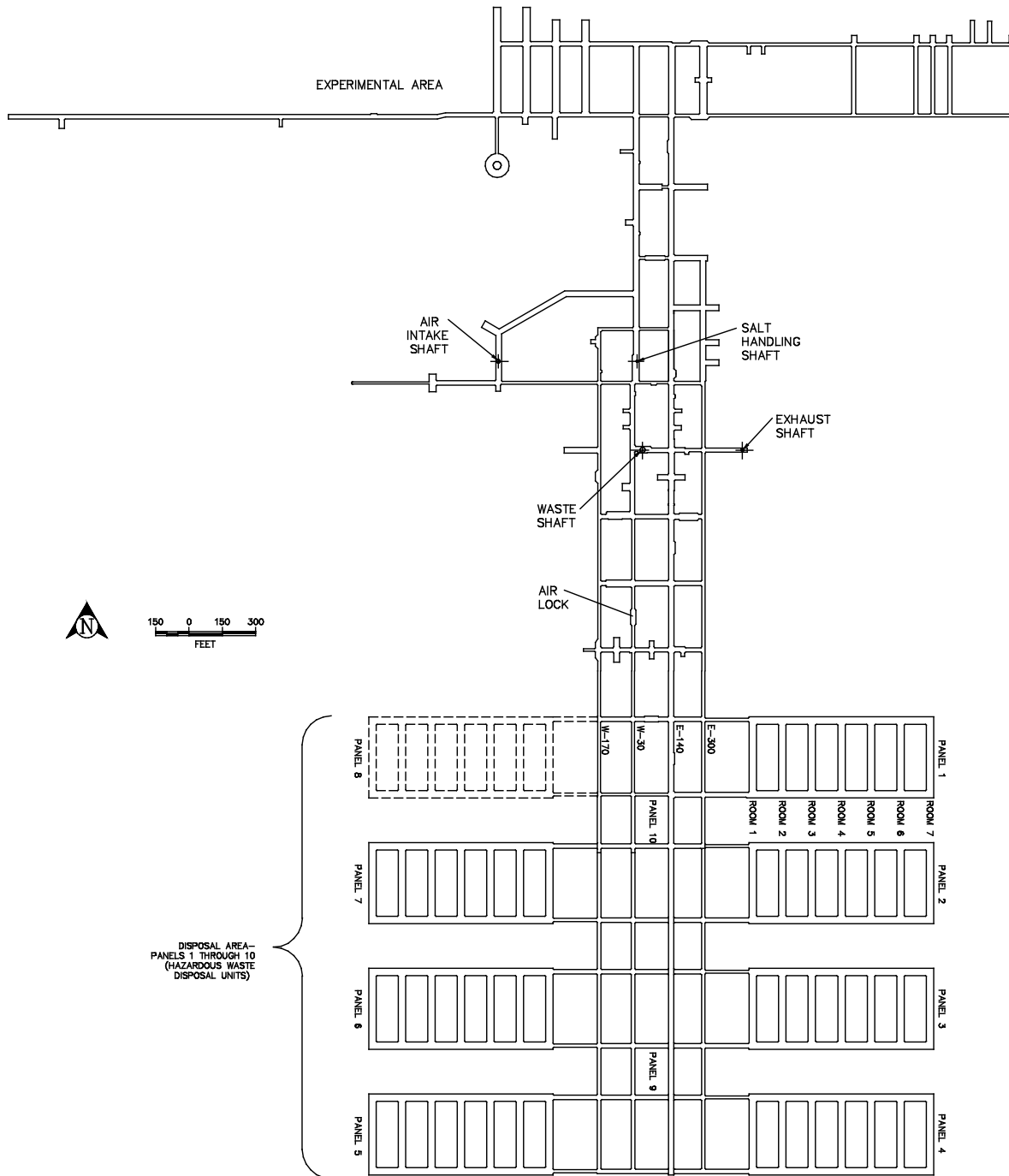
BLDG./ FAC.#	DESCRIPTION	BLDG./ FAC.#	DESCRIPTION	BLDG./ FAC.#	DESCRIPTION
#241	EQUIPMENT SHED	#384	SALT HANDLING SHAFT HOISTHOUSE	#475	GATEHOUSE
#242	GUARDSHACK	#384A	MINING OPERATIONS	#480	VEHICLE FUEL STATION
#243	SALT HAULING TRUCKS SHELTER	#411	WASTE HANDLING BUILDING	#481	WAREHOUSE ANNEX
#245	TRUPACT 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
			SAFETY & EMERGENCY SERVICES FACILITY	#918	VOC TRAILER
#254.4	AREA SUBSTATION NO. 4 25P-SW15.4	#452	WAREHOUSE/SHOPS BUILDING	#918A	VOC AIR MONITORING STATION
#254.5	AREA SUBSTATION NO. 5 25P-SW15.5	#453	AUXILIARY WAREHOUSE BUILDING	#918B	VOC LAB TRAILER
#254.6	AREA SUBSTATION NO. 6 25P-SW15.6	#455	WATER PUMPHOUSE	#950	WORK CONTROL TRAILER
#254.7	AREA SUBSTATION NO. 7 25P-SW15.7	#456	WATER TANK 25-D-001B	#951	PROCUREMENT/PURCHASING
#254.8	AREA SUBSTATION NO. 8 25P-SW15.8	#457N	WATER TANK 25-D-001A	#952	TRAILER
#254.9	480V SWITCHGEAR (25P-SWGO4/9)	#457S	GUARD AND SECURITY BUILDING	#953	MODULAR OFFICE COMPLEX
#255.1	BACK-UP DIESEL GENERATOR #1 25-PE 503	#458	CORE STORAGE BUILDING	#971	HUMAN RESOURCES TRAILER
#255.2	BACK-UP DIESEL GENERATOR #2 25-PE 504	#459	COMPRESSOR BUILDING	#986	PUBLICATIONS & PROCEDURES TRAILER
#256.4	SWITCHBOARD #4 (25P-SBD04/4)	#463	AUXILIARY AIR INTAKE	SWR NO. 6	SWITCHRACK NO. 6
#311	WASTE SHAFT	#465	TELEPHONE HUT	SWR NO. 7	7A, 7B SWITCHRACK NO. 7, 7A, 7B
#351	EXHAUST SHAFT	#468	ARMORY BUILDING	SWR NO. 7C	SWITCHRACK NO. 7C
#361	AIR INTAKE SHAFT	#473	HAZARDOUS WASTE STORAGE FACILITY	SWR NO. 10	SWITCHRACK NO. 10
#362	AIR INTAKE SHAFT/HOIST HOUSE	#474	HAZARDOUS WASTE STORAGE BUILDING	SWR NO. 11	SWITCHRACK NO. 11
#363	AIR INTAKE SHAFT/WINCH HOUSE	#474A	HAZARDOUS WASTE STORAGE BUILDING	SWR NO. 12	SWITCHRACK NO. 12
#364	EFFLUENT MONITORING INSTRUMENT SHED A	#474B	OIL & GREASE STORAGE BUILDING	SWR NO. 15	SWITCHRACK NO. 15
#365	EFFLUENT MONITORING INSTRUMENT SHED B	#474C	GAS BOTTLE STORAGE BUILDING		
#366	AIR INTAKE SHAFT HEADFRAME	#474D	HAZARD MATERIAL STORAGE BUILDING		
#371	SALT HANDLING SHAFT	#474E	WASTE OIL RETAINER		
#372	SALT HANDLING SHAFT HEADFRAME	#474F			

**Figure D-1a**  
**Legend to Figure D-1**



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





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

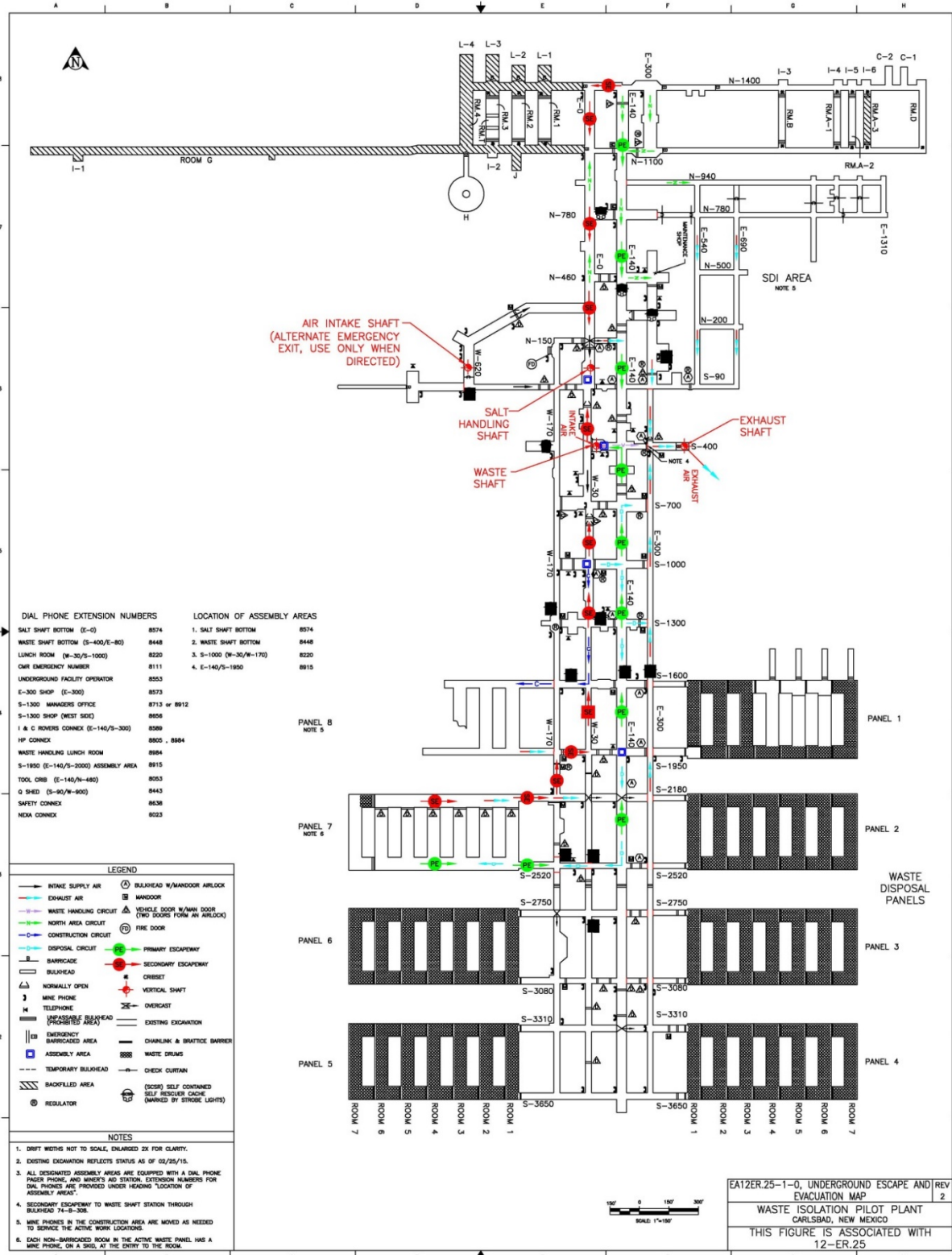


Figure D-4  
 Underground Escapeways/Evacuation Routes

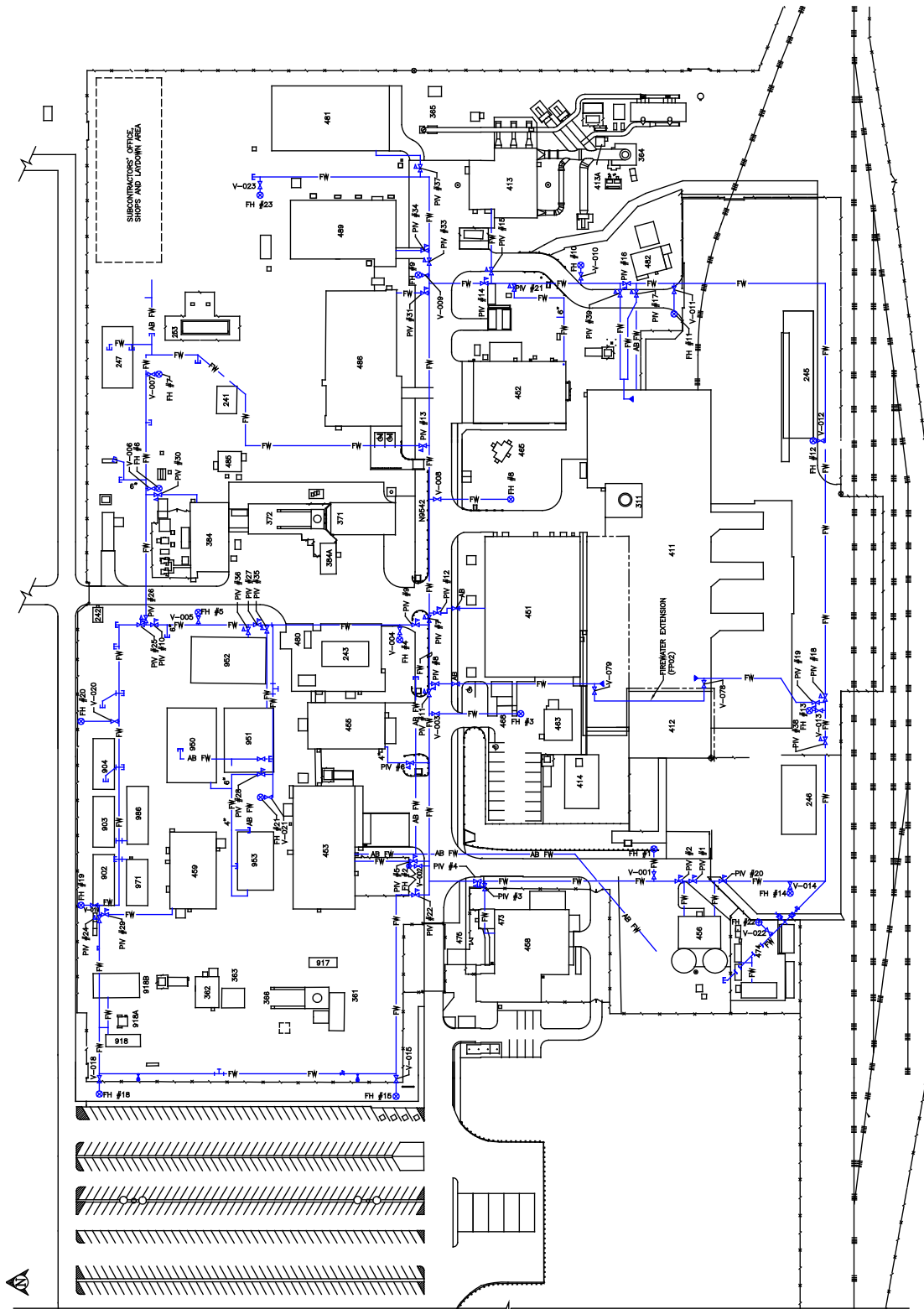


Figure D-5  
Fire-Water Distribution System

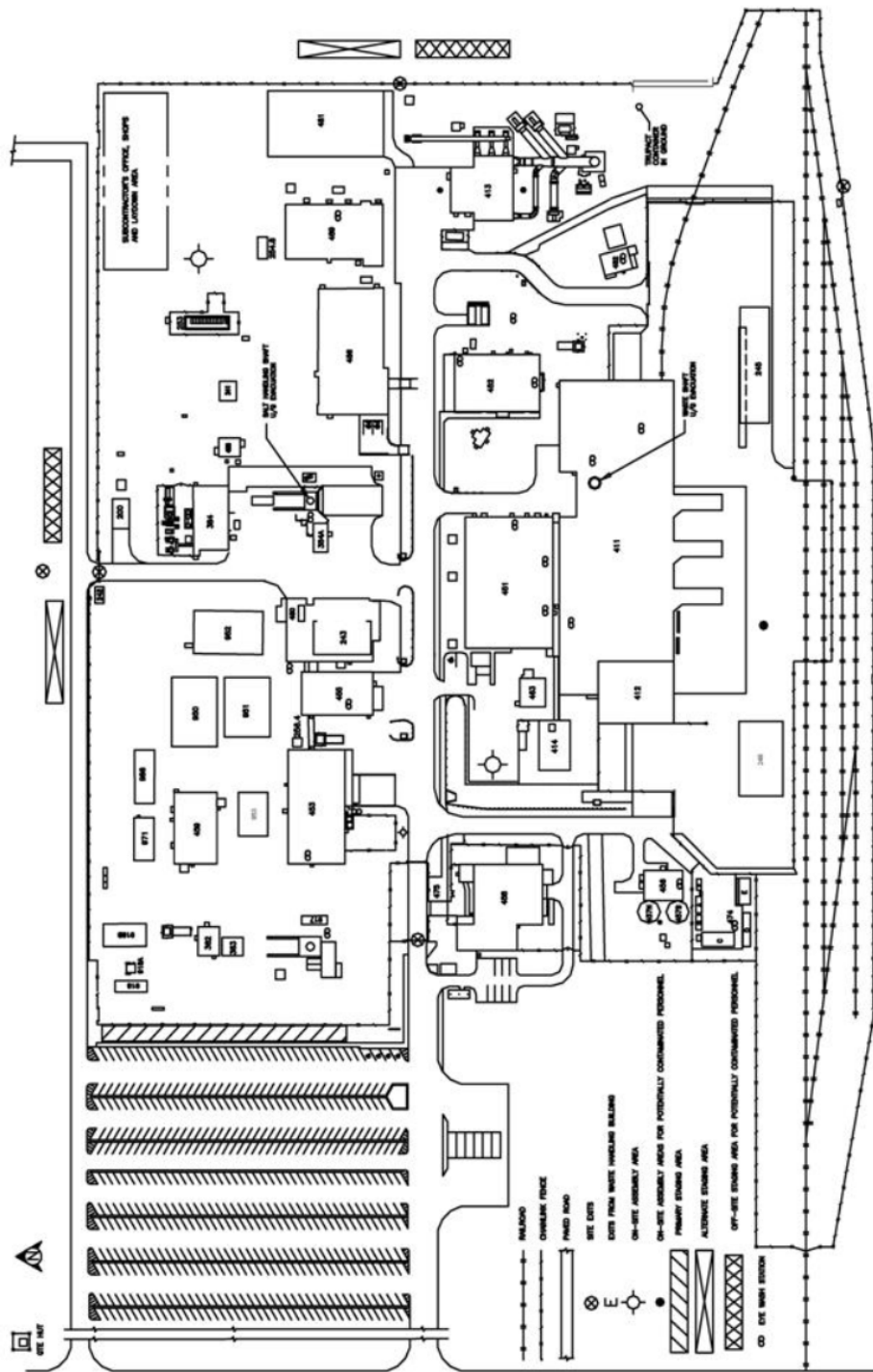
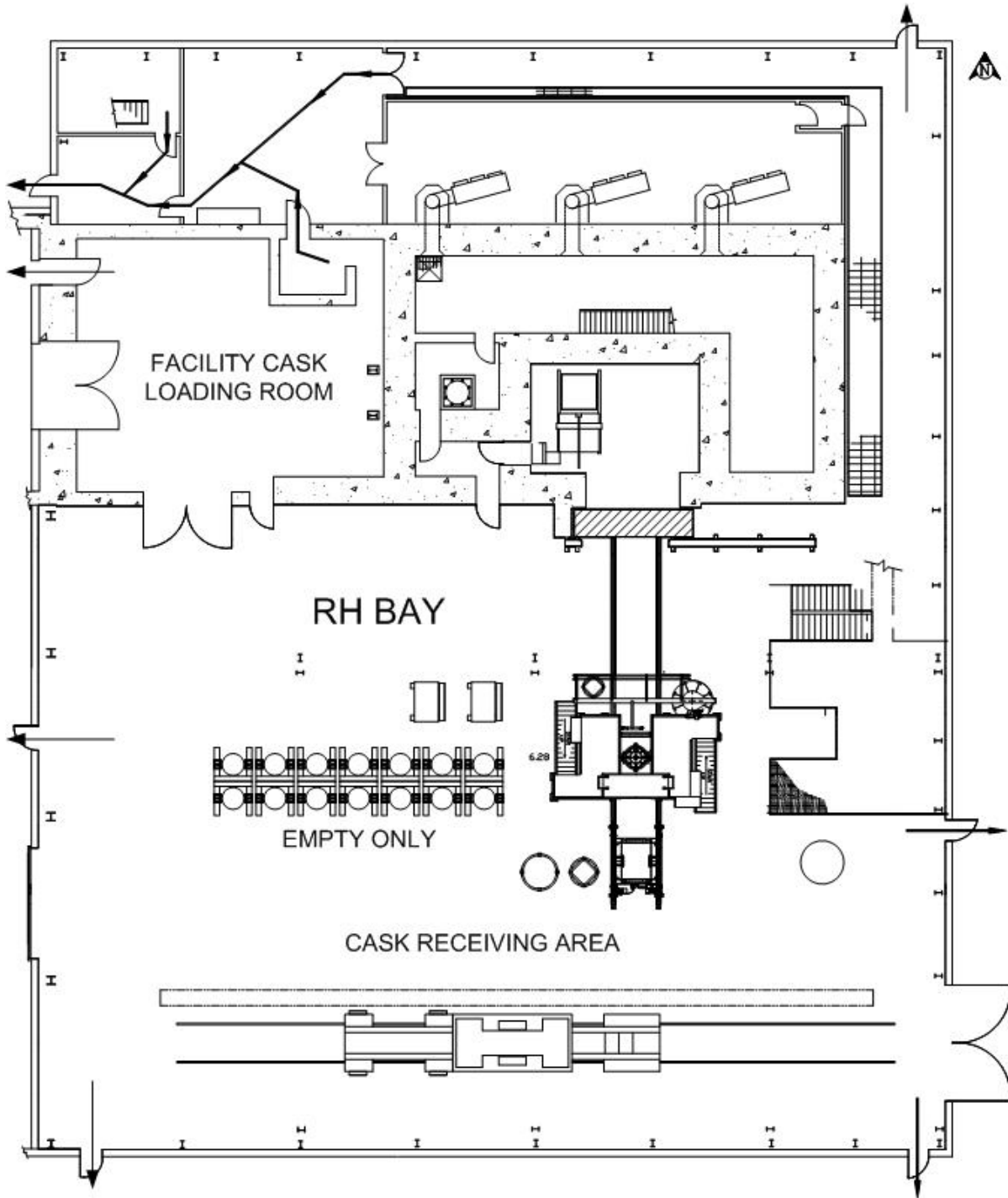


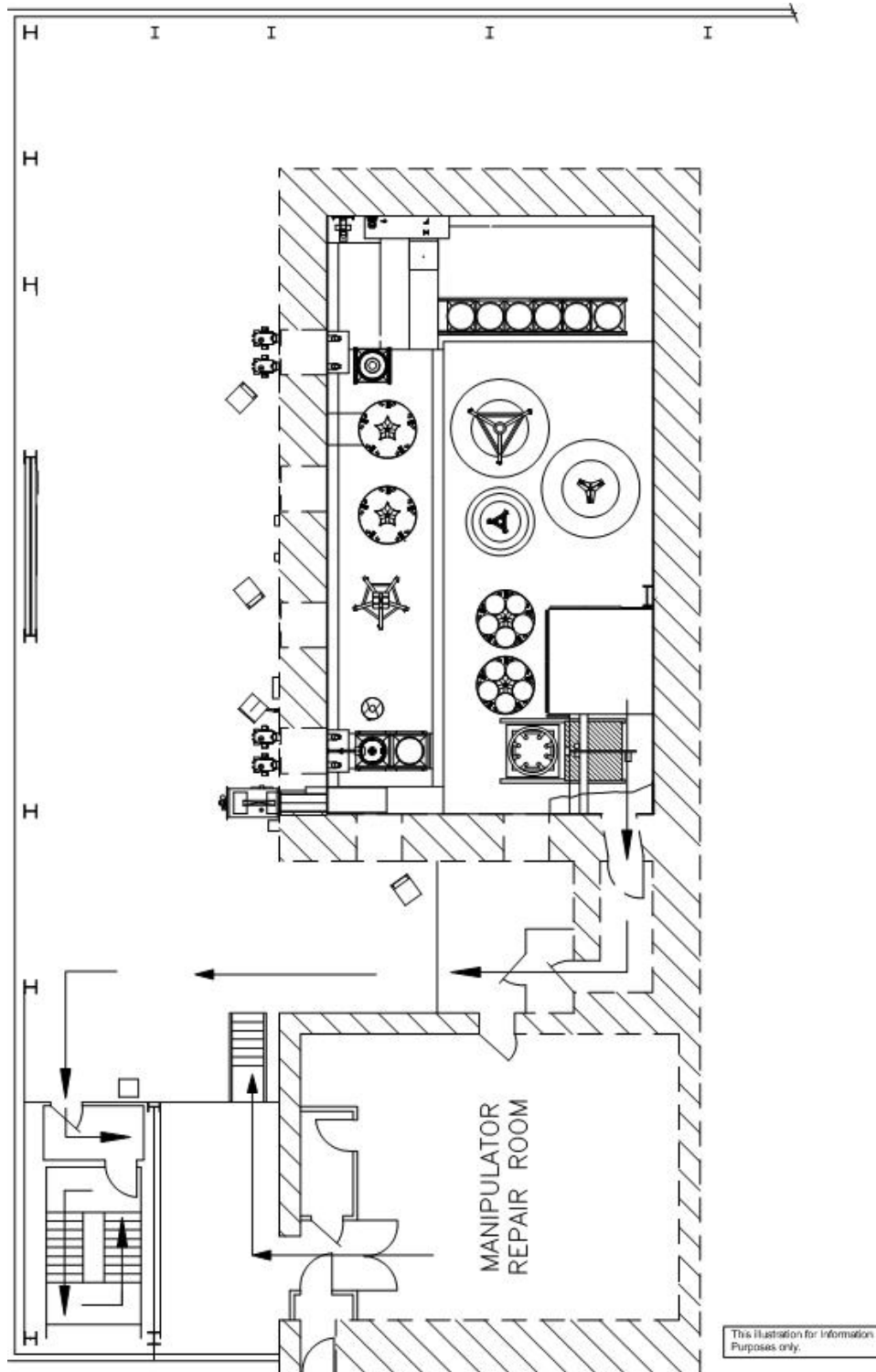
Figure D-6  
 WIPP On-Site Assembly Areas and Off-Site Staging Areas



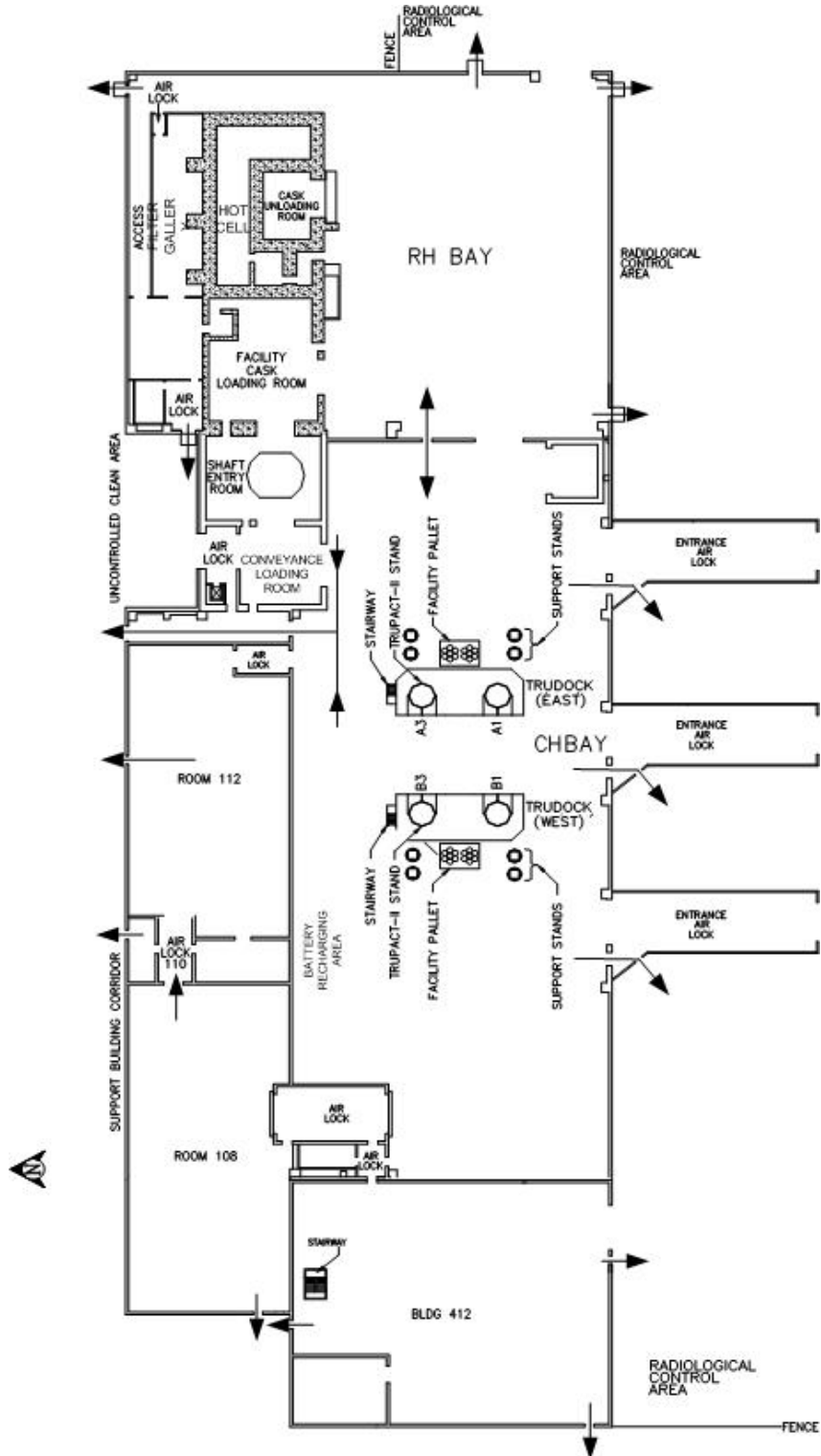


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Information Purposes Only.

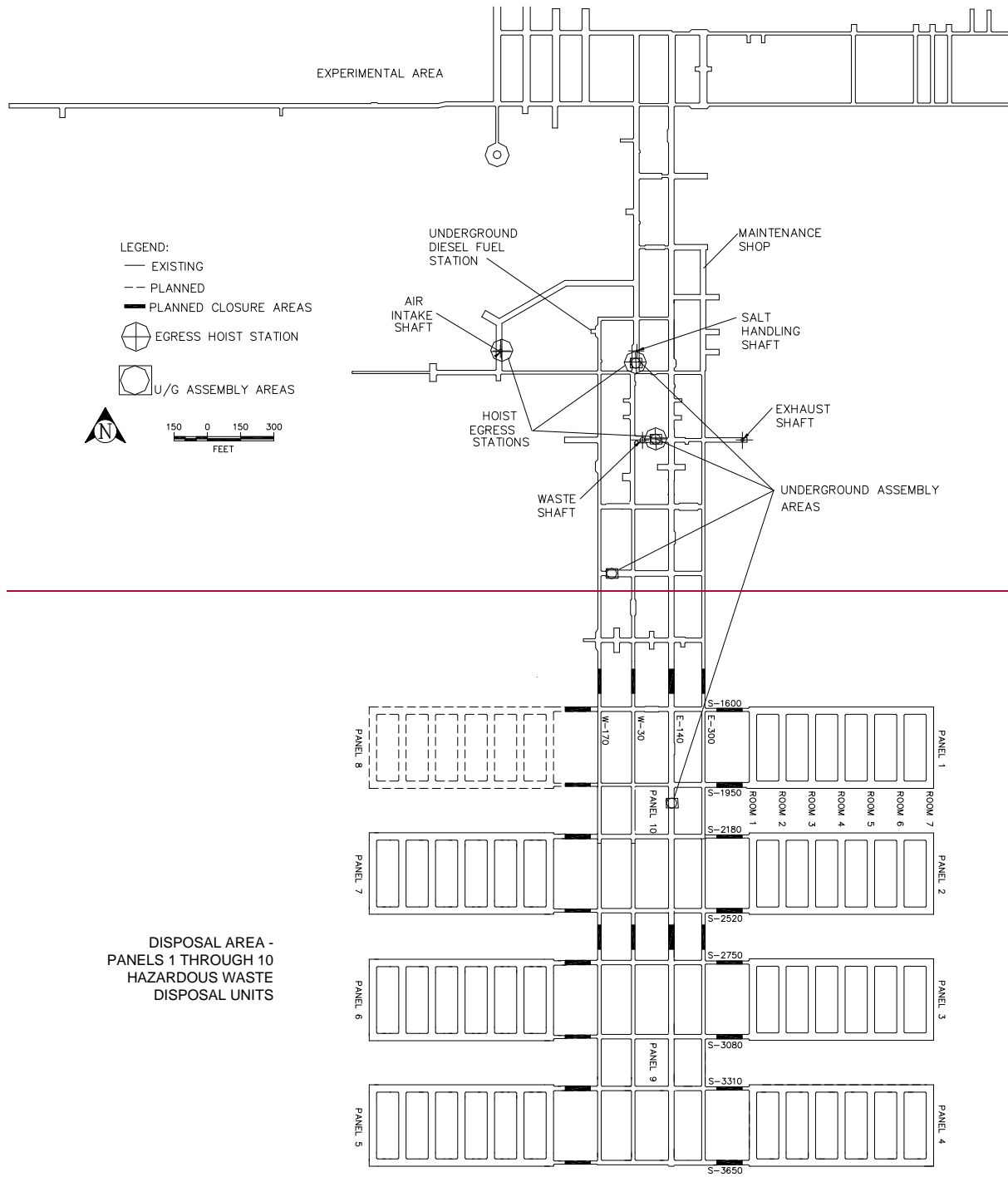
**Figure D-6a**  
**RH Bay Evacuation Routes**

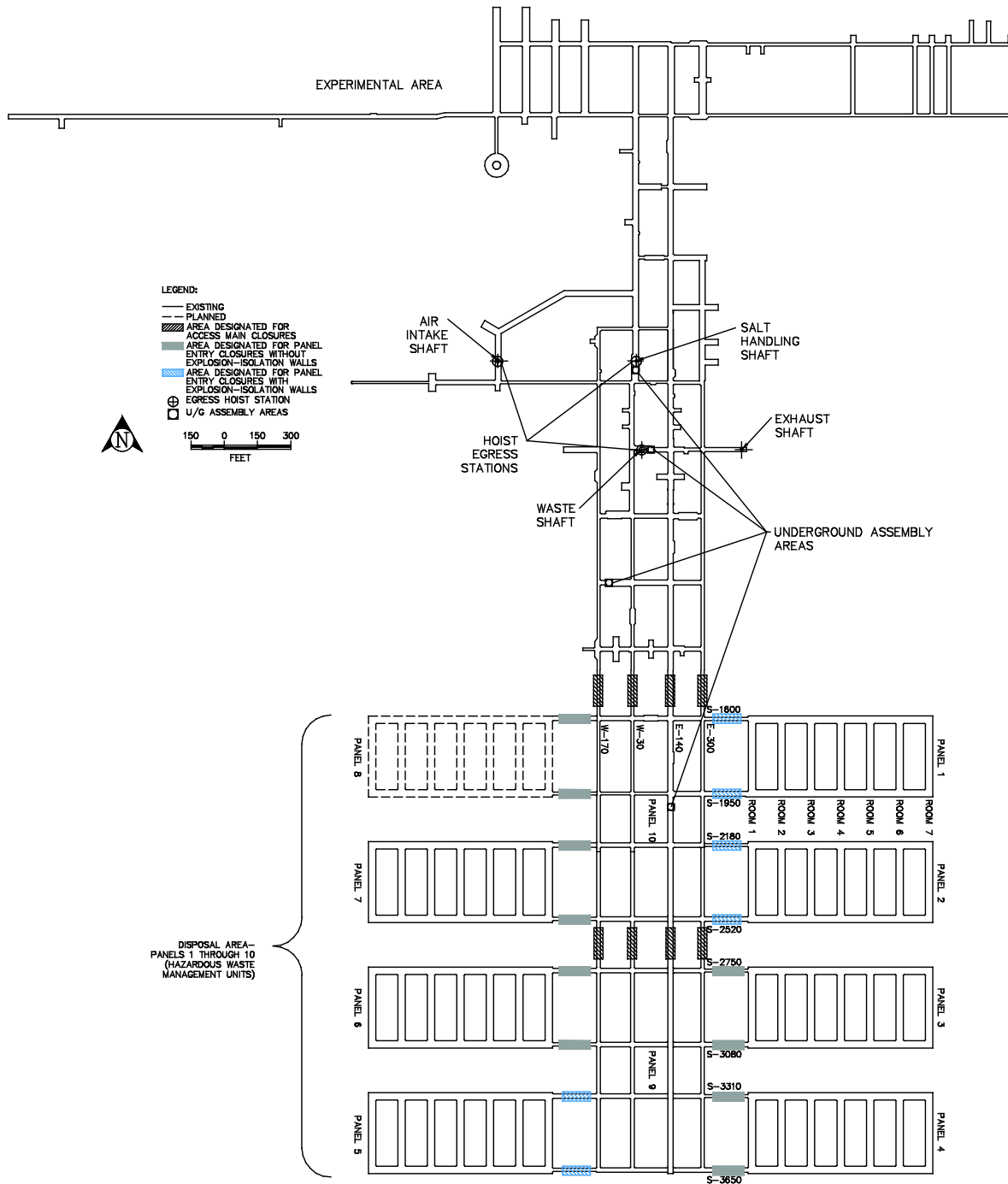


**Figure D-6b**  
**RH Bay Hot Cell Evacuation Route**



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





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

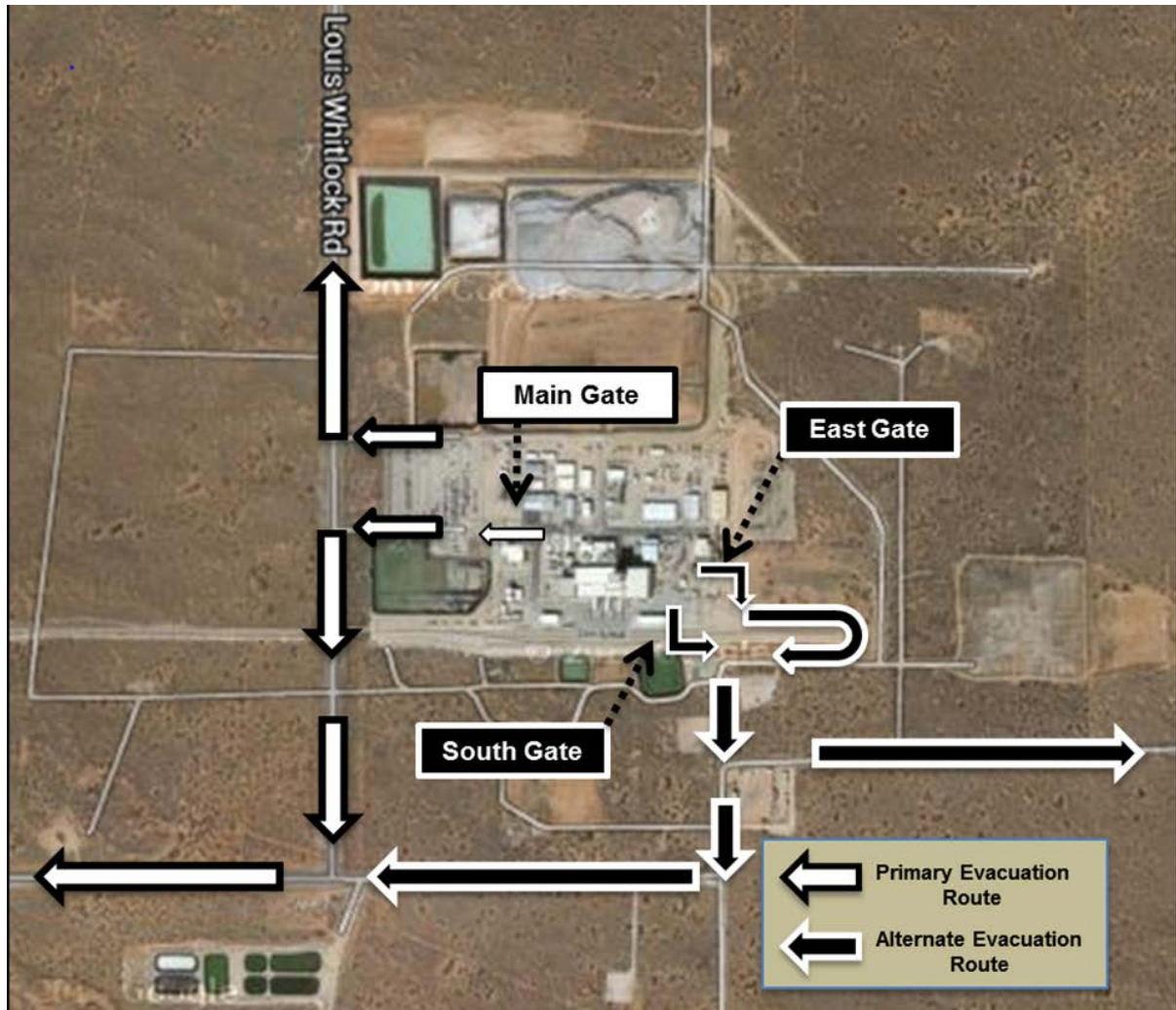


Figure D-8  
WIPP Site Evacuation Routes