

ATTACHMENT D
RCRA CONTINGENCY PLAN

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1 **ATTACHMENT D**

2 **RCRA CONTINGENCY PLAN**

3 Introduction

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

14 D-1 Scope and Applicability

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

19 Pursuant to 20.4.1.500 NMAC (incorporating 40 CFR §264.51(b)), owners/operators of
20 treatment, storage, and disposal facilities are required to have formal contingency plans in place
21 that describe actions that facility personnel will take in response to any fire, explosion, or
22 release of hazardous waste or hazardous waste constituents which could threaten human
23 health or the environment. The contingency plan must meet the requirements of NMAC
24 20.4.1.500 NMAC (incorporating 40 CFR Part 264, Subpart D). The provisions of the *RCRA*
25 *Contingency Plan* apply to HWDUs in the underground waste disposal panels, HWMUs in the
26 WHB Unit and the Parking Area Unit, the Waste Shaft, and supporting TRU mixed waste
27 handling areas. These areas are shown in Figures D-1 through D-3.

28 The WIPP facility is a large quantity generator of hazardous waste pursuant to 20.4.1.300
29 NMAC (incorporating 40 CFR Part 262, "Standards for Generators of Hazardous Waste").
30 20.4.1.300 NMAC (incorporating 40 CFR §262.34(a)(4), which references 40 CFR Part 265,
31 Subpart D) requires that a contingency plan be in place that describes actions that facility
32 personnel will take in response to any fire, explosion, or release of hazardous waste or
33 hazardous waste constituents which could threaten human health or the environment. The
34 provisions of the *RCRA Contingency Plan* also apply to the Hazardous Waste Staging Areas for
35 site-generated hazardous waste, which are located in Buildings 474A and 474B on the surface,
36 as shown in Figure D-1, and in the underground at S550/E140.

37 Wastes may also be generated at the WIPP facility as a direct result of managing the TRU and
38 TRU mixed wastes received from the off-site generators. Throughout the remainder of this plan,
39 this waste is referred to as "derived waste." Derived waste will be placed in the rooms in
40 HWDUs along with the TRU mixed waste for disposal. Every reasonable effort to minimize the
41 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 F, under “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 F (*Facility
21 Personnel Permit Training Program*), or provide support to the qualified RCRA
22 Emergency Coordinator on shift.

- 23 • **Central Monitoring Room Operator (CMRO)**—An on-shift operator responsible for
24 Central Monitoring Room (CMR) operations, including coordination of facility
25 communications. The CMRO documents these activities (e.g., communications,
26 notifications) in a facility log. The CMRO is a member of Facility Operations, and
27 during emergencies, the CMRO supports the RCRA Emergency Coordinator.

- 28 • **Emergency Response Team (ERT)** — WIPP facility personnel who serve as an
29 Industrial Fire Brigade and are trained to respond to surface and underground
30 emergencies on site, including fires, medical emergencies, and releases of
31 hazardous materials. The ERT members supplement WIPP Fire Department
32 response capabilities. The ERT member assigned to the underground will not
33 perform any coordinated firefighting underground and will only respond to incipient-
34 stage fires that threaten TRU mixed waste, if it is safe to do so.

- 35 • **Firefighter**—A WIPP Fire Department member who serves as a primary responder
36 to surface and underground emergencies, including fires, medical emergencies,
37 and releases of hazardous materials. Firefighters assigned to the underground will
38 not perform any coordinated firefighting underground and will only respond to
39 incipient-stage fires that threaten TRU mixed waste, if it is safe to do so.

- 40 • **Fire Department Incident Commander**—Upon delegation by the RCRA Emergency
41 Coordinator, and once incident command has been established, the Incident
42 Commander is responsible for direction and supervision of emergency responders

1 during an incident resulting in implementation of the *RCRA Contingency Plan*. The
2 Incident Commander will be a member of the WIPP Fire Department. For security-
3 related incidents that invoke implementation of the *RCRA Contingency Plan*, the
4 Fire Department Incident Commander will establish a unified command with the
5 WIPP Protective Force.

- 6 • Mine Rescue Team (MRT)— The MRT is responsible for emergency rescue and
7 recovery of trapped or missing personnel in the underground, conducting mine
8 facility assessments, and underground firefighting once the underground has been
9 evacuated and only if needed to rescue unaccounted personnel.
- 10 • Emergency Operations Center (EOC) Staff- Upon activation, the EOC supports the
11 RCRA Emergency Coordinator and Incident Commander with emergency
12 management decision-making and associated notifications. Since EOC staff
13 performs duties similar to their normal job functions during an emergency response
14 and provides support related to their area(s) of expertise, no specific RCRA
15 training is required.

16 D-2b Emergency Response Training

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

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

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

29 As described above, emergency response training is conducted in accordance with the *WIPP*
30 *Fire Department Training Plan*, which is updated whenever the applicable standards are
31 revised. In addition to the emergency response training, WIPP Fire Department personnel are
32 required to complete applicable site-specific training, which is described in Permit Attachment F,
33 *Facility Personnel Permit Training Program*.

34 D-3 Criteria for Implementation of the RCRA Contingency Plan

35 The provisions of the *RCRA Contingency Plan* shall be implemented immediately whenever
36 there is a fire, an explosion, or a release of hazardous wastes or hazardous waste constituents
37 that could threaten human health or the environment, or whenever the potential for such an
38 event exists as determined by the RCRA Emergency Coordinator, as required under 20.4.1.500
39 NMAC (incorporating 40 CFR §264.51(b)).

40 There may be situations which do not readily lend themselves to an immediate assessment of
41 the possible hazards to human health and the environment. In these cases, the RCRA

1 Emergency Coordinator will implement the *RCRA Contingency Plan* as a precautionary
2 measure, regardless of the emergency situation or occurrence, if the RCRA Emergency
3 Coordinator has reason to believe that a fire, explosion, or release of hazardous waste or
4 hazardous waste constituents has occurred that could threaten human health or the
5 environment.

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

14 • Fires

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

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

26 • Explosions

- 27 - If an explosion involving TRU mixed waste or site-generated hazardous waste occurs
- 28 - If an explosion occurs within or near the Hazardous Waste Staging Areas which
29 threatens to involve site-generated hazardous waste
- 30 - If an explosion occurs within or near the permitted HWMUs which threatens to involve
31 TRU mixed waste
- 32 - If an explosion occurs in the underground that results in immediate personnel evacuation
33 or prevents normal personnel access to the underground
- 34 - If there is an imminent danger of an explosion occurring (e.g., gas leak with an ignition
35 source nearby) which could involve TRU mixed or site-generated hazardous waste

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

4 • Unplanned Sudden/Non-Sudden Releases

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

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

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

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

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

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

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

25 • Other Occurrences

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

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

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

1 D-4 Emergency Response Method

2 Methods that describe implementation of the *RCRA Contingency Plan* cover the following six
3 areas:

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

17 D-4a Immediate Notifications

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

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

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

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

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

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

38 The response to an unplanned event will be performed in accordance with standard operating
39 procedures and guides based on the applicable Federal, State, or local regulations and/or
40 guidelines for that response. These include DOE Order 151.1C, *Comprehensive Emergency*
41 *Management System*; the U.S. Mine Safety and Health Administration (**MSHA**); NMAC;

1 Comprehensive Environmental Response, Compensation, and Liability Act; Chapter 74, Article
2 4B, New Mexico Statutes Annotated 1978; and the New Mexico Emergency Management Act.

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

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

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

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

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

- 19 • Local Fire Alarms

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

- 22 • Surface Evacuation Signal

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

- 26 • Underground Evacuation Warning System

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

33 WIPP facility personnel are trained and given instruction during GET to recognize the various
34 alarm signals and the significance of each alarm. WIPP facility employees and site visitors are
35 required to comply with directions from emergency personnel and alarm system notifications
36 and to follow instructions concerning emergency equipment, shutdown procedures, and
37 emergency evacuation routes and exits.

38

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

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

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

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

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

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

40 D-4c Assessment of the Potential Hazards

41 Concurrent with the actions described in Sections D-4a and D-4b, and in accordance with
42 20.4.1.500 NMAC (incorporating 40 CFR §264.56(c)), the RCRA Emergency Coordinator shall

1 assess possible hazards to human health or the environment that may result from the release,
2 fire, or explosion. This assessment will consider both direct and indirect effects of the release,
3 fire, or explosion (e.g., the effects of any toxic, irritating, or asphyxiating gases that are
4 generated, or the effects of any hazardous surface water run-off from water or chemical agents
5 used to control fire and heat-induced explosions). The RCRA Emergency Coordinator will be
6 responsible for identifying and responding to immediate and potential hazards, using the
7 services of trained personnel.

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

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

18 D-4d Post-Assessment Notifications

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

- 28 • New Mexico Department of Homeland Security and Emergency Management (telephone
29 number: (505) 476-9635)
- 30
- 31 • Eddy County via the Regional Emergency Dispatch Authority (telephone number: (575)
32 616-7155)
- 33
- 34 • Lea County via the Regional Emergency Dispatch Authority (telephone number: (575)
35 397-9265)

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

38 After local authorities are notified, the RCRA Emergency Coordinator must immediately notify
39 either the government official designated as the on-scene coordinator for that geographical
40 area, or the National Response Center. For the purposes of the *RCRA Contingency Plan*, the
41 following notifications satisfy the requirements of 20.4.1.500 NMAC (incorporating 40 CFR
42 §264.56(d)(2)):

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

9 This notification shall include the following information:

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

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

20 D-4e Control and Containment of the Emergency

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

- 29 • Stopping processes and operations
- 30 • Collecting and containing released wastes and materials
- 31 • Removing or isolating containers of hazardous waste posing a threat
- 32 • Ensuring that wastes managed during an emergency are handled, stored, or treated with
33 due consideration for compatibility with other wastes and materials on site and with
34 containers utilized (Section D-4f(2))
- 35 • Restricting personnel not needed for response activities from the scene of the incident

- 1 • Evacuating the area
- 2 • Curtailing nonessential activities in the area
- 3 • Conducting preliminary inspections of adjacent facilities and equipment to assess
- 4 damage
- 5 • Maintaining fire equipment on standby at the incident site in cases where ignitable
- 6 liquids have been or may be released and ensuring that ignition sources are kept out of
- 7 the area. Ignitable liquids will be segregated, contained, confined, diluted, or otherwise
- 8 controlled to preclude inadvertent explosion or detonation.

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

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

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

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

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

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

- 33 1. Physical methods of control may involve any of several processes to reduce the area
34 of the spill/leak, or other release mechanism (such as fire suppression).

- 1 a. Absorption (e.g., absorbent sheets; spill control bucket materials specifically for
2 solvents, neutralization, or acids/caustics; and absorbent socks for general liquids
3 or oils)
- 4 b. Dikes or Diversions (e.g., absorbent socks or earth)
- 5 c. Overpacking
- 6 d. Plug and Patch
- 7 e. Transfers from leaking container to new container f. Vapor Suppression (e.g.,
8 aqueous foam blanket)
- 9 2. Chemical methods of mitigation may include the following:
- 10 a. Neutralization
- 11 b. Solidification

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

17 D-4e(1) Fires

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

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

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

8 D-4e(2) Explosions

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

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

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

24 Spills of Site-Generated Hazardous Waste

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

- 29 1. The RCRA Emergency Coordinator will remain in contact with and advise the Incident
30 Commander of the known hazards.
- 31 2. The Incident Commander will maintain overall control of the emergency and may
32 accept and evaluate the advice of WIPP facility personnel and emergency response
33 organization members, but retains overall responsibility until the emergency is
34 terminated.
- 35 3. The immediate area will be evacuated.
- 36 4. The source of the release will be mitigated, if possible.

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

9 Releases of TRU Mixed Waste

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

- 13 1. The RCRA Emergency Coordinator will remain in contact with and advise the Incident
14 Commander of the known hazards.
- 15 2. The Incident Commander will maintain overall control of the emergency and may
16 accept and evaluate the advice of WIPP facility personnel and emergency response
17 organization members, but retains overall responsibility until the emergency is
18 terminated.
- 19 3. Prior to the re-entry following an event involving containers that are managed as TRU
20 mixed waste, a Radiological Work Permit (**RWP**) will be prepared.
- 21 4. During the re-entry phase, the extent of radiological contamination will be determined.
22 This information is used by the RCRA Emergency Coordinator to determine an
23 appropriate course of action to recover the area.
- 24 5. During the recovery phase, the necessary resources to conduct decontamination
25 and/or overpacking operations will be used as needed.
- 26 6. Prior to returning the affected area and/or equipment to normal activities, the RCRA
27 Emergency Coordinator will determine if additional measures are required by the
28 *RCRA Contingency Plan* (e.g., characterization and disposal of contaminated media).
- 29 7. The recovery phase will include activities (e.g., placing the waste material in another
30 container, vacuuming the waste material, overpacking or plugging/patching the
31 affected waste container(s), decontaminating or covering the affected area), as
32 specified in the RWP, to minimize the spread of contamination to other areas.
- 33 8. The RWPs and other administrative controls will provide protective measures to help
34 ensure that new hazardous constituents will not be added during decontamination
35 activities.

1 D-4e(4) Other Occurrences

2 Natural Phenomena

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

- 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. Containers which have not been disposed will be inspected for signs of leakage or
14 damage, and containment systems will be inspected for deterioration.
- 15 4. Affected equipment or areas associated with hazardous waste management activities
16 will be inspected, and the operability of monitoring systems will be ensured.
- 17 5. Affected electrical equipment and lines will be inspected for damage.
- 18 6. Affected buildings and fencing directly related to hazardous waste management
19 activities will be inspected for damage.
- 20 7. A general survey of the site will be conducted to check for signs of physical damage.
- 21 8. The RCRA Emergency Coordinator will ensure that measures are taken to shut down
22 operational units (e.g., process equipment and ventilation equipment) that have been
23 affected by the natural phenomenon.

24 Underground Structural Integrity Emergencies

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

- 29 1. The RCRA Emergency Coordinator will remain in contact with and advise the Incident
30 Commander of the known hazards.
- 31 2. The Incident Commander will maintain overall control of the emergency and may
32 accept and evaluate the advice of WIPP facility personnel and emergency response
33 organization members, but retains overall responsibility until the emergency is
34 terminated.
- 35 3. The RCRA Emergency Coordinator will ascertain whether the roof conditions allow for
36 safe entry and if the waste container or containers in question are accessible.

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

15 D-4f Post-Emergency Activities

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

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

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

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

31 If radioactive contamination is detected on equipment or on structures, radiological cleanup
32 standards will be used to determine the effectiveness of decontamination efforts and/or the final
33 disposition of the equipment or structures. Many types of equipment are difficult to
34 decontaminate and may have to be discarded as derived waste. Fixatives (e.g., paint or water
35 spray on salt in the underground) may be used on contaminated structures if the contamination
36 cannot be safely removed.

37 Following decontamination, the RCRA Emergency Coordinator will ensure that nonradioactive
38 hazardous waste resulting from the cleanup of a fire, an explosion, or a release involving a
39 nonradioactive hazardous waste at the WIPP facility will be contained and managed as a

1 hazardous waste until such time as the waste is disposed of, or determined to be
2 nonhazardous, as defined in 20.4.1.200 NMAC (incorporating 40 CFR Part 261, Subparts C and
3 D). In most cases, knowledge of the material inventories for the various buildings and areas at
4 the facility will allow a hazardous waste determination for the material resulting from the cleanup
5 of a release. When knowledge of the material inventories is not sufficient, samples of the waste
6 will be collected and analyzed using U.S. Environmental Protection Agency (**EPA**)-approved
7 methods to determine the presence of any hazardous characteristics and/or hazardous waste
8 constituents.

9 D-4f(2) Incompatible Waste

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

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

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

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

28 D-5 Required Reporting

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

- 35 • The name, address, and telephone number of the Owner/Operator
- 36 • The name, address, and telephone number of the facility
- 37 • The date, time, and type of incident (e.g., fire, explosion, or release)
- 38 • The name and quantity of material(s) involved

- 1 • The extent of injuries, if any
- 2 • An assessment of actual or potential hazards to human health or the environment,
3 where this is applicable
- 4 • The estimated quantity and disposition of recovered material that resulted from the
5 incident

6 D-6 Emergency Equipment

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

18 D-7 Agreements with Local Emergency Response Agencies

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

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

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

- 1 • A mutual-aid Agreements with the City of Hobbs and the City of Carlsbad for mutual
2 ambulance, medical, rescue, and hazardous material response services; for use of
3 WIPP facility radio frequencies during emergencies; and for mutual security and law
4 enforcement services, within the appropriate jurisdiction limits of each party.

- 5 • Agreements with the Lea Regional Medical Center and the Carlsbad Medical Center for
6 the treatment of persons with radiological contamination who have incurred injuries
7 beyond the treatment capabilities at the WIPP site. The WIPP facility provides transport
8 of the patient(s) to the medical center.

- 9 • Agreements with the Sheriff of Eddy County and the Sheriff of Lea County for mutual law
10 enforcement services support.

- 11 • An agreement with the New Mexico Department of Homeland Security and Emergency
12 Management for mutual emergency management support, access to state law
13 enforcement, public works, and transportation assets.

14 D-8 Evacuation Plan

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

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

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

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

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

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

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

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

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

15 D-8c Plan for Surface Evacuation

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

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

26 D-8d Plan for Underground Evacuation

27 Notification for underground evacuation will be made using the underground evacuation alarm
28 and strobe light signals.

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

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

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

6 D-8e Further Site Evacuation

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

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

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

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

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

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

- 29 • Intrepid Potash New Mexico LLC
- 30 • Mosaic Potash Carlsbad Inc.
- 31 • City of Carlsbad
- 32 • Carlsbad Medical Center, Carlsbad
- 33 • Lea Regional Medical Center, Hobbs
- 34 • City of Hobbs
- 35 • BLM, Carlsbad
- 36 • New Mexico State Police
- 37 • New Mexico Department of Homeland Security and Emergency Management
- 38 • Eddy County Commission
- 39 • Sheriff of Eddy County
- 40 • Sheriff of Lea County

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

- 3 • The Permit for the WIPP facility is revised in any way that would affect the *RCRA*
4 *Contingency Plan*;
- 5 • This plan fails in an emergency;
- 6 • The WIPP facility design, construction, operation, maintenance, or other circumstances
7 change in a way that materially increases the potential for fires, explosions, or releases
8 of hazardous waste or hazardous constituents or change the response necessary in an
9 emergency;
- 10 • The list of RCRA Emergency Coordinators change; or
- 11 • 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 Coordinators¹**

Name	Address*	Office Phone	Personal Phone*	24-Hour Emergency Phone
J. E. (Joseph) Bealler		(575) 234-8276 or (575) 234-8916		(575) 234-8111
M. G. (Mike) Proctor		(575) 234-8276 or (575) 234-8143		(575) 234-8111
G. L. (Gary) Kessler		(575) 234-8326		(575) 234-8111
P. J. (Paul) Paneral		(575) 234-8498		(575) 234-8111
M. L. (Mark) Long		(575) 234-8170		(575) 234-8111
A.C. (Andy) Cooper		(575) 234-8197		(575) 234-8111
C.J. (Chris) Belis		(575) 628-5851		(575) 234-8111
B.R. (Bobby) Franco		(575) 234-8163		(575) 234-8111
G.W. (Gregory) Brown		(575) 234-5862		(575) 234-8111
R.D. (Ryan) Parrish		(575) 234-8638		(575) 234-8111

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

¹ 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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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), New Filter Building (NFB) (Building 416), Salt Reduction Building (SRB) (Building 417), Support Building (Building 451), CMR/Computer Room, Waste Handling Building (Building 411), TRUPACT Maintenance Building (Building 412), Salt Handling (SH) Shaft Hoisthouse (Building 384), Auxiliary Warehouse Building (Building 455), Engineering Building (Building 486), Training Building (Building 489), Safety and Emergency Services Facility (Building 452), and 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

Equipment	Description and Capabilities	Location
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
Spill Response Equipment and Materials		
HAZMAT Equipment	Spill response equipment and supplies, PPE, and decontamination supplies stored and maintained in accordance with NFPA 1901 and as documented in WIPP facility files	Surface, in designated areas near Safety and Emergency Services Facility (Building 452)
Absorbent Materials	Containment or cleanup of spills, including: Pressurized spill-response gun; Absorbent sheets and/or dikes for containment or cleanup of spills of oil, petroleum-based chemicals, and general liquids; Spill-control material for solvents and neutralizing absorbents and for acids/caustics	Surface, in designated areas near Safety and Emergency Services Facility (Building 452)
Medical Resources		
Ambulance	A minimum of one ambulance, maintained and equipped in accordance with the New Mexico Ambulance Standard, 18.3.14 NMAC, and as documented in WIPP facility files	Surface at Safety and Emergency Services Facility (Building 452, Vehicle Bay)
Medical Cart	A minimum of one medical cart, equipped to provide basic life support operations, as documented in WIPP facility files	Underground (Emergency Vehicle Parking/Charging Area at S700/E140)
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
Fire Detection and Fire Suppression Equipment		
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), NFB (Building 416), SRB (Building 417), 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)
Personal Protection Equipment		
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
General Plant Emergency Equipment		
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), Exhaust Shaft Filter Building (Building 413) NFB (Building 416), and SRB (Building 417)
Backup Power Sources	A minimum of two diesel generators, and battery-powered uninterruptible power supply (UPS)	Generators are located on the surface. UPS is located at the essential loads

Equipment	Description and Capabilities	Location
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), NFB (Building 416), SRB (Building 417), 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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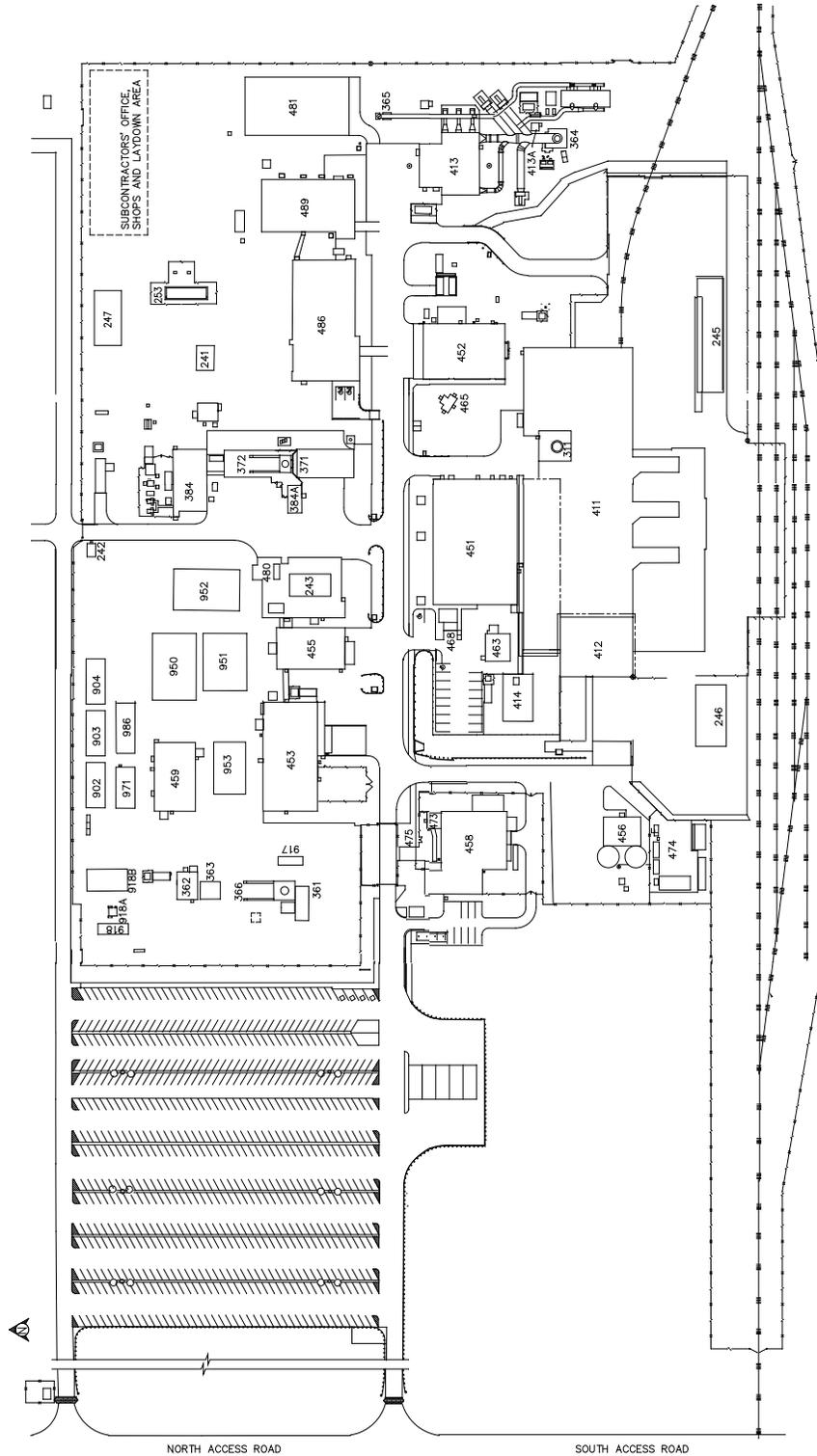


Figure D-1
WIPP Surface Structures

Waste Isolation Pilot Plant
 Hazardous Waste Permit
 August 2019

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	#486	ENGINEERING BUILDING
#246	MgO STORAGE SHELTER	#413	EXHAUST SHAFT FILTER BUILDING	#489	TRAINING BUILDING
#253	13.8 KV SWITCHGEAR 25p-SWG15/1	#413A	MONITORING STATION A	#H-16	SANDIA TEST WELL
#254.1	AREA SUBSTATION NO.1 25P-SW15.1	#413B	MONITORING STATION B	#917	AIS MONITORING
#254.2	AREA SUBSTATION NO.2 25P-SW15.2	#414	WATER CHILLER FACILITY & BLDG	#918	VOC TRAILER
#254.3	AREA SUBSTATION NO.3 25P-SW15.3	#451	SUPPORT BUILDING	#918A	VOC AIR MONITORING STATION
#254.4	AREA SUBSTATION NO.4 25P-SW15.4	#452	SAFETY & EMERGENCY SERVICES FACILITY	#918B	VOC LAB TRAILER
#254.5	AREA SUBSTATION NO.5 25P-SW15.5	#453	WAREHOUSE/SHOPS BUILDING	#950	WORK CONTROL TRAILER
#254.6	AREA SUBSTATION NO.6 25P-SW15.6	#455	AUXILLIARY WAREHOUSE BUILDING	#951	PROCUREMENT/PURCHASING
#254.7	AREA SUBSTATION NO.7 25P-SW15.7	#456	WATER PUMPHOUSE	#952	TRAILER
#254.8	AREA SUBSTATION NO.8 25P-SW15.8	#457N	WATER TANK 25-D-001B	#953	MODULAR OFFICE COMPLEX
#254.9	480V SWITCHGEAR (25P-SWGO4/9)	#457S	WATER TANK 25-D-001A	#971	HUMAN RESOURCES TRAILER
#255.1	BACK-UP DIESEL GENERATOR #1 25-PE 503	#458	GUARD AND SECURITY BUILDING	#986	PUBLICATIONS & PROCEDURES TRAILER
#255.2	BACK-UP DIESEL GENERATOR #2 25-PE 504	#459	CORE STORAGE BUILDING	SWR NO.6	SWITCHRACK NO. 6
#256.4	SWITCHBOARD #4 (25P-SBD04/4)	#463	COMPRESSOR BUILDING	SWR NO.7,7A,7B	SWITCHRACK NO. 7, 7A, 7B
#311	WASTE SHAFT	#465	AUXILIARY AIR INTAKE	SWR NO.7C	SWITCHRACK NO. 7C
#351	EXHAUST SHAFT	#468	TELEPHONE HUT	SWR NO.10	SWITCH RACK NO. 10
#361	AIR INTAKE SHAFT	#473	ARMORY BUILDING	SWR NO.11	SWITCH RACK NO. 11
#362	AIR INTAKE SHAFT/HOIST HOUSE	#474	HAZARDOUS WASTE STORAGE FACILITY	SWR NO.12	SWITCH RACK NO. 12
#363	AIR INTAKE SHAFT/WINCH HOUSE	#474A	HAZARDOUS WASTE STORAGE BUILDING	SWR NO.15	SWITCH RACK NO. 15
#364	EFFLUENT MONITORING INSTRUMENT SHED A	#474B	HAZARDOUS WASTE STORAGE BUILDING		
#365	EFFLUENT MONITORING INSTRUMENT SHED B	#474C	OIL & GREASE STORAGE BUILDING		
#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

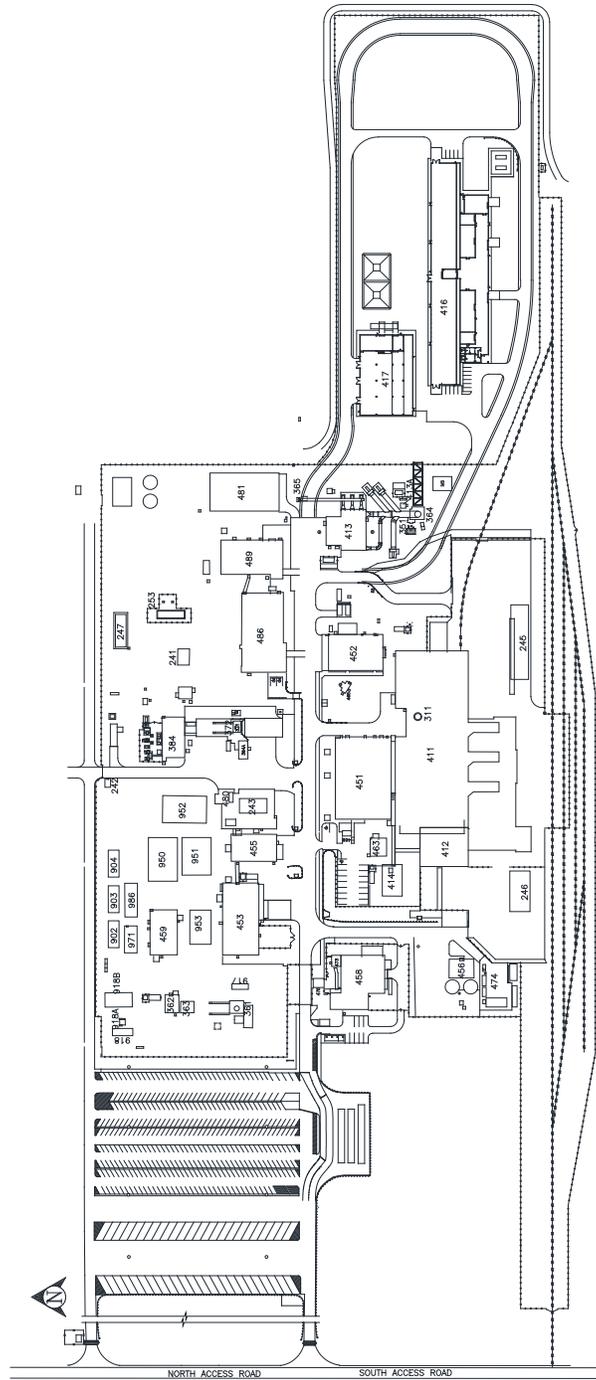


Figure D-1-NFB
WIPP Surface Structures with Building 416

Waste Isolation Pilot Plant
Hazardous Waste Permit
August 2019

BLDG./ FAC. #	DESCRIPTION	BLDG./ FAC. #	DESCRIPTION	BLDG./ FAC. #	DESCRIPTION
#241	EQUIPMENT SHED	#384A	MINING OPERATIONS	#475	GATEHOUSE
#242	GUARDSHACK	#411	WASTE HANDLING BUILDING	#480	VEHICLE FUEL STATION
#243	SALT HAULING TRUCKS SHELTER	#412	TRUPACT MAINTENANCE BUILDING	#481	WAREHOUSE ANNEX
#245	TRUPACT TRAILER SHELTER	#413	EXHAUST SHAFT FILTER BUILDING	#486	ENGINEERING BUILDING
#246	MgO STORAGE SHELTER	#413A	MONITORING STATION A	#489	TRAINING BUILDING
#253	13.8 KV SWITCHGEAR 25p-SWG 15/1	#413B	MONITORING STATION B	#H-16	SANDIA TEST WELL
#254.1	AREA SUBSTATION NO.1 25P-SW15.1	#414	WATER CHILLER FACILITY & BLDG	#902	TRAILER
#254.2	AREA SUBSTATION NO.2 25P-SW15.2	#416	NEW FILTER BUILDING	#903	TRAILER
#254.3	AREA SUBSTATION NO.3 25P-SW15.3	#417	SALT REDUCTION BUILDING	#904	TRAILER
#254.4	AREA SUBSTATION NO.4 25P-SW15.4	#451	SUPPORT BUILDING	#917	AIS MONITORING
#254.5	AREA SUBSTATION NO.5 25P-SW15.5	#452	SAFETY & EMERGENCY SERVICES FACILITY	#918	VOC TRAILER
#254.6	AREA SUBSTATION NO.6 25P-SW15.6	#453	WAREHOUSE/SHOPS BUILDING	#918A	VOC AIR MONITORING STATION
#254.7	AREA SUBSTATION NO.7 25P-SW15.7	#455	AUXILLIARY WAREHOUSE BUILDING	#918B	VOC LAB TRAILER
#254.8	AREA SUBSTATION NO.8 25P-SW15.8	#456	WATER PUMPHOUSE	#950	WORK CONTROL TRAILER
#254.9	480V SWITCHGEAR (25P-SWGO4/9)	#457N	WATER TANK 25-D-001B	#951	PROCUREMENT/PURCHASING
#255.1	BACK-UP DIESEL GENERATOR #1 25-PE 503	#457S	WATER TANK 25-D-001A	#952	TRAILER
#255.2	BACK-UP DIESEL GENERATOR #2 25-PE 504	#458	GUARD AND SECURITY BUILDING	#953	MODULAR OFFICE COMPLEX
#256.4	SWITCHBOARD #4 (25P-SBDO4/4)	#459	CORE STORAGE BUILDING	#971	HUMAN RESOURCES TRAILER
#311	WASTE SHAFT	#463	COMPRESSOR BUILDING	#986	PUBLICATIONS & PROCEDURES TRAILER
#351	EXHAUST SHAFT	#465	AUXILIARY AIR INTAKE	SWR NO.6	SWITCHRACK NO. 6
#361	AIR INTAKE SHAFT	#468	TELEPHONE HUT	SWR NO.7,7A,7B	SWITCHRACK NO. 7, 7A, 7B
#362	AIR INTAKE SHAFT/HOIST HOUSE	#473	ARMORY BUILDING	SWR NO.7C	SWITCHRACK NO. 7C
#363	AIR INTAKE SHAFT/WINCH HOUSE	#474	HAZARDOUS WASTE STORAGE FACILITY	SWR NO.10	SWITCHRACK NO. 10
#364	EFFLUENT MONITORING INSTRUMENT SHED A	#474A	HAZARDOUS WASTE STORAGE BUILDING	SWR NO.11	SWITCHRACK NO. 11
#365	EFFLUENT MONITORING INSTRUMENT SHED B	#474B	HAZARDOUS WASTE STORAGE BUILDING	SWR NO.12	SWITCHRACK NO. 12
#366	AIR INTAKE SHAFT HEADFRAME	#474C	OIL & GREASE STORAGE BUILDING	SWR NO.15	SWITCHRACK NO. 15
#371	SALT HANDLING SHAFT	#474D	GAS BOTTLE STORAGE BUILDING		
#372	SALT HANDLING SHAFT HEADFRAME	#474E	HAZARD MATERIAL STORAGE BUILDING		
#384	SALT HANDLING SHAFT HOISTHOUSE	#474F	WASTE OIL RETAINER		

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

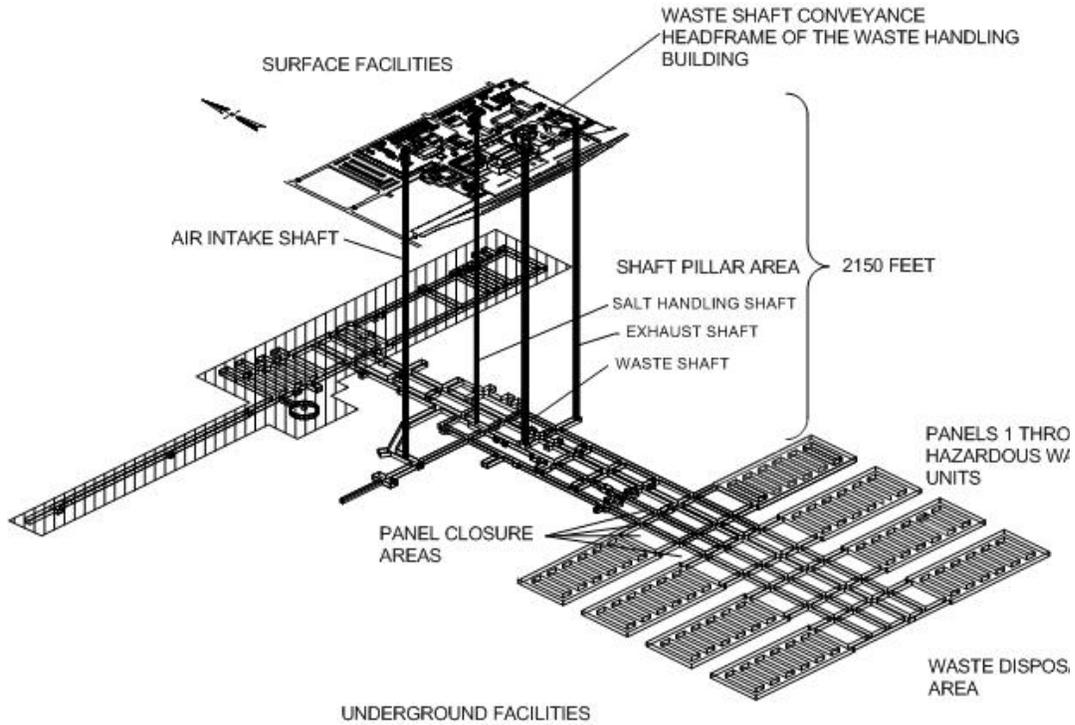


Figure D-2
Spatial View of the WIPP Facility

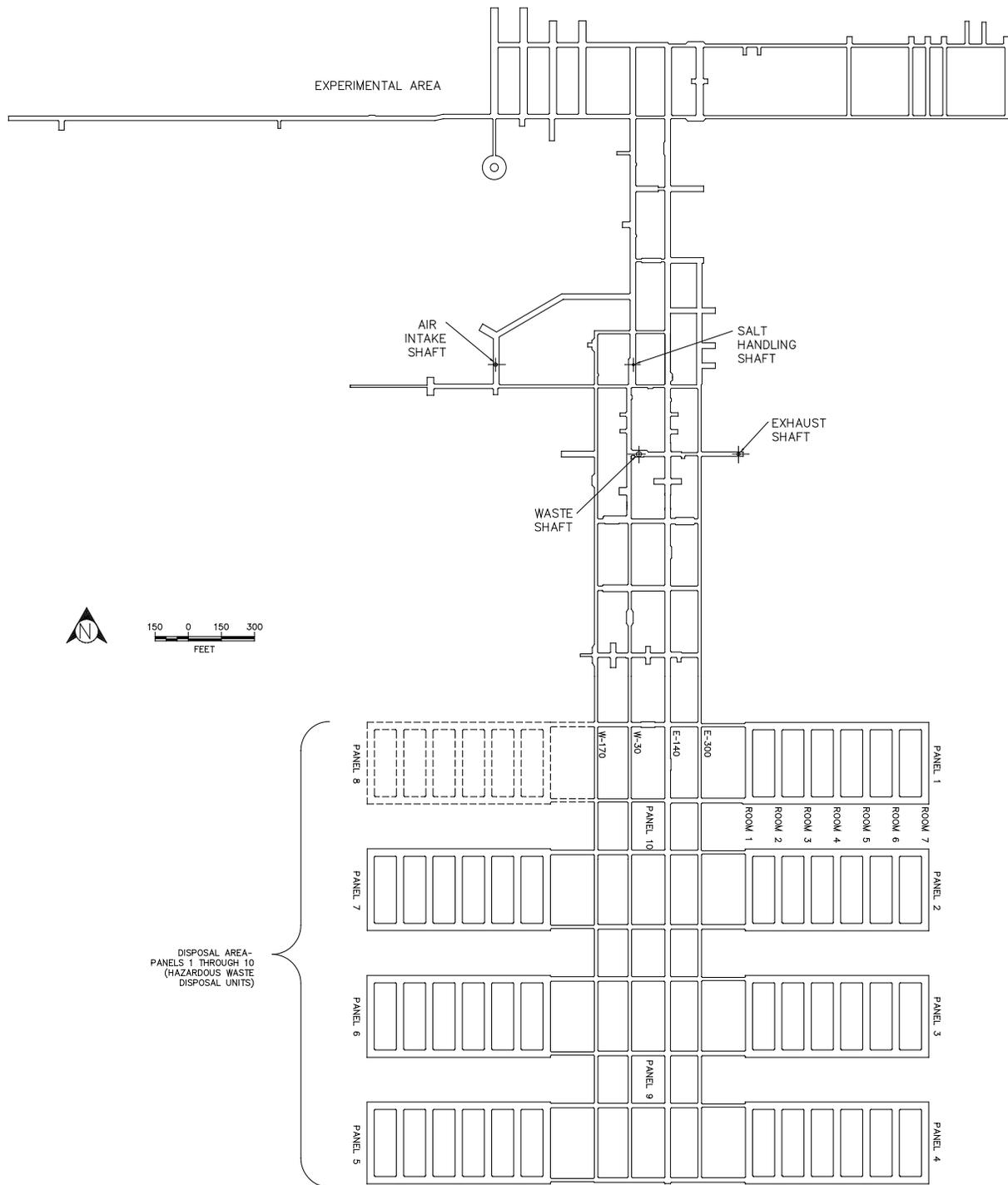


Figure D-3
WIPP Underground Facilities

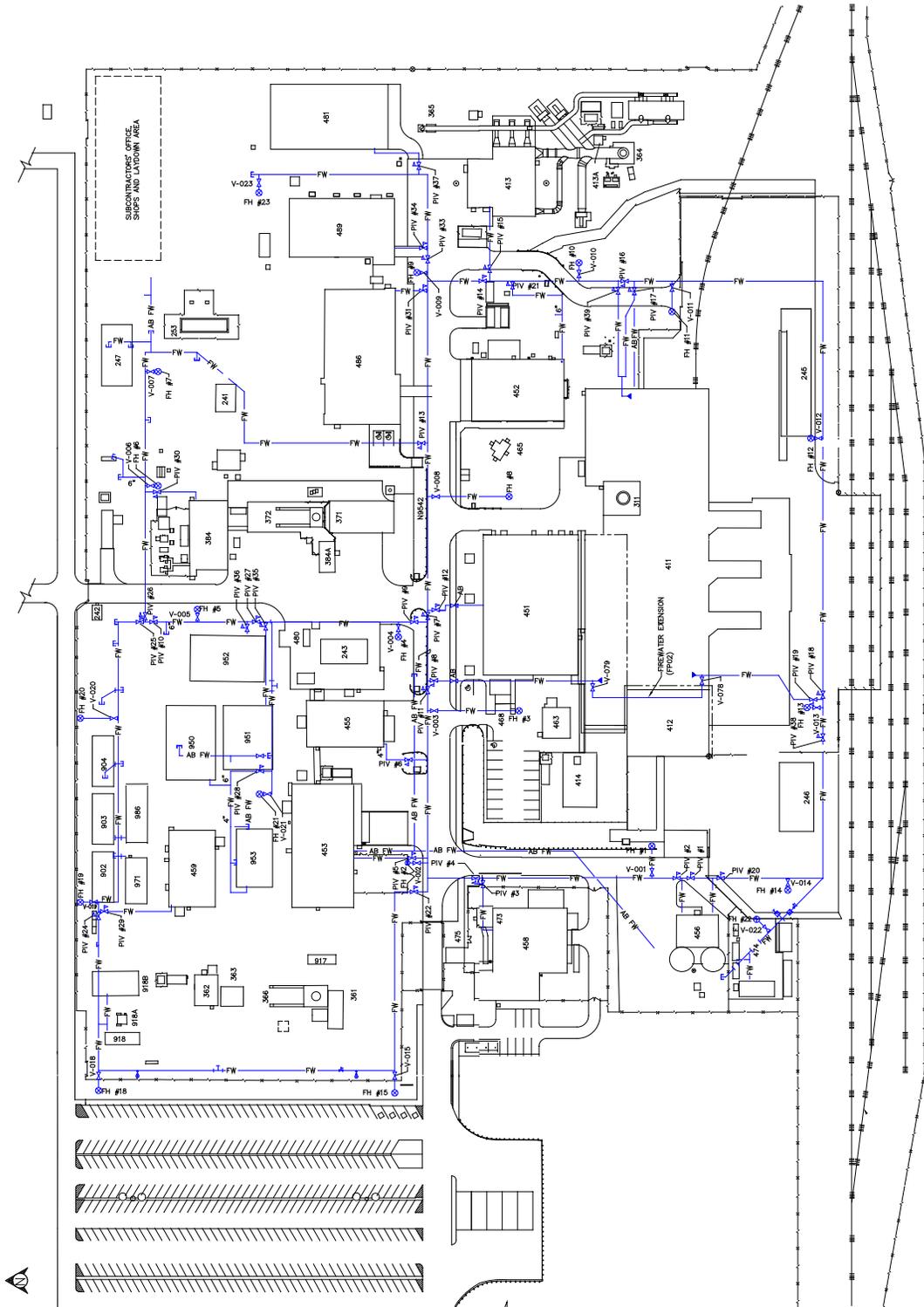


Figure D-5
Fire-Water Distribution System

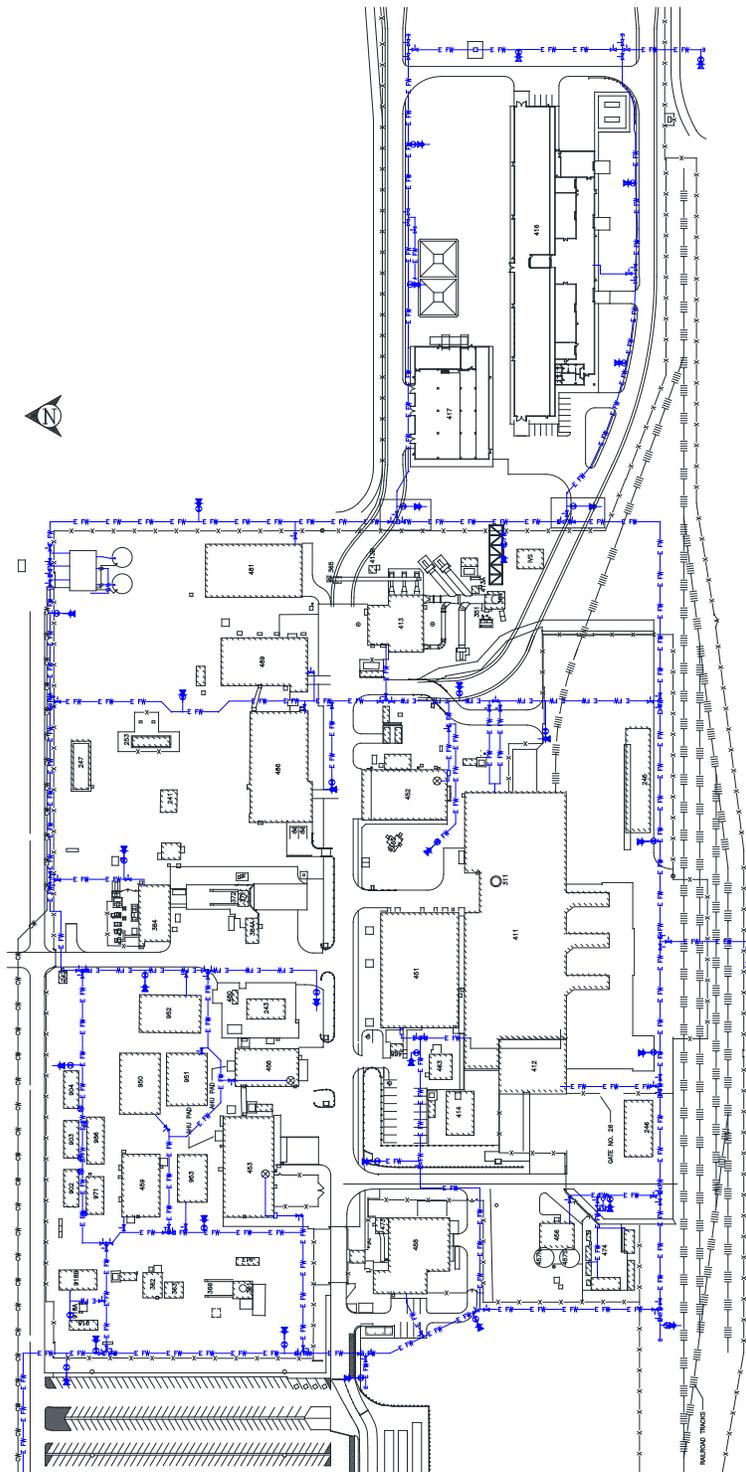


Figure D-5-NFB
Fire-Water Distribution System with Building 416

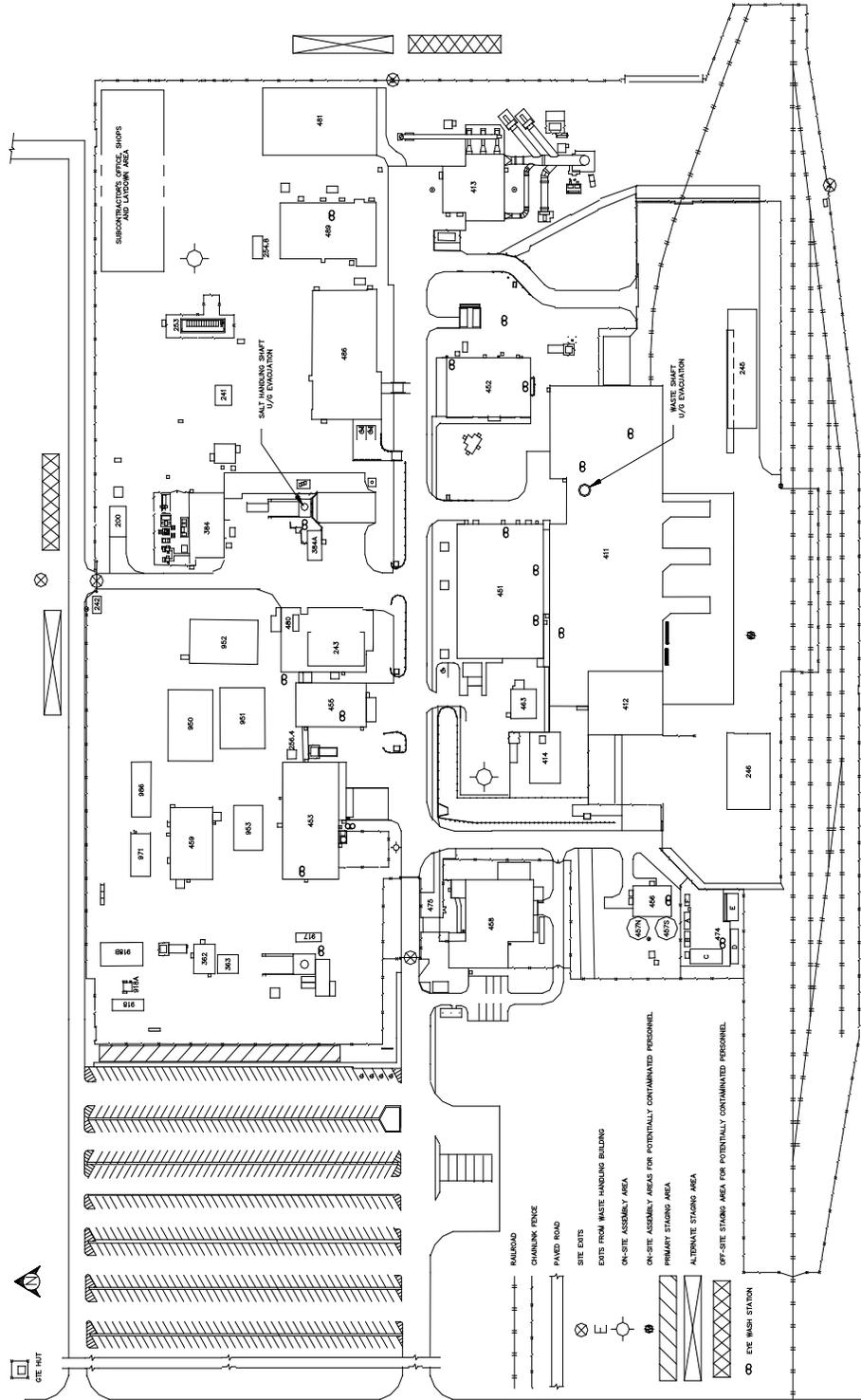


Figure D-6
WIPP On-Site Assembly Areas and Off-Site Staging Areas

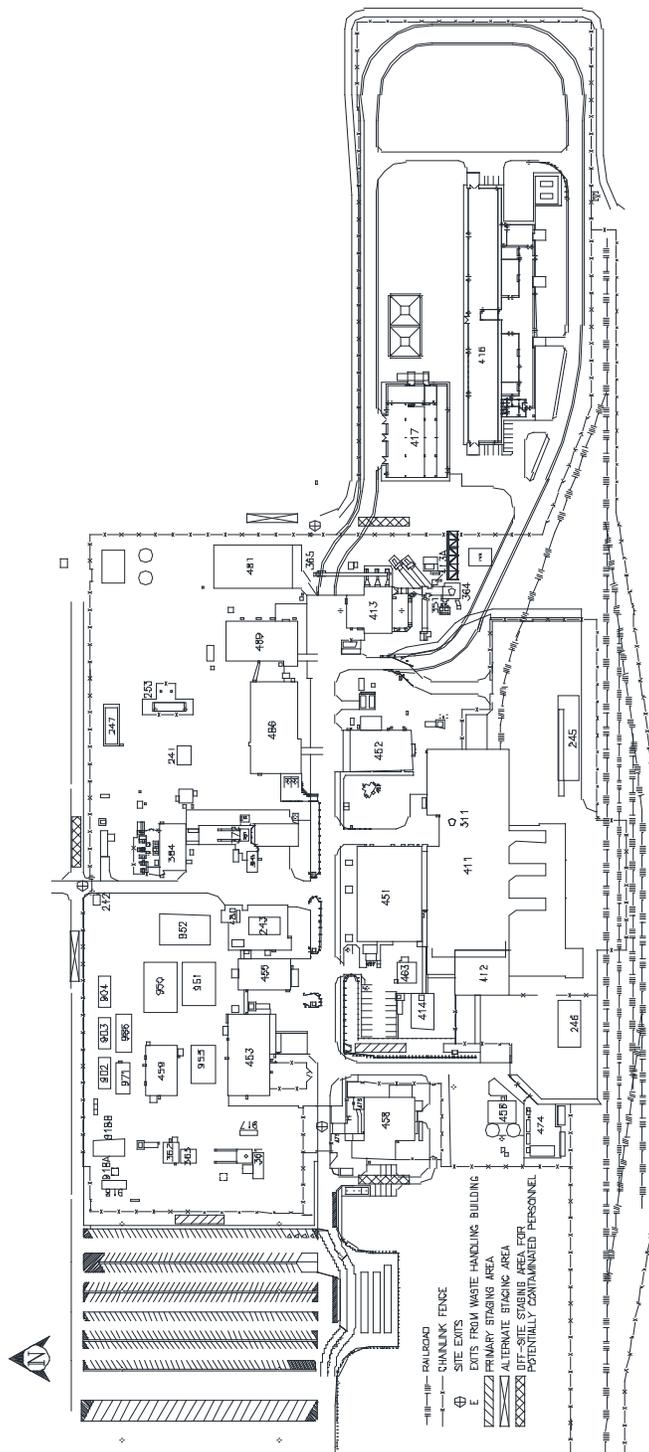
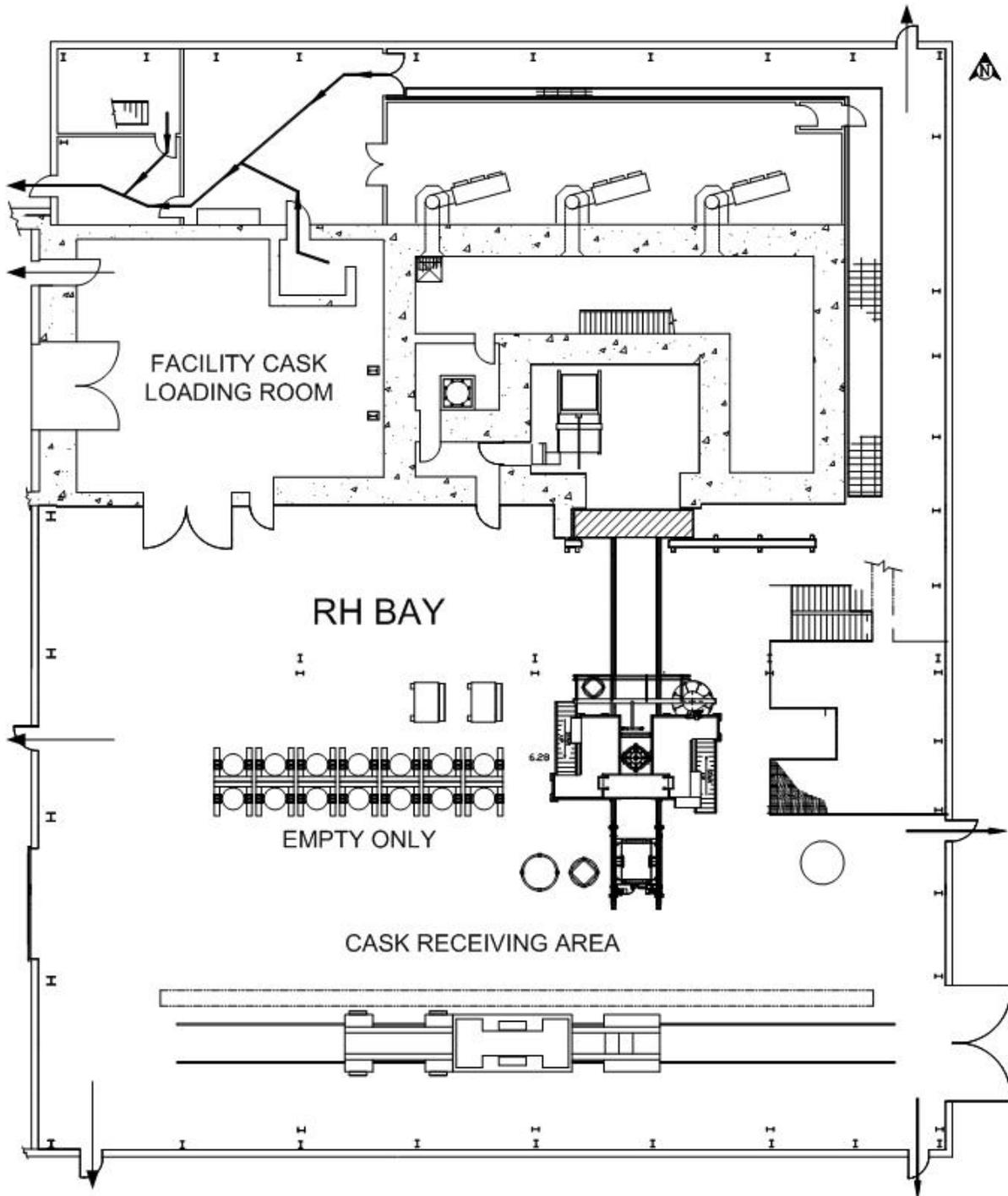


Figure D-6-NFB
WIPP On-Site Assembly Areas and Off-Site Staging Areas with Building 416



This illustration for
Information Purposes Only.

Figure D-6a
RH Bay Evacuation Routes

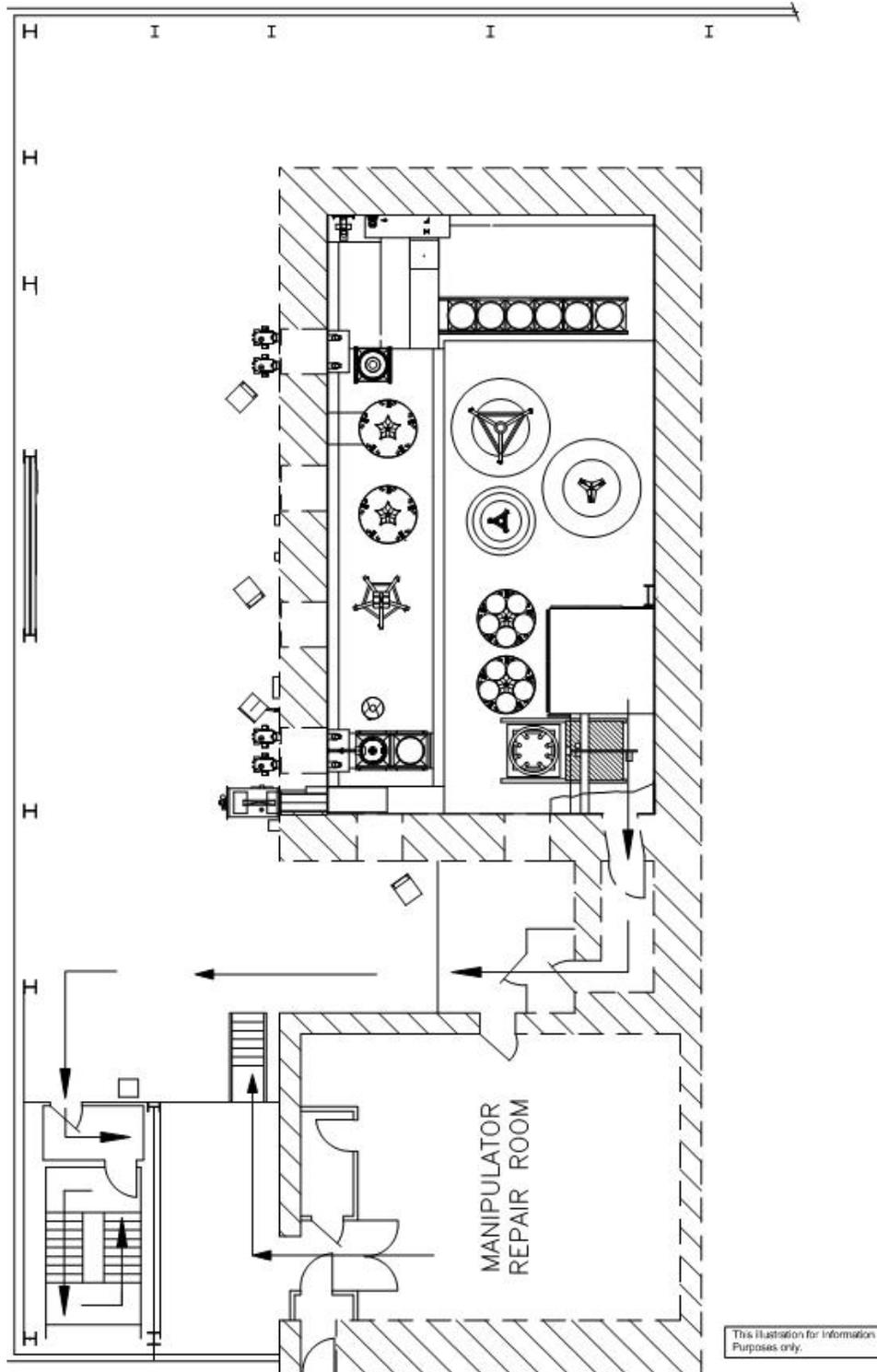


Figure D-6b
RH Bay Hot Cell Evacuation Route

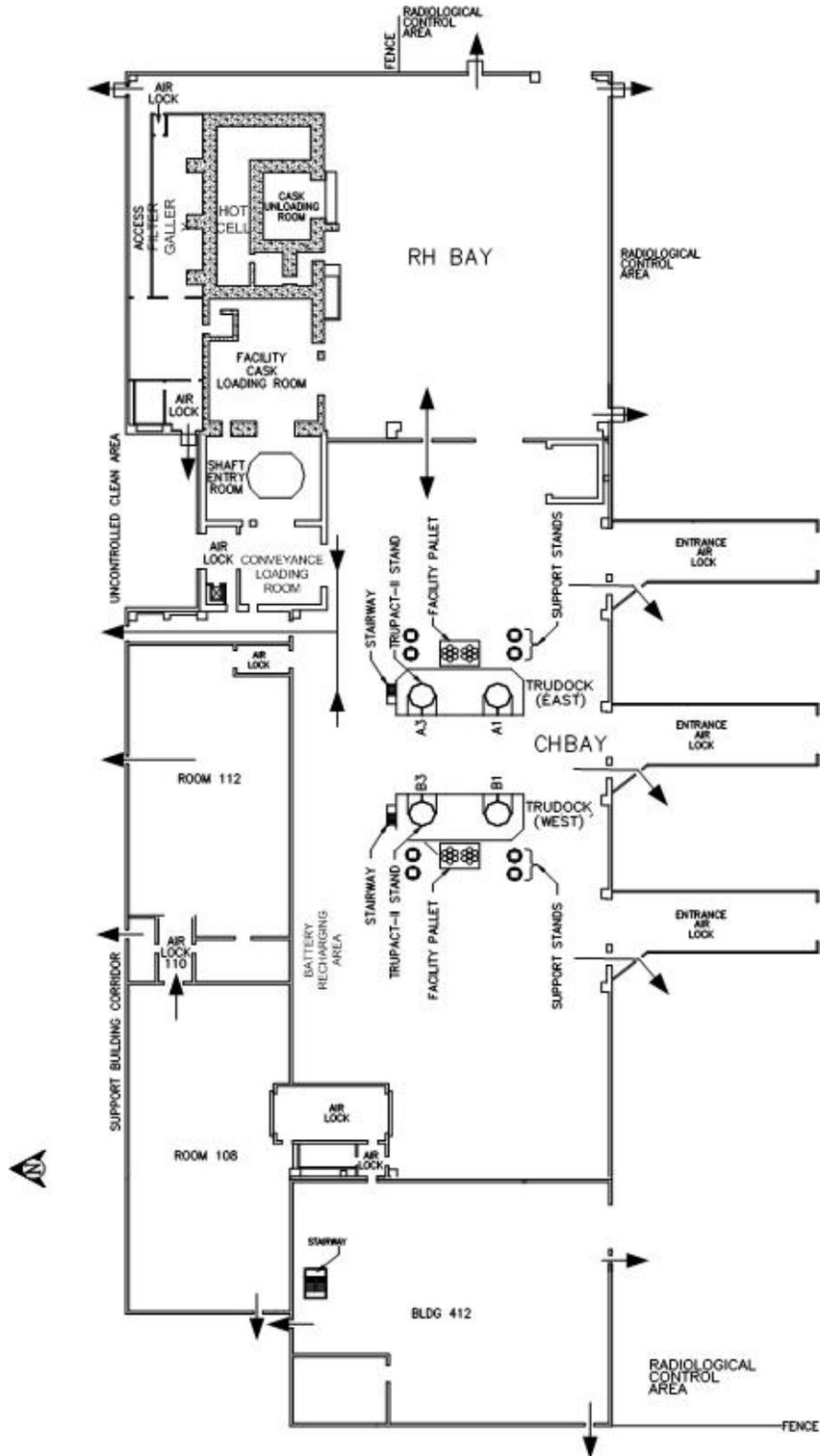


Figure D-6c
Evacuation Routes in the Waste Handling Building

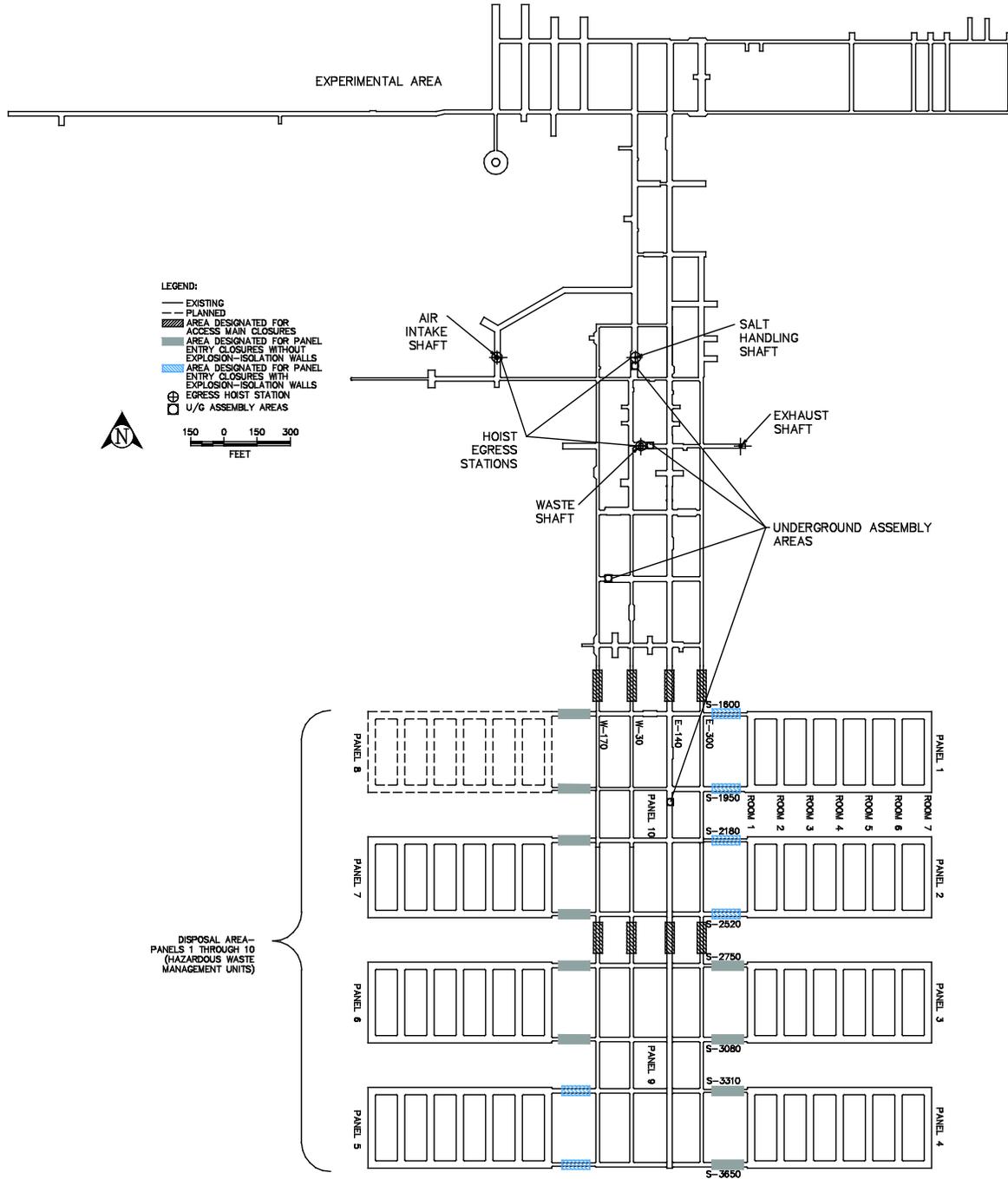


Figure D-7
Designated Underground Assembly Areas

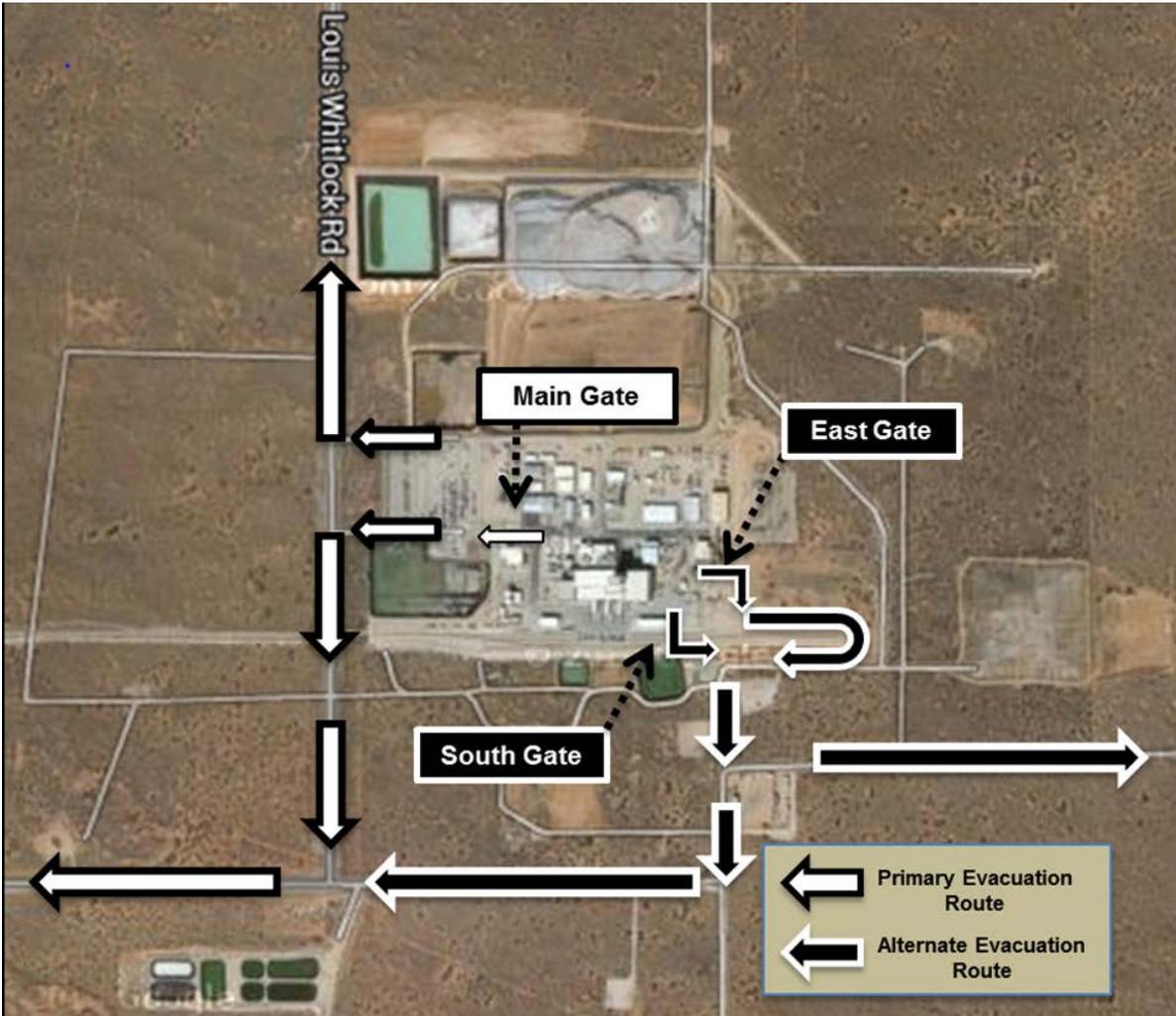


Figure D-8
WIPP Site Evacuation Routes