

ATTACHMENT D
RCRA CONTINGENCY PLAN

ATTACHMENT D

RCRA CONTINGENCY PLAN

TABLE OF CONTENTS

Introduction	4
D-1 Scope and Applicability	4
D-2 Emergency Response Personnel and Training.....	6
D-2a Emergency Response Personnel.....	6
D-2b Emergency Response Training	7
D-3 Criteria for Implementation of the <i>RCRA Contingency Plan</i>	8
D-4 Emergency Response Method	10
D-4a Immediate Notifications	10
D-4a(1) Initial Emergency Response and Alerting the RCRA Emergency Coordinator	10
D-4a(2) Communication of Emergency Conditions to Facility Employees	11
D-4b Identification of Released Materials and Assessment of the Extent of the Emergency	12
D-4c Assessment of the Potential Hazards.....	13
D-4d Post-Assessment Notifications.....	13
D-4e Control and Containment of the Emergency	15
D-4e(1) Fires.....	17
D-4e(2) Explosions	17
D-4e(3) Unplanned Sudden/Non-Sudden Releases.....	18
D-4e(4) Other Occurrences	19
D-4f Post-Emergency Activities.....	21
D-4f(1) Management and Disposition of Released Material	21
D-4f(2) Incompatible Waste	22
D-4f(3) Cleaning and Restoration of Equipment	22
D-5 Required Reporting.....	22
D-6 Emergency Equipment.....	23
D-7 Emergency Response Agreements	23
D-8 Evacuation Plan	24
D-8a Surface Evacuation On-site Assembly and Off-site Staging Areas	24
D-8b Underground Assembly Areas and Egress Hoist Stations	25
D-8c Plan for Surface Evacuation.....	25
D-8d Plan for Underground Evacuation	25
D-8e Further Site Evacuation.....	26

LIST OF TABLES

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

LIST OF FIGURES

Figure	Title
Figure D-1	WIPP Surface Structures
Figure D-1-NFB	WIPP Surface Structures with Building 416
Figure D-2	Spatial View of the WIPP Facility
Figure D-3	Underground Escape and Evacuation Map
Figure D-4	Fire-Water Distribution System
Figure D-4-NFB	Fire-Water Distribution System with Building 416
Figure D-4-S#5	Fire-Water Distribution System (with S#5)
Figure D-5	RH Bay Evacuation Routes
Figure D-6	RH Bay Hot Cell Evacuation Route
Figure D-7	Evacuation Routes in the Waste Handling Building
Figure D-8	WIPP Site Evacuation Map
Figure D-8a	WIPP Site Evacuation Routes

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 20.4.1.300 New Mexico Administrative Code (**NMAC**) (incorporating Title 40 of the Code of Federal Regulations (**CFR**) Part 262, Subpart M) and 20.4.1.500 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 in accordance with 20.4.1.300 NMAC (incorporating 40 CFR §262.260(a)) and 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.

Pursuant to 20.4.1.300 NMAC (incorporating 40 CFR §262.262(b)), the Permittees ensure that a copy of the *Quick Reference Guide to the WIPP Facility RCRA Contingency Plan* is maintained on file at the facility and is available to the emergency response organizations listed in Section D-2a, *Emergency Response Personnel*, and Section D-9, *Location of the RCRA Contingency Plan and Plan Revision*. Whenever the *RCRA Contingency Plan* is revised, the Permittees will update, if necessary, the quick reference guide and redistribute it in accordance with 20.4.1.300 NMAC (incorporating 40 CFR §262.262(c)).

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(a)), 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 Applicable to Generators of Hazardous Waste”). 20.4.1.300 NMAC (incorporating 40 CFR §262.261(a)) 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 this *RCRA Contingency Plan* also apply to the site-generated hazardous waste accumulation areas (both the central accumulation areas (**CAAs**), also referred to as the less-than-90-day areas, and satellite accumulation areas (**SAAs**)), the locations of which are specified in the *Quick Reference Guide to the WIPP Facility RCRA Contingency Plan*. For the remainder of this document, the term “site-generated hazardous waste” will mean waste accumulated in both the CAAs and SAAs.

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 managed as TRU mixed waste and emplaced 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.

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

- Non-Mixed—Accumulated liquids contaminated only with hazardous constituents will be placed into containers and managed in accordance with 20.4.1.300 NMAC (incorporating 40 CFR §262.17) requirements. The waste will be shipped to an approved off-site treatment, storage, or disposal facility.
- Mixed—Accumulated liquids contaminated with TRU mixed waste will be solidified and the solidified materials will be disposed of in the underground WIPP repository as TRU mixed waste.

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

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

D-2 Emergency Response Personnel and Training

D-2a Emergency Response Personnel

A RCRA Emergency Coordinator will be on-site at the WIPP facility 24 hours a day, seven days a week, with the responsibility for coordinating emergency response measures. In accordance with 20.4.1.300 NMAC (incorporating 40 CFR §262.261(d)) and 20.4.1.500 NMAC (incorporating 40 CFR §264.52(d)), qualified RCRA Emergency Coordinators are listed in Table D-1 and are trained to the requirements found in Permit Attachment F, Table F-2, under “Emergency Coordinator.”

Persons qualified to act as the RCRA Emergency Coordinator have the authority to commit the necessary resources to implement this *RCRA Contingency Plan*.

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

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

In addition to the RCRA Emergency Coordinator, the following individuals, groups, and organizations have responsibilities during a WIPP facility emergency, which may include the following:

- **WIPP Fire Department**—The primary providers of fire suppression, technical rescue, Emergency Medical Services (EMS), and hazardous materials response for the protection of personnel in both surface and underground facilities. The WIPP Fire Department personnel serve as an Industrial Fire Brigade and are trained to respond to surface and underground emergencies on site, including fires, medical emergencies, and releases of hazardous materials.
- **Facility Shift Manager (FSM)**—A member of the Facility Operations organization who is in charge of plant operations and is the senior shift representative responsible for maintaining the facility in a safe configuration during normal and abnormal conditions. The FSM can concurrently serve as the RCRA Emergency Coordinator, if trained to the requirements of Permit Attachment F (*Facility Personnel Permit Training Program*) or provide support to the qualified RCRA Emergency Coordinator on shift.
- **Central Monitoring Room Operator (CMRO)**—An on-shift operator responsible for Central Monitoring Room (CMR) operations, including coordination of facility communications. The CMRO documents these activities (e.g., communications,

notifications) in a facility log. The CMRO is a member of Facility Operations, and during emergencies, the CMRO supports the RCRA Emergency Coordinator.

- Firefighter—A WIPP Fire Department member who serves as a primary responder to surface and underground emergencies, including fires, medical emergencies, and releases of hazardous materials. Firefighters assigned to the underground will not perform any coordinated firefighting underground and will only respond to incipient-stage fires that threaten TRU mixed waste, if it is safe to do so.
- Fire Department Incident Commander—Upon delegation by the RCRA Emergency Coordinator, and once incident command has been established, the Incident Commander is responsible for direction and supervision of emergency responders during an incident resulting in implementation of the *RCRA Contingency Plan*. The Incident Commander will be a member of the WIPP Fire Department. For security-related incidents that invoke implementation of the *RCRA Contingency Plan*, the Fire Department Incident Commander will establish a unified command with the WIPP Protective Force.
- Mine Rescue Team (MRT)— The MRT emergency response capabilities include search, rescue, reentry, and recovery operations. The MRT responds in accordance with the requirements of 30 CFR Part 49. The MRT emergency response actions include extinguishing incipient stage fires, if encountered, and immediately reporting uncontrolled fires.
- Emergency Operations Center (EOC) Staff- Upon activation, the EOC supports the RCRA Emergency Coordinator and Incident Commander with emergency management decision-making and associated notifications. Since EOC staff performs duties similar to their normal job functions during an emergency response and provides support related to their area(s) of expertise, no specific RCRA training is required.

D-2b Emergency Response Training

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

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

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

As described above, emergency response training is conducted in accordance with the *WIPP Fire Department Training Plan*, which is updated whenever the applicable standards are revised. In addition to the emergency response training, WIPP Fire Department personnel are

required to complete applicable site-specific training, which is described in Permit Attachment F, *Facility Personnel Permit Training Program*.

D-3 Criteria for Implementation of the RCRA Contingency Plan

The provisions of the *RCRA Contingency Plan* shall be implemented immediately whenever there is a fire, an explosion, or a release of hazardous wastes or hazardous waste constituents that could threaten human health or the environment, or whenever the potential for such an event exists as determined by the RCRA Emergency Coordinator, as required under 20.4.1.300 NMAC (incorporating 40 CFR §262.260(b)) and 20.4.1.500 NMAC (incorporating 40 CFR §264.51(b)).

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

In accordance with 20.4.1.300 NMAC (incorporating 40 CFR §262.265(i)) and 20.4.1.500 NMAC (incorporating 40 CFR §264.56(i)), the RCRA Emergency Coordinator, on behalf of the Permittees, will record the time, date, and details of the incident that required implementation of the *RCRA Contingency Plan*. The Secretary of the NMED will be immediately notified by the Permittees. Additionally, the Permittees shall submit a written report to the NMED within 15 days of the incident, as specified in Section D-5. The following emergency situations, as they pertain to TRU mixed waste and generated hazardous wastes, warrant immediate implementation of the *RCRA Contingency Plan* by the RCRA Emergency Coordinator in accordance with standard operating procedures on file at the WIPP facility:

- Fires
 - If a fire involving TRU mixed waste or site-generated hazardous waste occurs
 - If a fire (e.g., building, grass, nonhazardous waste fire) occurs within or near a CAA or SAA that threatens to involve site-generated hazardous waste
 - If a fire (e.g., building, grass, nonhazardous waste fire) occurs within or near the permitted HWMUs that threatens to involve TRU mixed waste
 - If a fire occurs in the underground that results in immediate personnel evacuation or prevents normal personnel access to the underground

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

- Explosions
 - If an explosion involving TRU mixed waste or site-generated hazardous waste occurs

- If an explosion occurs within or near a CAA or SAA that threatens to involve site-generated hazardous waste
- If an explosion occurs within or near the permitted HWMUs that threatens to involve TRU mixed waste
- If an explosion occurs in the underground that results in immediate personnel evacuation or prevents normal personnel access to the underground
- If there is an imminent danger of an explosion occurring (e.g., gas leak with an ignition source nearby) which could involve TRU mixed or site-generated hazardous waste

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

- Unplanned Sudden/Non-Sudden Releases
 - If, prior to waste emplacement, one or more containers of TRU mixed waste has spilled or been breached due to dropping, puncturing, container failure or degradation, or any other physical or chemical means, resulting in a release
 - If, after waste emplacement, one or more containers of TRU mixed waste in an active room has been breached
 - If a continuous air monitor confirms a release of radioactive particulates to the ambient atmosphere, indicating a possible release of TRU mixed waste constituents from the permitted facility
 - If a spill of site-generated hazardous waste occurs in a CAA or SAA and cannot be contained with secondary containment methods or absorbents, thereby threatening a release to air, soil, or surface water
 - If a site-generated hazardous waste spill occurs in a CAA or SAA and results in the release of potentially flammable material, thereby threatening to create a fire or explosion hazard
 - If a site-generated hazardous waste spill occurs in a CAA or SAA and results in the release of potentially toxic fumes that could threaten human health

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

- Other Occurrences

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

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

D-4 Emergency Response Method

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

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

D-4a Immediate Notifications

Notification requirements in the event of implementation of the *RCRA Contingency Plan* are defined by 20.4.1.300 NMAC (incorporating 40 CFR §262.265(a)) and 20.4.1.500 NMAC (incorporating 40 CFR §§264.56(a)). Personnel at the WIPP facility are trained to respond to emergency notifications.

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

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

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

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

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

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

If needed, the RCRA Emergency Coordinator will immediately notify the appropriate federal, state, and local agencies and mining companies in the vicinity of the WIPP facility, listed in Section D-7, with designated response roles.

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

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

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

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

- Local Fire Alarms

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

- Surface Evacuation Signal

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

- **Underground Evacuation Warning System**

The underground evacuation signal is a yelp tone and flashing strobe light. In the event of an evacuation signal, underground personnel will follow escape routes to egress hoist stations. Underground personnel are trained to report to the underground assembly areas and await further instruction if power fails or if ventilation stops. If evacuation of underground personnel is required due to a power failure, a backup generator is available to power the hoisting equipment. Evacuation will be in accordance with the applicable requirements of MSHA.

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

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

The identification of hazardous wastes or hazardous waste constituents involved in a fire, an explosion, or a release to the environment is a necessary part of the RCRA Emergency Coordinator's assessment of an incident, as described in 20.4.1.300 NMAC (incorporating 40 CFR §262.265(b)) and 20.4.1.500 NMAC (incorporating 40 CFR §264.56(b)). Immediately after alarms have been activated and required notifications have been made, the RCRA Emergency Coordinator shall direct an investigation to determine pertinent information relevant to the actual or potential threat posed to human health or the environment. The information will include the character, exact source, amount, and areal extent of any released material. This may be done by observation or review of facility records or manifests and, if necessary, by chemical analysis.

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

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

The waste received at the WIPP facility must meet the TSDF-WAC (e.g., no more than one percent liquid), which minimizes the possibility of waste container degradation and liquid spills. Should a spill or release occur from a container of site-generated hazardous or TRU mixed waste, following an initial assessment of the event, the RCRA Emergency Coordinator will

ensure that the following actions are immediately taken, consistent with radiological control procedures, in compliance with 20.4.1.300 NMAC (incorporating 40 CFR §262.261(a)) and 20.4.1.500 NMAC (incorporating 40 CFR §264.52(a) and §264.171):

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

D-4c Assessment of the Potential Hazards

Concurrent with the actions described in Sections D-4a and D-4b, and in accordance with 20.4.1.300 NMAC (incorporating 40 CFR §262.265(c)) and 20.4.1.500 NMAC (incorporating 40 CFR §264.56(c)), the RCRA Emergency Coordinator shall assess possible hazards to human health or the environment that may result from the release, fire, or explosion. This assessment will consider both direct and indirect effects of the release, fire, or explosion (e.g., the effects of any toxic, irritating, or asphyxiating gases that are generated, or the effects of any hazardous surface water run-off from water or chemical agents used to control fire and heat-induced explosions). The RCRA Emergency Coordinator will be responsible for identifying and responding to immediate and potential hazards, using the services of trained personnel.

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

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

D-4d Post-Assessment Notifications

Upon *RCRA Contingency Plan* implementation, post-assessment notifications may be necessary in order to satisfy 20.4.1.300 NMAC (incorporating 40 CFR §262.265(d)) and 20.4.1.500 NMAC (incorporating 40 CFR §264.56(d)). If it has been determined that the facility has had a fire, an explosion, or a release of hazardous waste or hazardous waste constituents that could threaten human health or the environment outside the facility (i.e., outside the Land Withdrawal Boundary), the RCRA Emergency Coordinator, after consultation with the DOE as the owner of the facility, will ensure that the appropriate local authorities are immediately notified by telephone and/or radio in the event that evacuation is needed. The following notifications satisfy the requirements of 20.4.1.300 NMAC (incorporating 40 CFR §262.265(d)(1)) and 20.4.1.500 NMAC (incorporating 40 CFR §264.56(d)(1)):

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

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

After local authorities are notified, the RCRA Emergency Coordinator must immediately notify either the government official designated as the on-scene coordinator for that geographical area, or the National Response Center. For the purposes of the *RCRA Contingency Plan*, the following notifications satisfy the requirements of 20.4.1.300 NMAC (incorporating 40 CFR §262.265(d)(2)) and 20.4.1.500 NMAC (incorporating 40 CFR §264.56(d)(2)):

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

This notification shall include the following information:

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

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

D-4e Control and Containment of the Emergency

The RCRA Emergency Coordinator is required to ensure control of an emergency and to minimize the potential for the occurrence, recurrence, or spread of releases due to the emergency situation, as described in 20.4.1.300 NMAC (incorporating 40 CFR §262.265(e) and (f)) and 20.4.1.500 NMAC (incorporating 40 CFR §264.56(e) and (f)). Standard operating procedures and guides are used to implement initial response measures with priority being control of the emergency, and those actions necessary to ensure confinement and containment in the early, critical stages of a spill or leak. The RCRA Emergency Coordinator, in conjunction with the Incident Commander, is responsible for implementing the following measures:

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

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

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

1. Isolating the area from unauthorized entry by fences, barricades, warning signs, or other security and site control precautions. Isolation and evacuation distances vary, depending upon the chemical/product, fire, and weather situations.
2. Establishing drainage controls.
3. Stabilizing physical controls (such as dikes or impoundment[s]).

4. Capping contaminated soils to reduce migration.
5. Using chemicals and other materials to retard the spread of the release or to mitigate its effects.
6. Excavating, consolidating, or removing contaminated soils.
7. Removing wastes containers to reduce exposure risk during situations such as fires.

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

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

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

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

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

D-4e(1) Fires

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

1. The RCRA Emergency Coordinator will remain in contact with and advise the Incident Commander of the known hazards.
2. The Incident Commander will maintain overall control of the emergency and may accept and evaluate the advice of WIPP facility personnel and emergency response organization members but retains overall responsibility until the emergency is terminated.
3. Only fire extinguishing materials that are compatible with the materials involved in the fire will be used to extinguish fires. Water and dry chemical materials in use at the WIPP facility have been determined to be compatible with components of the TRU mixed waste and site-generated hazardous waste.
4. In order to ensure that storm drains and/or sewers do not receive potentially hazardous runoff, dikes will be built around storm drains to control discharge as needed. Collected waste will be sampled and analyzed for hazardous constituents, and appropriately disposed.
5. The RCRA Emergency Coordinator will ensure that measures are taken to shut down operational units (e.g., process equipment and ventilation equipment) that have been affected directly or indirectly by the fire.
6. Fire suppression materials used in response to incidents will be retained on-scene, where an evaluation will be performed to determine appropriate recovery and disposal methods.
7. Upon underground evacuation due to a fire in the underground that involves or threatens to involve TRU mixed waste or site-generated hazardous waste, a response plan will be developed depending on the status of the fire. The plan may include ventilation control, barrier erection, and/or waiting for the fire to self-extinguish or implement active ventilation.

D-4e(2) Explosions

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

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

3. The RCRA Emergency Coordinator will ensure measures are taken to shut down operational units (e.g., process equipment and ventilation equipment) that have been affected directly or indirectly by the explosion.
4. If, following an explosion, there is an ensuing fire, see Section D-4e(1).
5. If, following an explosion, there is an underground structural integrity emergency, see Section D-4e(4).

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

Spills of Site-Generated Hazardous Waste

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

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

Releases of TRU Mixed Waste

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

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

D-4e(4) Other Occurrences

Natural Phenomena

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

1. The RCRA Emergency Coordinator will remain in contact with and advise the Incident Commander of the known hazards.
2. The Incident Commander will maintain overall control of the emergency and may accept and evaluate the advice of WIPP facility personnel and emergency response organization members but retains overall responsibility until the emergency is terminated.
3. Containers that have not been disposed will be inspected for signs of leakage or damage, and containment systems will be inspected for deterioration.

4. Affected equipment or areas associated with hazardous waste management activities will be inspected, and the operability of monitoring systems will be ensured.
5. Affected electrical equipment and lines will be inspected for damage.
6. Affected buildings and fencing directly related to hazardous waste management activities will be inspected for damage.
7. A general survey of the site will be conducted to check for signs of physical damage.
8. The RCRA Emergency Coordinator will ensure that measures are taken to shut down operational units (e.g., process equipment and ventilation equipment) that have been affected by the natural phenomenon.

Underground Structural Integrity Emergencies

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

1. The RCRA Emergency Coordinator will remain in contact with and advise the Incident Commander of the known hazards.
2. The Incident Commander will maintain overall control of the emergency and may accept and evaluate the advice of WIPP facility personnel and emergency response organization members but retains overall responsibility until the emergency is terminated.
3. The RCRA Emergency Coordinator will ascertain whether the roof conditions allow for safe entry and if the waste container or containers in question are accessible.
4. The RCRA Emergency Coordinator may recommend closing the entire panel, or the affected room of waste containers, based on the location of the event and the stability of the roof and walls in the panel as a method to ensure that measures are taken to shut down affected operational units.
5. Access to the ventilation flow path downstream of the incident will be restricted, as appropriate.
6. Ventilation to the affected room will be restricted to ensure that there is no spread of contamination that may have been released, as appropriate.
7. Accessible containers will be inspected for signs of leakage or damage.

8. The spill area will be covered with material (e.g., plastic, fabric sheets) in a manner that safely isolates the contamination in the area.
9. The RCRA Emergency Coordinator will determine if the covered spill area safely allows for continued waste disposal operations or whether further action is required to reinitiate operations.

D-4f Post-Emergency Activities

Immediately after the emergency, and once initial release or spill control and containment have been completed, the RCRA Emergency Coordinator will ensure that necessary decontamination occurs and that recovered hazardous waste is properly managed, stored, and/or disposed, as required by 20.4.1.300 NMAC (incorporating 40 CFR §262.265(g)) and 20.4.1.500 NMAC (incorporating 40 CFR §264.56(g)). As required by 20.4.1.300 NMAC (incorporating 40 CFR §262.265(h)) and 20.4.1.500 NMAC (incorporating 40 CFR §264.56(h)), the RCRA Emergency Coordinator will ensure that incompatibility of waste and restoration of emergency equipment are addressed.

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

When a release of TRU mixed waste has occurred, priority is given to actions required to minimize radiological exposure to workers and the public. If the release is TRU mixed waste, decontamination and disposition will be in accordance with the RWP. If a release of site-generated hazardous waste occurs, the contaminated surface will be cleaned, and decontamination materials will be placed in containers and dispositioned appropriately. In most cases, actions taken to address a radiological contamination are sufficient to mitigate any health effects associated with contamination by hazardous waste or hazardous waste constituents.

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

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

D-4f(2) Incompatible Waste

The RCRA Emergency Coordinator will ensure, in accordance with 20.4.1.300 NMAC (incorporating 40 CFR §262.262(h)(1)) and 20.4.1.500 NMAC (incorporating 40 CFR §264.56(h)(1)), that in the affected area(s) of the facility, no waste that may be incompatible with the released material is treated, stored, or disposed of until cleanup has been completed. The RCRA Emergency Coordinator will not allow hazardous or TRU mixed waste operations to resume in a building or area in which incompatible materials have been released prior to completion of necessary post-emergency cleanup operations to remove potentially incompatible materials. In making the determination of compatibility, the RCRA Emergency Coordinator will have available the resources and information described in Section D-4b, *Identification of Released Materials and Assessment of the Extent of the Emergency*.

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

The RCRA Emergency Coordinator will take measures to ensure, in accordance with 20.4.1.300 NMAC (incorporating 40 CFR §262.262(h)(2)) and 20.4.1.500 NMAC (incorporating 40 CFR §264.56(h)(2)), that in the affected area(s) of the facility, emergency equipment listed in the *RCRA Contingency Plan*, and used in the emergency response, is cleaned and fit for its intended use or replaced before operations are resumed.

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

D-5 Required Reporting

The RCRA Emergency Coordinator, on behalf of the Permittees, will note in the Operating Record the time, date, and details of the incident that required implementation of the *RCRA Contingency Plan*. In compliance with 20.4.1.300 NMAC (incorporating 40 CFR §262.265(i)) and 20.4.1.500 NMAC (incorporating 40 CFR §264.56(i)), within 15 days after the incident, the Permittees will ensure that a written report on the incident will be submitted to the Secretary of the NMED. The report will include:

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

D-6 Emergency Equipment

A variety of equipment is available at the facility for emergency response, containment, and cleanup operations in the surface HWMUs, the underground HWDUs, and the WIPP facility in general. This includes equipment for spill control, fire control, personnel protection, monitoring, first aid and medical attention, communications, and alarms. This equipment is immediately available to emergency response personnel. A listing of major emergency equipment available at the WIPP facility, as required by 20.4.1.300 NMAC (incorporating 40 CFR §262.261(e)) and 20.4.1.500 NMAC (incorporating 40 CFR §264.52(e)), is shown in Table D-2. Table D-2 also includes the location and a physical description of each item on the list along with a brief outline of its capabilities. The fire-water distribution system map is shown in Figure D-4/Figure D-4-NFB. Equipment specified at the locations listed in Table D-2 are inspected in accordance with the inspection schedule specified in Attachment E, Table E-1, as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.15(b)).

D-7 Emergency Response Agreements

The Permittees have established agreements with federal, state, and local emergency response agencies and mining companies in the vicinity of the WIPP facility for firefighting, medical assistance, hazardous materials response, and law enforcement. In the event that on-site response resources are unable to provide the needed response actions during a medical, fire, hazardous materials, or security emergency, the RCRA Emergency Coordinator will notify appropriate emergency response agencies and request assistance. Once on site, emergency response agency personnel will perform emergency response activities under the direction of the Incident Commander.

The agreements with federal, state, and local agencies and mining companies in the vicinity of the WIPP facility for emergency response capabilities are on file at the WIPP facility. Additional agreements may be established when needed. Descriptions of the agreements with federal, state, and local agencies and mining operations in the vicinity of the WIPP facility, as required by 20.4.1.300 NMAC (incorporating 40 CFR §§262.256 and 262.261(c)) and 20.4.1.500 NMAC (incorporating 40 CFR §264.37 and §264.52(c)), include, but is not limited to, the following:

- Agreements with local mining companies, including Intrepid Potash NM LLC, White Marble Mine, and Mosaic Potash Carlsbad Inc. provide for mutual aid and assistance, in the form of MRTs, in the event of a mine disaster or other circumstance at either of the facilities. This provision ensures that the WIPP MOC will have two MRTs available at all times when miners are underground.
- An agreement with the U.S. Department of Interior (**DOI**), represented by the Bureau of Land Management (**BLM**), Roswell District, for wildland firefighting support within the WIPP Land Withdrawal Area.
- Agreements for mutual-aid firefighting with Eddy County, the City of Hobbs, and the City of Carlsbad for assistance, including equipment and personnel.
- Mutual-aid Agreements with the City of Hobbs and the City of Carlsbad for mutual ambulance, medical, rescue, and hazardous material response services; for use of WIPP facility radio frequencies during emergencies; and for mutual security and law enforcement services, within the appropriate jurisdiction limits of each party.

- Agreements with the Covenant Health Hobbs Hospital and the Carlsbad Medical Center for the treatment of persons with radiological contamination who have incurred injuries beyond the treatment capabilities at the WIPP facility. The WIPP facility provides transport of the patient(s) to these facilities.
- Agreements with the Sheriff of Eddy County and the Sheriff of Lea County for mutual law enforcement services support.
- An agreement with the New Mexico Department of Homeland Security and Emergency Management for mutual emergency management support, access to state law enforcement, public works, and transportation assets.

D-8 Evacuation Plan

If it becomes necessary to evacuate all or part of the WIPP facility, on-site assembly and off-site staging areas have been established. The off-site staging areas are outside the security fence. The Permittees have plans and implementation procedures for both surface and underground evacuations. Drills are performed on these procedures at the WIPP facility at least annually. The following sections describe the evacuation plan for the WIPP facility, as required under 20.4.1.300 NMAC (incorporating 40 CFR §262.261(f)) and 20.4.1.500 NMAC (incorporating 40 CFR §264.52(f)).

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

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

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

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

D-8b Underground Assembly Areas and Egress Hoist Stations

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

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

Decontamination of underground personnel will be conducted consistent with radiological control procedures pursuant to 10 CFR Part 835. Contaminated personnel are trained to remain segregated from other personnel until radiological contamination control personnel can respond.

D-8c Plan for Surface Evacuation

Surface evacuation notification is initiated by the CMRO, as directed by the RCRA Emergency Coordinator, via sounding of the surface evacuation alarm and providing incident information via the public address system. The persons responsible for surface accountability assist personnel in evacuation from their areas. Egress routes from buildings and site evacuation routes and instructions are posted in designated areas throughout the site. Egress routes from the WHB Unit are shown in Figures D-5 through D-7.

D-8d Plan for Underground Evacuation

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

Personnel will evacuate to the nearest Egress Hoist Station. Primary underground escape routes (identified by green reflectors on the rib) will be used, if possible. Secondary underground escape routes (identified by red reflectors on the rib) will be used if necessary (Figure D-3). Detailed descriptions of escapeways and an underground escape map are included in the *Underground Escape and Evacuation Plan* on file at the WIPP facility, as required by MSHA, 30 CFR §57.11053, for underground mining situations. The MSHA required map takes precedence over Figure D-3, *Underground Escape and Evacuation Map*, should an underground mine related event occur necessitating a change to the evacuation routes. The Underground Controller is responsible for underground personnel accountability and for reporting accountability to the RCRA Emergency Coordinator.

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

Members of the WIPP Fire Department and the MRT who may be underground, will assist in the evacuation of the underground when an underground evacuation is called for. A reentry by the MRT will be performed according to 30 CFR Part 49 and MSHA regulations for reentry into a

mine. The MRTs are trained in compliance with 30 CFR Part 49 in mine mapping, mine gases, ventilation, exploration, mine fires, rescue, and recovery.

D-8e Further Site Evacuation

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

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

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

The primary evacuation route for the WIPP facility is Louis Whitlock Road, which connects to U.S. Highway 62/180 to the north and State Highway 128 via the South Access Road. Alternate evacuation routes from the facility are provided at the south side and the east side of the facility. Utilization of the alternate evacuation routes leads to either the main DOE north/south access road or Campbell Road, which travels north and intersects with U.S. Highway 62/180. The primary and alternate evacuation routes are depicted in Figures D-8 and D-8a.

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

In accordance with 20.4.1.300 NMAC (incorporating 40 CFR §§262 and 262.262(a)) and 20.4.1.500 NMAC (incorporating 40 CFR §264.53(a)), the owner/operator of the WIPP facility will ensure that copies of this *RCRA Contingency Plan* are maintained at the WIPP facility and are available to the emergency personnel and organizations described in Section D-2. When the *RCRA Contingency Plan* is revised, updated copies are distributed (electronically or via site mail) or hand delivered to applicable WIPP facility emergency personnel and Emergency Operations Centers. In addition, the Permittees will make copies available to the following federal, state, and local agencies and mining companies in the vicinity of the WIPP facility, as required by 20.4.1.300 (incorporating 40 CFR §262.262(a)) and 20.4.1.500 NMAC (incorporating 40 CFR §264.53(b)):

- Intrepid Potash New Mexico LLC
- White Marble Mine
- Mosaic Potash Carlsbad Inc.
- City of Carlsbad
- Carlsbad Medical Center, Carlsbad
- Covenant Health Hobbs Hospital, Hobbs
- City of Hobbs
- BLM, Carlsbad
- New Mexico State Police
- New Mexico Department of Homeland Security and Emergency Management
- Eddy County Commission

- Sheriff of Eddy County
- Sheriff of Lea County
- Eddy County Fire and Rescue
- Eddy County Emergency Management
- Lea County Emergency Management

In accordance with 20.4.1.300 NMAC (incorporating 40 CFR §262.263) and 20.4.1.500 NMAC (incorporating 40 CFR §264.54), the Permittees will ensure that this plan is reviewed and amended whenever:

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

TABLES

**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
P.J. (Paul) Paneral		(575) 234-8498		(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.E. (Eric) Chavez		(575) 234-5831		(575) 234-8111
D.L. (Donald) Jurney		(575) 234-8216		(575) 234-8111
R.H. (Robert) Valenzuela		(575) 234-8799		(575) 234-8111
J.R. (James) Bailey		(575) 234-8276		(575) 234-8111
M.L. (Martin) Mendes		(575) 234-5822		(575) 234-8111
D.J. (Derek) Tweedy		(575) 234-8272		(575) 234-8111
J.W. (Justin) Bailey		(575) 234-8276		(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.

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

Equipment	Description and Capabilities	Location
Communications		
Building Fire Alarms	Fire alarm panels, fire alarm transmitter, audible alarm devices (e.g., horns, bells, tones) that provide notification of fires; transmitted to the CMR	Guard and Security Building (Building 458), Water Pumphouse (Building 456), Warehouse/Shops Building (Building 453), Exhaust Shaft Filter Building (Building 413), New Filter Building (NFB) (Building 416), Salt Reduction Building (SRB) (Building 417), Support Building (Building 451), CMR/Computer Room, Waste Handling Building (Building 411), TRUPACT Maintenance Building (Building 412), Salt Handling (SH) Shaft Hoisthouse (Building 384), Auxiliary Warehouse Building (Building 455), Engineering Building (Building 486), Training Building (Building 489), Safety and Emergency Services Facility (Building 452), and CAAs (Buildings 474A and 474B)
Underground Fire Alarms	Fire alarm panels, 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 E300 Maintenance Shop, S550/W30, S700/W30, S1600/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-Based Radios	Two-way, stationary; transmits and monitors information to/from other radios	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 S700/W30, S1300/W30, and S1600/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 with rescue equipment to assist in fighting fires and emergency rescue; 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	A minimum of one light rescue unit, equipped in accordance with the NFPA 1901 and as documented in WIPP facility files	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 CAAs (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; 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 CAAs (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), CAAs, and SAAs
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 firefighting water or decontamination solutions	Surface Connex A, located south of Waste Handling Building (Building 411)
TDOP Upender	Upender facilitates overpacking standard waste boxes into TDOPs	Waste Handling Building (Building 411)
Nonhazardous Decontaminating Agents	For decontamination of surfaces, equipment, and personnel	Waste Handling Building (Building 411); Surface Connex A, located south of Building 411

FIGURES

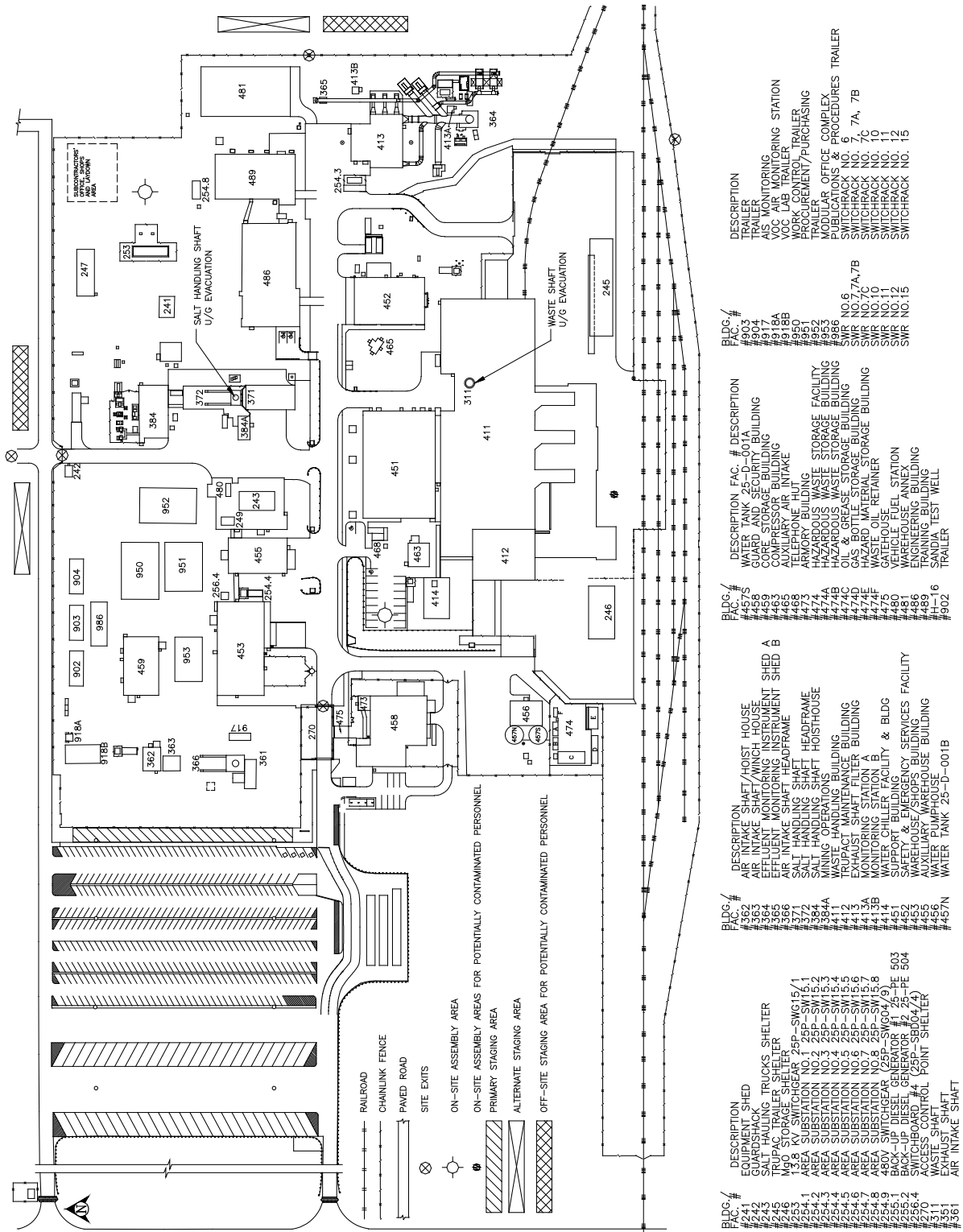


Figure D-1
 WIPP Surface Structures

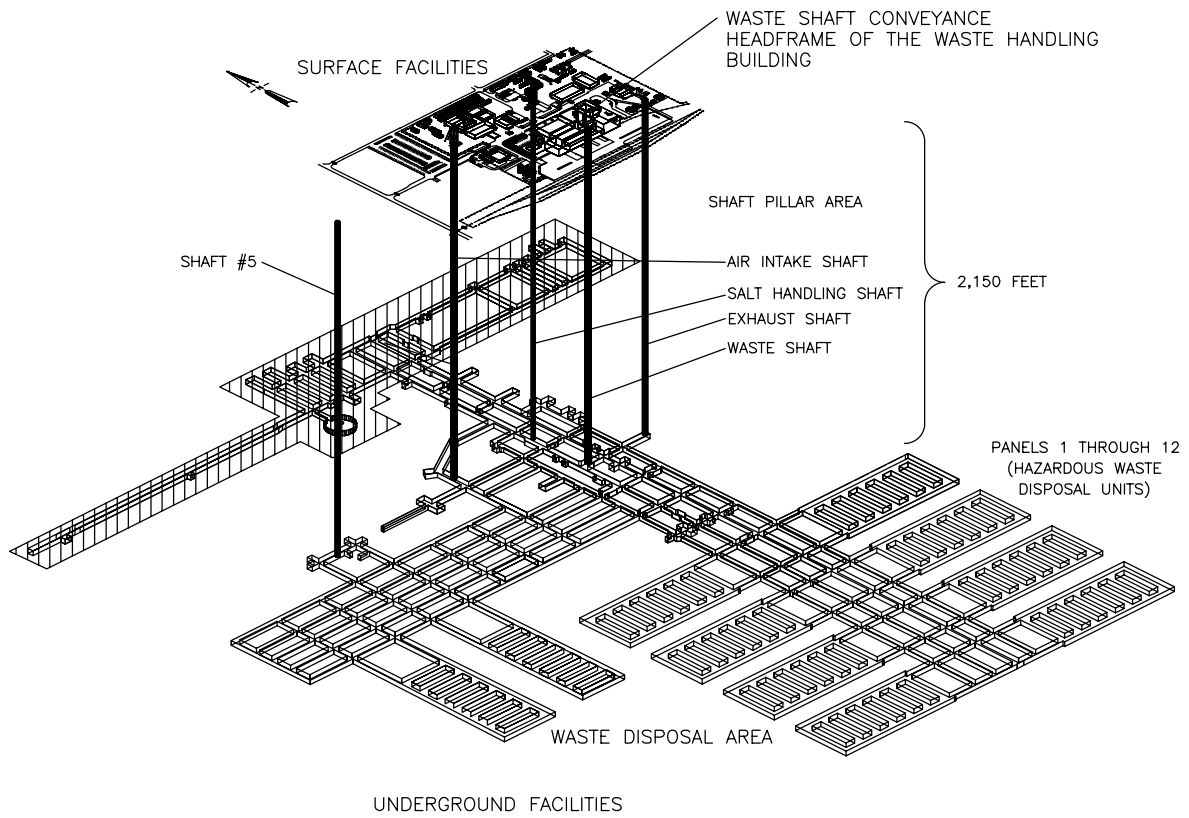


Figure D-2
Spatial View of the WIPP Facility

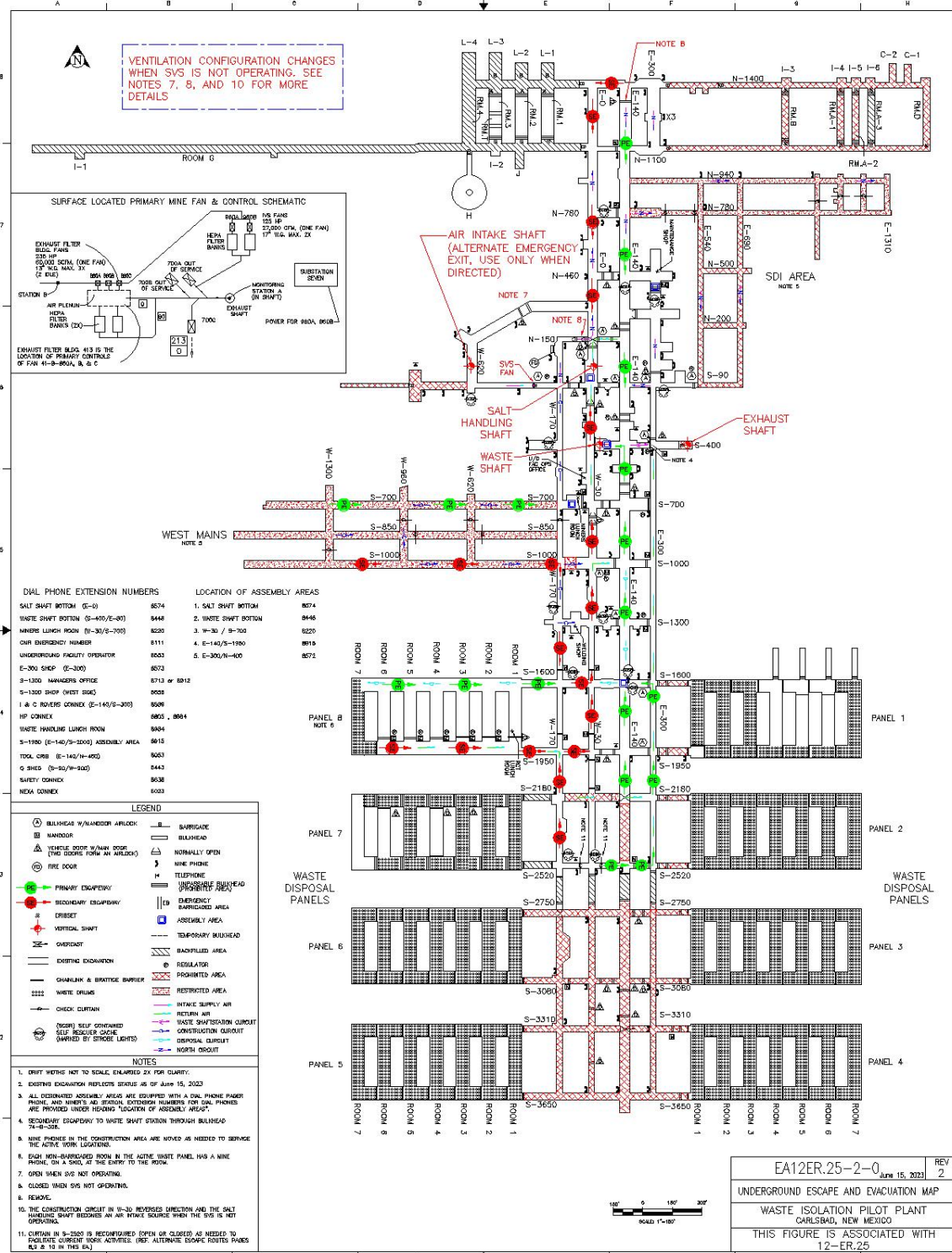


Figure D-3
 Underground Escape and Evacuation Map

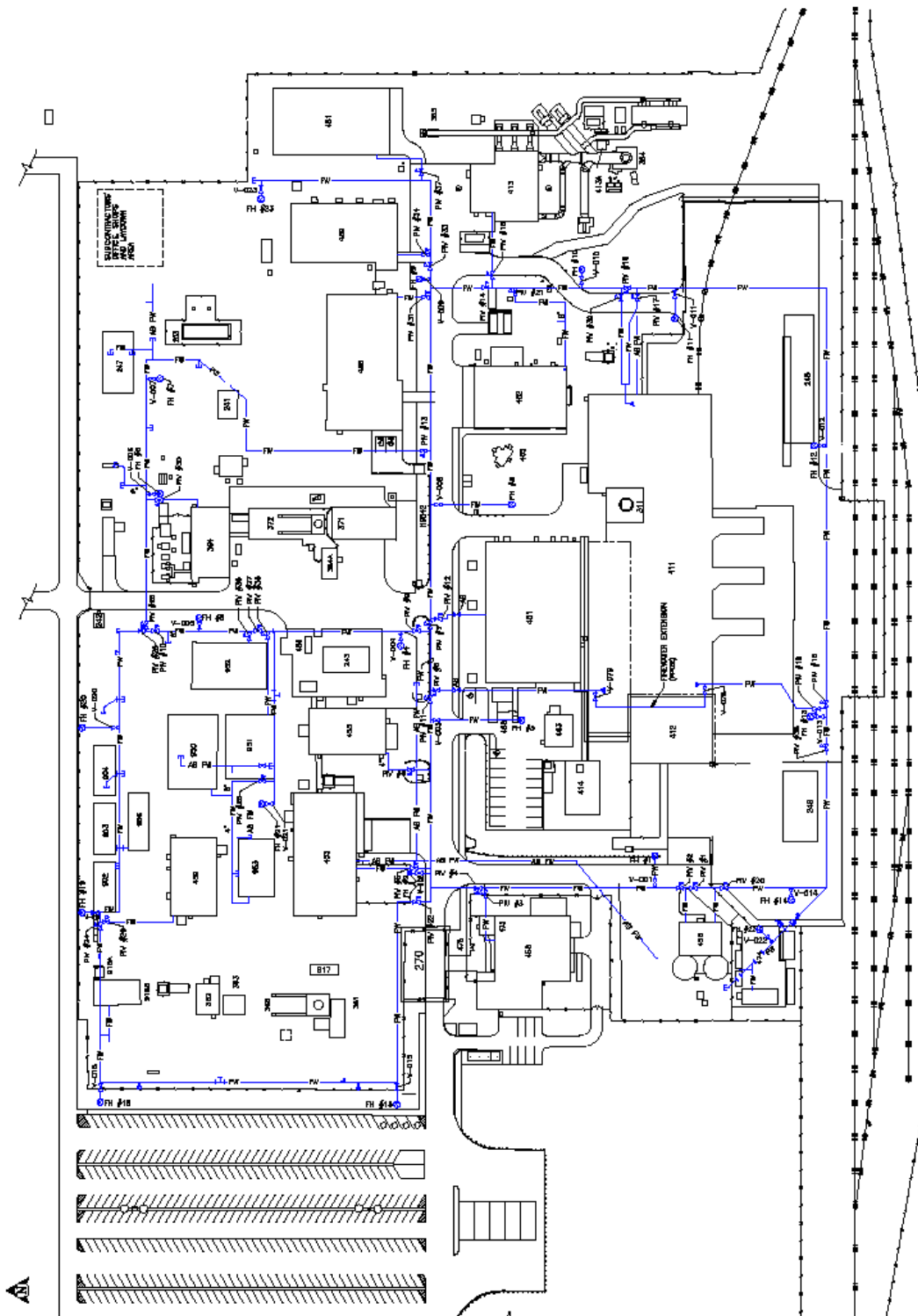


Figure D-4
Fire-Water Distribution System

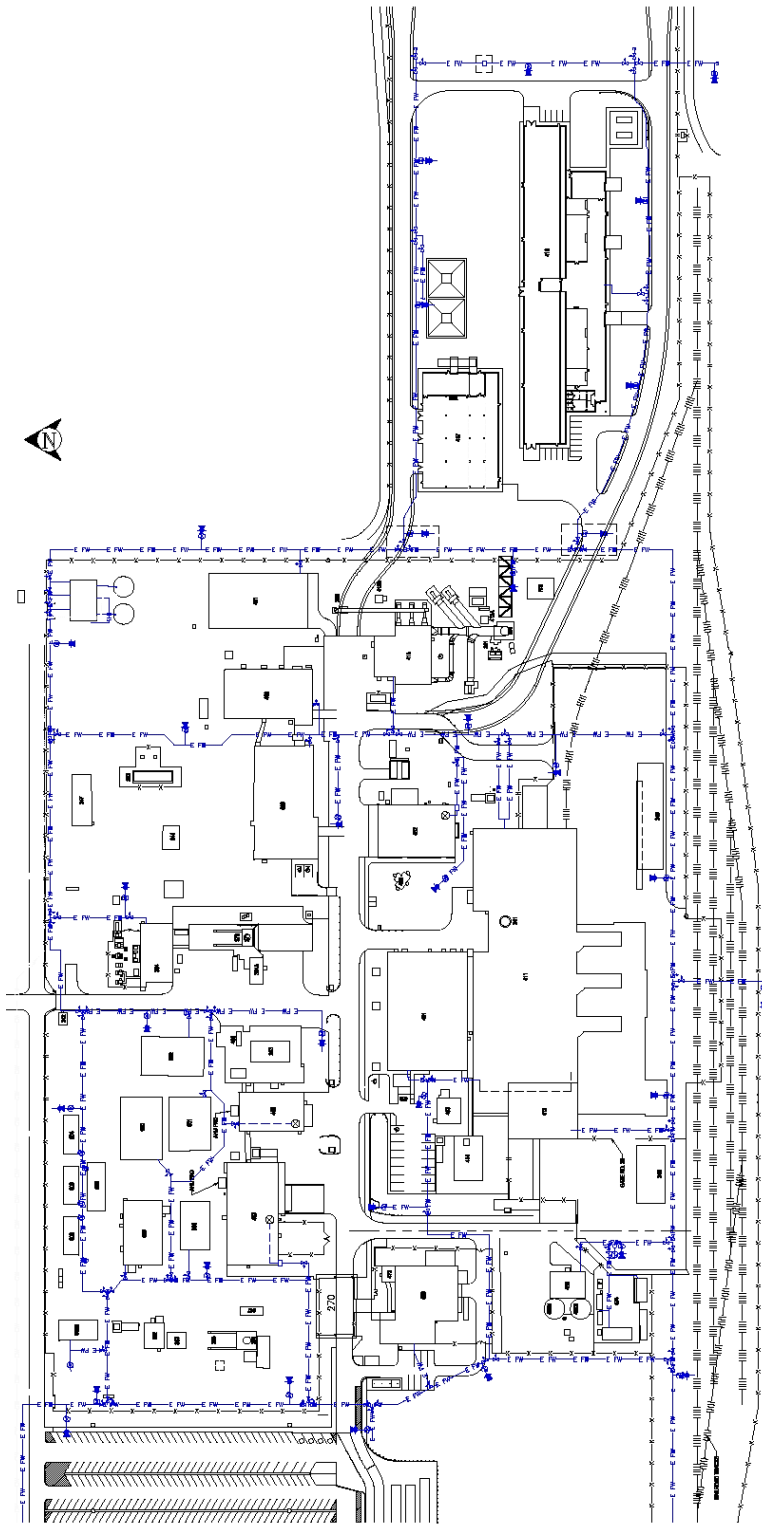


Figure D-4-NFB
Fire-Water Distribution System with Building 416

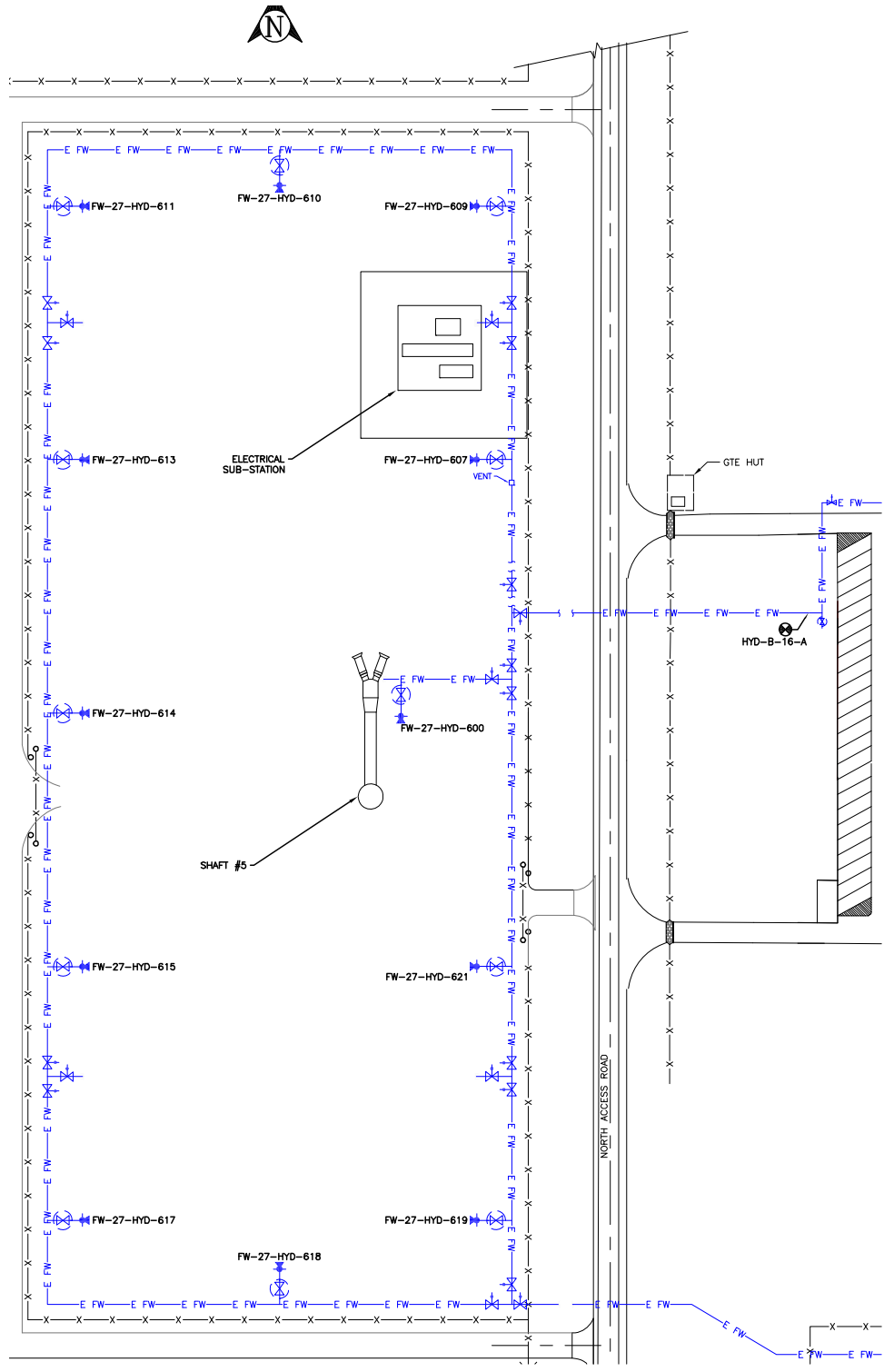


Figure D-4-S#5
Fire-Water Distribution System (with S#5)

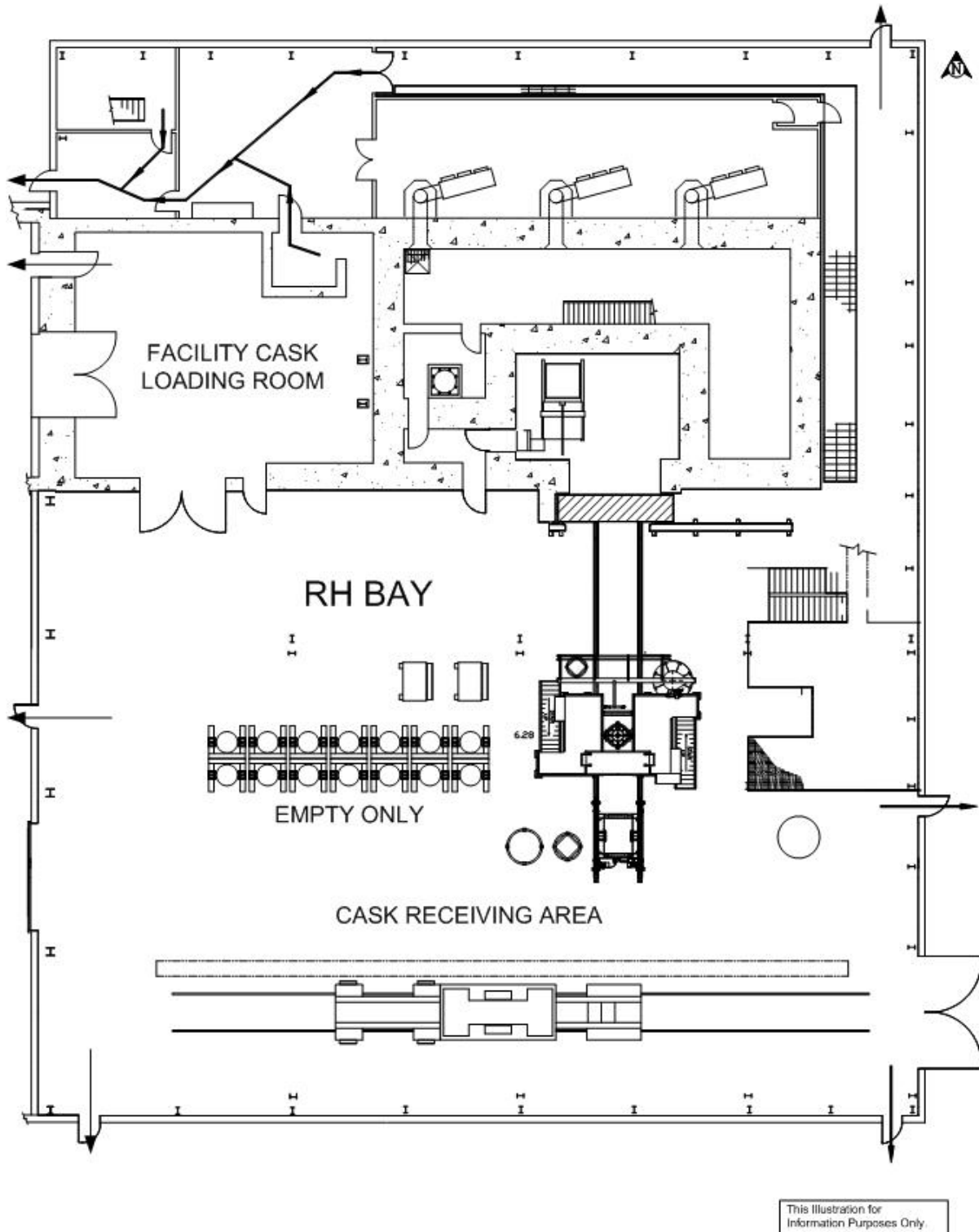


Figure D-5
RH Bay Evacuation Routes

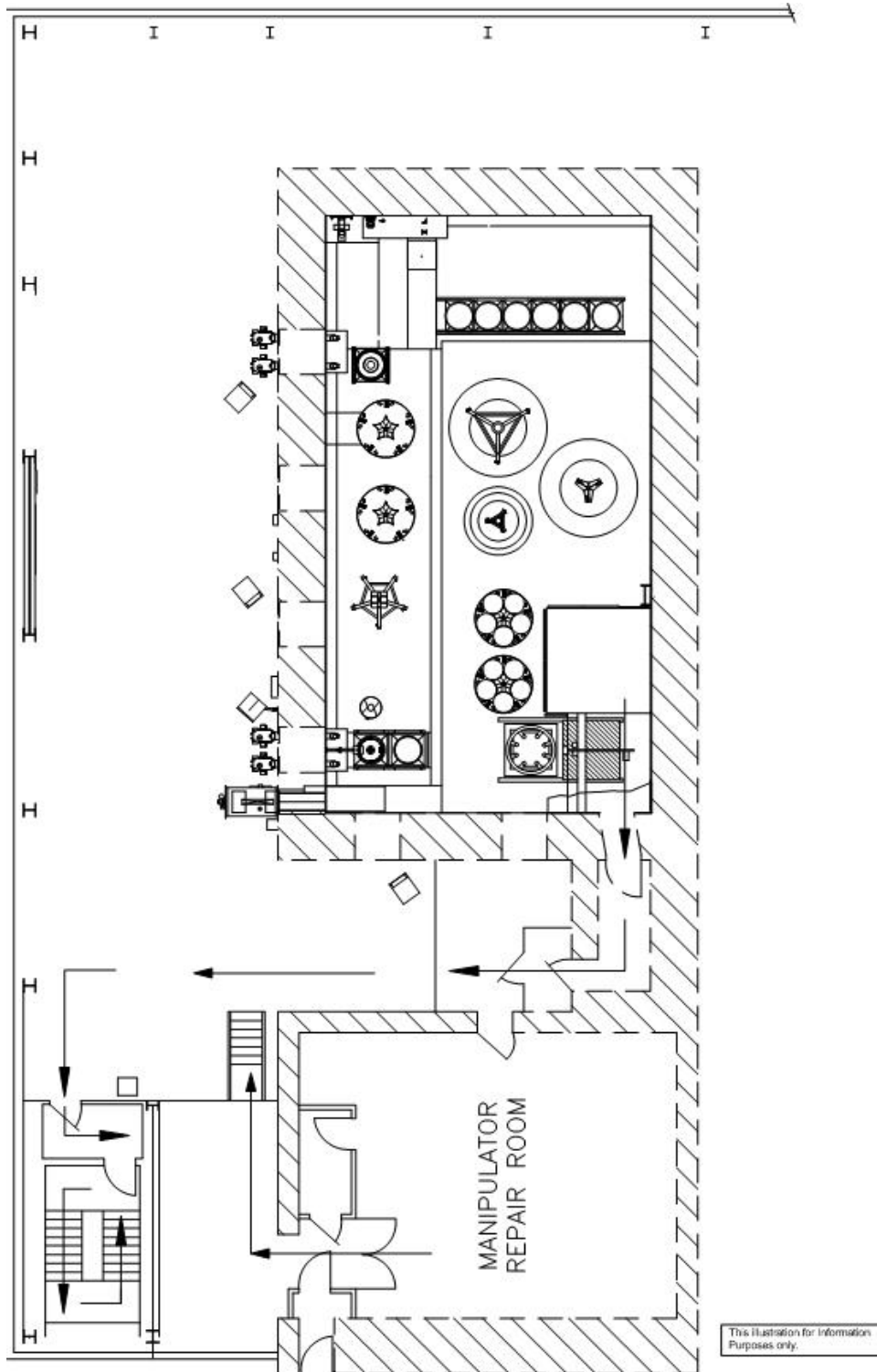


Figure D-6
RH Bay Hot Cell Evacuation Route

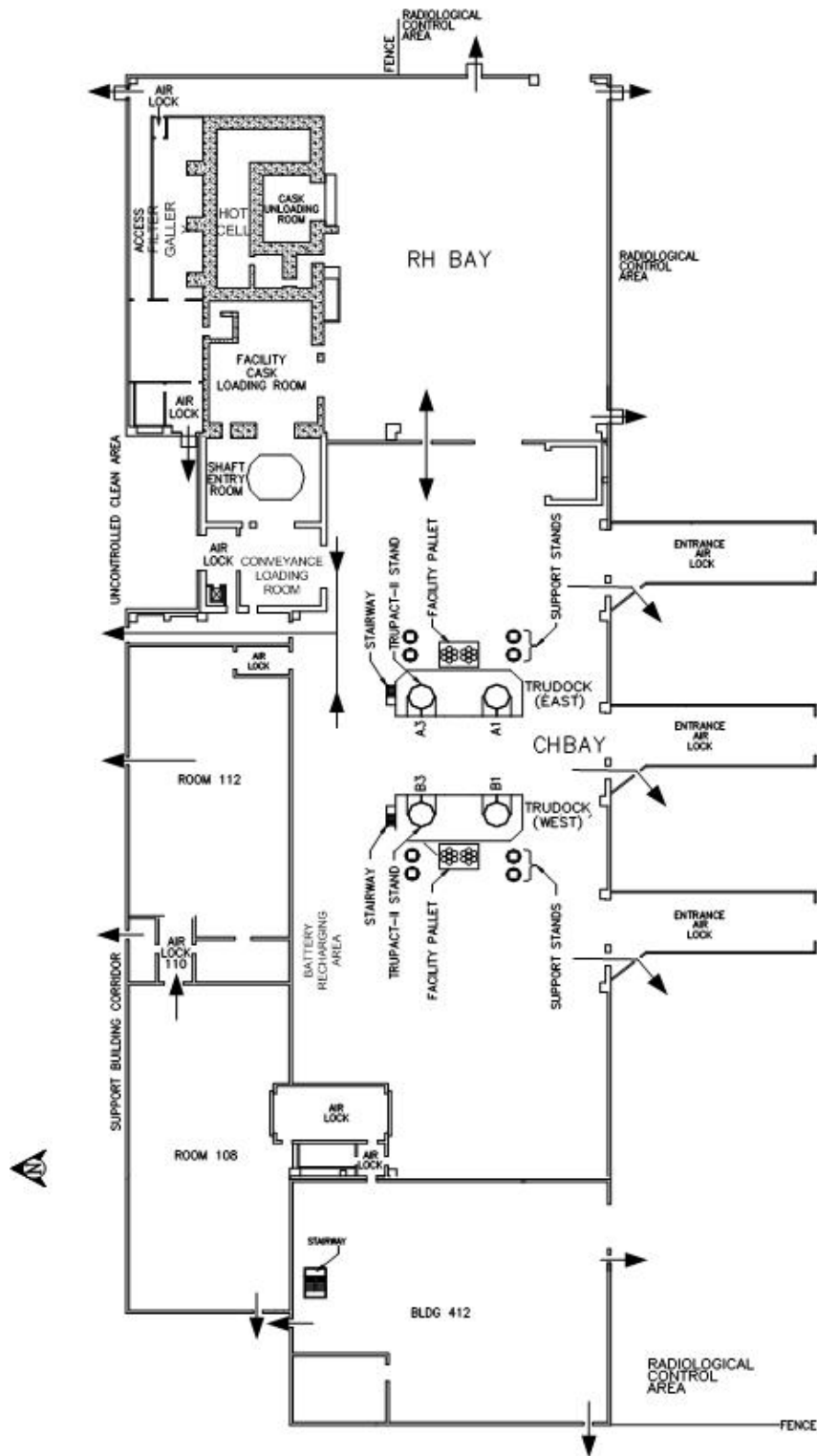


Figure D-7
Evacuation Routes in the Waste Handling Building

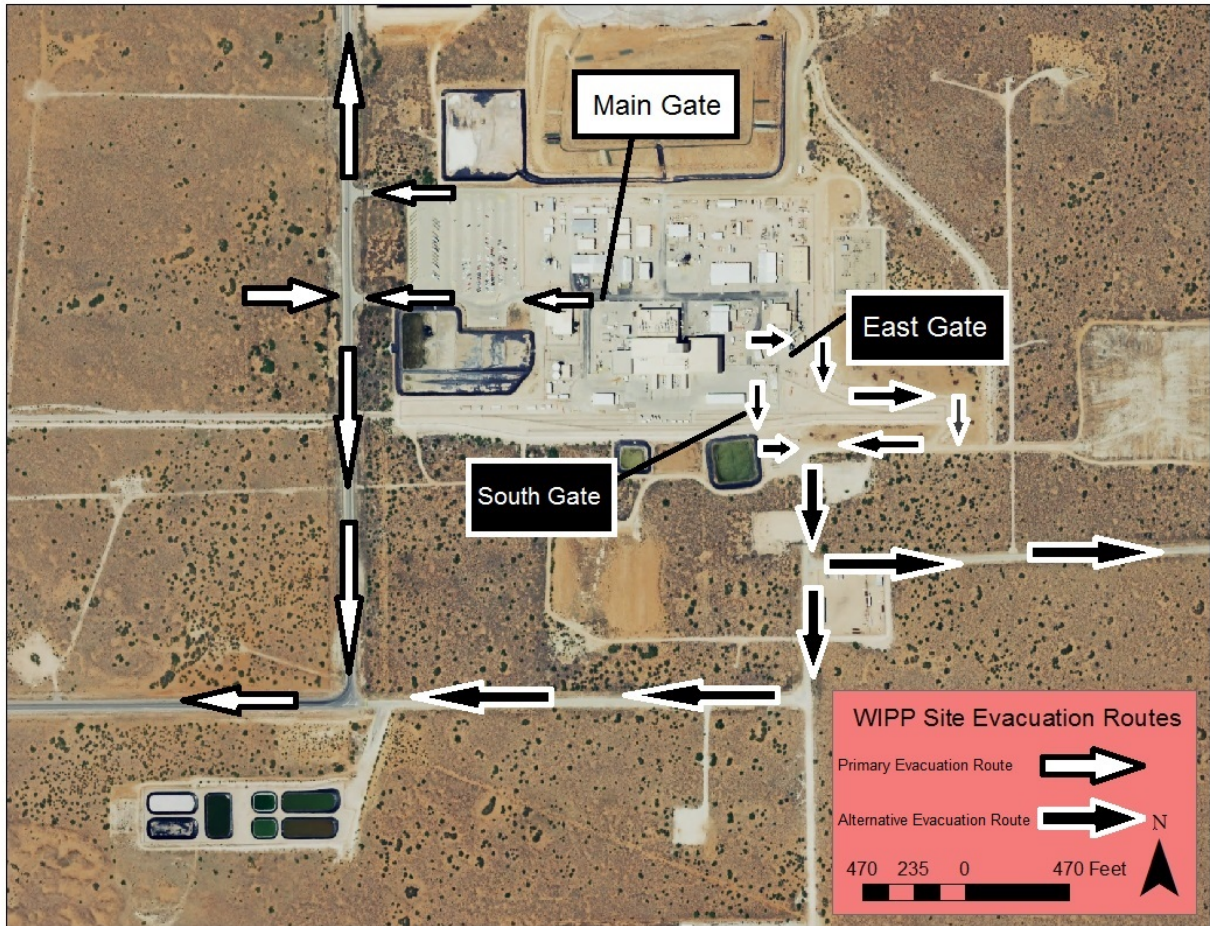


Figure D-8
WIPP Site Evacuation Map

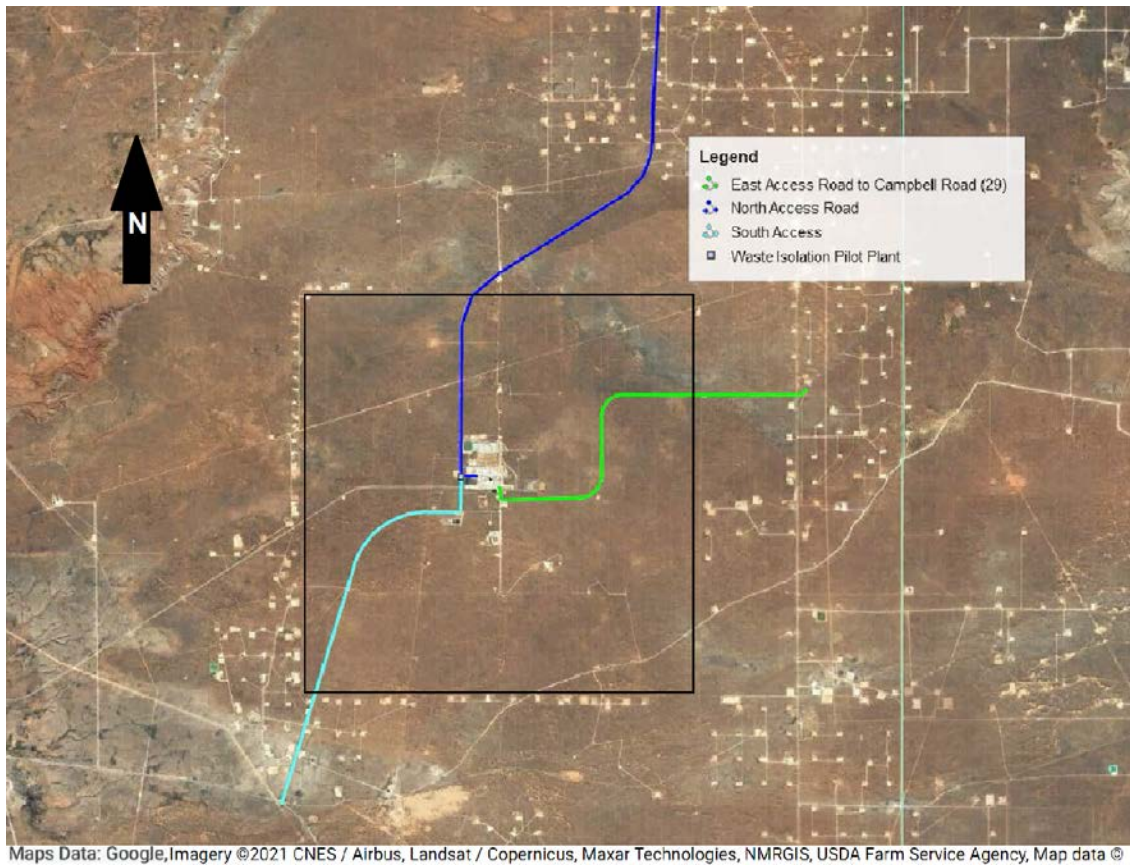


Figure D-8a
WIPP Site Evacuation Routes