

ATTACHMENT D
RCRA CONTINGENCY PLAN

Waste Isolation Pilot Plant

Hazardous Waste Permit

| ~~October~~August 2016

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ATTACHMENT D

RCRA CONTINGENCY PLAN

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ATTACHMENT D

RCRA CONTINGENCY PLAN

Introduction

~~The WIPP facility is owned and co-operated by the U.S. Department of Energy (DOE) and co-operated by its designated Management and Operating Contractor (MOC) (Permit Section 1.5.3).~~

This ~~attachment contains the RCRA Contingency Plan~~ was prepared in accordance with the Resource Conservation and Recovery Act (RCRA) requirements codified in 20.4.1.500 New Mexico Administrative Code (NMAC) (incorporating 40 CFR Part 264, Subpart D §264.50 to §264.56), “Contingency Plan and Emergency Procedures,” ~~and submitted in compliance with 20.4.1.900 NMAC (incorporating 40 CFR §270.14(b)(7)).~~ The purpose of this document is to define responsibilities, and to describe the coordination of activities necessary, ~~and~~ to minimize hazards to human health and the environment from fires, explosions, or any sudden or non-sudden release of hazardous waste, or hazardous waste constituents to air, soil, or surface water (20.4.1.500 NMAC (incorporating 40 CFR §264.51 [a])). This plan consists of descriptions of ~~processes and~~ emergency responses specific to ~~hazardous substances~~, contact-handled (CH) and remote-handled (RH) transuranic (TRU) mixed waste and ~~other site-generated~~ hazardous waste handled at the WIPP facility.

D-1 General Information Scope and Applicability

~~The WIPP facility is located 26 miles (mi) (42 kilometers [km]) east of Carlsbad, in Eddy County in southeastern New Mexico, and includes an area of 10,240 acres (ac) (4,144 hectares [ha]). The facility is located in an area of low population density, with fewer than 30 permanent residents living within a 10 mi (16 km) radius of the facility. The area surrounding the facility is used primarily for grazing, potash mining, and mineral exploration. Resource development that would affect WIPP facility operations or the long-term integrity of the facility is not allowed within the 10,240 ac (4,144 ha) that have been set aside for the WIPP Project.~~

~~The WIPP facility is designed to receive containers of TRU waste, which will be transported to the WIPP facility from the ten major and other minor DOE TRU mixed waste generator and/or storage sites. The waste will be emplaced in the bedded salt of the Salado Formation, 2,150 feet (ft) (655 meters [m]) below ground surface.~~

~~As a geologic facility for the management of TRU mixed waste, the WIPP repository is regulated as a “miscellaneous unit,” as defined under 20.4.1.500 NMAC (incorporating 40 CFR §264.601 to §264.603). The areas regulated units at the WIPP facility subject to this permit include the surface container storage areas 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), located south of the WHB, and the areas below ground in which waste will be emplaced hazardous waste disposal units (HWMDUs) in the underground disposal panels.~~

Pursuant to 20.4.1.500 NMAC (incorporating 40 CFR §264.51(b)), owners/operators of treatment, storage, and disposal facilities are required to have formal contingency plans in place that describe actions that facility personnel will take in response to any fire, explosion, or release of hazardous waste or hazardous waste constituents which could threaten human

health or the environment. The contingency plan must meet the requirements of NMAC 20.4.1.500 NMAC (incorporating 40 CFR Part 264, Subpart D). The provisions of the RCRA Contingency Plan apply to HWDUs in the underground waste disposal panels, HWMUs in the WHB Unit and the Parking Area Unit, the Waste Shaft, and supporting TRU mixed waste handling areas. These areas are shown in Figures D-1 through D-3.

The WIPP facility is a large quantity generator of hazardous waste pursuant to 20.4.1.300 NMAC (incorporating 40 CFR Part 262, "Standards for Generators of Hazardous Waste"). 20.4.1.300 NMAC (incorporating 40 CFR §262.34(a)(4), which references 40 CFR Part 265, Subpart D) requires that a contingency plan be in place that describes actions that facility personnel will take in response to any fire, explosion, or release of hazardous waste or hazardous waste constituents which could threaten human health or the environment. The provisions of the RCRA Contingency Plan also apply to the Hazardous Waste Staging Areas for site-generated hazardous waste, which are located in Buildings 474A and 474B on the surface, as shown in Figure D-1, and in the underground at S550/E140. The WIPP facility includes other surface structures, shafts, and underground areas (Figures D-1, D-2, and D-3). Surface structures other than the WHB, that support TRU mixed waste management include:

Exhaust Filter Building – houses the filter banks to which the underground ventilation can be diverted in the unlikely event of an underground release of radionuclides.

Guard and Security Building – houses the facility security personnel and communications equipment necessary for them to perform their duties. Section D-4a specifies the duties of the security officers relative to contingency actions.

Safety and Emergency Services Building – houses the surface emergency response vehicles (fire truck, rescue truck, ambulance), Health Services (first aid), Emergency Operations Center, and the Dosimetry Laboratory. The Hazardous Material Response Trailer is staged at the WIPP facility in an area that is readily accessible to Emergency Services. Emergency Services is located in Building 452. Table D-6 describes emergency equipment and associated locations.

Support Building – houses the Central Monitoring Room (see section D-4a).

Transuranic Package Transporter-II (TRUPACT-II) Maintenance Facility – is located west of the CH bay. No TRU mixed waste management activities will occur in this facility.

Surface facilities used for storage of support equipment are identified in Table D-6.

Building 452, Safety and Emergency Services Facility, houses the emergency response vehicles, emergency equipment, the mine rescue room, mine rescue team equipment, and the Emergency Operations Center (EOC). The Hazardous Material Response Trailer is staged at the WIPP facility in an area readily accessible to Emergency Services. Emergency Services is located in Building 452.

The RCRA permit addresses TRU mixed waste management activities in the WHB Unit, the Parking Area Unit, and the disposal units. The provisions of this Contingency Plan apply to hazardous waste disposal units (HWDU) in the underground waste disposal panels, storage in the WHB Unit and the Parking Area Unit, the Waste Shaft, and supporting TRU mixed waste handling areas. The remainder of the facility will not manage TRU mixed waste. This

Contingency Plan has also been designed in accordance with 20.4.1.300 NMAC (incorporating 40 CFR § 262.34(a)(4) – Standards for Generators of Hazardous Waste), and will be implemented whenever there is a fire, explosion, or release of hazardous waste which could threaten human health or the environment. Hazardous substances in the remainder of the facility are included as possible triggers of the Contingency Plan but are outside the scope of the regulations promulgated pursuant to RCRA. This allows WIPP to maintain one emergency response plan which is consistent with the National Response Teams Integrated Contingency Plan Guidance (Federal Register, Vol. 61, No. 109, June 5, 1996). Inclusion is based on their National Fire Protection Association (**NFPA**) ratings in addition to their storage quantities. The majority of hazardous substances on-site are not expected to trigger the Contingency Plan because they are present in the same form and concentration as the product packaged for distribution and use by the general public or are used in a laboratory under the direct supervision of a technically qualified individual. Superfund Amendments and Reauthorization Act (**SARA**) Title III excludes these from emergency planning reporting. The list of hazardous substances in large enough quantities to constitute a Level II incident (Section D-3) is provided in Table D-1. In addition to TRU mixed waste, these are the only hazardous substances currently on-site which, if spilled, may be of sufficient impact to cause this Contingency Plan to be implemented. Magnesium Oxide (**MgO**) is stored on-site in large quantities. It is used as backfill in the waste emplacement rooms as a pH buffer. The pH buffer will limit the solubility of radionuclides after the underground rooms are filled and closed. MgO is not a hazardous substance, a release of MgO will not create hazardous waste and poses no threat to human health or the environment, and is therefore not addressed in the Contingency Plan.

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

Wastes generated as a result of ~~maintenance or~~emergency response actions will be categorized into one of three groups and disposed of accordingly. These are: 1) nonhazardous wastes to be disposed of ~~in 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) TRU mixed derived waste to be disposed of in the underground HWDUs as TRU mixed waste. ~~Disposal of TRU mixed waste in the WIPP facility is subject to regulation under 20.4.1.500 NMAC. As required by 20.4.1.500 NMAC (incorporating 40 CFR §264.601), the Permittees will demonstrate that the environmental performance standards for a miscellaneous unit, which are applied to the HWDUs in the underground, will be met. In addition, the technical requirements of 20.4.1.500 NMAC (incorporating 40 CFR §264.170 to §264.178) are applied to the operation of the container storage units in the WHB Unit and in the Parking Area Unit south of the WHB.~~ Hazardous Liquid wastes that may be generated as a result of emergency response actions~~the fire fighting water or decontamination solutions~~ will be managed as follows:

Non-Mixed - ~~Hazardous waste~~ 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 §262.34) requirements. The waste will be shipped to an approved off-site treatment, storage, or disposal facility.

Mixed -- Accumulated Liquids contaminated with TRU mixed waste (~~inside the WHB Unit~~) will be solidified ~~as they are placed into containers with cement, Aquaset, or absorbent~~

~~material in them. and T~~he solidified materials will be disposed of in the underground WIPP repository as ~~derived~~ TRU mixed waste.

~~This chapter of the permit application describes the HWDUs, the TRU mixed waste management facilities and operations, compliance with the environmental performance standards, and with the applicable technical requirements of 20.4.1.500 NMAC (incorporating 40 CFR §264.170 to §264.178 and §264.601, respectively). The configuration of the WIPP facility consists of completed structures, including all buildings and systems for the operation of the facility.~~

~~D-1a—Disposal Phase Overview~~

~~The Disposal Phase will consist of receiving CH TRU mixed waste shipping containers, unloading and transporting the waste containers to the underground HWDUs, emplacing the waste in the underground HWDUs, and subsequently achieving closure of the underground HWDUs in compliance with applicable State and Federal regulations.~~

~~The TRU mixed waste that will be disposed at the WIPP facility results primarily from activities related to the reprocessing of plutonium-bearing reactor fuel and fabrication of plutonium-bearing weapons, as well as from research and development. This TRU mixed waste consists largely of such items as paper, cloth, and other organic material; laboratory glassware and utensils; tools; scrap metal; shielding; and solidified sludges from the treatment of wastewater. Much of this TRU mixed waste is also contaminated with substances that are defined as hazardous under 20.4.1.200 NMAC.~~

~~D-1b—Waste Description~~

~~Waste destined for WIPP are, or were, produced as a byproduct of weapons production and have been identified in terms of waste streams based on the processes that produced them. Each waste stream identified by generators is assigned to a Waste Summary Category to facilitate RCRA waste characterization, and reflect the final waste forms acceptable for WIPP disposal.~~

~~These Waste Summary Categories are:~~

~~S3000—Homogeneous Solids~~

~~Solid process residues defined as solid materials, excluding soil, that do not meet the applicable regulatory criteria for classification as debris (20.4.1.800 NMAC (incorporating 40 CFR §268.2[g] and [h])). Included in solid process residues are inorganic process residues, inorganic sludges, salt waste, and pyrochemical salt waste. Other waste streams are included in this Waste Summary Category based on the specific waste stream types and final waste form. This category includes wastes that are at least 50 percent by volume solid process residues.~~

~~S4000—Soils/Gravel~~

~~This waste summary category includes waste streams that are at least 50 percent by volume soil. Soils are further categorized by the amount of debris included in the matrix.~~

1 S5000—Debris Wastes

2 ~~This waste summary category includes waste that is at least 50 percent by volume~~
3 ~~materials that meet the criteria for classification as debris (20.4.1.800 NMAC~~
4 ~~(incorporating 40 CFR §268.2)). Debris is a material for which a specific treatment is not~~
5 ~~provided by 20.4.1.800 NMAC (incorporating 40 CFR §268 Subpart D), including process~~
6 ~~residuals such as smelter slag from the treatment of wastewater, sludges or emission~~
7 ~~residues.~~

8 ~~Debris means solid material exceeding a 2.36 inch (60 millimeter) particle size that~~
9 ~~is intended for disposal and that is: 1) a manufactured object, 2) plant or animal~~
10 ~~matter, or 3) natural geologic material.~~

11 ~~Included in the S5000 Waste Summary Category are metal debris, lead containing metal~~
12 ~~debris, inorganic nonmetal debris, asbestos debris, combustible debris, graphite debris,~~
13 ~~heterogeneous debris, and composite filters, as well as other minor waste streams.~~
14 ~~Particles smaller than 2.36 inches in size may be considered debris if the debris is a~~
15 ~~manufactured object and if it is not a particle of S3000 or S4000 material.~~

16 ~~Examples of waste that might be included in the S5000 Waste Summary Category are~~
17 ~~asbestos-containing gloves, fire hoses, aprons, flooring tiles, pipe insulation, boiler jackets,~~
18 ~~and laboratory tabletops. Also included are combustible debris constructed of plastic,~~
19 ~~rubber, wood, paper, cloth, graphite, and biological materials. Examples of graphite waste~~
20 ~~that would be included are crucibles, graphite components, and pure graphite.~~

21 ~~Wastes may be generated at the WIPP facility as a direct result of managing the TRU and TRU~~
22 ~~mixed wastes received from the off-site generators. Such generated waste may occur in either~~
23 ~~the WHB Unit or the Underground. For example, when TRU mixed wastes are received at the~~
24 ~~WHB Unit, the CH or RH Package shipping containers and the TRU mixed waste containers are~~
25 ~~checked for surface contamination. Under some circumstances,⁴ if contamination is detected,~~
26 ~~the shipping container and/or the TRU mixed waste containers will be decontaminated. In the~~
27 ~~underground, waste may be generated as a result of radiation control procedures used during~~
28 ~~monitoring activities. The waste generated from radiation control procedures will be assumed to~~
29 ~~be TRU and/or TRU mixed waste. Throughout the remainder of this plan, this waste is referred~~
30 ~~to as “derived waste.” All such derived waste will be placed in the rooms in HWDUs along with~~
31 ~~the TRU mixed waste for disposal.~~

32 D-1c—Containers

33 ~~The waste containers that will be used at the WIPP facility qualify as “containers,” in accordance~~
34 ~~with 20.4.1.101 NMAC (incorporating 40 CFR §260.10). That is, they are “portable devices in~~
35 ~~which a material is stored, transported, treated, disposed of, or otherwise handled.”~~

36 ~~TRU mixed waste containers, containing off-site waste, will not be opened at the WIPP facility.~~
37 ~~Derived waste containers are kept closed at all times unless waste is being added or removed.~~

⁴-Typically contamination that is less than six square feet in area and less than 2000 disintegrations per minute (dpm) alpha or 20,000 dpm beta/gamma, may be decontaminated. Containers that exceed these thresholds will be returned to the point of origin for decontamination.

Waste, including "derived 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-WIPP (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. Special requirements for ignitable, reactive, and incompatible waste are addressed in 20.4.1.500 NMAC (incorporating 40 CFR §§264.176 and 177). The RCRA Permit Treatment, Storage, and Disposal Facility Waste Acceptance Criteria (TSDF-WAC) precludes ignitable, reactive, or incompatible TRU mixed waste from being placed into storage or disposed of at WIPP.

D-1d—Description of Containers

CH TRU mixed waste containers will be either 55-gallon (gal) (208-liter (L)) drums singly or arranged into seven (7) packs, 85-gal (322-L) drums (used as singly or arranged into four (4) packs, 100-gal (379 L) drums singly or arranged into three (3) packs, ten-drum overpacks (**TDOP**), 66.3 ft³ (1.88 m³) SWBs, or standard large box 2s (**SLB2**).

RH TRU mixed waste containers are either canisters or drums. Canisters will be loaded singly in an RH-TRU 72-B cask and drums will be loaded in a CNS 10-160B cask. Drums in the CNS 10-160B cask will be arranged singly or in drum carriage units containing up to five drums each. Canisters and drums are described in Permit Attachment M1.

Remote-Handled TRU mixed waste may arrive in shielded containers with an internal capacity of 4.0 ft³ (0.11 m³). Shielded containers will be arranged as three-packs.

D-1e—Description of Surface Hazardous Waste Management Units

The WHB is the surface facility where waste handling activities will take place. The WHB has a total area of approximately 84,000 square feet (ft²) (7,804 square meters [m²]) of which 49,710 ft² (4,618 m²) are designated as the WHB Unit for TRU mixed waste management. Within the WHB Unit, 32,307 ft² (3,001 m²) are designated for the waste handling and container storage of CH TRU mixed waste and 17,403 ft² (1,617 m²) are designated for the handling and storage of RH TRU mixed waste. These areas are being permitted as container storage units. The concrete floors within the WHB Unit are sealed with an impermeable coating that has excellent resistance to the chemicals in TRU mixed waste and, consequently, provide secondary containment for TRU mixed waste. In addition, a Parking Area Unit south of the WHB will be used for storage of waste in sealed shipping containers awaiting unloading. This area is also

being permitted as a container storage unit. The sealed shipping containers provide secondary containment in this hazardous waste management unit (~~HWMU~~).

~~D-1e(1) CH Bay Operations~~

Once unloaded from the Contact Handled Package, CH TRU mixed waste containers (3-pack of shielded containers, 7-packs of 55-gal drums, 3-packs of 100-gal drums, 4-packs of 85-gal drums, SWBs, TDOPs, or one SLB2) are placed on the facility pallet. The waste containers are stacked on the facility pallets (one or two high, depending on weight considerations). The use of facility pallets will elevate the waste at least 6 inches (in.) (15 centimeters [cm]) from the floor surface. Pallets of waste will then be stored in the CH bay. This storage area will be clearly marked to indicate the lateral limits of the storage area. This storage area will have a maximum capacity of thirteen facility pallets of waste during normal operations. These pallets will typically be in the CH Bay storage area for a period of up to five days.

In addition, four Contact Handled Packages, containing up to 640 ft³ of CH TRU waste in containers, may occupy positions at the TRUPACT-II Unloading Docks (~~TRUDOCK~~).

Aisle space shall be maintained in all CH Bay waste storage areas. The aisle space shall be adequate to allow unobstructed movement of fire response personnel, spill-control equipment, and decontamination equipment that would be used in the event of an off-normal event. An aisle space between facility and containment pallets will be maintained in all CH TRU mixed waste storage areas.

~~D-1e(2) RH Complex Operations~~

Loaded RH TRU casks are received in the RH Bay of the WHB. The RH Bay is served by an overhead bridge crane used for cask handling and maintenance operations. Storage in the RH Bay occurs in the RH TRU 72-B or CNS 10-160B casks. A maximum of two loaded casks may be stored in the RH Bay and a maximum of one cask in the Cask Unloading Room may be stored at one time. A minimum of 44 inches (1.1 m) will be maintained between loaded casks in the RH Bay. The cask serves as secondary containment in the RH Bay for the RH TRU mixed waste payload container. In addition, the RH Bay has a concrete floor.

Single RH TRU mixed waste canisters are unloaded from the RH TRU 72-B casks in the Transfer Cell of the RH Complex where they are transferred to facility casks. Drums of RH TRU mixed waste will be transferred remotely from the CNS 10-160B cask, into the Hot Cell, and loaded into a canister. Storage in the Hot Cell occurs in either drums or canisters. A maximum of 12 55-gallon drums of RH TRU mixed waste and one 55-gallon drum of derived waste (94.9 ft³ (2.7 m³)) may be stored in the Hot Cell. Except for the derived waste drum, individual 55-gallon drums may not be stored in the Hot Cell for more than 25 days. The Transfer Cell houses the Transfer Cell Shuttle Car, which is used to facilitate transferring the canister to the facility cask. Storage in this area typically occurs at the end of a shift or in an off-normal event that results in the suspension of waste handling. A maximum of one canister (31.4 ft³ (0.89 m³)) may be stored in the Transfer Cell in a shielded insert in the Transfer Cell Shuttle Car or in a RH TRU 72-B cask.

The Facility Cask Loading Room provides for transfer of a canister to the facility cask for subsequent transfer to the waste shaft conveyance and to the Underground Hazardous Waste Disposal Unit. The Facility Cask Loading Room also functions as an air lock between the waste shaft and the Transfer Cell. Storage in this area typically occurs at the end of a shift or in an off-

~~normal event that results in the suspension of waste handling. A maximum of one canister (31.4 ft³ (0.89 m³)) may be stored in the Facility Cask in the Facility Cask Loading Room.~~

~~Derived waste will be stored in the RH Bay and in the Hot Cell.~~

~~D-1e(3) — Parking Area Container Storage Unit (Parking Area Unit)~~

~~The area extending south from the WHB within the fenced enclosure identified as the Controlled Area on Figure A1-2 is defined as the Parking Area Container Storage Unit. This area provides storage for up to 6,734 ft³ (191 m³) of CH and/or RH TRU mixed waste contained in up to 40 loaded Contact-Handled Packages and 8 Remote-Handled Packages. Secondary containment and protection of the waste containers from standing rainwater are provided by the transportation containers. Up to 12 additional Contact-Handled Packages and four additional Remote-Handled Packages may be stored in the Parking Area Surge Area so long as the requirements of Permit Sections 3.1.2.3 and 3.1.2.4 are met. No more than 50 Contact-Handled and 12 Remote-Handled Packages may be stored in the Parking Area Storage Unit.~~

~~The safety criteria for Contact-Handled and Remote-Handled Packages require that they be opened and vented at a frequency of at least once every 60 days. During normal operations, Contact-Handled and Remote-Handled Packages will not require venting while located in the Parking Area Unit. Any off-normal event which results in the need to store a waste container in the Parking Area Unit for a period of time approaching fifty-nine (59) days shall be mitigated by returning the shipment to the generator prior to the expiration of the 60-day NRC venting period or by moving the Contact-Handled or Remote-Handled Package inside the WHB Unit where the waste will be removed and placed in one of the permitted storage areas or in the underground hazardous waste disposal unit.~~

~~D-1f — Off-Normal Events~~

~~Off-normal events could interrupt normal operations in the waste management process line. Shipments of waste from the generator sites will be stopped in any event which results in an interruption to normal waste handling operations that exceeds three days.~~

~~D-1g — Containment~~

~~The WHB Unit has concrete floors, which are sealed with a coating designed to resist all but the strongest oxidizing agents. Such oxidizing agents do not meet the TSDF-WAC and will not be accepted in TRU mixed waste at the WIPP facility. Therefore, TRU mixed wastes pose no compatibility problems with respect to the WHB Unit floor.~~

~~During normal operations, the floor of the normal storage areas within the CH Bay and RH Complex shall be visually inspected on a weekly basis to verify that it is in good condition and free of obvious cracks and gaps. When a RH TRU mixed waste container is present in the RH Complex, inspections will be conducted visually and/or using closed-circuit television cameras in order to manage worker dose and minimize radiation exposures. Manual inspections of the areas are performed at least annually during routine maintenance periods when waste is not present.~~

~~Floor areas of the WHB used during off-normal events will be inspected prior to use and weekly while in use. Containers located in the permitted storage areas shall be elevated from the~~

surface of the floor. Facility pallets provide at least 6 in (15 centimeters [cm]) of elevation from the surface of the floor. TRU mixed waste containers that have been removed from Contact-Handled or Remote-Handled Packages shall be stored at a designated storage area inside the WHB so as to preclude exposure to the elements.

Secondary containment at permitted storage areas inside the WHB Unit shall be provided by the floor. The Parking Area Unit and TRUDOCK storage area of the WHB Unit do not require engineered secondary containment, since waste is not stored there unless it is protected by the Contact-Handled or Remote-Handled Packaging. Floor drains, the fire suppression water collection sump, and portable dikes, if needed, will provide containment for liquids that may be generated by fire fighting. Sump capacities and locations are shown in Drawing 41-F-087-014. Residual fire fighting liquids will be placed in containers and managed as described above. Secondary containment at storage locations inside the RH Bay, Cask Unloading Room, Transfer Cell, and Facility Cask Loading Room is provided by the cask or canisters that contain drums of RH TRU mixed waste. In the Hot Cell, secondary containment is provided by the Hot Cell subfloor. In addition, the RH Complex contains a 220-gallon (833-L) sump in the Hot Cell, a 11,400-gallon (43,152-L) sump in the RH Bay, and a 220-gallon (833-L) sump in the Transfer Cell to collect any liquids.

D-2 Emergency Response Personnel and Training

D-2A Emergency Response Personnel

Persons qualified to act as the RCRA Emergency Coordinator, as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.55), are listed in Table D-2.

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 20.4.1.500 NMAC (incorporating 40 CFR §264.52(d)), qualified RCRA Emergency Coordinators are listed in Table D-12, and are trained to the requirements found in Attachment F1, under "RCRA Emergency Coordinator." where four individuals have been designated primary RCRA Emergency Coordinators. This is because the on-duty Facility Shift Manager (FSM) is designated as the RCRA Emergency Coordinator. The four individuals shown serve as FSM on a rotating shift basis.

Persons qualified to act as the RCRA Emergency Coordinator are thoroughly familiar with this Contingency Plan, the TRU mixed waste and hazardous waste operations and activities at the WIPP facility, the locations of TRU mixed waste and hazardous waste activities, the locations on the site where hazardous materials are stored and used, and the locations of waste staging and accumulation areas. They are familiar with the characteristics of hazardous substances, TRU mixed waste and hazardous waste handled at the WIPP facility, the location of TRU mixed waste and hazardous waste records within the WIPP facility, and the facility layout. In addition, persons qualified to act as the RCRA Emergency Coordinator have the authority to commit the necessary resources to implement this RCRA Contingency Plan. Figure D-4 outlines the RCRA Emergency Coordinator's position relative to other organizations that provide support.

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, ~~or~~ groups, and organizations have specified responsibilities during any WIPP facility emergency:

~~Assistant Chief Office Warden (ACOW)—Persons assigned to take accountability for sections of the site, and then reporting the accountability to the Chief Office Warden.~~

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.

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 Attachment F1, or provide support to the qualified RCRA Emergency Coordinator on shift. Since the FSM provides support to the RCRA Emergency Coordinator relative to the safety of the WIPP facility, no specific RCRA training is required.

Central Monitoring Room Operator (CMRO)—~~The~~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. The facility log is maintained by the CMRO, and during emergencies, the CMRO supports the RCRA Emergency Coordinator.

~~Chief Office Warden (COW)—A predesignated individual with responsibilities for complete surface accountability at staging areas in the event of an evacuation. The Chief Office Warden receives reports from the ACOWs.~~

Emergency Response Team (ERT)—~~Supplemental group~~ WIPP facility personnel who serve as an Industrial Fire Brigade and are trained to respond to surface and underground emergencies on site, ~~to provide emergency first aid including fires, medical emergencies, and to respond to releases of hazardous waste or hazardous materials.~~ The ERT members supplement WIPP Fire Department response capabilities. are part of the WIPP Supplemental Emergency Response Program. The ERT member 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.

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

6 Incident Commander—Upon delegation by the RCRA Emergency Coordinator, and once
7 incident command has been established, the Incident Commander is responsible for direction
8 and supervision of emergency responders during an incident resulting in implementation of the
9 RCRA Contingency Plan. The Incident Commander will either be a member of the WIPP Fire
10 Department or, for security-related incidents, the WIPP Protective Force.

11 Emergency Services Technician (EST)/Fire Protection Technician (FPT)—Regular employee
12 whose job is that of full-time emergency responder. During non-emergency conditions, the
13 EST/FPT inspects facility fire suppression systems and emergency equipment. The EST/FPT
14 completes specific sections of the “WIPP Hazardous Material Incident Report.” Additional
15 technical personnel complete identified sections of the report.

16 Fire Brigade—The fire brigade is a team of five personnel who respond to site emergencies.
17 The team consists of an Incident Commander and four fire fighters. The fire fighters are trained
18 in accordance with NFPA Standards for Industrial Fire Brigades (Fire Brigades that perform both
19 advanced exterior and interior structural fire fighting).

20 First Line Initial Response Team (FLIRT)—Supplemental primary responders in the event of a
21 general underground emergency for medical and hazardous material response. The FLIRT also
22 provides backup support for the ERT in the event of a general surface facility emergency. FLIRT
23 members are part of the WIPP Supplemental Emergency Response Program.

24 Mine Rescue Team (MRT)— The MRT is responsible for emergency rescue and recovery of
25 trapped or missing personnel in the underground, conducting mine facility assessments, and
26 underground firefighting once the underground has been evacuated and only if needed to
27 rescue unaccounted personnel. Supplemental group responsible for underground reentry and
28 rescue after an emergency evacuation. The MRT responds in accordance with 30 CFR Part 49
29 requirements. MRT members are part of the WIPP Supplemental Emergency Response
30 Program.

31 Office Warden—An individual assigned responsibility for assuring that personnel are evacuated
32 from his/her assigned area or building during evacuations. Office Wardens maintain a list of all
33 personnel in their specific area. This list is compared with the physical presence of personnel
34 who assemble at the staging areas. The Office Wardens report area accountability to the
35 ACOWs.

36 Emergency Operations Center (EOC) Staff—The EOC consists of a minimum staff of three MOC
37 management positions (the Crisis Manager, a Safety Representative and an Operations
38 Representative) to activate the EOC. The full EOC Staff includes the Crisis Manager, the
39 Deputy Crisis Manager, a Safety Representative, an Operations Representative and the EOC
40 Coordinator. Additional technical and logistics personnel will provide support as necessary. The
41 EOC is activated by the FSM. Upon activation, the EOC supports the RCRA Emergency
42 Coordinator and Incident Commander with emergency management decision-making and
43 associated notifications. Since EOC staff are performing performs duties similar to their normal

job functions during an emergency response and ~~providing~~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 and ERT members.

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 Attachment F, Personnel Training; Attachment F1, RCRA Hazardous Waste Management and Emergency Response Job Titles and Descriptions; and Attachment F2, Training Course and Qualification Card Outlines.

D-3 ~~Implementation~~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 20.4.1.500 NMAC (incorporating 40 CFR §264.51(b)).

There may be situations which 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.

~~The provisions of this Contingency Plan will be implemented immediately whenever there is an emergency event (e.g., a fire, an explosion, or a natural occurrence that involves or threatens hazardous or TRU mixed wastes or a release of hazardous substances, hazardous materials, or hazardous wastes) 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 20.4.1.500 NMAC (incorporating 40 CFR §264.51(b)). The following information is utilized for categorization of events to determine implementation of the Contingency Plan in accordance with 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 the Hazardous Waste Staging Areas 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 underground that results in immediate personnel evacuation or prevents normal personnel access to the underground

For any fire which 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 the Hazardous Waste Staging Areas which threatens to involve site-generated hazardous waste
- If an explosion occurs within or near the permitted HWMUs which 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 which 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

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

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

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

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

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

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

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

21 • Other Occurrences

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

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

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

33 1. Medical Emergencies (does not implement the Contingency Plan)

34 2. Non-emergency (does not implement the Contingency Plan)

35 a. Fire already out, did not involve any hazardous materials.

~~b. Spill or release involved materials excluded according to the SARA Title III, Statute 42 U.S.C. 11021 (e). Such as:~~

~~1) Any substance present in the same form and concentration as product packaged for distribution and use by the general public. (Example: Cleaning solutions)~~

~~2) Any substance to the extent it is used in a laboratory under the direct supervision of a technically qualified individual.~~

~~3) Petroleum, including crude oil or any fraction thereof, which is not otherwise specifically listed or designated as a hazardous substance by Comprehensive Environmental Response, Compensation and Liability Act (**CERCLA**).~~

~~3. Incident Level I: According to the NFPA 471, Responding to Hazardous Materials Incidents (See Table D-3). If the product(s) involved in the fire, explosion, spill or leakage meets the following criteria, it will be classified as a Level I incident and does not implement the Contingency Plan.~~

~~a. The product does not require a U.S. Department of Transportation (**DOT**) placard, is a NFPA listed 0 or 1 for all categories, or is Other Regulated Materials A, B, C, or D.~~

~~b. The fire is under control and the reactivity rating of the material is less than a rating 2, indicating a low potential for subsequent explosion as the hazardous material can be considered normally stable.~~

~~c. There was no release or the release can be confined with readily available resources.~~

~~d. There is no life-threatening situation.~~

~~e. There is no potential environmental impact.~~

~~4. Incident Level II: According to NFPA 471, Responding to Hazardous Materials Incidents, (See Table D-3). If the product(s) involved in the fire, explosion, spill or leakage meets the following criteria, it will be classified as a Level II incident and the Contingency Plan will be implemented by the RCRA Emergency Coordinator.~~

~~a. The product requires a DOT placard, is an NFPA 2 for any categories, or is Environmental Protection Agency (**EPA**) regulated waste (Site-specific: Table D-1 and TRU mixed waste) AND~~

~~b. The incident involves multiple packages.~~

~~c. There is potential for the fire to spread since the hazardous material's flammability level (rating 2) is below 200 degrees Fahrenheit, or the reactivity (rating 2) indicates that violent chemical changes are possible and thus may be explosive.~~

~~d. The release may not be controllable without special resources.~~

~~e. The incident requires evacuation of a limited area for life safety.~~

~~f. The potential for environmental impact is limited to soil and air within incident boundaries.~~

~~g. The container is damaged but able to contain the contents to allow handling or transfer of product.~~

~~5. Incident Level III: According to NFPA 471, Responding to Hazardous Materials Incidents (See Table D-3). If the product(s) involved in the fire, explosion, spill or leakage meet the following criteria, it will be classified as a Level III incident and the Contingency Plan will be implemented by the RCRA Emergency Coordinator.~~

~~a. The product is a poison A (gas), an explosive A/B, organic peroxide, flammable solid, material that is dangerous when wet, chlorine, fluorine, anhydrous ammonia, NFPA 3 and 4 for any categories including special hazards, EPA extremely hazardous substances, and cryogenics.~~

~~b. The site-specific container size for this incident level will be a tank truck.~~

~~c. There is potential for the fire to spread since the hazardous material's flammability level (rating 3 or 4) is below 100 degrees Fahrenheit, or the reactivity (rating 3 or 4) indicates that the material may explode.~~

~~d. The release may not be controlled even with special resources.~~

~~e. The incident requires mass evacuation of a large area for life safety.~~

~~f. Even though the NFPA guidelines for this incident level indicate that the potential for environmental impact is severe, due to the site engineering controls, the impact is contained within the HWMUs.~~

~~g. The container is damaged to such an extent that catastrophic rupture is possible.~~

~~The above categories include fire situations, weather conditions, natural phenomena, and explosions which will have to be evaluated to make an incident level determination. A Level II (potential threat to human health in localized area, potential for moderate on-site environmental impact) or Level III (potential threat to human health in a larger area, potential for severe environmental impact) incident by definition is considered to be a potential threat to human health or the environment and, therefore, is considered to be an emergency requiring activation of the Contingency Plan.~~

D-4 Emergency Response Method

Methods that describe implementation of how and when the WIPP Contingency Plan will be implemented RCRA Contingency Plan cover the following six11 implementation areas:

1. Immediate Notifications (Section D-4a)
2. Identification of hazardous Released Mmaterials and Assessment of Extent of Emergency (Section D-4b)

3. Assessment of the ~~nature and extent of the emergency~~Potential Hazards (Section D-4c)

4. ~~Post-Assessment Notifications (Section D-4d)~~

~~5. Control, and e~~Containment, and correction of the ~~e~~Emergency (Section D-4ed)

~~6. Prevention of recurrence or spread of fires, explosions, or releases~~ Post-Emergency Activities (Section D-4e)

~~6. Management and containment of released material and waste (Section D-4f)~~

~~7. Incompatible waste (Section D-4g)~~

~~8. Post-emergency facility and equipment maintenance and reporting (Section D-4h)~~

~~9. Container spills and leakage (Section D-4i)~~

~~10. Tank spills and leakage (Section D-4j)~~

~~11. Surface impoundment spills and leakage (Section D-4k)~~

D-4a Immediate Notifications

Notification requirements in the event of ~~an emergency at a RCRA hazardous waste management facility implementation of the RCRA Contingency Plan~~ are defined by 20.4.1.500 NMAC (incorporating 40 CFR §§264.56(a)) ~~and (d)). Necessary notifications in case of an emergency at the WIPP facility are described in this section (Figure D-4a).~~ 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 following relevant information, as appropriate: Facility personnel are trained in the process for notifying the CMRO as part of General Employee Training (GET).

~~Name and telephone number of the caller~~

~~Location of the incident and the caller~~

~~Time and type of incident~~

~~Severity of the incident~~

~~Magnitude of the incident~~

~~Cause of the incident~~

~~Assistance needed to deal with or control the incident~~

~~Areas or personnel affected by the incident~~

In addition to receiving incident reports from facility personnel, the CMRO continuously monitors (24 hours a day) the status of ~~mechanical, electrical, and/or radiological conditions at selected points on the site, both above and below ground. Alarms to indicate abnormal conditions are located throughout the WIPP facility. The alarm(s) (e.g., fire, radiation) may be the first notification of an emergency situation received by the CMRO. The CMRO monitors alarms, takes telephone calls and radio messages, and initiates outgoing calls to emergency staff, and outside agencies 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.

~~Once notified, t~~The RCRA Emergency Coordinator ensures that the emergency responders, including the WIPP Fire Department, the ERT, 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 ~~assumes responsibility for the management of activities related to the assessment, abatement, and/or cleanup of the incident.~~

~~A RCRA Emergency Coordinator is on-site at all times and, therefore, can be reached at any time via a two-way radio or over the public address (PA) and plectrons on-site. If the RCRA Emergency Coordinator is unavailable or unable to perform these duties, a qualified alternate RCRA Emergency Coordinator is available.~~

~~The EST/FPT is also notified in case of fire, explosion, or release. The RCRA Emergency Coordinator determines if supplemental emergency responders are necessary. Notification of the ERT (surface) is made by using the ERT pagers and/or the public announcement system and/or other equivalent communication devices (e.g., phone, pager, cellular phone). Notification of the FLIRT is by using the Mine Page Phone System. If the MRT is needed the RCRA Emergency Coordinator will instruct the CMRO to use the PA system or other communication devices (e.g., phone, pager, cellular phone) to make an announcement for the MRT to assemble in the Mine Rescue Room, located in a predetermined location.~~

~~Off-shift personnel may be notified using the on-call list, which is updated weekly by the Permittees. The FSM/CMRO, each individual on the on-call list, and WIPP Security receive copies of the on-call list. The CMRO may direct Security to make the notifications.~~

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 151.1C, Comprehensive Emergency Management System; the U.S. Mine Safety and Health Administration (**MSHA**); NMAC; Comprehensive Environmental Response, Compensation, and Liability Act; Chapter 74, Article 4B, New Mexico Statutes Annotated 1978; and the New Mexico Emergency Management Act; ~~and agreements between the Permittees and local authorities (Section D-6) for emergencies throughout the WIPP facility.~~

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

~~After notification by the CMRO, the EST/FPT shall immediately investigate to determine pertinent information relevant to the actual or potential threat posed to human health or the environment. The information will include the location of release, type, and quantity of spilled or released material (or potential for release due to fire, explosion, weather conditions, or other naturally occurring phenomena), source, areal extent, and date and time of release. The EST/FPT shall provide information for classification of the incident, according to the emergency response guidelines, to the RCRA Emergency Coordinator. The RCRA Emergency Coordinator then classifies the incident after evaluation of all pertinent information. This classification 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).~~

When the RCRA Emergency Coordinator determines that an Incident Level II or III has occurred, the Contingency Plan is implemented. Depending on the emergency The RCRA Emergency Coordinator then may choose to activate the EOC may be activated for additional support (Figure D-4). If the RCRA Emergency Coordinator determines that due to extenuating circumstances the potential to upgrade to an incident Level II or III exists, the RCRA Emergency Coordinator also may activate the EOC. 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 the RCRA Emergency Coordinator in the mitigation of the incident with the use of appropriate communications equipment and technical expertise from available resources any WIPP organization (see Section D-4c). During the emergency, the RCRA Emergency Coordinator will remain in contact with and advise the EOC of the known hazards.

The EOC staff will assesses opportunities for coordination and the use of mutual-aid agreements with local outside agencies making additional emergency personnel and equipment available (Section D-76), as well as the use of specialized response teams available through various State and Federal agencies. AsBecause the WIPP facility is a DOE-owned facility, the PermitteesWIPP facility may also use the resources available from the National Response Framework.Federal Response Plan, signed by 27 Federal departments and agencies in April 1987, and developed under the authorities of the Earthquake Hazards Reduction Act of 1977 (42 U.S.C. 7701 et seq.) and amended by the Stafford Disaster Relief Act of 1988. Most resources are available within 24 hours. The WIPP facility maintains its own emergency response capabilities on-site. In addition to the supplemental emergency responders, radiological control technicians, environmental sampling technicians, wildlife biologists, and various other technical experts are available for use on an as-needed basis.

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

Procedures for immediately notifying facility personnel of emergencies depend upon the type of emergency. Methods of notification are as follows:

- Local Fire Alarms

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

- Surface Evacuation Signal

The evacuation signal is a yelp² tone and is manually activated by the CMRO when needed. The CMRO shall follow the evacuation signal with verbal instructions and ensure the Site Notification System (i.e., the electron) 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 proceed to the nearest egress hoist station (Section D-7b) to be apprised of the nature of the emergency and the evacuation route to take follow escape routes to egress hoist stations.

² The yelp tone increases from 500 to 1,000 hertz and drops to 500 hertz.

Underground personnel are trained to report to the underground assembly areas and await further instruction if all power fails or if ventilation stops. If evacuation of underground personnel is required, this will be done using the backup electric generators and in accordance with the applicable requirements of MSHA.

~~Contingency Evacuation Notification~~

~~If the primary warning system consisting of alarms and signals fails to operate when activated (as in a total power outage and failure of the back-up power systems), WIPP Security will be notified by the CMRO to initiate the contingency evacuation plan. In this event Security officers will alert personnel to evacuate the area and will check trailers, if possible, to ensure that personnel have been alerted/evacuated.~~

WIPP facility personnel are trained and given instruction during ~~General Employee Training~~ **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-4a(3) — Notification of Local, State, and Federal Authorities~~

~~If it is determined that the facility has had a fire, an explosion, a spill, or a release of hazardous waste or hazardous waste constituents (included in 20.4.1.200 NMAC (incorporating 40 CFR § 261)) in the miscellaneous unit or TRU mixed waste handling areas, or an emergency resulting in a release of a hazardous substance (included in 40 CFR §302.4 and §302.6 or the New Mexico Emergency Management Act, §74-4B-3 and §74-4B-5) that could threaten human health or the environment outside the facility, the RCRA Emergency Coordinator, after consultation with the DOE as the owner of the facility, will assure that local authorities are notified by telephone and/or radio, including:~~

~~Carlsbad Police Department (telephone number: [575] 885-2111) (or 911)
Carlsbad Fire Department (telephone number: [575] 885-2111) (or 911)
Eddy County Sheriff (telephone number: [575] 887-7551)
Hobbs Fire Department (telephone number: [575] 397-9265)~~

~~After local authorities are notified, the RCRA Emergency Coordinator will ensure notification of the following:~~

~~New Mexico Environment Department (**NMED**)
Department of Public Safety
24-Hour Emergency Reporting Telephone Number: (505) 827-9329
FAX number: (505) 827-9368~~

~~Department of Public Safety WIPP Coordinator
Telephone Number: (505) 827-9224
FAX number: (505) 829-3434~~

~~Hazardous Materials Emergency Response, Chemical Safety Office, Department of
Public Safety, State Emergency Response Commission
Telephone number: (505) 476-9684
FAX number: (505) 476-9695~~

~~National Response Center
Telephone number: 1-800-424-8802
FAX number: (202) 479-7181~~

~~Local Emergency Planning Committee
Telephone number: (575) 885-3584
Fax number: (575) 628-3973~~

~~The first notification of public safety and regulatory agencies will include the following:~~

~~The name and address of the facility and the name and phone number of the reporter~~

~~The type of incident (fire, explosion, or release)~~

~~The date and time of the incident~~

~~The type and quantity of material(s) involved, to the extent known~~

~~The exact location of the incident~~

~~The source of the incident~~

~~The extent of injuries, if any~~

~~Possible hazards to human health and the environment (air, soil, water, wildlife, etc.)
outside the facility~~

~~The name, address, and telephone number of the party in charge of or responsible for
the facility or activity associated with the incident~~

~~The name and the phone number of the RCRA Emergency Coordinator~~

~~The identity of any surface and/or groundwater involved or threatened and the extent
of actual and potential water pollution~~

~~The steps being taken or proposed to contain and clean up the material involved in the incident~~

~~The RCRA Emergency Coordinator will also be available to advise the appropriate local, State,
or Federal officials on whether or not local areas should be evacuated.~~

~~D-4a(4) — Notification of the General Public~~

~~Immediate notification of the general public through the public safety and emergency agencies
listed above will be made by, or under the direction of, the RCRA Emergency Coordinator
following an evaluation to determine if local adjacent areas need to be evacuated. This
evaluation will be made in consultation with the DOE who, as the owner of the facility, has
management responsibility for the land withdrawal area. DOE policy is to provide accurate and~~

~~timely information to the public by the most expeditious means possible concerning emergency situations at the WIPP site that may affect off-site personnel, public health and safety, and/or the environment. A DOE (DOE) Management representative is always on-call. This person is available by pager or telephone 24 hours a day.~~

~~A Hazards Assessment was conducted, which indicated no need for protective actions or emergency action levels, as defined by the Permittees, for the facility. Therefore, no procedures are in place for evacuation of the public. Procedures are in place for notification of the public by radio, television, and newspapers for news items which might include notification of on-site emergency situations. These procedures include a Public Affairs Coordinator in the EOC who writes and transmits press releases to the DOE office, where formal press conferences are conducted.~~

D-4b Identification of ~~Hazardous~~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 20.4.1.500 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. The identification of hazardous wastes, hazardous waste constituents, or hazardous materials involved in a fire, an explosion, or a release to the environment is a necessary part of the assessment of an incident, as described in 20.4.1.500 NMAC (incorporating 40 CFR §264.56(b)). RCRA hazardous waste and hazardous substances and materials listed in 40 CFR §302.4 and §302.6 or New Mexico Emergency Management Act, §74-4B-3 and §74-4B-5 and, involved in any release at the WIPP facility will be identified. The identification of likely hazardous materials at any location is enhanced because hazardous materials and hazardous waste are only stored or managed in specified locations throughout the WIPP facility. An attempt will be made to identify products involved by occupancy/location, container shape, markings/color, placards/labels, United Nations/North America/Product Identification Number, on-site technical experts, or field sampling. Further, the ES&H department maintains an updated inventory of hazardous materials/substances that are brought on-site, and a master MSDS listing in the Safety and Emergency Services Facility, Building 452.~~

Sources of information available to identify the hazardous wastes, ~~substances, or materials~~ 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 (MSDSs) for hazardous materials~~s~~ 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 ~~H~~azardous ~~W~~aste ~~S~~taging ~~A~~reas, satellite staging 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 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 20.4.1.500 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

~~TRU-mixed waste received by the WIPP facility during the Disposal Phase will be characterized for hazardous constituents prior to receipt, and acceptable knowledge will be used to characterize derived waste prior to emplacement.~~

~~Information required for identifying TRU-mixed hazardous constituents in case of an incident is readily available through the WWIS and the waste acceptance records. Waste accepted at WIPP is already known to be compatible with all materials used to respond to an emergency. All non-TRU mixed waste materials received on site, other than those listed in Table D-1, are in such small quantities that no reaction could develop which would trigger an Incident Level II or III response.~~

~~The RCRA Emergency Coordinator will have access to the WWIS through Operations, or through the Facility Shift Manager's Office.~~

~~The RCRA Emergency Coordinator has access to the inventory lists and MSDSs in the Safety and Emergency Services Facility at all times.~~

D-4c Assessment of the ~~Nature and Extent of the Emergency~~Potential Hazards

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

1 responsible for identifying and responding to immediate and potential hazards, using the
2 services of trained personnel.

3 ~~Once the required notifications have been made, the RCRA Emergency Coordinator will ensure~~
4 ~~that the identity, exact source, amount, and areal extent of any released materials are~~
5 ~~determined, as required under 20.4.1.500 NMAC (incorporating 40 CFR §264.56(b)). The~~
6 ~~RCRA Emergency Coordinator will determine whether the occurrence constitutes an emergency~~
7 ~~based on knowledge of the area and access to the waste identification/characterization~~
8 ~~information described in Section D-4b. An emergency will require response by only trained~~
9 ~~emergency response personnel. The RCRA Emergency Coordinator will be responsible for~~
10 ~~responding to immediate and potential hazards, using the services of trained personnel to~~
11 ~~determine: 1) the identity of hazardous wastes, hazardous waste constituents, and other~~
12 ~~hazardous materials involved in a release, as described in Section D-4b; 2) whether or not a~~
13 ~~release involved a reportable quantity of a hazardous substance; 3) the areal extent of a~~
14 ~~release; 4) the exact source of a release; and 5) the potential hazards to human health or to the~~
15 ~~environment.~~

16 After the materials involved in an emergency are identified, the specific information (e.g., on the
17 associated hazards, appropriate personal protective equipment (PPE), decontamination), etc.,
18 will may be obtained from MSDSs and from appropriate chemical reference materials at the
19 same location. These information sources ~~may be accessed by~~ are available to the RCRA
20 Emergency Coordinator or may be accessed through several WIPP facility organizations.

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

26 ~~The emergency assessment requires determination of hazards involving evaluation of several~~
27 ~~criteria, including:~~

- 28 ~~• Exposure: magnitude of actual or potential exposure to employees, the general public,~~
29 ~~and the environment; duration of human and environmental exposure; pathways of~~
30 ~~exposure~~
- 31 ~~• Toxicity: types of adverse health or environmental effects associated with exposures; the~~
32 ~~relationship between the magnitude of exposure and adverse effects~~
- 33 ~~• Reactivity: hazardous materials or hazardous wastes, which are not TRU mixed wastes,~~
34 ~~involved in an incident will be assessed for reactivity through accessing the MSDSs for~~
35 ~~the affected material and the recommended method(s) for managing such waste~~
- 36 ~~• Uncertainties: considerations for undeterminable or future exposures; uncertain or~~
37 ~~unknown health effects, including future health effects~~

38 D-4d Post-Assessment Notifications

39 Upon RCRA Contingency Plan implementation, post-assessment notifications may be
40 necessary in order to satisfy 20.4.1.500 NMAC (incorporating 40 CFR §264.56(d)). If it has been

1 determined that the facility has had a fire, an explosion, or a release of hazardous waste or
2 hazardous waste constituents that could threaten human health or the environment outside the
3 facility (i.e., outside the Land Withdrawal Boundary), the RCRA Emergency Coordinator, after
4 consultation with the DOE as the owner of the facility, will ensure that the appropriate local
5 authorities are immediately notified by telephone and/or radio in the event that evacuation is
6 needed. The following notifications satisfy the requirements of 20.4.1.500 NMAC (incorporating
7 40 CFR §264.56(d)(1)):

- 8 • New Mexico Department of Homeland Security and Emergency Management (telephone
9 number: (505) 476-9635)
- 10
- 11 • Eddy County via the Regional Emergency Dispatch Authority (telephone number: (575)
12 616-7155)
- 13
- 14 • Lea County via the Regional Emergency Dispatch Authority (telephone number: (575)
15 397-9265)

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

18 After local authorities are notified, the RCRA Emergency Coordinator must immediately notify
19 either the government official designated as the on-scene coordinator for that geographical
20 area, or the National Response Center. For the purposes of the *RCRA Contingency Plan*, the
21 following notifications satisfy the requirements of 20.4.1.500 NMAC (incorporating 40 CFR
22 §264.56(d)(2)):

- 23 • New Mexico Environment Department (NMED)
24 Department of Public Safety
25 24-Hour Emergency Reporting Telephone Number: (505) 827-9329
26 FAX number: (505) 827-9368
- 27
- 28 • National Response Center
29 Telephone number: 1-800-424-8802
30 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-e4d Control, and Containment, and Correction of the Emergency

The ~~WIPP facility~~ 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 20.4.1.500 NMAC (incorporating 40 CFR §264.56 (e) and (f)). ~~The WIPP Emergency Response Standard operating procedures and guides utilize the incident mitigation guidelines in NFPA 471, Responding to Hazardous Materials Incidents, with~~ are used to implement initial response measures with priority being ~~on~~ control of the emergency, and those actions necessary to ensure confinement and containment ~~(the first line of defense)~~ in the early, critical stages of a spill or leak. The RCRA Emergency Coordinator, in conjunction with the Incident Commander, is responsible for ~~stopping~~ implementing the following measures:

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

16 ~~processes and operations when necessary, and removing or isolating containers. No operation~~
17 ~~that has been shut down in response to the incident will be restarted until authorized by the~~
18 ~~RCRA Emergency Coordinator. If a release occurs that involves radioactivity, the RCRA~~
19 ~~Emergency Coordinator actions will be consistent with radiation control policies and~~
20 ~~practices. TRU mixed waste will remain within the WHB Unit, the Parking Area Unit, and the~~
21 ~~underground HWDU.~~

22 ~~D-4d(1) — All Emergencies~~

23 The ~~WIPP Emergency Response standard operating~~ procedures for emergency response may
24 include, but are not limited to, the following actions appropriate for control of releases:

- 25 1. Isolating~~ing~~ the area from unauthorized ~~personentry~~ by fences, barricades, warning
26 signs, or other security and site control precautions. Isolation and evacuation distances
27 vary, depending upon the chemical/product, fire, and weather situations.
- 28 2. ~~Identify the chemical/product according to Section D-4b.~~
- 29 23. Establishing dDrainage controls.
- 30 34. Stabilizingation of physical controls (such as dikes or impoundment[s]).
- 31 45. Capping~~of~~ contaminated soils to reduce migration.
- 32 56. Using chemicals and other materials to retard the spread of the release or to mitigate
33 its effects.

67. ~~Excavating, consolidating, or removing~~ contaminated soils.

78. ~~Removing drums, barrels, or tanks where it will~~ 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. ~~If operations continue, personnel normally assigned to these tasks will continue.~~

~~Both n~~Natural and/or synthetic methods will be employed to limit the releases of hazardous materials wastes or hazardous waste constituents so that effective recovery and treatment can be accomplished with ~~minimal~~ additional risk to human health or the environment. ~~A combination of the above methods to achieve protection of human health and the environment, with emphasis on two basic methods for mitigation of hazardous materials incidents - Physical and Chemical (Tables D-4, D-5) mitigation, will be used.~~

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).

aA. Absorption (e.g., absorbent sheets; spill control bucket materials specifically for solvents, neutralization, or acids/caustics; and absorbent socks for general liquids or oils) is the process in which materials hold liquids through the process of wetting. Absorption is accompanied by an increase in the volume of the sorbate/sorbent system through the process of swelling. Some of the materials utilized in response to Level I incidents or Level II incidents involving liquids will be absorbent sheets of polyolefin-type fibers, spill control bucket materials (specifically for solvents, neutralization, or for acids/caustics), and absorbent socks for general liquids or oils.

B. ~~Covering refers to a temporary form of mitigation for radioactive incidents that will be utilized in response to Level II or Level III incidents involving CH TRU mixed waste. These could include absorbent sheets, plastic, or actual ambulance blankets.~~

bC. Dikes or Diversions ~~refer to the use of physical barriers to prevent or reduce the quantity of liquid flowing into the environment. Dikes may be soil or other barriers temporarily utilized to hold back the spill or leak. Diversion refers to the methods used to physically change the direction of the flow of the liquid. A(e.g., absorbent socks or earth) may be utilized as dikes or diversions for all levels of incidents.~~

cD. Overpacking ~~is accomplished by the use of an oversized container. Overpack containers will be compatible with the hazards of the materials involved.~~

dE. Plug and Patch ~~refers to the use of compatible plugs and patches to reduce or temporarily stop the flow of materials from small holes, rips, tears, or gashes in containers. A Series "A" hazardous response kit containing nonsparking~~

equipment to control and plug leaks may be utilized for response to all levels of incidents.

~~eF. Transfers from leaking container to new container refers to the process of moving a liquid, gas, or some forms of solids, either manually or by pump, from a leaking or damaged container. Scoops, shovels, jugs, and pails as well as drum transfer pumps for chemical and petroleum transfer are utilized as needed in response to all levels of incidents.~~

~~fG. Vapor Suppression refers to the reduction or elimination of vapors emanating from a spilled or released material through the most efficient method or application of specially designed agents such as an (e.g., aqueous foam blanket).~~

2. Chemical ~~m~~Methods of ~~m~~Mitigation may include the following:

~~aA. Neutralization is the process of applying acids or bases to a spill to form a neutral salt. The application of solids for neutralizing can often result in confinement of the spilled material. This would include using the neutralizing adsorbents.~~

~~bB. Solidification is the process whereby a hazardous liquid is added to material such as an absorbent so that a solid material results.~~

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.

~~The established procedures are based upon the incident level and a graded approach for nonradioactive or CH TRU waste emergencies and initiated to:~~

- ~~1. Minimize contamination or contact (through PPE, etc.)~~
- ~~2. Limit migration of contaminants~~
- ~~3. Properly dispose of contaminated materials~~

~~For RH TRU mixed waste that is not managed in shielded containers, the detection of contamination on or damage to a RH TRU mixed waste canister or a facility canister may occur outside the Hot Cell during cask to cask transfer of the canister or during loading of the Shielded Insert in the Transfer Cell. When such contamination or damage is found, the Permittees have the option to decontaminate or return the canister to the generator/storage site or another site for remediation. In the case of a damaged facility canister, the Shielded Insert may be used as an overpack to facilitate further management. Contamination may also be detected within the Hot Cell during the unloading of the CNS-10-160B shipping cask. In this case, the Permittees may decontaminate the 55-gallon drums or return them to the generator/storage site or another site for remediation. Spills or releases that occur within the RH Complex or the underground as the result of RH TRU mixed waste handling will be mitigated by using appropriate measures which may include the items above.~~

D-4e(1)d(2) 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: The incident level emergency response identified in Section D-3 includes fire/explosion potential. WIPP fire response includes incipient, exterior structure fires, and internal structure fires. The RCRA Emergency Coordinator can implement the Memoranda of Understanding (MOU) for additional support.

The first option in mine fire response will be to apply mechanical methods to stop fires (e.g., cut electrical power). The last option in mine fire response will be to reconfigure ventilation using control doors associated with the underground ventilation system. The following actions are implemented in the event of a fire:

1. ~~1. All emergency response personnel at an incident will wear appropriate PPE.~~

2. ~~2. Only fire extinguishing materials that are compatible with the materials involved in the fire will be used to extinguish fires. Compatibility with materials involved in a fire are determined by pre-fire plans, Emergency Response Guide Book (DOT, 1993), DOT labeling, and site-specific knowledge of the emergency response personnel. Water and dry chemical materials have been determined to be compatible with all components of the TRU mixed waste. Pre-fire plans for the WHB are included in Figures D-10 and D-11.~~

~~Fires in areas of the WHB Unit should not propagate, due to limited amount of combustibles, and the concrete and steel construction of the structures. Administrative controls, such as landlord inspections and EST/FPT inspections, help to insure good housekeeping is maintained. Combustible material and TRU mixed waste will be isolated, if possible. Firewater drain trenches collect the water and channel it into a sump. In areas not adjacent to the trenches, portable absorbent dikes (pigs) will be used to retain as much as possible, until it can be transferred to containers or sampled and analyzed for hazardous constituents.~~

~~3. If the fire spreads or increases in intensity, personnel will be directed to evacuate.~~

14. The RCRA Emergency Coordinator will remain in contact with responding personnel to advise them 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 have been determined to be compatible with all components of the TRU mixed waste.

45. 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 before being discharged to evaporation ponds. ~~There are two ponds south of the security fence, opposite the WHB Unit, that will collect drainage~~

1 from the parking area. The rest of the site, inside the security fence, drains to the large
2 pond to the west. Samples will be taken from these ponds, after the emergency has
3 been abated, to determine any cleanup requirements. NMED will approve any
4 procedures associated with the sampling and analysis of the ponds.

5 ~~6. The RCRA Emergency Coordinator maintains overall control of the emergency and~~
6 ~~may accept and evaluate the advice of WIPP facility personnel and emergency~~
7 ~~response organization members, but retains overall responsibility.~~

8 57. The RCRA Emergency Coordinator will ensure that measures are taken to shut down
9 operational units (e.g., process equipment and ventilation equipment) that have been
10 affected directly or indirectly by the fire.~~The RCRA Emergency Coordinator will be in~~
11 ~~overall control of WIPP facility emergency response efforts until the emergency is~~
12 ~~terminated.~~

13 ~~8. Materials involved in a fire can be identified in the following ways:~~

14 According to Section D-4b.

15 If the contents of the waste container cannot be determined based on its
16 location and the label is destroyed by fire, the material will be treated as an
17 unknown, evaluated for radiological contamination, and analyzed according to
18 methods in the EPA's "Test Methods for Evaluating Solid Waste
19 Physical/Chemical Methods" (**SW-846**), Third Edition, after the fire has been
20 extinguished.

21 Airborne radioactivity samples may be obtained during a fire involving
22 radioactive materials, using portable and fixed air samplers. Response
23 personnel will be adequately protected from airborne radioactivity by their PPE
24 required for fire response.

25 ~~9. Only materials compatible with the waste may be used for fire response.~~

26 ~~10. When cleanup has proceeded to the point of finding no radionuclide activity, then the~~
27 ~~"swipe" can be sent for analysis for hazardous constituents. The use of these~~
28 ~~confirmation analyses is as follows:~~

29 For waste containers, once radiologically clean and free of any visible
30 evidence of hazardous waste spills on the container, it will be placed in the
31 underground without further action.

32 For area contamination, once the area is cleaned up and is shown to be
33 radiologically clean, it will be sampled for the presence of hazardous waste
34 residues (for further information see Section D-4d, Emergency Termination
35 Procedures).

36 614. Fire suppression materials used in response to incidents will be retained on-
37 scene, where an evaluation will be performed to determine appropriate recovery and
38 disposal methods.

7. Upon underground evacuation due to a fire in the underground that involves or threatens to involve TRU mixed waste, a response plan will be developed depending on the status of the fire. The plan may include ventilation control, barrier erection, and waiting for the fire to self-extinguish or implement active ventilation.

D-4e(2)d(3) 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:The following actions will be implemented in the event that an explosion that involves or threatens hazardous or TRU mixed waste or hazardous materials has occurred:

1. The RCRA Emergency Coordinator will remain in contact with and advise the Incident Commander of the known hazards.~~The area will be evacuated immediately.~~

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.~~The CMRO will immediately notify the appropriate emergency response personnel and the RCRA Emergency Coordinator about the explosion.~~

~~3. Injured personnel will be treated and transported as necessary.~~

~~4. The RCRA Emergency Coordinator will remain in contact with responding personnel to advise them of the known hazards involved and the degree and location of the explosion and associated fires.~~

~~5. As required by Permit Part 2, Section 2.12.4 and Attachment D, Section D-2, the RCRA Emergency Coordinator has the authority to commit the necessary resources to implement the RCRA Contingency Plan. The RCRA Emergency Coordinator may accept and evaluate the advice of WIPP facility personnel and emergency response organization members with regard to the selection of methods and tactics of response, but retains the overall responsibility to commit the resources necessary to implement the RCRA Contingency Plan.~~

~~6. The RCRA Emergency Coordinator will be in overall control of WIPP facility emergency response efforts until the emergency is terminated.~~

~~7. When cleanup has proceeded to the point of finding no radionuclide activity, then samples may be taken for chemical analysis if there is visible evidence to suspect additional hazardous waste residues. Chemical residues on floor surfaces resulting from a hazardous waste explosion will be evaluated, sampled, analyzed (if required), isolated, and returned to appropriate containers, and surfaces will be cleaned using appropriate cleaners.~~

38. The RCRA Emergency Coordinator will ensure measures are taken to~~may~~ shut down operational units (e.g., process equipment and ventilation equipment) that have been affected directly or indirectly by the explosion. ~~Once the areas have been determined safe for reentry, processes may be reactivated.~~

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-4d(4) — Spills~~

~~Protection of response personnel at a hazardous material incident is paramount. The primary methods to protect personnel are time, distance, and shielding. If a Level II or III incident exists, the RCRA Emergency Coordinator will implement the following actions:~~

~~1. The immediate area will be evacuated.~~

~~2. The RCRA Emergency Coordinator will review facility records to determine the identity and chemical nature of released material.~~

~~3. Entry team procedures will be utilized, with special attention to the following:~~

~~Buddy system
Appropriate PPE
Backup rescue team
Supplemental communication signals (hand signals and hand-light signals)
Monitoring equipment
Exposure time limitations~~

~~4. If possible, the source of the release will be secured.~~

~~5. A dike to contain runoff may be built.~~

~~6. Emergency responders will ensure that storm drains and/or sewers do not receive potentially hazardous runoff or spilled material. They may build dikes around storm drains to control discharge.~~

~~7. Released wastes may be collected and contained by stabilizing or neutralizing the spilled material, as appropriate, pouring an absorbent over the spilled material, and sweeping or shoveling the absorbed material into drums or other appropriate containers. The absorbents have been determined to be compatible with all components of the TRU mixed waste.~~

~~8. No TRU mixed waste that may be incompatible with the released material will be managed in the affected area until cleanup procedures are complete.~~

~~9. The RCRA Emergency Coordinator will direct spill control, decontamination, and termination procedures described below.~~

~~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~~

1 material, or 3) the spill results in toxic fumes, the RCRA Emergency Coordinator will ensure
2 implementation of measures that may include, but are not limited to, the following actions:

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

19 Releases of TRU Mixed Waste

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

- 23 1. The RCRA Emergency Coordinator will remain in contact with and advise the Incident
24 Commander of the known hazards.
- 25 2. The Incident Commander will maintain overall control of the emergency and may
26 accept and evaluate the advice of WIPP facility personnel and emergency response
27 organization members, but retains overall responsibility until the emergency is
28 terminated.
- 29 3. Prior to the re-entry following an event involving containers that are managed as TRU
30 mixed waste, a Radiological Work Permit (RWP) will be prepared.
- 31 4. During the re-entry phase, the extent of radiological contamination will be determined.
32 This information is used by the RCRA Emergency Coordinator to determine an
33 appropriate course of action to recover the area.
- 34 5. During the recovery phase, the necessary resources to conduct decontamination
35 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 which 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), 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-4d(5) — Decontamination of Personnel

~~Decontamination of personnel with radioactive contamination is the responsibility of the Radiological Control (RC) section. If a person is contaminated with radioactivity during a site evacuation to the staging areas, the contaminated area will be covered before the person can be moved (under escort by RC personnel) to the staging area. The RC personnel will ensure the contaminated person remains segregated from other site personnel while under RC supervision.~~

~~In the event of an emergency that requires immediate evacuation of the area, the contamination can be covered by any method warranted, given the circumstance (e.g., clean clothing wrapped around the area). If the size of the radioactive contamination on the body is small and localized, it can be covered with clothing (e.g., glove, shoe cover, coveralls). If the size of the radioactive contamination on the body is large, it may be covered by dressing the individual in a full set of Anti-Contamination clothing (coveralls, hood, gloves, shoe covers, etc.).~~

1 ~~If time and location permit and the contamination is on the face, it will be decontaminated~~
2 ~~immediately using a cloth moistened with tepid water (and a mild detergent, if necessary). If the~~
3 ~~size of the radioactive contamination on the individual's body is small and localized, it will be~~
4 ~~decontaminated using the same method as for the face, but after the individual has been~~
5 ~~transferred to an area appropriate for conducting decontamination.~~

6 ~~If the individual is transferred to the staging area prior to decontamination, he/she will be~~
7 ~~decontaminated at the staging area using site procedures for personnel decontamination and~~
8 ~~using decontamination supplies and equipment as appropriate for the extent and magnitude of~~
9 ~~the contamination.~~

10 ~~D-4d(6)—Control of Spills or Leaking or Punctured Containers of CH and RH TRU Mixed Waste~~

11 ~~In the event of spills or leaking or punctured containers of CH and RH TRU mixed waste, the~~
12 ~~WIPP responds to three distinct phases: 1) the event, 2) the re-entry, and 3) the recovery.~~

13 ~~During the event, the following immediate actions are completed: 1) stop work, 2) warn others~~
14 ~~(notify CMR), 3) isolate the area, 4) minimize exposure, and 5) close off unfiltered ventilation.~~
15 ~~These actions can take place simultaneously, as long as they are completed before proceeding~~
16 ~~to the re-entry phase.~~

17 ~~CH TRU Mixed Waste~~

18 ~~Prior to the re-entry following an event involving containers that are managed as CH TRU mixed~~
19 ~~waste, a Radiological Work Permit (RWP) is written for personnel to enter with protective~~
20 ~~clothing to assess the conditions, take surveys and samples, and mitigate problems that could~~
21 ~~compound the hazards in the area (cover up spilled material with plastic material sheeting and~~
22 ~~or any approved fixatives such as paint, place equipment in a safe configuration, etc.). During~~
23 ~~the re-entry phase, smears and air sample filters are taken and counted. This information is~~
24 ~~used by cognizant managers, RC personnel, and As Low As Reasonably Achievable (ALARA)~~
25 ~~Committee representatives to determine an appropriate course of action to recover the area. A~~
26 ~~plan to decontaminate and recover affected areas and equipment will be approved with a~~
27 ~~separate RWP written to establish the radiological controls required for the recovery.~~

28 ~~During the recovery phase, the plan will be executed to utilize the necessary resources to~~
29 ~~conduct decontamination and/or overpacking operations as needed. The completion of this~~
30 ~~phase will occur prior to returning the affected area and/or equipment to normal activities. The~~
31 ~~recovery phase will include activities to minimize the spread of contamination to other areas.~~
32 ~~These activities will involve placing the waste material in another container; vacuuming the~~
33 ~~waste material; overpacking or plugging/patching the spilled, leaking, or punctured waste~~
34 ~~container; and/or decontaminating the affected area(s). If an affected surface cannot be~~
35 ~~decontaminated to releasable levels, it may be covered with a fixative coating and established~~
36 ~~as a Fixed Contamination Area to prevent spread of contamination, or it may be removed using~~
37 ~~heavy machinery and tools, packaged in approved waste containers, and emplaced in the~~
38 ~~underground. Every reasonable effort to minimize the amount of derived waste, while providing~~
39 ~~for the health and safety of personnel, will be made.~~

40 ~~Should a breach of a CH TRU mixed waste container occur at the WIPP that results in~~
41 ~~removable contamination exceeding the small area "spot" decontamination levels, the affected~~
42 ~~container(s) (e.g., breached and contaminated) will be placed into an available overpack~~
43 ~~container (e.g., 85-gal drum, SWB, TDOP), except that TDOPs and SLB2s will be~~

decontaminated, repaired/patched in accordance with 49 CFR §173 and §178 (e.g., 49 CFR §173.28), or returned to the generator. The decontamination of equipment and the overpacking of contaminated/damaged waste containers will be performed in the vicinity of the incident. For example, under normal operations CH TRU mixed waste will be handled only in the areas of the WHB Unit. Therefore, it is within these same areas that decontamination and/or overpacking operations would occur. By eliminating the transport of contaminated equipment to other areas for decontamination or overpacking, the risk of spreading contamination is reduced.

Equipment used during a spill cleanup or CH TRU mixed waste overpacking operation could include: cloths, brushes, scoops, absorbents, squeegees, tape, bags, pails, slings, hand tools, and others as needed for a given incident.

At the underground emplacement room, salt contaminated by a spill of CH TRU mixed waste would be either covered or cleaned up, depending on location, extent, and spilled material, due to potential radioactive contamination spread via the salt dust. The contaminated salt would be covered to isolate it from the workers, and the stacking of waste containers would resume or would be removed and packaged as site-derived waste using applicable site procedures for decontaminating surfaces.

The decontamination methods will initially involve wiping down structures, equipment, and other containers in the area with absorbent cloths moistened with tepid water. Surveys of these structures will take place and the need to continue decontamination activities will be established. If further decontamination is required, nonhazardous decontaminating agents, such as Liquinox[®], Simple Green[®], Windex[®], citric acid, Bartlett Strip Coat[®], and high pressure CO₂ will be used to prevent generating CH TRU mixed waste.

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

Certain structures and/or equipment may be disassembled to facilitate decontamination or may be placed directly into a derived waste container. Items used in the spill cleanup and decontamination operations (e.g., swipes, tools, PPE, etc.) may also be placed into a derived waste container.

When decontamination is deemed by the recovery team to be complete, RC personnel will conduct one final, intensive radcon survey of the area and components in the area to release it for uncontrolled use. The free release criteria for items, equipment, and areas is < 20 dpm/100 cm² for alpha radioactivity and < 200 dpm/100 cm² for beta-gamma radioactivity. Personnel will then perform hazardous material sampling after decontamination efforts are complete to verify the removal of hazardous waste substances. After cleanup is complete, facility personnel will complete an inspection and include the details of the spill and cleanup in the log.

RH TRU Mixed Waste

For RH TRU mixed waste, the detection of contamination on or damage to a RH TRU mixed waste canister or a facility canister may occur outside the Hot Cell during cask to cask transfer of the canister or during loading of the Shielded Insert in the Transfer Cell. When such contamination or damage is found, the Permittees have the option to decontaminate or return the canister to the generator/storage site or another site for remediation. In the case of a damaged facility canister, the Shielded Insert may be used as an overpack to facilitate further

management. Contamination may also be detected within the Hot Cell during the unloading of the CNS-10-160B shipping cask. In this case, the Permittees may decontaminate the 55-gallon drums or return them to the generator/storage site or another site for remediation. Spills or releases that occur within the RH Complex or the underground as the result of RH TRU mixed waste handling will be mitigated by using the following measures, as appropriate:

During the re-entry phase, an evaluation of the incident, including the nature of the release, amount, location, and other appropriate factors, will be performed. A RWP will be written and approved prior to personnel entering the Hot Cell with the appropriate PPE to further assess the situation, perform surveys and take samples, and, if possible, mitigate problems that could compound the hazards in the area. Based on the results of the evaluation, a determination will be made by the RCRA Emergency Coordinator, with input from the cognizant managers, radiological control personnel, and ALARA Committee representatives whether to implement the Contingency Plan and to determine the appropriate course of action to recover from the event. An action response plan to decontaminate and recover affected areas and equipment, together with an RWP establishing the radiological controls required for the recovery will be developed and approved.

Should a breach of a RH TRU mixed waste container occur in the Hot Cell that results in removable contamination exceeding the small area "spot" decontamination levels, the affected container(s) (e.g., breached and contaminated) will be placed into a canister and processed for disposal. The decontamination of equipment, cleanup of spilled material and the overpacking of contaminated/damaged waste containers will be performed in the vicinity of the incident. For example, under normal operations RH TRU mixed waste in 55-gallon drums will be handled only in the Hot Cell. Therefore, it is within this area that decontamination and/or overpacking operations would occur. By eliminating the transport of contaminated equipment to other areas for decontamination or overpacking, the risk of spreading contamination is reduced. Contaminated materials for the cleanup and overpacking of a breached RH TRU mixed waste container may be managed as CH TRU mixed waste, depending on the surface dose rate.

Equipment used during a spill cleanup or RH TRU mixed waste overpacking operation could include: cloths, brushes, scoops, absorbents, squeegees, tape, bags, pails, slings, hand tools, and other equipment as needed for a given incident.

The decontamination methods may initially involve wiping down structures, equipment, and other containers in the area with absorbent cloths moistened with tepid water. Surveys of these structures will take place and the need to continue decontamination activities will be established. If further decontamination is required, nonhazardous decontaminating agents, such as Liquinox[®], Simple Green[®], Windex[®], citric acid, Bartlett Strip Coat[®], and high pressure CO₂ will be used to prevent generating CH TRU mixed waste.

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

Certain structures and/or equipment within the Hot Cell may be disassembled to facilitate decontamination or may be placed directly into a derived waste container. Items used in the spill cleanup and decontamination operations (e.g., swipes, tools, PPE, etc.) may also be placed into a derived waste container.

When decontamination of the Hot Cell is deemed by the recovery team to be complete, RC personnel will conduct one final, intensive radcon survey of the area and components in the

1 ~~area to release it for continued use. The free release criteria for items and equipment that will be~~
2 ~~released for uncontrolled use are ≤ 20 dpm/100 cm² for alpha radioactivity and ≤ 200 dpm/100~~
3 ~~cm² for beta-gamma radioactivity. Personnel will then perform hazardous material sampling~~
4 ~~after decontamination efforts are complete to confirm the removal of hazardous waste~~
5 ~~substances. After cleanup is complete, facility personnel will complete an inspection and include~~
6 ~~the details of the spill and cleanup in the log. The recovery phase must be completed before the~~
7 ~~affected area and/or equipment are returned to service.~~

8 ~~D-4d(7) ——— Natural Emergencies~~

9 ~~After a natural emergency (earthquake, flood, lightning strike, etc.) that involves hazardous~~
10 ~~waste or hazardous materials, the FSM will ensure the following actions are taken:~~

11 ~~1. ——— Inspect containers which have not been disposed and containment for signs of leakage~~
12 ~~or damage. Inspect areas where containers are stored looking for leaking containers and for~~
13 ~~deterioration of containers and the containment system.~~

14 ~~2. ——— Inspect affected equipment or areas associated with hazardous waste management~~
15 ~~activities for proper operating mode in accordance with site procedures and manually check to~~
16 ~~ensure automatic and alarmed features on the units are working.~~

17 ~~3. ——— Inspect affected equipment or areas within the HWMUs in accordance with site~~
18 ~~procedures for damage.~~

19 ~~4. ——— Inspect electrical boards and overhead electrical lines for damage.~~

20 ~~5. — Check container areas for signs of leakage or damage to drums and containers.~~

21 ~~6. — Check affected buildings and fencing directly related to hazardous waste management~~
22 ~~activities for damage.~~

23 ~~7. — Conduct a general survey of the site looking for signs of land movement, etc.~~

24 ~~8. — Take any necessary corrective measures, however temporary, to rectify potential or~~
25 ~~real problems.~~

26 ~~9. — Record inspection results.~~

27 ~~D-4d(8) — Roof Fall~~

28 ~~Roof fall is not expected to affect RH TRU mixed waste because it is emplaced in the rib of~~
29 ~~the disposal room and not subject to impact from a roof fall. The following incident~~
30 ~~description and mitigation apply to CH TRU mixed waste.~~

31 ~~The WIPP underground is routinely evaluated for stability and safety of the underground~~
32 ~~openings. These evaluations can be as simple as the MSHA required visual checks by~~
33 ~~personnel working in the area or as extensive as the expert review of the roof support~~
34 ~~system for Room 1 Panel 1 conducted in 1991. An in-depth evaluation of all of the~~
35 ~~accessible underground is performed on an annual basis as part of the formal ground~~
36 ~~control operating plans. Weekly visual and sounding inspections are performed by the~~

Permittees. More frequent inspections and evaluations are performed in areas where roof or ribs are in need of evaluations, based on visual observations, analysis of rock deformation data, excavation effects program data acquired from observation holes, and support system performance.

This process applies not only to the waste disposal rooms but to the entire WIPP underground. Prior to waste emplacement, stability of each room will be evaluated. This evaluation will concentrate on the age and current performance of the installed support systems (if any) and the rate of roof beam expansion based on data from installed instrumentation. The roof support system's performance and surety, to provide the support necessary for the required time will be addressed. Criteria used will include design parameters such as the amount of load, the deformation of the installed system, and the number and type of component failures observed, if any. Geotechnical criteria will include parameters such as the type and quantity of fracturing, roof beam expansion rates, and future ground performance based on a predictive model.

Should the evaluation results indicate that remedial actions are necessary prior to placement of waste, experiences at the WIPP indicate that rebolting or installing supplemental support can extend the safe life of a room for several years.

After waste emplacement commences, geomechanical monitoring will continue with monitors that are tied into a computer network program. The readings obtained will provide information needed for the roof beam stability assessment. Visual observations of the ground and the support systems will also continue in all accessible areas. Based on the experiences from the Site and Preliminary Design Validation test rooms, it has been proven that any developing instability will be detected through monitoring. Multiple measures to deal with the observed conditions can be implemented months before an event to mitigate any risk associated with a roof fall in the storage room or any affected area within the mine. At a minimum, the affected area will be isolated and withdrawn from ventilation flow. Isolation operations will utilize current available methods, materials, and equipment.

Ground control conditions which could result in a fall can be divided into two scenarios: The first consists of spalling (falling) of individual small and localized rock falling on waste containers.

By definition, they can be considered insignificant as no damage to the drums can occur. The second consists of an entire section of roof falling on multiple stacks of waste containers. Each of these scenarios is discussed below.

Spalling-of-Ground Scenario

The maximum distance between the room roof and a container of waste is 10 ft. Waste containers are designed to withstand impact loads of at least 1,000 pounds (lbs) dropped from a height of 6 ft. flat or 450 lbs dropped on a circumferential edge from a height of 4 ft. Both of which correspond to an allowable impact stress of 25,450 pounds per square inch (psi). Rocks from spalling are small and would not be of sufficient weight when striking a drum from a 10 ft vertical height to cause an impact stress of more than 25,450 psi. Taking into account the falling distance, average

~~weight, and the typical shape of the salt rock, the conclusion is that puncturing a drum by spalling is non-credible.~~

~~Fall-of-Ground Scenario~~

~~Fall-of-ground occurs when a large section of roof beam falls onto the waste containers. As previously discussed, the possibility of this occurring in an active room is remote, due to continuous monitoring and engineered roof support systems.~~

~~The following actions have been developed and will be taken by the RCRA Emergency Coordinator should a rock fall occur in an active waste emplacement area of the repository:~~

~~Spalling-of-Ground Actions~~

- ~~1. Determine whether the roof conditions allow for safe entry and if the waste container or containers in question are accessible.~~

~~The process used to determine if a roof condition of a room will allow for safe entry is the same as the ground control inspection process used for inspection of the ground conditions and roof bolt integrity. The inspection will begin at a safe and sound roof starting point and consist of visual inspections of roof bolts, roof, and rib areas for missing or damaged bolts; deformed roof bolt plates; or roof and rib cracks, fractures, or separations. If during the visual inspection suspicious roof bolts, roof, or ribs are found, then operators will proceed with sounding the area in question with a scaling bar for loose roof bolts, bad roof, or ribs (loose roof bolts will not ring when sounded). Bad roof or ribs will have a drummy, hollow, or un-solid sound when struck with the scaling bar. When this operation is performed, a safe avenue for retreat is always maintained. Also maintained is a position such that an unexpected event will not place personnel in a position where the scaling bar or material being scaled could fall on personnel. If the inspection reveals ground that cannot be safely scaled manually or with the available mining equipment, the affected area, up to and including the entire room, will be barricaded and removed from ventilation flow.~~

~~The criteria used to determine whether a waste container is accessible is based on the location of the container, the amount of waste in the room, and the expense of reaching the waste container safely versus the expense of abandonment of the room. For example, if the room is 95% filled and spalling-of-ground punctured a waste container at or near the exit of the room, the decision to isolate the room and move waste emplacement activities to the next room would be prudent.~~

- ~~2. Restrict access in ventilation flow path downstream of the incident.~~

- ~~3. Restrict ventilation to the affected room to ensure that there is no spread of contamination that may have been released. Survey for contamination and establish the boundaries.~~

- ~~4. Inspect accessible and affected containers and containment for signs of leakage or damage.~~

- ~~5. Cover the spill area with material such as plastic or fabric sheets or paint, in a way that would safely isolate the area.~~
- ~~6. Determine if the covered spill area safely allows for continued waste disposal operations or whether further cleanup is required. If further cleanup is required, provide with cleanup methods described below. Note: Cleaning may not be required since this is the permitted disposal area.~~
- ~~7. Inspect any affected equipment (vehicles, handling equipment, and communication and alarm equipment) for proper function.~~
- ~~8. Repackage spilled waste and repackage, plug, or patch breached waste containers into 55 or 85-gallon drums, SWBs, or TDOPs, depending on volume. Temporarily locate overpack waste containers in an adjacent room. Remove only those intact waste containers necessary to clear the area for decontamination.~~
- ~~9. At the underground emplacement room, salt contaminated by a spill of TRU mixed waste will be covered with materials such as salt, plastic or fabric sheets or PVA to isolate it from the workers or removed and packaged as site derived waste in accordance with site procedures for decontaminating surfaces.~~
- ~~10. Manage the radioactive debris as derived waste.~~
- ~~11. Characterize containers of waste based on the waste containers that were damaged.~~
- ~~12. Replace the removed and derived waste containers into the waste stack as appropriate and update the WWIS.~~
- ~~13. Document activities and record results.~~

~~Fall of Ground Actions~~

- ~~1. Restrict access in ventilation flow path downstream of the incident.~~
- ~~2. Restrict the room from ventilation flow by closing bulkhead regulators.~~
- ~~3. Survey for radiological contamination and establish the boundary for a Radiological Buffer Area.~~
- ~~4. Install barricade devices to remove access.~~
- ~~5. At the underground emplacement room, salt contaminated by a spill of TRU mixed waste will be covered with materials such as salt, plastic or fabric sheets, or PVA to isolate it from the worker or removed and packaged as site derived waste using damp rags, hand tools, and HEPA filtered vacuums.~~

~~The criteria used to determine whether to close the entire panel or just the affected room of waste containers would include the location of the roof fall and the stability of the unaffected roof area in the panel. Techniques to determine the stability would be the same as previously described in this section.~~

~~D-4d(9) — Structural Integrity Emergencies~~

~~In the event of a WIPP facility emergency involving underground structural integrity, the situation will be handled as a natural emergency. Monitoring and inspection procedures ensure the safety and integrity of the WIPP facility underground.~~

~~D-4d(10) — Emergency Termination Procedures~~

~~For the transition from emergency phase to cleanup phase, the following items will be complete:~~

~~Emergency scene will be stable~~

~~Release of hazardous substance will be stopped~~

~~Reaction of hazardous substance will be controlled~~

~~The released hazardous substance will be contained within a localized and manageable area~~

~~The area of contamination will be adequately secure from unauthorized entry~~

~~At every incident involving hazardous materials, there is a possibility that response personnel and their equipment will become contaminated. Emergency response personnel have procedures to minimize contamination or contact, and to properly dispose of contaminated materials.~~

~~For nonemergencies and Incident Level I emergencies, the following methods of decontamination are available for personnel, environment, and/or equipment according to emergency response procedures:~~

~~Absorption~~

~~Adsorption~~

~~Chemical degradation~~

~~Dilution~~

~~Disposal~~

~~Isolation~~

~~Neutralization~~

~~Solidification~~

~~Any necessary verification of air, soil, or water samples will be directed by the RCRA Emergency Coordinator. Immediately after an emergency, the RCRA Emergency Coordinator will provide for treating, storing, or disposing of recovered waste, contaminated soil or surface water, or any other material that results from a release, fire, or explosion at the facility in accordance with standard operating procedures.~~

~~For Level II and III incidents after the emergency itself is controlled and contained, the RCRA Emergency Coordinator will be responsible for the development and implementation of an incident-specific decontamination plan.~~

~~PPE will be decontaminated or disposed according to procedure before it is returned to its storage location.~~

1 ~~As part of the facility's defense-in-depth approach, equipment will be assumed to be~~
2 ~~contaminated after each hazardous material response and a thorough check for radioactive~~
3 ~~contamination will be conducted. If contamination is found, a technically sound decontamination~~
4 ~~process will be followed. Many types of equipment are difficult to decontaminate and may have~~
5 ~~to be discarded as hazardous or derived waste. Whenever possible, pieces of equipment will be~~
6 ~~disposable or made of nonporous material.~~

7 ~~If radioactive contamination is detected on equipment or on structures, it will be assumed that~~
8 ~~hazardous constituents may also be present. Radiological surveys to determine whether a~~
9 ~~potential release of hazardous constituents has occurred (Permit Attachment G3) will be used~~
10 ~~along with other techniques as a detection method to determine when decontamination is~~
11 ~~required. Radiological cleanup standards will be used to determine the effectiveness of~~
12 ~~decontamination efforts. To provide verification of the effectiveness of the removal of hazardous~~
13 ~~waste constituents, once a contaminated surface is demonstrated to be radiologically clean, the~~
14 ~~"swipe" can be sent for analysis for hazardous constituents. The use of these confirmation~~
15 ~~analyses is as follows:~~

16 ~~For waste containers, the analyses become documentation of the condition of the~~
17 ~~container at the time of emplacement. These containers will be placed in the underground~~
18 ~~without further action, once the radiological contamination is removed, unless there is~~
19 ~~visible evidence of hazardous waste spills or hazardous waste on the container and this~~
20 ~~contamination is considered likely to be released prior to emplacement in the~~
21 ~~underground. In no case shall these containers contain a total liquid content equal to, or~~
22 ~~which exceeds, one volume percent of the container.~~

23 ~~For area contamination, once the area is cleaned up and is shown to be radiologically~~
24 ~~clean, it will be sampled for the presence of hazardous waste residues. If the area is large,~~
25 ~~a sampling plan will be developed. The sampling plan will be approved by the NMED~~
26 ~~before it is implemented. If the area is small, swipes will be used. If the results of the~~
27 ~~analysis show that residual contamination remains, a decision will be made whether~~
28 ~~further cleaning will be beneficial or whether final clean up will be deferred until closure.~~
29 ~~Appropriate notations will be entered into the operating record to assure proper~~
30 ~~consideration of formerly contaminated areas at the time of closure. Furthermore,~~
31 ~~measures such as covering, barricading, and/or placarding will be used as needed to mark~~
32 ~~areas that remain contaminated.~~

33 ~~For all Contingency Plan emergency responses, the RCRA Emergency Coordinator will~~
34 ~~ensure, in keeping with standard operating procedures, that, in the affected area(s) of the~~
35 ~~facility:~~

36 ~~No waste that may be incompatible with the released material is treated, stored, or~~
37 ~~disposed of until cleanup procedures are completed~~

38 ~~All emergency equipment listed in the Contingency Plan is cleaned and fit for its intended~~
39 ~~use, or replaced before operations are resumed~~

40 ~~D-4e — Prevention of Recurrence or Spread of Fires, Explosions, or Releases~~

41 ~~During an emergency, the RCRA Emergency Coordinator will ensure that reasonable~~
42 ~~measures are taken so that fires, explosions, and releases do not occur, recur, or spread~~

~~to TRU mixed waste or other hazardous materials at the facility, as required under 20.4.1.500 NMAC (incorporating 40 CFR §§264.56(e) and (f)). These measures include:~~

~~Stopping processes and operations.~~

~~Collecting and containing released wastes and materials.~~

~~Removing or isolating containers of waste or hazardous substances 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-4h).~~

~~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.~~

~~Overpacking and/or removing damaged containers/drums from affected areas. Damaged equipment and facilities will be repaired as appropriate.~~

~~Constructing, monitoring, and reinforcing temporary dikes as needed.~~

~~Maintaining fire equipment on standby at the incident site in cases where ignitable liquids have been or may be released and ensuring that all 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. Sections D-4g, Incompatible Waste, and D-4h, Post-Emergency Facility and Equipment Maintenance and Reporting, address specific issues related to decreasing the possibility of a recurrence or spread of a release, a fire, or an explosion.~~

~~After resolution of the incident, a Root Cause Analysis will be conducted to review all Level II and Level III incidents for determination of cause, and the corrective action plan to prevent recurrence.~~

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 20.4.1.500 NMAC (incorporating 40 CFR §264.56(g)). As required by 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 Containment of Released Material and Waste

~~Once initial release or spill containment has been completed, the RCRA Emergency Coordinator will ensure that recovered hazardous materials and waste are properly stored and/or disposed, as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.56(g)). For spills of liquid, the perimeter of the spill will be diked with an absorbent material that is compatible with the material(s) released. Free-standing liquid will be transferred to a marked compatible container. The remaining liquid will be absorbed with an absorbent material and swept or scooped into a marked compatible container. Spill residue will be removed. Spills of dry material will be swept or shoveled into a labeled compatible recovery container. Material recovered from the spill will be transferred to clean containers or tanks or to containers or tanks that have held a compatible material. All containers will meet DOT specifications for shipping the wastes, and materials will be recovered.~~

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

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. If the release is TRU mixed waste, decontamination and disposition will be in accordance with the RWP.

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) 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 ~~or hazardous substance~~ 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, ~~hazardous knowledge of the materials~~ inventories for the various buildings and areas at the facility will allow a determination of the hazardous materials present in any waste determination for the material resulting from the cleanup of a release or of the residues from an emergency condition (The quantities of such spills are so small, it is not likely to trigger an Incident Level II or III). When necessary 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.

~~this information is needed to evaluate disposal options. EPA-approved sampling and analytical methods will be utilized. Hazardous wastes will be transferred to the Hazardous Waste Staging Area. The staging area is used to store hazardous waste awaiting transfer to an off-site treatment or disposal facility in accordance with applicable regulations (e.g., 20.4.1 NMAC and DOT regulations). The Hazardous Waste Staging Area for nonradioactive hazardous waste is Buildings 474A and 474B, as shown in Figure D-1. Nonradioactive hazardous wastes will be shipped off-site for disposal at a RCRA permitted disposal facility.~~

D-4f(2) Incompatible Waste

The RCRA Emergency Coordinator will ensure, in accordance with 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 20.4.1.500 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.

~~Under normal operations, administrative controls will be implemented to ensure that hazardous materials and incompatible materials will not be introduced to the radioactive materials area during TRU mixed waste handling operations. Examples of administrative controls include restricting the waste received in the TRU mixed waste management area(s) to TRU mixed waste properly manifested from the generator sites and ensuring that materials used in these area(s) are restricted to only those that have previously been determined to be compatible with the TRU mixed waste. The RCRA Emergency Coordinator will have access to building design information and information on specific equipment used within an area upon which to base a determination of the compatibility of materials with the area. If necessary, the RCRA Emergency Coordinator will use EPA-600/2-80-076, "A Method for Determining the Compatibility of Hazardous Waste," (EPA, 1980) for making compatibility determinations. Waste resulting from the cleanup of a fire, explosion, or release in the miscellaneous unit, the CH TRU mixed waste handling areas, or the RH Complex will be considered derived from the received TRU mixed waste and may be treated and managed as CH TRU mixed waste depending on the surface dose rate.~~

~~In the event of a prolonged cessation of TRU mixed waste handling operations, TRU mixed waste can be placed in areas of the WHB Unit that are available for such contingencies. These areas and the TRU mixed waste containers in them would be located so that adequate aisle space would be maintained for unobstructed movement of personnel and equipment in an emergency. Permit Attachments A1 and A2 describe the HWMUs in detail, including the facility description, support structures and equipment, security, waste handling areas, ventilation, and fire protection.~~

~~The contaminated area will be decontaminated. If a release is to a permeable surface, such as soil, asphalt, concrete, or other surface, the surface material will be removed and placed in~~

1 ~~containers meeting applicable DOT requirements. Contaminated soil, asphalt, concrete, or other~~
2 ~~surface material, as well as materials used in the cleanup (e.g., rags and absorbent material)~~
3 ~~will be contained and disposed of in the same manner as dictated for the contaminant. Clean~~
4 ~~soil, new asphalt, or new concrete will be emplaced at the spill location.~~

5 ~~If a spill occurs on an impermeable surface, the surface will be decontaminated with water~~
6 ~~and/or a detergent. In the event that the spilled material is water reactive, a compatible~~
7 ~~nonhazardous cleaning solution will be used. Contaminated wash water or cleaning solution will~~
8 ~~be transferred to an appropriate container, marked, and managed as described above for~~
9 ~~nonradioactive or radioactive liquid wastes.~~

10 ~~In the event of a hazardous material or hazardous waste release, the RCRA Emergency~~
11 ~~Coordinator will ensure that no wastes will be received or disposed of in the affected areas until~~
12 ~~cleanup operations have been completed. This is to ensure that incompatible waste will not be~~
13 ~~present in the vicinity of the release.~~

14 ~~Because of the restrictions which the WIPP facility places on generators, and because of control~~
15 ~~of WIPP operations, TRU mixed wastes and derived wastes will not contain any incompatible~~
16 ~~wastes. However, the areas established for the temporary holding of nonradioactive waste~~
17 ~~routinely generated at the WIPP facility is divided into bays to accommodate the management of~~
18 ~~wastes that may be incompatible. If waste is generated as the result of a spill or release of~~
19 ~~hazardous materials or nonradioactive hazardous waste, the waste generated as a result of~~
20 ~~abatement and cleanup will be evaluated to determine its compatibility with other wastes being~~
21 ~~managed in the temporary holding areas. The evaluation will be by identifying the material or~~
22 ~~waste that was spilled or released and determining its characteristics (e.g., ignitable, reactive,~~
23 ~~corrosive, or toxic). The waste generated by the abatement and cleanup activities will be stored~~
24 ~~in that part of the temporary holding area that has been established to manage wastes with~~
25 ~~which it is compatible.~~

26 ~~For small nonemergency liquid spills (e.g., a detergent solution leaking out of the pump handle~~
27 ~~during decontamination, a spill of hydraulic fluid while servicing a vehicle), spill control~~
28 ~~procedures will be used to contain and absorb free-standing liquid. The contaminated absorbent~~
29 ~~will be swept or shoveled into a compatible container and managed as described above. No~~
30 ~~notifications will be required, but site procedures require documentation of the incident.~~

31 ~~D-4g—Incompatible Waste~~

32 ~~Implementation of the TSDF-WAC for the WIPP ensures that incompatible TRU mixed waste~~
33 ~~will not be shipped to the WIPP facility. Nonradioactive waste at the WIPP facility will be~~
34 ~~carefully segregated during handling and holding and will be transported within and off the~~
35 ~~facility. The RCRA Emergency Coordinator will not allow hazardous or TRU mixed waste~~
36 ~~operations to resume in a building or area in which incompatible materials have been released~~
37 ~~prior to completion of necessary post-emergency cleanup operations to remove potentially~~
38 ~~incompatible materials. In making the determination of compatibility, the RCRA Emergency~~
39 ~~Coordinator will have available the resources and information described in Section D-4b,~~
40 ~~Identification of Hazardous Materials. In addition, ES&H department personnel will be available~~
41 ~~for consultation. Finally, the RCRA Emergency Coordinator may use EPA-600/2-80-076, (EPA,~~
42 ~~1980).~~

~~D-4h—Post-Emergency Facility and Equipment Maintenance and Reporting~~

~~The RCRA Emergency Coordinator will ensure that emergency equipment that is located or used in the affected area(s) of the facility and listed in the Contingency Plan is cleaned and ready for its intended use before operations are resumed, as specified in 20.4.1.500 NMAC (incorporating 40 CFR §264.56(h)(2)). Any equipment that cannot be decontaminated will be discarded as waste (e.g., hazardous, mixed, solid), as appropriate. The WIPP facility is committed to replacing any needed equipment or supplies that cannot be reused following an emergency. 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.~~

~~Cleaning and decontaminating equipment will be accomplished by physically removing gross or solid residue; rinsing with water or another suitable liquid, if required; and/or washing with detergent and water. Decontamination and cleaning will be conducted in a confined area, such as a wash pad or building equipped with a floor drain and sump isolated from the environment. Care will be taken to prevent wind dispersion of particles and spray. Liquid or particulate resulting from cleaning and decontamination of equipment will be placed in clean, compatible containers. Waste produced in an emergency cleanup in the TRU mixed waste handling areas is derived waste and will be emplaced in the underground derived waste emplacement area. Waste resulting from decontamination operations elsewhere in the WIPP facility will be analyzed for hazardous waste constituents and/or hazardous waste characteristics to ensure proper management.~~

~~D-4i—Container Spills and Leakage~~

~~The waste received at the WIPP facility will meet stringent TSDF-WAC (e.g., no more than one percent liquid), which will minimize the possibility of waste container degradation and liquid spills. Should a spill or release occur from a container, following an initial assessment of the event, the WIPP facility will immediately take the following actions, in compliance with 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, and hand tools~~

~~Transfer the released material to a container that is in good condition or overpack the leaking container into another container that is in good condition~~

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

~~D-4j—Tank Spills and Leakage~~

~~The TRU mixed waste handling areas at the WIPP facility do not include tank storage or treatment of hazardous waste, as defined in 20.4.1.101 NMAC (incorporating 40 CFR §260.10), and as regulated under 20.4.1.500 NMAC (incorporating 40 CFR §264) Subpart J. At the WIPP facility, tanks are used to store water and petroleum fuels only. The petroleum tanks store diesel and unleaded gasoline.~~

~~D-4k~~ Surface Impoundment Spills and Leakage

~~The WIPP facility does not manage hazardous or TRU mixed waste using a surface impoundment, as defined in 20.4.1.101 NMAC (incorporating 40 CFR §260.10), and as regulated under 20.4.1.500 NMAC (incorporating 40 CFR, §264) Subpart K. Surface impoundment regulations are not applicable to the WIPP facility.~~

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 20.4.1.500 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 and the EPA Region VI Administrator. 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-65~~ Emergency Equipment

A variety of equipment is available at the facility for emergency response, containment, and cleanup operations in ~~both~~ 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 20.4.1.500 NMAC (incorporating 40 CFR §264.52(e)), is shown in Table D-~~26~~. 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 show in Figure D-5. 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 §264.52(e)). Table D-7 identifies the locations where fire-suppression systems are provided. Locations of the underground emergency equipment are shown in Figure D-5. The firewater-distribution system map is shown in Figure D-6. The underground fuel area fire-protection system is shown in Figure D-7.

D-76 Coordination Agreements with Local Emergency Response Agencies

The Permittees have established ~~MOUs~~ with off-site emergency response agencies for firefighting, medical assistance, hazardous materials response, and law enforcement. In the event that on-site response resources are unable to provide all the needed response actions during either a medical, fire, hazardous materials, or security emergency, the RCRA Emergency Coordinator will notify appropriate off-site response agencies and request assistance. Once on site, off-site emergency response agency personnel will be under the direction of the RCRA Emergency Coordinator.

The ~~MOUs~~agreements with ~~off-site cooperating local~~ agencies for emergency response capabilities ~~are available from the Permittees on file at the WIPP facility. Additional agreements may be established when needed.~~ A ~~listing and~~ description of the ~~MOUs~~agreements with ~~State~~ and local agencies and mining operations in the vicinity of the WIPP facility, as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.37 and §264.52(c)), ~~are~~include, but is not limited to the following:

- ~~An a~~Agreements with local mining companies, including among the Permittees, Intrepid Potash NM LLC, and Mosaic Potash Carlsbad Inc., provides for the mutual aid and assistance, in the form of MRTs, in the event of a mine disaster or other circumstance at either of the two facilities. This provision ensures that the WIPP MOC will have two MRTs available at all times when miners are underground.
- ~~— A memorandum of agreement between the City of Carlsbad, New Mexico, and the WIPP MOC for ambulance service assistance provides that, upon notification by the WIPP MOC, the Carlsbad Fire Department/Ambulance Service will be dispatched from Carlsbad toward the WIPP site by a designated route and will accept the transfer of patient(s) being transported by the WIPP facility ambulance at the point both ambulances meet. If the patient(s) is not transferrable, the Carlsbad Fire Department/Ambulance Service will provide equipment and personnel to the WIPP facility ambulance, as necessary.~~
- ~~— A MOU between the DOE and the Carlsbad Medical Center provides for the treatment of radiologically contaminated personnel who have incurred injuries beyond the treatment capabilities at the WIPP facility. The DOE will provide transport of the patient(s) to the Carlsbad Medical Center for decontamination and medical treatment.~~
- ~~— A MOU between the DOE and the Lea Regional Medical Center provides for the treatment of radiologically contaminated personnel who have incurred injuries beyond the treatment capabilities at the WIPP facility. The DOE will provide transport of the patient(s) to the Lea Regional Medical Center for decontamination and medical treatment.~~
- ~~A MOU between the DOE and~~ An agreement with the U.S. Department of Interior (**DOI**), represented by the Bureau of Land Management (**BLM**), Roswell District, ~~provides for a fire management program that will ensure a timely, well-coordinated, and cost-effective response to suppress wild fire within the withdrawal area using the WIPP incident commander for fire management activities. The DOI will provide for wildland firefighting support within the WIPP Land Withdrawal Area if requested. In addition, the MOU~~

provides for responsibilities concerning cultural resources, grazing, wildlife, mining, gas and oil production, realty/lands/rights-of-way, and reclamation.

- Agreements for mutual-aid firefighting agreement between the with Eddy County, the City of Hobbs, and the City of Carlsbad Commission and the DOE provides for the assistance of the Otis and Joel Fire Departments (a volunteer fire district created under the Eddy County Commission and the New Mexico State Fire Marshall's Office), including equipment and personnel, at any location within the WIPP Fire Protection Area upon request by an authorized representative of the WIPP Project. These responsibilities are reciprocal.
- A mutual-aid aAgreements betweenwith the City of Hobbs and the City of CarlsbadDOE provides for mutual ambulance, medical, fire, rescue, and hazardous material response services; provides for joint annual exercises; provides for use of WIPP facility radio frequencies by the City of Hobbs during emergencies; and provides for mutual security and law enforcement services, within the appropriate jurisdiction limits of each party.
- A mutual-aid agreement between the City of Carlsbad and the DOE provides for mutual ambulance, medical, fire, rescue, and hazardous material response services; provides for joint annual exercises; provides for use of WIPP facility radio frequencies by the City of Carlsbad during emergencies; and provides for mutual security and law enforcement services, within the appropriate jurisdiction limits of each party.
- A MOU between the DOE and the New Mexico Department of Public Safety (DPS) concerning Mutual Assistance and Emergency Management applies to any actual or potential emergency or incident that: 1) involves a significant threat to employees of the Permittees or general public; 2) involves property under the control or jurisdiction of either the DOE or the State; 3) involves a threat to the environment which is reportable to an off-site agency; 4) requires the combined resources of the DOE and the state; 5) requires a resource that the DOE has which the State does not have, or a resource the State has which DOE does not have; or 6) involves any other incident for which a joint determination has been made by the DOE and the State that the provisions of this MOU will apply. The MOU provides that the DPS shall permit qualified and security cleared DOE Emergency Management members into the State EOC for the purpose of: a) coordinating communications functions; b) evaluating and maintaining communications capabilities; c) participating in exercises; d) link the State's High-Frequency radio communications network with the DOE; and e) assisting the State during radioactive materials accidents that require joint operations or the use of the DOE Radiological Assistance Program team. The DOE shall permit qualified and security cleared members the State Emergency Management community into the DOE's EOCs for the purposes of coordinating communications and activities. Additional duties for each participant are specified for assistance in incidents or emergencies. Agreements with the Lea Regional Medical Center and the Carlsbad Medical Center for the treatment of persons with radiological contamination who have incurred injuries beyond the treatment capabilities at the WIPP site. The WIPP facility provides transport of the patient(s) to the medical center.
- 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-87 Evacuation Plan

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

D-78a Surface Evacuation On-site and Off-site Staging Areas

Figure D-~~68~~ shows the surface assembly and staging areas. Security officers remain at the primary staging area 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 which can be opened, similar to the main gates for the primary staging area. The east gate is a turnstile gate. Upon notification, security personnel will respond, open gates, and facilitate egress for evacuation. Personnel report to their Office Wardens at designated staging areas where accountability is conducted.

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 are is to be used and will advise the Office Warden of the selections. The RCRA Emergency Coordinator will communicate the selection to facility personnel locations to the Office Wardens via office warden pager, radio, plectron, WIPP Security, or telephone, as appropriate. 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. Office Wardens 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-6). Personnel who are working in a contaminated area when site evacuation is announced will assemble at specific staging areas for potentially contaminated personnel in order to minimize contact with other personnel during the evacuation (Figure D-8).

Office Wardens conduct accountability of personnel assigned to their specific areas. For complete surface accountability, the Office Wardens report to their ACOW, who reports to the COW. When the COW has reports from all ACOWs, surface accountability is reported to the CMRO, who then notifies the RCRA Emergency Coordinator of the accountability.

~~The COW and all ACOWs communicate between themselves and the CMRO using devices (e.g., telephones, radios, pagers, the public address system, email, Internet). The Office Wardens, Assistant Office Wardens, ACOWs, and COW are notified by a public address announcement (or other devices) in accordance with emergency response procedures for evacuation or sheltering in place. At the staging areas Office Wardens report directly to their ACOW.~~

~~There are three off-site staging areas identified on Figure D-8. The RCRA Emergency Coordinator determines which staging area will be used. Security officers remain at the primary staging area 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 large gate which can be opened, similar to the main gates for the primary staging area. The east gate is a turnstile gate. Upon notification by the RCRA Emergency Coordinator, Security will respond, open gates, and facilitate egress for evacuation.~~

~~The on-site staging areas are identified in Figure D-8. These are used for building or area evacuations as determined by the RCRA Emergency Coordinator.~~

D-78b Underground Assembly Areas and Egress Hoist Stations

~~In the event of an underground or surface event, the RCRA Emergency Coordinator can call for underground personnel to report to assembly areas (Figure D-9). 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-7), or to evacuate the underground. Underground personnel are also trained to immediately report to assembly areas under specific circumstances (i.e., loss of underground power or ventilation). If accountability is required, Underground accountability is taken when the underground will be sheltered in place or evacuated. The Underground Controller is responsible for underground personnel accountability by comparing the brass numbers with the brass tags signed out in the lamproom. Each assembly area contains a mMine pPage pPhone, miner's aid station, and evacuation maps.~~

In accordance with 30 CFR §57.10501, the mine maintains two escapeways. These escapeways are designated as Egress Hoist Stations. When the need for an underground evacuation has been determined ~~is called for~~, all underground personnel report to the Egress Hoist Stations.

Decontamination of underground personnel will be conducted the same way as described for surface decontamination. Contaminated personnel are trained to remain segregated from other personnel until RC-radiological contamination control personnel can respond ~~to the incident at the underground location~~.

D-78c Plan for Surface Evacuation

Surface evacuation notification is initiated by the CMRO, as directed by the RCRA Emergency Coordinator, ~~directing the CMRO to via~~ sound-ing of the surface evacuation alarm and providing incident information via the public address system. The persons responsible for surface accountability ~~Office Wardens~~ assist personnel in evacuation from their areas. Egress routes from buildings and site ~~e~~Evacuation routes and instructions are posted in designated areas throughout the site. Egress routes from the WHB Unit are shown in Figures D-6a, D-6b, and D-6c.

If the ~~FSM/CMRO notifies the~~ ERT members have been notified by a communication device (e.g., pager) to respond to an identified area, these members will not depart the site during an evacuation, but will report to the Incident Commander FSM for instructions and accountability. ~~The EST/FPT notifies the COW of response members present. These personnel ERT members~~ will not evacuate until released by the Incident Commander RCRA Emergency Coordinator.

D-78d 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 ~~e~~Egress ~~H~~hoist ~~S~~station. Primary underground escape evacuation routes (identified by green reflectors on the rib) will be used, if possible. Secondary underground escape evacuation routes (identified by red reflectors on the rib) will be used if necessary (Figure D-45). 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-4, Underground Escape/Evacuation Routes, should an underground mine related event occur necessitating a change to the evacuation routes. ~~Brass tags will be collected from personnel at the hoist collar on the surface, and taken to the Underground Controller is responsible for underground personnel accountability and for reporting, who functions as an Office Warden. When all brass tags are accounted for, underground accountability is reported 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 ~~FLIRT and 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 two MRTs are trained in compliance with 30 CFR Part 49 in mine mapping, mine gases, ventilation, exploration, mine fires, rescue, and recovery.

D-78e 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 ~~utilized~~ in an emergency. Personnel ~~may be directed as to~~ 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 routes for the WIPP facility are the main DOE north/south access road, which connects to U.S. Highways 62/180 (north) and State Highway 128 (south). Alternate

1 evacuation routes from the facility are provided at the south side and the east side of the facility
2 (Figure D-8).

3 D-8—Required Reports

4 ~~The RCRA Emergency Coordinator, on behalf of the Permittees, will note in the operating~~
5 ~~record the time, date, and details of any incident that requires implementing this Contingency~~
6 ~~Plan. This notation will be in the facility log maintained by the CMRO. In compliance with~~
7 ~~20.4.1.500 NMAC (incorporating 40 CFR §264.56(i)), within 15 days after the incident, the~~
8 ~~Permittees will ensure that a written report on the incident will be submitted to the Secretary of~~
9 ~~the NMED. The report will include:~~

10 ~~The name, address, and telephone number of the Owner/Operator~~

11 ~~The name, address, and telephone number of the facility~~

12 ~~The date, time, and type of incident (e.g., fire, explosion or release)~~

13 ~~The name and quantity of material(s) involved~~

14 ~~The extent of injuries, if any~~

15 ~~An assessment of actual or potential hazards to human health or the environment, where this is~~
16 ~~applicable~~

17 ~~The estimated quantity and disposition of recovered material that resulted from the incident~~

18 ~~In addition to the above report, the Permittees will ensure that the ES&H Manager, or designee,~~
19 ~~submits reports to the appropriate agencies as listed in Tables D-8 and D-9.~~

20 ~~The WIPP requires the EST/FPT to initiate the “WIPP Hazardous Materials Incident Report” if~~
21 ~~the Contingency Plan is implemented. A form is attached as Figure D-12. The form is initiated~~
22 ~~by the EST/FPT. The RCRA Emergency Coordinator, CMRO, and Environmental Compliance~~
23 ~~representatives complete their respective sections.~~

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

25 In accordance with 20.4.1.500 NMAC (incorporating 40 CFR §264.53(a)), ~~t~~The owner/operator
26 ~~of the WIPP facility will ensure that copies of this RCRA Contingency Plan Contingency Plan are~~
27 ~~maintained at the WIPP facility and are available to all the emergency personnel and~~
28 ~~organizations described in Section D-2. When the RCRA Contingency Plan Contingency Plan is~~
29 ~~revised, updated copies are manually distributed (electronically or via site mail) or hand~~
30 ~~delivered to applicable WIPP ~~f~~Facility emergency personnel and ~~alternate~~ Emergency~~
31 ~~Operations Centers s and Joint Information Center. In addition, the Permittees owner/operator will~~
32 ~~make copies available to the following outside State and local agencies, as required by~~
33 ~~20.4.1.500 NMAC (incorporating 40 CFR §264.53(b)):~~

- 34 • Intrepid Potash ~~New Mexico~~ LLC and
- 35 • Mosaic Potash Carlsbad Inc.
- 36 • ~~Carlsbad Fire Department, City of~~ Carlsbad
- 37 • Carlsbad Medical Center, Carlsbad

- Lea Regional Medical Center, Hobbs
- ~~• Otis Fire Department, Otis~~
- ~~Hobbs Fire Department, City of~~ Hobbs
- ~~• Joel Fire Department, Carlsbad~~
- 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

In accordance with 20.4.1.500 NMAC (incorporating 40 CFR §264.54, ~~The owner/operator of the WIPP facility~~ Permittees will ensure that this plan is reviewed ~~annually~~ and amended whenever:

- ~~• Applicable regulations are revised~~
- The ~~RCRA Part B~~ permit for the WIPP facility is revised in any way that would affect the ~~RCRA Contingency Plan~~ 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 change; or
- The list of WIPP facility emergency equipment changes.

References

U.S. Environmental Protection Agency, "A Method for Determining the Compatibility of Hazardous Waste," EPA-600/2-80-076, 1980.

U.S. Department of Transportation, Emergency Response Guidebook, U.S. Government Printing Office, 1993.

Westinghouse Electric Corporation, 1994, "Quality Assurance Project Plan for WIPP Site Effluent and Hazardous Materials Sampling," WP 02-EM1, Westinghouse Electric Corporation, Carlsbad, New Mexico.

U. S. Department of Energy, "WIPP Safety Analysis Report," DOE/WIPP-95-2065, Rev. 2

U. S. Department of Energy, "WP 12-5, WIPP Radiation Safety Manual".

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TABLES

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~~Table D-1~~
~~Hazardous Substances in Large Enough Quantities to Constitute a Level II Incident~~

Chemical Description	Building Location	Hazard Category
Ethylene Glycol Solution - 35%	Buildings 411; 412; 451; 452; 486; 463; 474C; FAC 414	Immediate (acute) Delayed (chronic)
Gasoline, Unleaded GASC0001	FAC 480	Fire Immediate (acute) Delayed (chronic)
No. 1 Diesel Fuel Oil GASC0210	U/G Fuel Station; Oil Depot U/G; FACs 480, 255.1 & 255.2; Transport Tank; Building 456	Fire Immediate (acute) Delayed (chronic)
Multiple containers of TRU Waste as described in Permit Section 3.3.1	WHB Waste Shaft U/G	Delayed (chronic)
Hazardous materials in quantities that exceed 5 times the Reportable Quantity (Per DOE O 151.1) values as defined in 40 CFR 302	It should be noted that WIPP is not expected to possess such quantities.	Fire Immediate (acute) Delayed (chronic)

Table D-12
Resource Conservation and Recovery Act Emergency Coordinators

Name	Address*	Office Phone	Personal Phone*
R. C. (Russ) Stroble ¹ (primary)		234-8276 or 234-8554	
J. E. (Joseph) Bealler ²		234-8276 or 234-8916	
M. G. (Mike) Proctor ²		234-8276 or 234-8143	
G. L. (Gary) Kessler ²		234-8326	
A. E. (Alvy) Williams ¹ (primary)		234-8276 or 234-8216	
P. J. (Paul) Paneral ¹ (primary)		234-8498	
J.B. (James) Wheeler ²		234-8273	
M. L. (Mark) Long ¹ (primary)		234-8170	
A.C (Andy) Cooper ²		234-8197	

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

¹ ~~The on-duty Facility Shift Manager is the primary RCRA Emergency Coordinator pursuant to 20.4.1.500 NMAG (incorporating 40 CFR §264.52), and is designated to serve as the RCRA Emergency Coordinator. 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.~~

² ~~The on-duty Facility Operations Engineer is the alternate RCRA Emergency Coordinator and is available as needed.~~

Table D-3
Planning Guide for Determining Incident Levels and Response

Incident Condition	Incident Level		
	I	II *	III *
Product identifications	Placard not required, NFPA 0 or 1 all categories, all Other Regulated Materials A, B, C, and D.	DOT placarded, NFPA 2 for any categories, PCBs without fire, EPA regulated waste. SITE SPECIFIC: Table D-1 and TRU mixed waste AND	Poison A (gas), explosive A/B, organic peroxide, flammable, solid, materials dangerous when wet, chlorine, fluorine, anhydrous ammonia, radioactive materials, NFPA 3 and 4 for any categories including special hazards, PCBs and fire including special hazards, PCBs and fire DOT inhalation hazard, EPA extremely hazardous substances, and cryogenics.
Container size	Container size does not impact this incident level.	Involves multiple packages.	Tank truck.
Fire/explosion potential	Under control.	May spread/may be explosive.	May spread/may be explosive.
Leak severity	No release or small release contained or confined with readily available resources.	Release may not be controllable without special resources.	Release may not be controllable even with special resources.
Life safety	No life threatening situation from materials involved.	Localized area, limited evacuation area.	Localized area, limited evacuation area.
Environmental impact (Potential)	None.	Limited to incident boundaries	Contained within the Hazardous waste Management Units.
Container integrity	Not damaged.	Damaged but able to contain the contents to allow handling or transfer of product.	Damaged to such an extent that catastrophic rupture is possible.

* Contingency Plan is implemented

Table D-4
Physical Methods of Mitigation

Method	Chemical		Radiological	
	Liquid	Solid	Liquid	Solid
Absorption	Yes	No	Yes	No
Covering	Yes	Yes	Yes	Yes
Dikes, diversions	Yes	Yes	Yes	Yes
Overpack	Yes	Yes	Yes	Yes
Plug/patch	Yes	Yes	Yes	Yes
Transfer	Yes	Yes	Yes	Yes
Vapor suppression	Yes	Yes	No	No

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Table D-5
Chemical Methods of Mitigation

Method	Chemical		Radiological	
	Liquid	Solid	Liquid	Solid
Neutralization	Yes	Yes ⁽¹⁾	No	No
Solidification	Yes	No	Yes ⁽²⁾	No

~~(1) — When solid neutralizing agents are used, they will be used simultaneously with water.~~

~~(2) — This method could be utilized for mitigation of firewater involving TRU waste.~~

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Table D-26
Emergency Equipment Maintained at the Waste Isolation Pilot Plant

Equipment	Description and Capabilities	Location
Communications		
Building Fire Alarms	Manual pull stations and automatic Fire alarm panels, fire alarm transmitter, audible alarm devices (e.g., horns, bells, tones) that provide notification of fires, transmitted to the <u>CMR</u> (sprinkler system flow, and smoke and thermal detectors) trigger fire alarm; locally visible and audible; visual display and alarm in Central Monitoring Room (CMR)	Guard and Security Building (Building 458), Water Pump house (Building 456), Warehouse/Shops Building (Building 453), Exhaust Shaft Filter Building (Building 413), Support Building (Building 451), CMR/ Computer Room, Waste Handling Building (Building 411), TRUPACT Maintenance Facility Building (Building 412), Salt Handling (SH) Shaft Hoist house (Building 384), Maintenance Shops, Guard Shack*, Entry Control Point Guard shack (Building 242), Auxiliary Warehouse Building (Building 455), Core Storage Building, Engineering Building (Building 486), Training Facility Building (Building 489), Safety and Emergency Services Facility Building (Building 452), North Maintenance Shop (Building 247), and surface Hazardous Waste Storage (non-TRU) Staging Areas (Buildings Facility 474A and 474B) *local alarms; not connected to the CMR
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 <u>CMR</u> Automatic/Manual; have priority over other paging channel signals but not override intercom channels; alarms sound in the general area of the control panel and are connected to the underground evacuation alarms; they also interface with 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, <u>E-0/N-1200</u> , Fuel Station <u>(N150/W170)</u>
Surface Evacuation Signals <u>Site Notification System;</u> Underground Evacuation Warning Alarm System-wide Evacuation Alarm	For surface, alarms and notifications t Transmitted over paging channel of the public address system, overriding its normal use; manually initiated according to procedures requiring evacuation; for underground, audible alarm produced by tone generator at 10 decibels above ambient noise level (or at least 75 decibels); flashing strobe lights; radios and/or pagers are used to notify facility personnel outside alarm range. Monthly test are performed on the PA, site notification alarms, and plectrons.	Site-wide
Vehicle Siren	Manual; oscillating; emergency services/surface response vehicles, is mechanical and electronic.	WIPP surface emergency vehicles

Equipment	Description and Capabilities	Location
Public Address System	Includes intercom phones; handset stations and loudspeaker assemblies; each with own amplifiers; multichannel, one for public address and pages, and others for independent party lines.	Surface and underground <u>Site-wide</u>
Intraplant Phones	Private automatic branch exchange; direct dial; provide communication link between surface and underground operations	Throughout surface and underground
Mine Page r Phones	Battery-operated paging system	CMR, Mine Rescue Room, EOC, lamproom, Underground at S550/W30, S1000/W30, S1950/E140, SH Shaft Collar and Underground Station, Waste Shaft Collar and Underground Station; – <u>surface at Support Building (Building 451, FSM desk, CMR, lamproom), EST Station Safety and Emergency Services Facility (Building 452, Fire Department workstation area, Mine Rescue Room)</u>
Emergency Pag ers	Manual; , intermittent alarm signals	Issued to appropriate emergency personnel
Electrons	Tone-alert radio receivers placed in areas not accessible by the public address system	Site-wide
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 VHF-FM; linked to Eddy County Sheriff Department, NM State Police, and Otis Fire Department), and WIPP Channels 1-18 (Communication with the Lea County Sheriff's Department, the Hobbs Fire Department, Carlsbad Medical Center and Lea Regional Hospital is available via the Eddy County dispatcher) (Site Security, Site Operations and Site Emergency, maintenance, repeater to Carlsbad). Wireless communications such as cellular phones may be used to contact the Eddy County emergency responders.	Various site locations <u>Safety and Emergency Services Facility (Building 452), Guard and Security Building (Building 458), Support Building (Building 451454, CMR, FSM desk)</u>
Mobile Phones	Provide communications link between <u>emergency response WIPP Security and key personnel, as needed</u>	Issued to individuals plus emergency vehicles,
Spill Response <u>Equipment and Materials</u>		
<u>HAZMAT Equipment</u>	<u>Spill response equipment and supplies, PPE, and decontamination supplies stored and maintained in accordance with NFPA 901 and as documented in WIPP facility files</u>	<u>Surface, in designated areas near Safety and Emergency Services Facility (Building 452)</u>

Equipment	Description and Capabilities	Location
<u>Absorbent Materials</u>	<u>Containment or cleanup of spills, including:</u> <u>Pressurized spill-response gun;</u> <u>Absorbent sheets and/or dikes for containment or cleanup of spills of oil, petroleum-based chemicals, and general liquids;</u> <u>Spill-control material for solvents and neutralizing absorbents and for acids/caustics</u>	<u>Surface, in designated areas near Safety and Emergency Services Facility (Building 452)</u>
SPILL-X-S Guns and Recharge Powder	Containment; (1)SPILL-X model SC-30-C(Gun) (1)SPILL-X model XC-30-S(Gun) (1)SPILL-X model SC-30-A(Gun); (1) A-Acid, 5-gallon bucket (Recharge Powder) (1)S-Solvent, 5-gallon bucket (Recharge Powder) (1)C-Caustic, 5-gallon bucket (Recharge Powder)	HAZMAT trailer
Absorbent Sheets	Containment or cleanup; (1) 3' x 100' Sheet	HAZMAT trailer
Absorbents	Grab and Go container; spill control bucket; (1) for solvents and neutralizing absorbents; 5-gallon bucket (1) for acids/caustics; 5-gallon bucket	HAZMAT trailer
Absorbent Material	Containment or cleanup; (1) 100 ft. rolled or equivalent socks "Pig" for general liquid (1) 100 ft. rolled or equivalent socks "Pig" for oil	HAZMAT trailer
Air Bag System	Extrication, Stabilization, Cribbing (1) bag system with tank kit and the following bag sizes: (1)12-ton; (1) 21.8-ton; (1)17-ton	Surface rescue truck
Air Chisel	Extrication (1) Capable of cutting 3/16" steel	Surface rescue truck
Drum Transfer Pumps and Drum Opener	Containment or cleanup; (1) unit for chemical transfer (1) hand-operated pump for petroleum transfer (1) drum opener	HAZMAT trailer
Floor Squeegee	Containment or cleanup; (1) straight rubber blade, nonwood handle	HAZMAT trailer
Foam Concentrate	AFFF 6% (4) 5-gallon pail	Fire truck # 1
Gas Cylinder Leak Control Kit	(1)Series A Hazardous Material Response Kit; contains nonsparking equipment to control and plug leaks	HAZMAT trailer
Portable Generator	(1)Backup power; 5,000-watt; 120 or 240-volt	Surface rescue truck

Equipment	Description and Capabilities	Location
Hand Tools	Containment and cleanup; Underground rescue truck; (1)12# Sledge Hammer (1)3/8" Drive Socket Set (1)1/2" Drive Socket Set (1)3/4" Drive Socket Set (1)25' 1/2" Chain (1)6' Wrecking Bar (1)Bottle Jack (1)4# Hammer (1)18" Crescent Wrench (1)5' Pry Bar (1)2' Pry Bar (1)100' Extension Cord (1)4' Nylon Sling (1)6' Nylon Sling (1)10' Nylon Sling These tools are located in the HAZMAT Trailer. They are non-sparking. (1)14"L adjustable pipe wrench (1)15" multi-opening bung wrench (1)hammer/crate opener (1)8" pipe pliers (1)8" blade Phillips (1)#2 screwdriver (1)6" blade standard screwdriver (1)Claw Hammer	Underground rescue truck, HAZMAT trailer
Come-a-longs	(1) 4-ton; cable-type Ratchet lever tool designed specifically for lifting, lowering and pulling applications including jobs requiring rigging, positioning, and stretching. Used in rescue for extrication.	Surface rescue truck and underground rescue truck
Porta-power	(1) 10-ton hydraulic, hand-powered jaws used for extrication during rescues.	Surface rescue truck
Jugs	Containment or cleanup; (4) 1-gallon plastic	HAZMAT trailer
Pails	Containment or cleanup; (3) 5-gallon plastic with lid	HAZMAT trailer
Portable Lighting	(1) Emergency lighting system; 120 volts; 500-watt bulbs, suitable for wet location	Underground rescue truck
Patching Kit	Series A Hazardous Response Kit; Class A; contains nonsparking equipment to control and plug leaks.	HAZMAT trailer
Scoops and Shovels	Cleanup; plastic; various sizes; nonsparking; nonwood handles (1) Scoop (3) Shovels	HAZMAT trailer

Equipment	Description and Capabilities	Location
Medical Resources		
Ambulance #1	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. Equipped as per Federal Specifications KKK-A-1822 and New Mexico Emergency Medical Services Act General Order 35; equipped with a radio to Carlsbad Medical Center, VHF radio, UHF medical frequency, cellular phone	Surface Surface at Safety and Emergency Services Facility (Safety and Emergency Services Facility Building 452 – Vehicle Bay)
Ambulance #2 <u>Medical Cart</u>	A minimum of one medical cart, Diesel and/or electric ambulance equipped to provide basic life support operations, as documented in WIPP facility files with first-aid kit, 2 stretchers, and other associated medical supplies	Underground (Emergency Vehicle Parking/Charging Area at S700/E140)
Ambulance #3 ^a	Diesel and/or electric ambulance equipped with first-aid kit, rescue basket, oxygen, cardiac monitor and other associated medical supplies	Underground
Rescue Truck #1	Special purpose vehicle; light and heavy duty rescue equipment; transports 1 litter patient, medical oxygen and supplies for mass casualties, fire suppression support equipment (rescue tool, air bag, K-12 Rescue Saw, 5,000-watt generator, self-contained breathing apparatus (SCBA), and much more equipment	Surface (Safety and Emergency Services Facility)
Miner's First-Aid Station <u>Miners First Aid Stations</u>	Equipped per 30 CFR 57.15001	Various Underground Locations Underground (Salt Shaft Area, Waste Shaft Area, E300 Maintenance Shop, and at S1000/W30, S1300/W30, and S1950/E140)
Fire Detection and Fire Suppression Equipment		
Building Smoke, Thermal Detectors, or Manual Pull Stations	Devices that trigger an alarm and/or fire suppression system Ionization and photoelectric or fixed temperature/rate of rise detectors; visual display and alarm in CMR; manual pull stations. The underground has manual fire alarm pull stations located where personnel have access when evacuating. These are connected to the U/G evacuation alarm.	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 Facility Building (Building 412), Waste Shaft Cellar, Underground Fuel Station (N150/W170), SH Shaft Hoisthouse (Building 384), Engineering Building (Building 486), Industrial Safety and Emergency Services Building Facility (Building 452), and Training Facility Building (Building 489)
Fire Trucks #1	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 Equipped per Class "A" fire truck per NFPA; capacity 750 gallons, with pump capacity of 1200 gallons per minute	Surface (Safety and Emergency Services Facility Surface at Safety and Emergency Services Facility (Building 452 – Vehicle Bay)

Equipment	Description and Capabilities	Location
Fire Truck #2	Equipped per Class "A" fire truck per NFPA; capacity 1500 gallons; with pump capacity rated for 1250 gallons per minute.	Surface (Safety and Emergency Services Facility)
Rescue Truck #2 (U/G)	(1) 125-pound dry chemical extinguisher (1) 150-pound foam extinguisher	Underground
Rescue Truck #3^a (U/G)	(1) 125-pound dry chemical extinguisher (1) 33-gallon foam extinguisher	Underground
Rescue Carts/Trucks	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 Surface at Safety and Emergency Services Facility (Building 452 – Vehicle Bay) and Underground (Emergency Vehicle Parking/Charging Area at S700/E140)
Underground Fire^a Suppression Vehicles	A minimum of one special-purpose electric cart to assist in fighting fires; equipped with a minimum of one fire extinguisher (1) 125-pound dry chemical extinguisher (1) 33-gallon foam extinguisher	Underground (Emergency Vehicle Parking/Charging Area at S700/E140)
Fire Extinguishers	Hand-held individual fire extinguishers; various types located throughout the facility, conforming to in accordance with NFPA-10.	Surface and underground locations used for hazardous waste management, as documented in WIPP facility files Buildings, underground, and underground vehicles
Automatic Dry Chemical Extinguishing Systems	Automatic; 1,000-pound system (Dry Chemical) ; 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 Individual fire suppression systems are installed on liquid-fueled vehicles	Surface and underground locations used for hazardous waste management, as documented in WIPP facility files Underground and Surface

Equipment	Description and Capabilities	Location
Sprinkler Systems	NFPA water-based fire suppression systems Fire alarms activated by water flow	Water Pumphouse (Building 456), Guard and Security Building (Building 458), Support Building , Waste Handling Building (Building 411, (Contact HandlingCH Bay, Remote HandlingRH Bay, and Overpack Repair Areas only), -transuranic waste area only), Warehouse/Shops Building, Auxiliary Warehouse Building, TRUPACT Maintenance FacilityBuilding (Building 412), Training Facility, SH Shaft Hoisthouse, Exhaust Shaft Filter Building (Building 413), and surface Hazardous Waste Staging Areas (Buildings 474A and 474B)Engineering Building, and Safety Building
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		
Headlamps Head Lamps	Mounted on hard hat; battery operated	Each person underground
Underground Self-Rescuer Units	Short-term rebreathers; approximately 300 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 69-8-16At least 60 minutes of oxygen available. Approximately 400 units cached throughout the underground	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 approximately 14 Mine Rescue Team Draeger units	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 (Building 452) Surface Fire Trucks and Rescue Truck; Underground Rescue Cart

Equipment	Description and Capabilities	Location
Chemical and Chemical-Supported Gloves	Body protection; (12 pair) inner-cloth; (12 pair) outer-pvc; (5 pair) outer-viton	HAZMAT trailer
Suit, Acid	Body protection; (4) acid	HAZMAT trailer
Suit, Fully Encapsulated	Body protection; used with SCBAs; full outerboot; (4) Level A; (4) Level B	HAZMAT trailer
Emergency Medical Equipment		
Antishock Trousers	Shock treatment; (2) inflatable, one on each ambulance	Ambulance # 1 and # 2
Heart Monitor and Defibrillator	Heart Monitor/defibrillator	Ambulance # 1 and # 2
Oxygen	Patient care; Size D: (2) Ambulance #1 (1) Underground Ambulance (1) Health Services Size E: (1) Rescue Truck (2) Underground Ambulance Size M: (1) Ambulance #1	Ambulance # 1 and # 2, surface rescue truck
Resuscitators (Bag)	Disposable bag resuscitation Ambulance #1: (2) adult size (1) child size Underground Ambulance: (2) adult size	Ambulance # 1, Ambulance # 2
Splints	Immobilize limbs; (1) Adult traction splint, lower extremity, with limb-supporting slings, padded ankle hitch and traction device per ambulance. (2) Rigid splinting devices or equivalents, suitable for immobilization of upper extremities per ambulance. (2) Rigid splinting devices or equivalents, suitable for the immobilization of lower extremities. (1) Set of Airsplints: 6 assorted splints; hand/wrist, half arm, full arm, foot/ankle, half leg, and full leg per miner's aid stations.	Ambulance # 1 and # 2, Miner's Aid Stations

Equipment	Description and Capabilities	Location
Stretchers	<p>Patient transport;</p> <p>(2) Spine Boards, one short and one long, with nylon straps per ambulance. (also used to perform cardiopulmonary resuscitation)</p> <p>(2) Emergency Stretchers or scoops, or combination per ambulance</p> <p>(1) All-purpose multi-level ambulance stretch (gurney), with 3 safety straps and locking mechanism per ambulance.</p> <p>(1) Stretcher in each miner's aid station.</p>	<p>Various combinations in Ambulance # 1 and # 2, Miner's Aid Station</p>
Suctions	<p>For medical emergencies:</p> <p>Portable</p> <p>(1) Suction unit, capable of delivering at least 300 mm. HG on each ambulance.</p>	Ambulances #1 and #2
Trauma Kits	<p>(1) adult blood pressure cuff and stethoscope</p> <p>(4) soft roller bandages</p> <p>(3) triangular bandages</p> <p>(1) pkg. band-aids</p> <p>(2) trauma dressings</p> <p>(25) 4X4 sponges</p> <p>(1) roll adhesive tape</p> <p>(1) bite stick</p> <p>(1) penlight</p> <p>(1) sterile burn sheet</p> <p>(1) oropharyngeal airway</p> <p>(1) glucose substance</p> <p>(2) sterile gauze dressings</p>	<p>(1) kit in each:</p> <p>Ambulances #1 and #2, surface rescue truck</p>
Miner's Aid Station	<p>For First Aid Stations in the Underground</p> <p>(1) Stretcher—as referenced above per station</p> <p>(1) Set of ahrsplints—as referenced above per station</p> <p>(1) Blanket per station</p> <p>(1) Box of latex gloves (50) per station</p> <p>(5) Pathogen Wipes per station</p> <p>(1) First Aid Kit (24) per station; includes,</p> <p>(3) Band-Aid Combo Paks</p> <p>(2) Swabs, PVP</p> <p>(1) Antibiotic Ointment</p> <p>(1) Sting-Kill Swab</p> <p>(2) Dressing, compresses</p> <p>(2) Roller Bandages</p> <p>(2) Tape</p> <p>(2) Triangle Bandage</p> <p>(1) Eyedressing Pak</p> <p>(1) Burn Dressing</p> <p>(1) Ammonia Inhalants</p> <p>(1) User Log Sheet</p>	Miner's Aid Stations—Various Underground Locations

Equipment	Description and Capabilities	Location
First Aid Supplies	According to General Order #35 (12) bandages, soft roller, self-adhering type—4" or 6" x 5 yards. (6) triangular bandages, 40" (1) box band-aids (1) 1 pair bandage shears (6) Trauma dressings, 30" x 10" (6) Trauma dressings, 5" x 7" (50) 4" x 4" sponges, individually wrapped and sterile (2) rolls adhesive tape (1) penlight (2) sterile burn sheets (2) oropharyngeal airways—adult (2) oropharyngeal airways—child (Ambulance #1 only) (2) oropharyngeal airways—infant (Ambulance #1 only) (1) Glucose substance (3) Occlusive dressings (1) Roll aluminum foil (6) Rigid cervical collars—2 each small, medium and large sizes (4) Cold packs (4) Heat packs (2) Bite sticks	Ambulance #1
First Aid Supplies	(2) Transfer sheets (2) Blankets	Ambulances #1 and #2
First Aid Supplies	(2) #16g angiosets (2) #18g angiosets (2) #20g angiosets (1) 1000cc LR IV fluid (1) 500cc NS IV fluid	Ambulances #1 and #2, surface rescue truck
General Plant Emergency Equipment		
Emergency Lighting	For employee rescue and 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	Surface and underground <u>Waste Handling Building (Building 411), TRUPACT Maintenance Building (Building 412), and Exhaust Shaft Filter Building (Building 413)</u>
Backup Power Sources	A minimum of t Two diesel generators, and battery-powered uninterruptible power supply (UPS); use limited to essential loads; manual or remote starting 1,100-kilowatt diesel generators with on-site fuel for 62% load for 3 days for selected loads; 30-minute battery capacity for essential loads	Generators are east of Safety and Emergency Services <u>Safety and Emergency Services Facility (Building 452)</u> ; UPS is located at the essential loads
<u>Emergency</u> Hoists	Hoists in Waste Shaft, Air Intake Shaft, and SH Shaft	Waste Shaft, Air Intake Shaft (Building 361), SH Shaft

Equipment	Description and Capabilities	Location
Radiation Monitoring Equipment	(5) Portable alpha and beta survey meters, portable air samplers, and portable continuous air monitors	Building 412
Emergency Showers	For emergency flushing of chemical contact or injury	Surface Waste Handling Building (Building 411) and surface Hazardous Waste Staging Areas (Building 474A)
Emergency Eyewash Equipment Eye Wash Fountains	For emergency flushing of affected eyes	Waste Handling Building (Building 411, RH Bay, Site Derived Waste Area, Waste Shaft Collar, and Room 108 TRUPACT III only), TRUPACT Maintenance Building (Building 412), Exhaust Shaft Filter Building (Building 413) surface, Hazardous Waste Staging Areas (Building 474A, Waste Oil Retainer Area), and the underground Hazardous Waste Staging Area (S550/E140)Various locations on surface and in the underground
Decon Shower Equipment	Self-contained decon shower trailer, portable decon shower unit	Surface
Overpack containers for TRU Mixed Waste	44-85 Gallon drums 4-SWBs 4-TDOP	Warehouse Annex (Building 481) Building 481 Building 481
HEPA Vacuums	2 HEPA Vacuums to be utilized for removal of contamination.	Building 481
Aquaset or Cement	100 lbs. of aquaset or cement m 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) Building 481
Paint or Fixative	1-5 gallon bucket of approved fixative to be used during recovery.	Building 481
TDOP Upender	Upender facilitates overpacking standard waste boxes	Waste Handling Building (Building 411)Building 481
Non hazardous Decontaminating Agents	4-1 Gallon bottles f For decontamination of surfaces, equipment, and personnel	Waste Handling Building (Building 411); Surface Connex A, located south of Building 411Building 481

1 ^a ~~The NMED will be notified when new equipment is brought on line in calendar year 2015.~~

1 ~~Table D-7~~
2 ~~Types of Fire Suppression Systems by Location~~

Location	AS	AD	MPS	PFE
Waste Handling Building	*		*	*
Support Building	*		*	*
Exhaust Filter Building	*		*	*
Water Pump House	*		*	*
Underground Support Areas (also has rescue truck) (as illustrated in Figure D-5)		*	*	*
Station A Effluent Monitoring Shed			*	*
Station B Effluent Monitoring Shed			*	*

(1) Symbols for WIPP fire protection systems:

AS = Automatic Wet Pipe Sprinkler System

AD = Automatic Dry Chemical Extinguishing System

MPS = Manual Pull Stations

PFE = Portable Fire Extinguishers

(2) The Waste Handling Building and the Support Building contain the following:

Automatic wet pipe sprinklers

Fire detection in the heating, ventilation, and air conditioning instrumentation (Support Building, only)

Manual pull stations

Portable fire extinguishers

Automatic detectors

The Safety and Emergency Services Building contains the following:

Automatic wet pipe sprinklers

Manual pull stations

Portable fire extinguishers

Automatic detectors

The Core Storage Building contains the following:

Automatic wet pipe sprinklers

Portable fire extinguishers

(3) The Exhaust Filter Building, Underground Facilities, Warehouse/Shops Building, Water Pump House, and Salt Handling Hoist house also have portable fire extinguishers, manual pull stations, and automatic detectors.

Table D-8
Hazardous Release Reporting, Federal

Statute	Chemical Releases Covered	To Whom Report Will Be Made	What Will Be Reported	
			Immediately (Oral)	Subsequently (Written)
Comprehensive Environmental Response, Compensation and Liability Act (CERCLA)/Superfund Amendments and Reauthorization Act (SARA) (40 CFR Part 302)	"Reportable quantities" of CERCLA/SARA "hazardous substances."	National Response Center: (800) 424-8802, State Emergency Response Commission (SERC); and the State of New Mexico Homeland Security and Emergency Management via the District 3, DPS Dispatch Center (575) 622-7200 Eddy County Emergency Manager via the Eddy County Regional Dispatch Authority (575) 616-7155 Lea County Emergency Manager via the Lea County Emergency Communications Authority (575) 397-9265	1) Chemical identification; 2) what hazardous substance; 3) quantity released; 4) time, location and duration of release; 5) media of release; 6) health risks and medical advice; 7) proper precautions (e.g., evacuation); and 8) name and phone number of reporter and facility.	As soon as practicable, update of oral notice and response action taken. Send report to: New Mexico State Emergency Response Commission, Department of Homeland Security and Emergency Management, P.O. Box 2711, Santa Fe, New Mexico, 87502, and Eddy County Emergency Manager, 324 S. Canyon Street, Suite B, Carlsbad, New Mexico 88220 and Lea County Emergency Manager, 1923 Dal Paso, Suite A, Hobbs New Mexico, 88240. National Response Center will contact the U.S. Environmental Protection Agency (EPA). EPA may request a written report.
Emergency Planning and Community Right-to-Know Act (SARA Title III) (40 CFR Parts 302 and 355)	SARA Title III "extremely hazardous substances."	National Response Center: (800) 424-8802, State Emergency Response Commission; and the State of New Mexico Homeland Security and Emergency Management via the District 3, DPS Dispatch Center (575) 622-7200 Eddy County Emergency Manager via the Eddy County Regional Dispatch Authority (575) 616-7155 Lea County Emergency Manager via the Lea County Emergency Communications Authority (575) 397-9265	1) Chemical identification; 2) what extremely hazardous substance; 3) quantity released; 4) time, location and duration of release; 5) media of release; 6) health risks and medical advice; 7) proper precautions (e.g., evacuation); and 8) name and phone number of reporter and facility.	As soon as practicable, update of oral notice and response action taken. Send report to: New Mexico State Emergency Response Commission, Department of Homeland Security and Emergency Management, P.O. Box 27111, Santa Fe, New Mexico, 87502, and Eddy County Emergency Manager, 324 S. Canyon Street, Suite B, Carlsbad, New Mexico 88220 and Lea County Emergency Manager, 1923 Dal Paso, Suite A, Hobbs New Mexico, 88240. National Response Center will contact the U.S. Environmental Protection Agency (EPA) for an address if a written report is requested by EPA.

Statute	Chemical Releases Covered	To Whom Report Will Be Made	What Will Be Reported	
			Immediately (Oral)	Subsequently (Written)
Resource Conservation and Recovery Act (RCRA), 40 CFR §§264.56(a) and 265.56(a)	Any imminent or actual emergency situation.	State or local agencies with designated response roles, if their help is needed: State of New Mexico Homeland Security and Emergency Management via the District 3, DPS Dispatch Center (575) 622-7200 Eddy County Regional Dispatch Authority (575) 616-7155 City of Carlsbad Emergency Dispatch Center (575) 885-2111 Lea County Emergency Communications Authority (575) 397-9265	What assistance is required.	Not Applicable (NA)
RCRA, 40 CFR §§264.56(d)	RCRA "hazardous waste" release, fire, or explosion, which could threaten human health or environment outside the facility.	National Response Center: (800) 424-8802. State Emergency Response Commission and the State of New Mexico Homeland Security and Emergency Management via the District 3, DPS Dispatch Center (575) 622-7200	(1) Name and telephone number of reporter; (2) name and telephone number of facility; (3) time and type of incident; (4) name and quantity of materials involved; (5) extent of injuries, if any; and (6) possible health or environmental hazards outside the facility.	N/A
RCRA, 40 CFR §§264.56(i) and 265.56(i)	Any incident which triggers implementation of Contingency Plan.	New Mexico Environment Department, Emergency Response Office, 24-hour telephone: (505) 827-9329 (emergencies); for non-emergencies contact (866) 428-6535 (24 hour voice mail) or Monday to Friday, 8 am to 5 pm: (505) 476-6000.	NA	Within 15 days: 1) name, address and telephone number of owner/operator; 2) name, address and telephone number of facility; 3) date, time and type of incident (e.g. fire, explosion); 4) name and quantity of materials involved; 5) extent of injuries, if any; 6) possible hazards to human health or the environment; 7) estimated quantity of material that resulted from the incident. Send to Secretary, New Mexico Environment Department, P.O. Box 26110, Santa Fe, New Mexico, 87502.

Table D-9
Hazardous Release Reporting, State of New Mexico

Regulations	Chemical Releases Covered	To Whom Report Will Be Made	What Will Be Reported	
			Immediately (Oral)	Subsequently (Written)
20.4.1.500 and 600 NMAC	RCRA "hazardous waste" releases, fire, or explosion, which could threaten human health or environment outside the facility.	National Response Center: (800) 424-8802, State Emergency Response Commission; and the State of New Mexico Homeland Security and Emergency Management via the District 3, DPS Dispatch Center (575) 622-7200	1) Name and telephone number of reporter; 2) name and telephone number of facility; 3) time and type of incident; 4) name and quantity of material involved; 5) extent of injuries, if any; and 6) possible health or environmental hazards outside the facility.	N/A
20.4.1.500 and 600 NMAC	Any incident which triggers implementation of Contingency Plan.	New Mexico Environment Department, Emergency Response Office, 24-hour telephone: (505) 827-9329 (emergencies); for non-emergencies contact (866) 428-6535 (24-hour voice mail) or Monday to Friday, 8 am to 5 pm: (505) 476-6000.	1) Name and telephone number of reporter; 2) name and address of facility; 3) name and quantity of materials involved, to extent known; 4) extent of injuries, if any; and 5) possible hazards to human health or the environment, outside the facility.	Within 15 days: 1) name, address and telephone number of owner/operator; 2) name, address and telephone number of facility; 3) date, time and type of incident (e.g., fire, explosion); 4) name and quantity of materials involved; 5) extent of injuries, if any; 6) possible hazards to human health or the environment; and 7) estimated quantity of material that resulted from the incident. Send to Secretary, New Mexico Environment Department, P.O. Box 26110, Santa Fe, New Mexico, 87502.

Regulations	Chemical Releases Covered	To Whom Report Will Be Made	What Will Be Reported	
			Immediately (Oral)	Subsequently (Written)
New Mexico Emergency Management Act, Section 74-4B-5	Any accident (spill) involving hazardous materials (including hazardous substances, radioactive substances, or a combination thereof) which may endanger human health or the environment.	New Mexico Environment Department, Monday to Friday 8 am to 5 pm: (505) 476-6000, after business hours call: (505) 827-9329, State Emergency Response Commission: and the State of New Mexico Homeland Security and Emergency Management via the District 3, DPS Dispatch Center (575) 622-7200 Eddy County Emergency Manager via the Eddy County Regional Dispatch Authority (575) 616-7155 Lea County Emergency Manager: (575) 605-6561, and New Mexico Department of Public Safety (505) 554-7565.	1) Name, address and telephone number of owner or operator; 2) name, address and telephone number of facility; 3) date, time and type of incident; 4) name and quantity of material(s) involved; 5) extent of any injuries; 6) assessment of actual or potential threat to environment or human health; and 7) estimated quantity and disposition of recovered material.	Written submission within one week of time permittees become aware of discharge. Same as oral and description of noncompliance and its cause, the period of noncompliance including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence. Send reports to New Mexico Environment Department, Chief, Ground Water Quality Bureau, P.O. Box 26110, Santa Fe, New Mexico, 87502, New Mexico State Emergency Response Commission, Homeland Security and Emergency Management, P.O. Box 27111, Santa Fe, New Mexico, 87502, and Eddy County Emergency Manager, 324 S. Canyon Street, Suite B, Carlsbad, New Mexico 88220 and Lea County Emergency Manager, 1923 Dal Paso, Suite A, Hobbs New Mexico, 88240.
New Mexico Water Quality Control Commission, Part 1, Section 203	Any discharge from any facility of oil or any other water contaminant in such quantities as may, with reasonable probability, injure or be detrimental to human health, animal or plant life, or property.	Chief, Ground Water Quality Bureau, New Mexico Environment Department, or his counterpart in any constituent agency delegated responsibility for enforcement of the rules as to any facility subject to such delegation (505) 827-2919.	Within 24 hours: 1) the name, address, and telephone number of the person or persons in charge of the facility; 2) the name, address, and telephone number of the owner/operator of the facility; 3) the date, time, location, and duration of the discharge; 4) the source and cause of the discharge; 5) a description of the discharge, including its chemical composition; and 6) the estimated volume of discharge, and immediate damage from the discharge.	Submit within seven days: verification of the prior oral notification, also provide any appropriate additions or corrections to the information contained in the prior oral notification. Within 15 days: submit a written report describing any corrective actions taken and/or to be taken relative to the discharge. Send reports to Chief, Ground Water Quality Bureau, New Mexico Environment Department, P.O. Box 26110, Santa Fe, New Mexico, 87502.

Regulations	Chemical Releases Covered	To Whom Report Will Be Made	What Will Be Reported	
			Immediately (Oral)	Subsequently (Written)
New Mexico Underground Storage Tank Regulations-2	Any known or suspected release from an Underground Storage Tank (UST) system, any spill or any other emergency situation.	New Mexico Environment Department Petroleum Storage Tank Bureau (505) 476-4397.	Within 24 hours: 1) the name, address, and telephone number of the agent in charge of the site at which the UST system is located, as well as the owner/operator of the system; 2) the name and address of the site and the location of the UST system on that site; 3) the date, time, location, and duration of the spill, release, or suspected release; 4) the source and cause of the spill, release, or suspected release; 5) a description of the spill, release, or suspected release, including its chemical composition; 6) the estimated volume of the spill, release, or suspected release; and 7) action taken to mitigate immediate damage from the spill, release, or suspected release.	Mail or deliver within seven days of the incident, a written notice describing the spill, release, or suspected release and any investigation or follow-up action taken or to be taken. Send reports to Petroleum Storage Tank Bureau, New Mexico Environment Department, 2044 Galisteo Street, Santa Fe, New Mexico, 87504.

FIGURES

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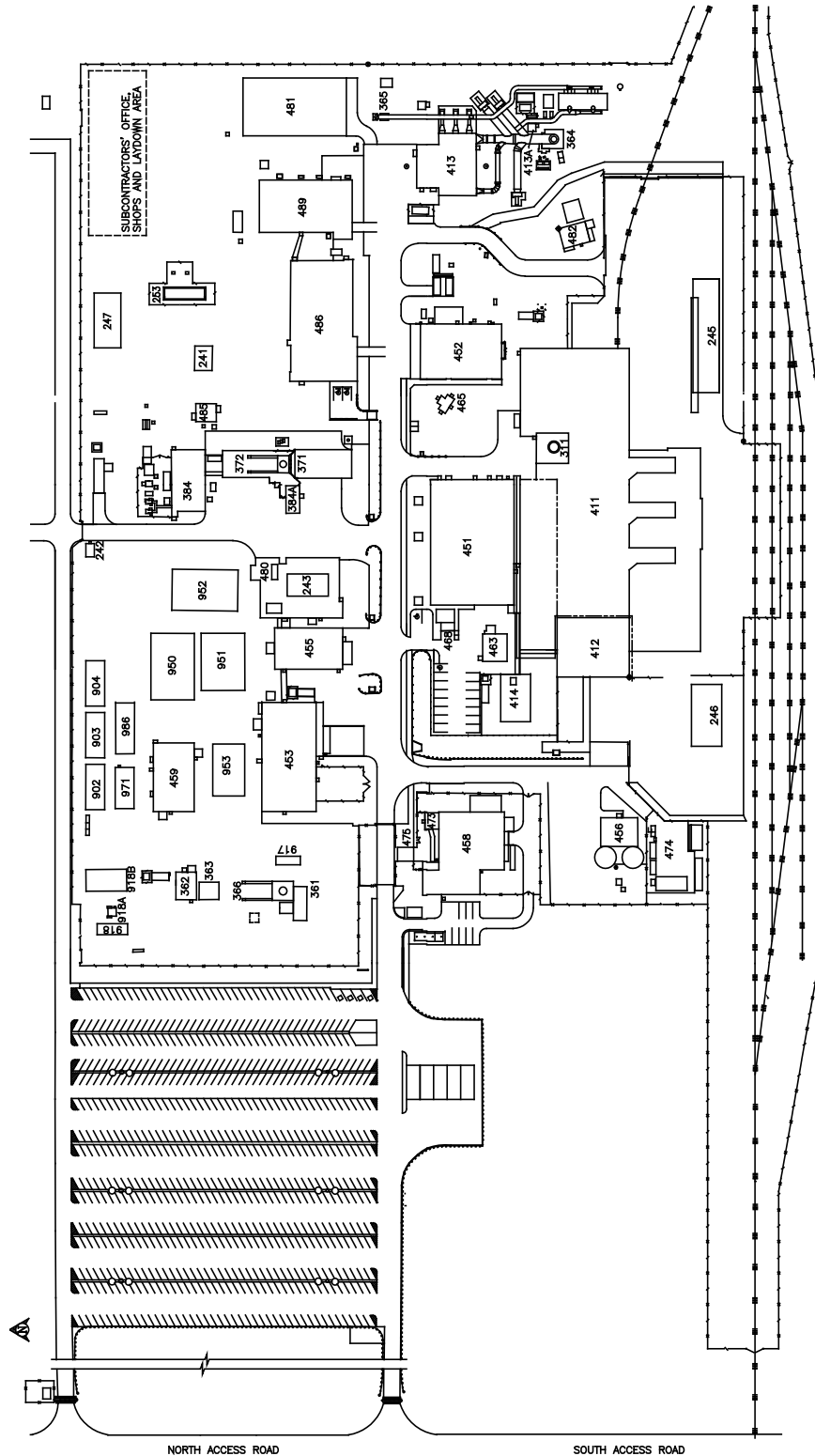


Figure D-1
WIPP Surface Structures

BLDG./ FAC.#	DESCRIPTION	BLDG./ FAC.#	DESCRIPTION	BLDG./ FAC.#	DESCRIPTION
#241	EQUIPMENT SHED	#384	SALT HANDLING SHAFT HOISTHOUSE	#475	GATEHOUSE
#242	GUARDSHACK	#384A	MINING OPERATIONS	#480	VEHICLE FUEL STATION
#243	SALT HAULING TRUCKS SHELTER	#411	WASTE HANDLING BUILDING	#481	WAREHOUSE ANNEX
#245	TRUPACT TRAILER SHELTER	#412	TRUPACT MAINTENANCE BUILDING	#482	EXHAUST SHAFT HOIST EQUIP. WAREHOUSE
#246	MgO STORAGE SHELTER	#413	EXHAUST SHAFT FILTER BUILDING	#485	SULLAIR COMPRESSOR BUILDING
#253	13.8 KV SWITCHGEAR 25p-SWG15/1	#413A	MONITORING STATION A	#486	ENGINEERING BUILDING
#254.1	AREA SUBSTATION NO. 1 25P-SW15.1	#413B	MONITORING STATION B	#489	TRAINING BUILDING
#254.2	AREA SUBSTATION NO. 2 25P-SW15.2	#414	WATER CHILLER FACILITY & BLDG	#H-16	SANDIA TEST WELL
#254.3	AREA SUBSTATION NO. 3 25P-SW15.3	#451	SUPPORT BUILDING	#917	AIS MONITORING
			SAFETY & EMERGENCY SERVICES		
#254.4	AREA SUBSTATION NO. 4 25P-SW15.4	#452	FACILITY	#918	VOC TRAILER
#254.5	AREA SUBSTATION NO. 5 25P-SW15.5	#453	WAREHOUSE/SHOPS BUILDING	#918A	VOC AIR MONITORING STATION
#254.6	AREA SUBSTATION NO. 6 25P-SW15.6	#455	AUXILIARY WAREHOUSE BUILDING	#918B	VOC LAB TRAILER
#254.7	AREA SUBSTATION NO. 7 25P-SW15.7	#456	WATER PUMPHOUSE	#950	WORK CONTROL TRAILER
#254.8	AREA SUBSTATION NO. 8 25P-SW15.8	#457N	WATER TANK 25-D-001B	#951	PROCUREMENT/PURCHASING
#254.9	480V SWITCHGEAR (25P-SWGO4/6)	#457S	WATER TANK 25-D-001A	#952	TRAILER
#255.1	BACK-UP DIESEL GENERATOR #1 25-PE 503	#458	GUARD AND SECURITY BUILDING	#953	MODULAR OFFICE COMPLEX
#255.2	BACK-UP DIESEL GENERATOR #2 25-PE 504	#459	CORE STORAGE BUILDING	#971	HUMAN RESOURCES TRAILER
#256.4	SWITCHBOARD #4 (25P-SBD04/4)	#463	COMPRESSOR BUILDING	#986	PUBLICATIONS & PROCEDURES TRAILER
#311	WASTE SHAFT	#465	AUXILIARY AIR INTAKE	SWR NO. 6	SWITCHRACK NO. 6
#351	EXHAUST SHAFT	#468	TELEPHONE HUT	SWR NO. 7	7A, 7B SWITCHRACK NO. 7, 7A, 7B
#361	AIR INTAKE SHAFT	#473	ARMORY BUILDING	SWR NO. 7C	SWITCHRACK NO. 7C
#362	AIR INTAKE SHAFT/HOIST HOUSE	#474	HAZARDOUS WASTE STORAGE FACILITY	SWR NO. 10	SWITCHRACK NO. 10
#363	AIR INTAKE SHAFT/WINCH HOUSE	#474A	HAZARDOUS WASTE STORAGE BUILDING	SWR NO. 11	SWITCHRACK NO. 11
#364	EFFLUENT MONITORING INSTRUMENT SHED A	#474B	HAZARDOUS WASTE STORAGE BUILDING	SWR NO. 12	SWITCHRACK NO. 12
#365	EFFLUENT MONITORING INSTRUMENT SHED B	#474C	OIL & GREASE STORAGE BUILDING	SWR NO. 15	SWITCHRACK NO. 15
#366	AIR INTAKE SHAFT HEADFRAME	#474D	GAS BOTTLE STORAGE BUILDING		
#371	SALT HANDLING SHAFT	#474E	HAZARD MATERIAL STORAGE BUILDING		
#372	SALT HANDLING SHAFT HEADFRAME	#474F	WASTE OIL RETAINER		

Figure D-1a
Legend to Figure D-1

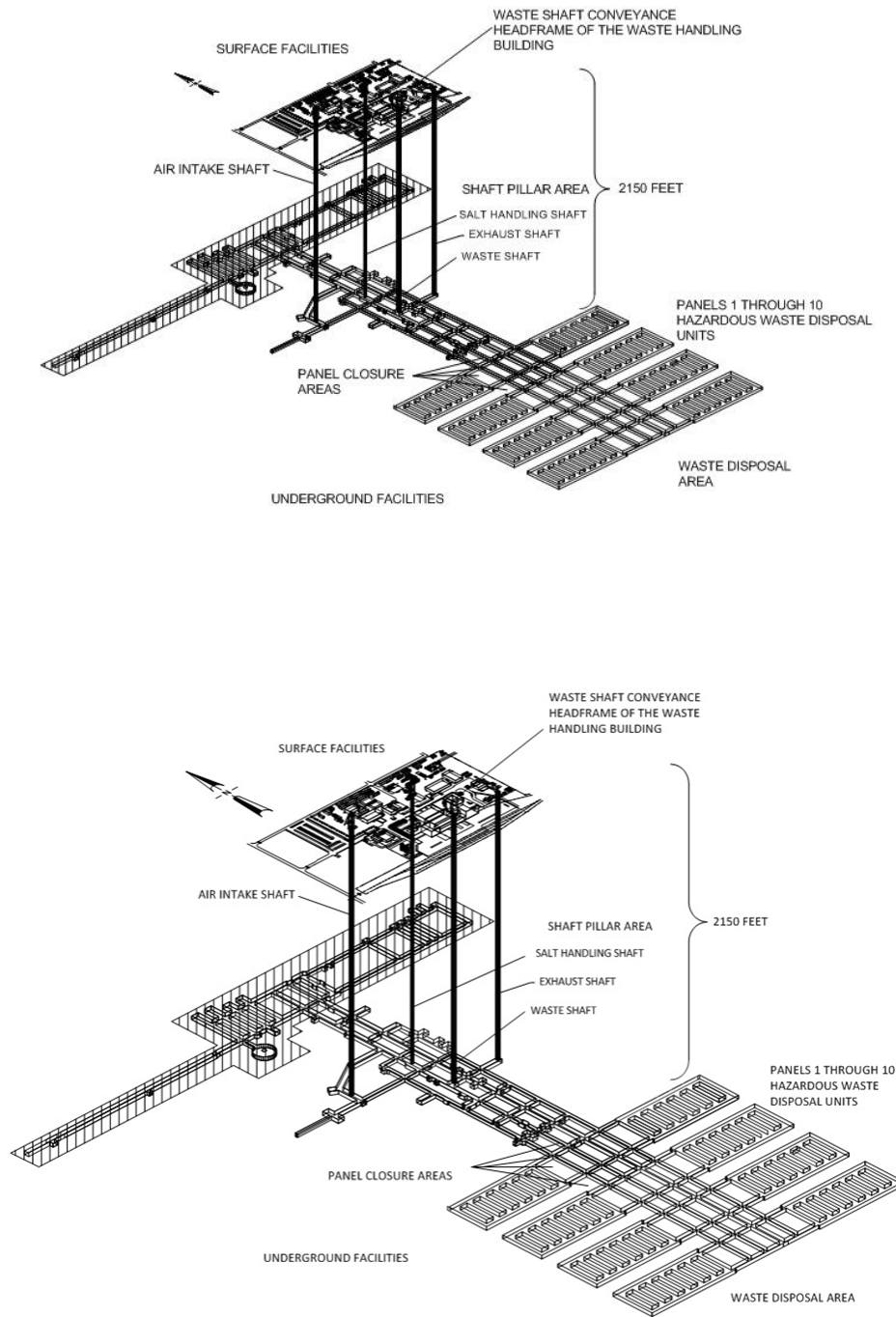


Figure D-2
Spatial View of the WIPP Facility

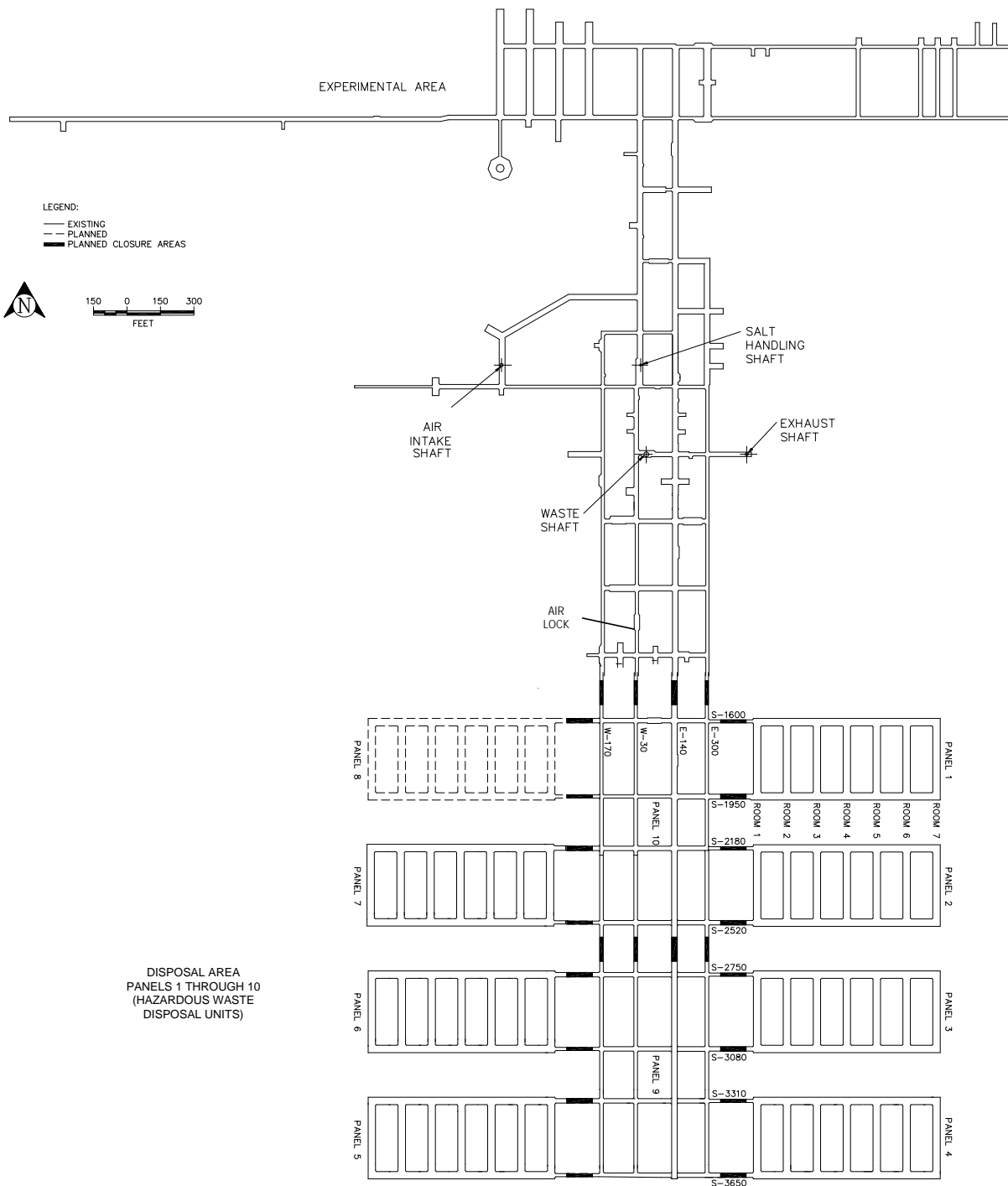


Figure D-3
WIPP Underground Facilities

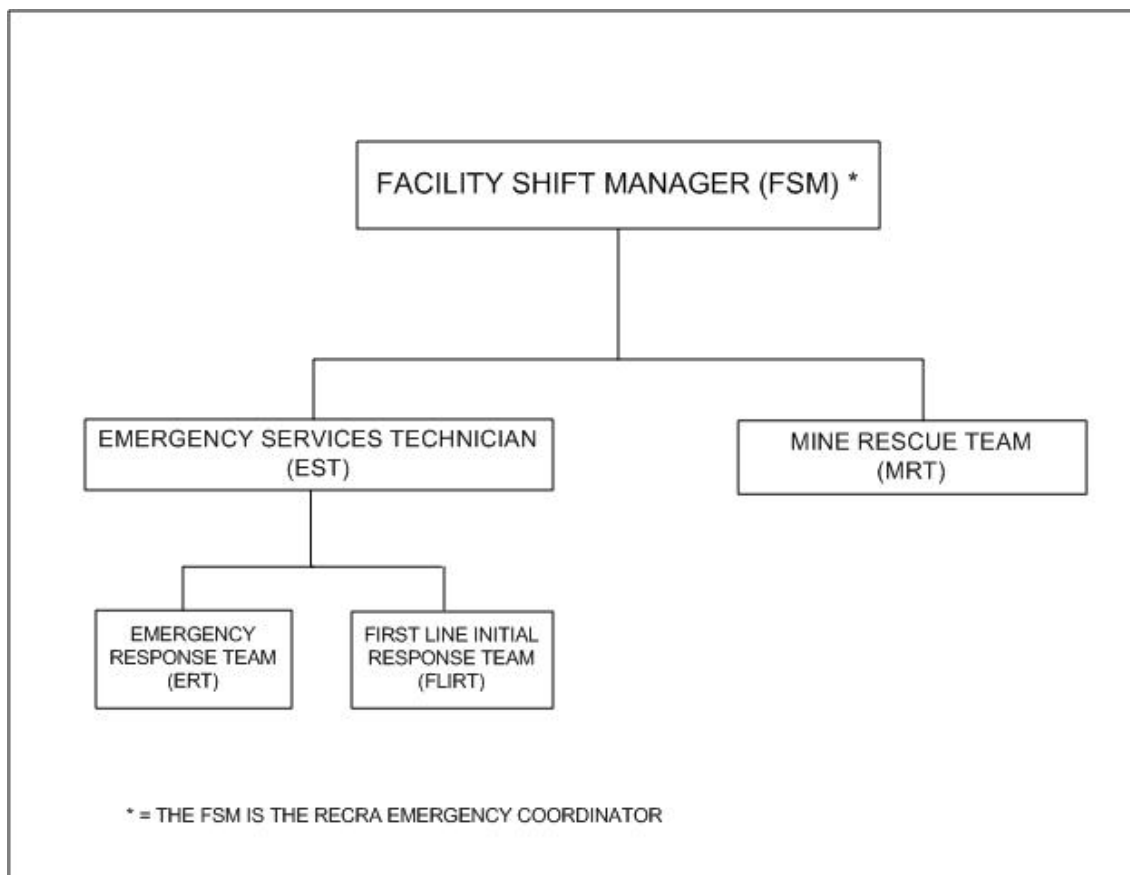


Figure D-4
Direction and Control Under Emergency Conditions in Which the Plan Has Been Implemented

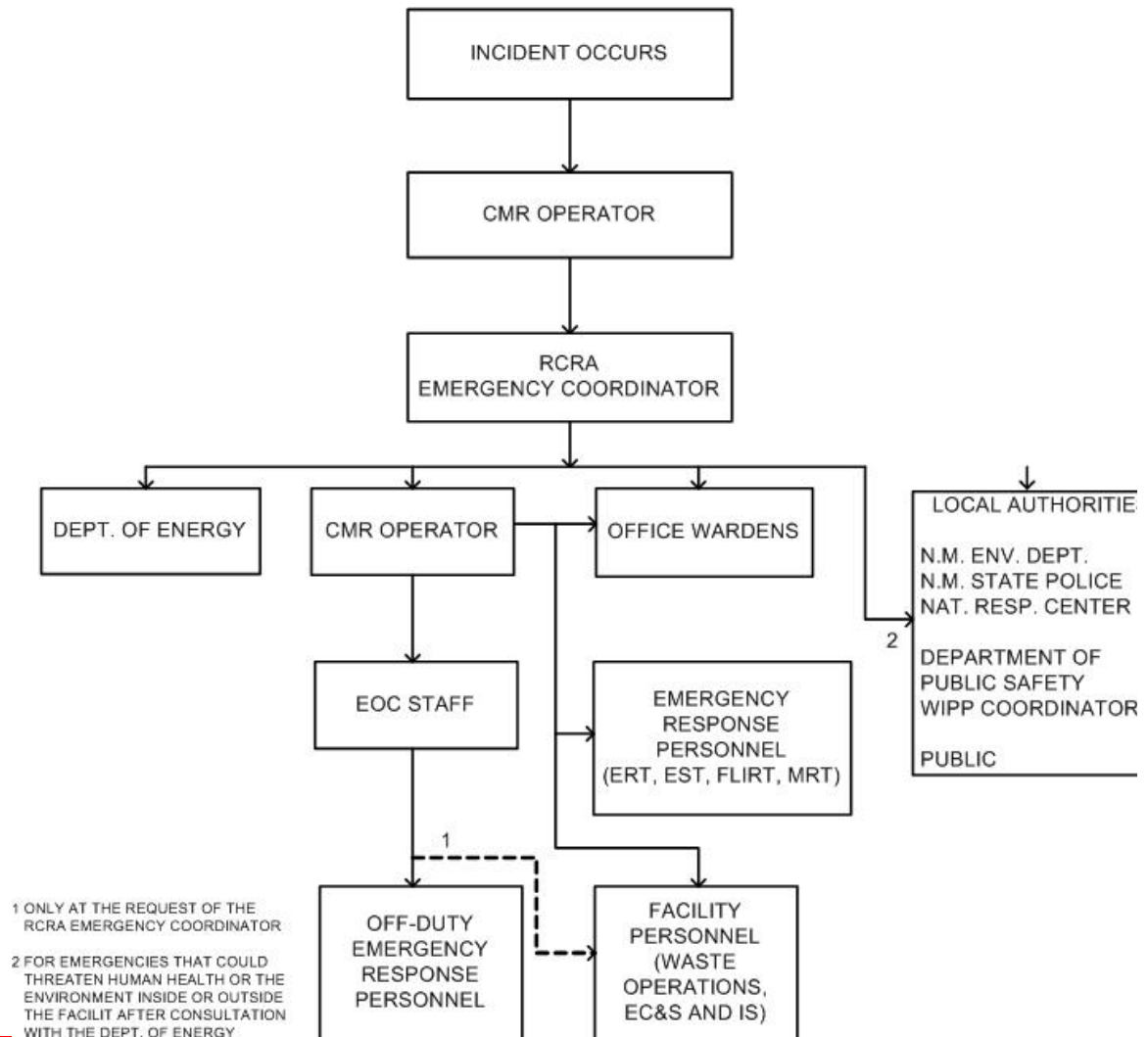
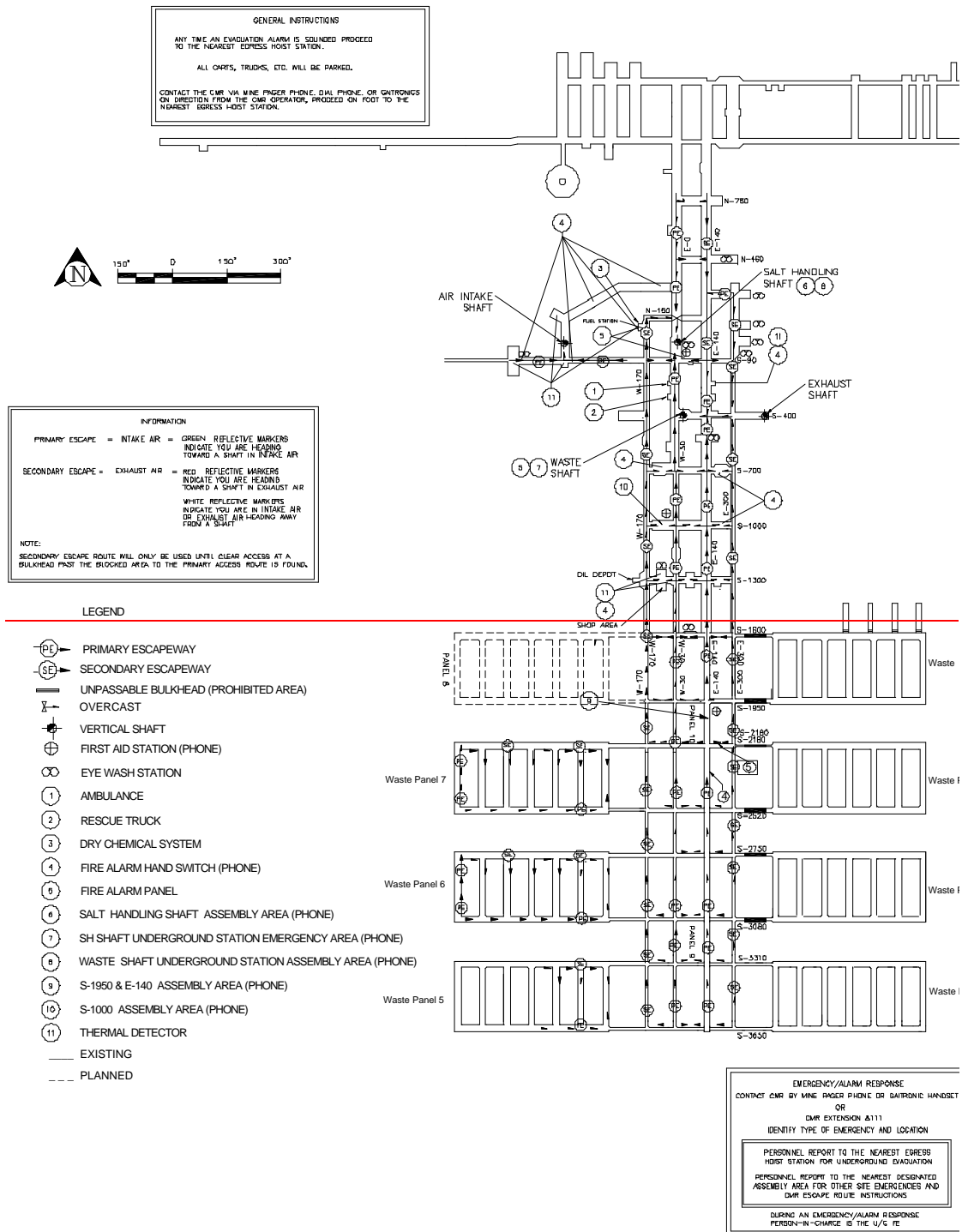


Figure D-4a
WIPP Facility Emergency Notifications



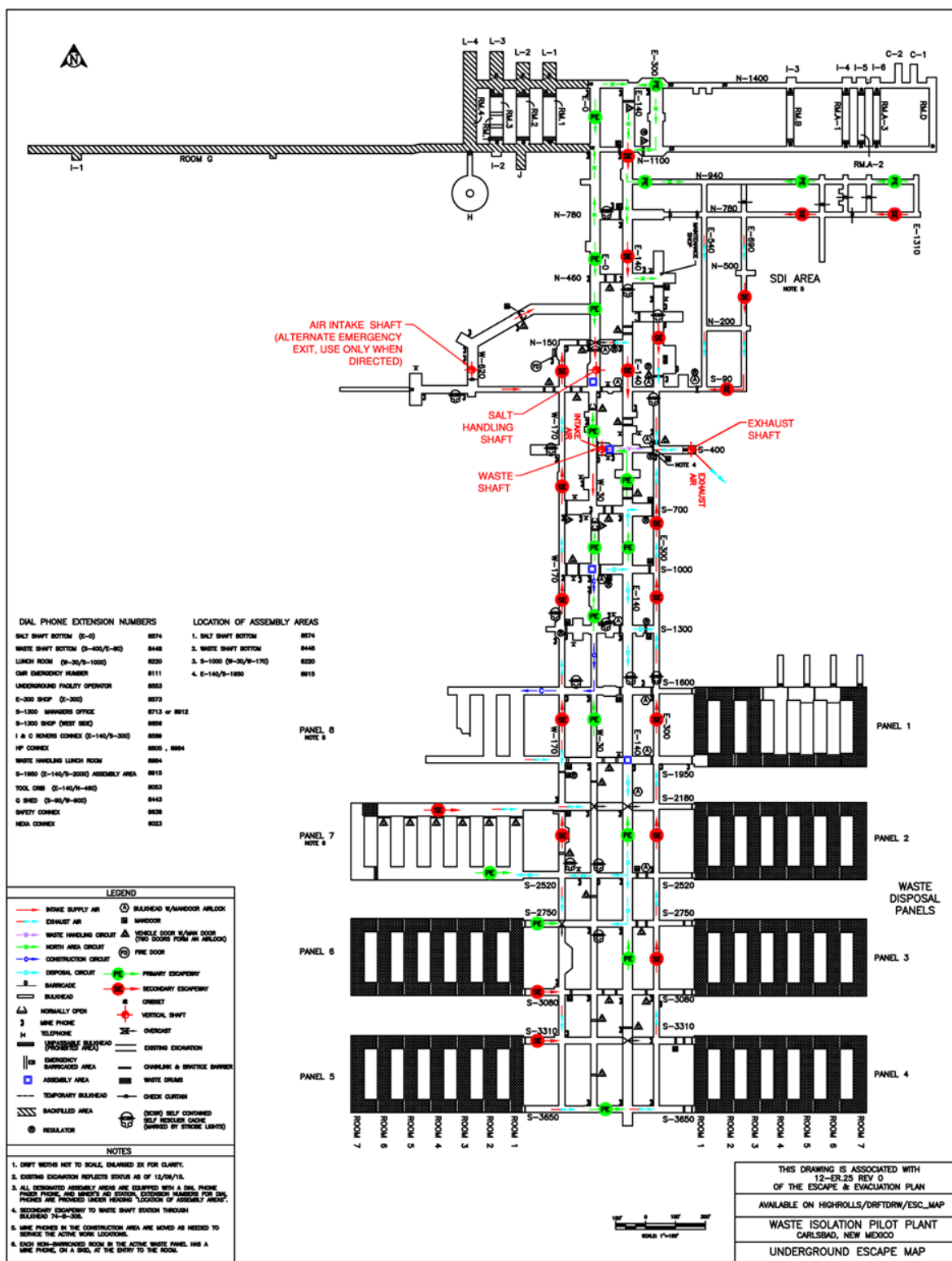


Figure D-4
Underground Escapeways/Evacuation Routes

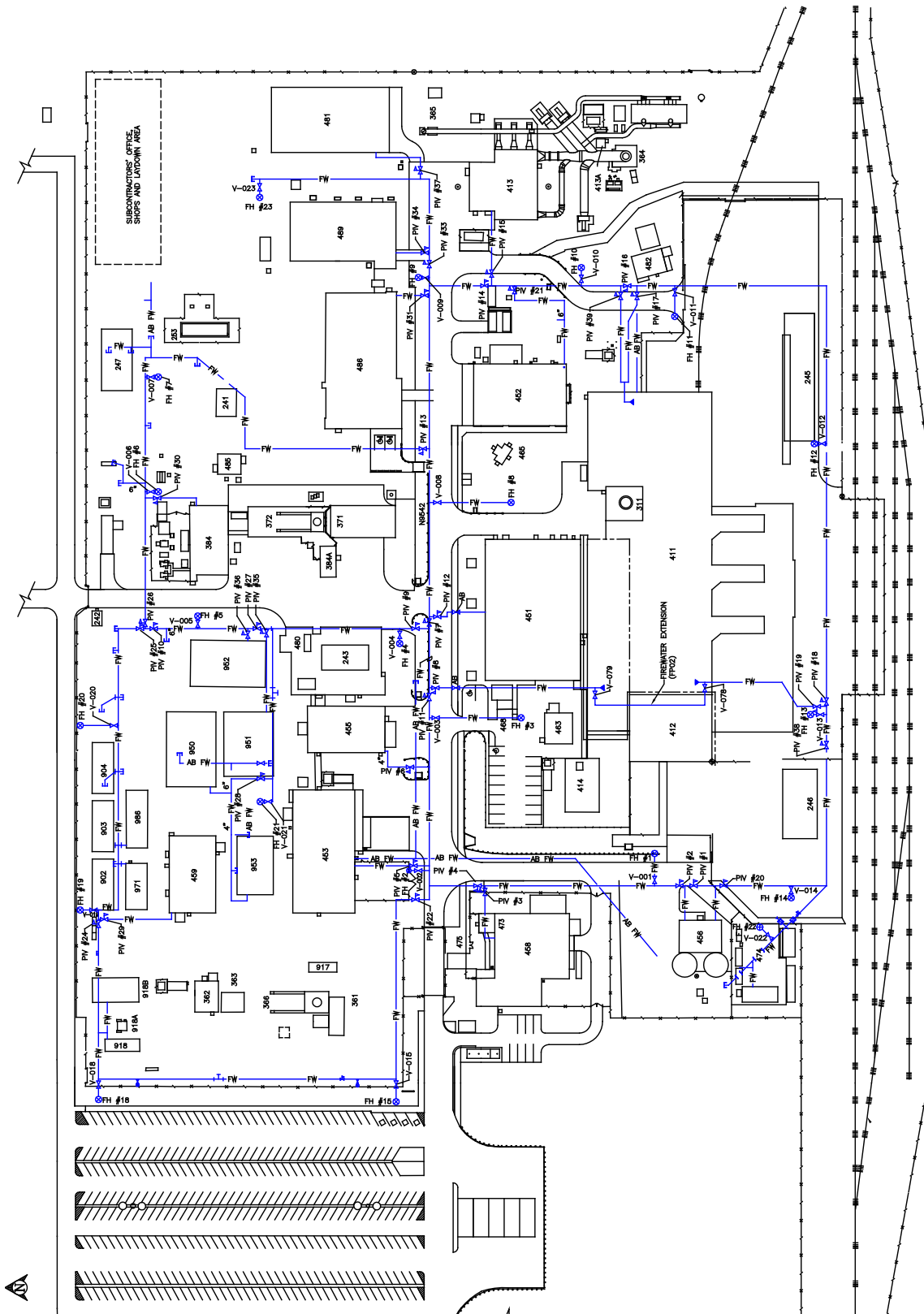


Figure D-5
Fire-Water Distribution System

Figure-D-5
Underground Emergency Equipment Locations and Underground Evacuation Routes

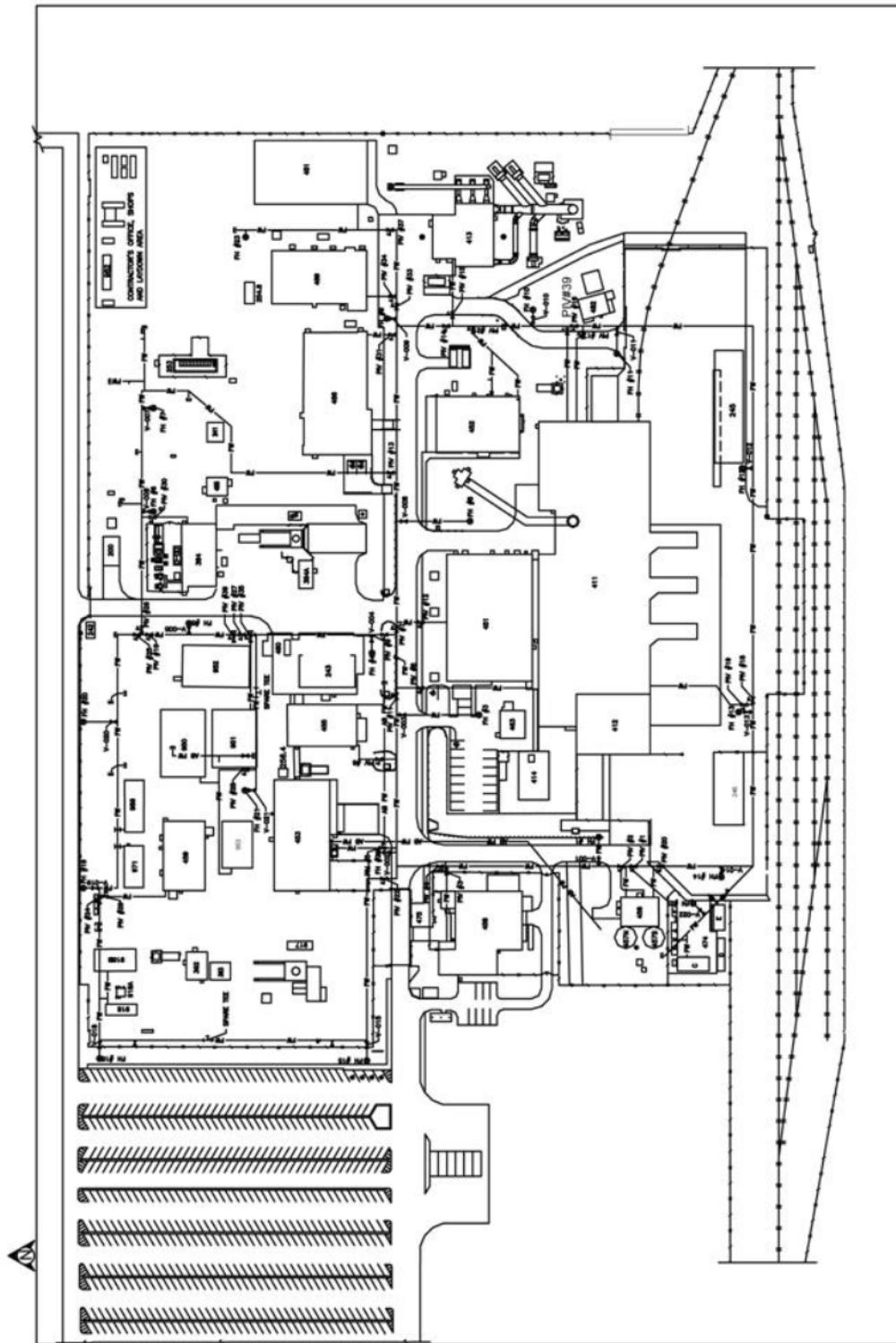


Figure-D-6
Fire-Water Distribution System

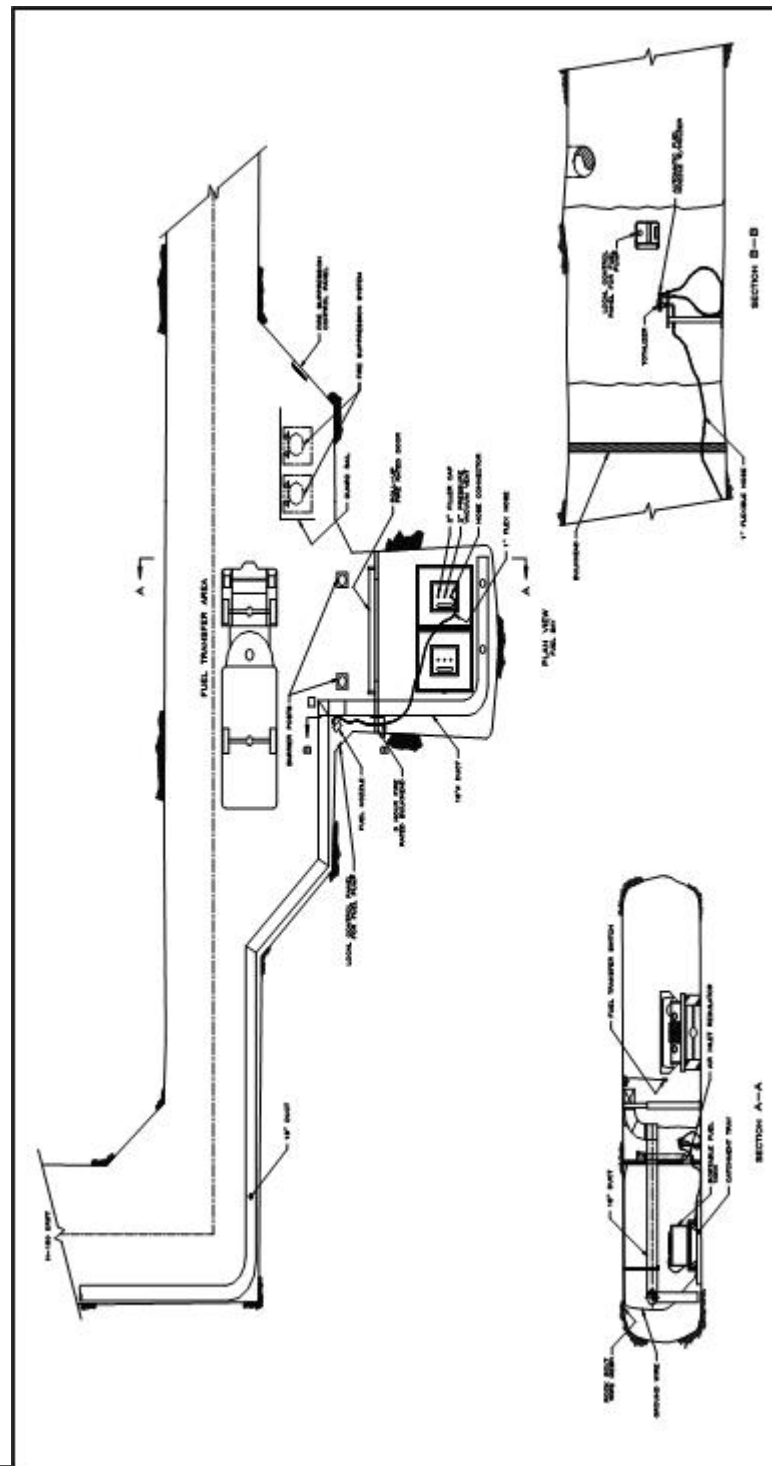


Figure D-7
Underground Diesel Fuel Station Area Fire-Protection System

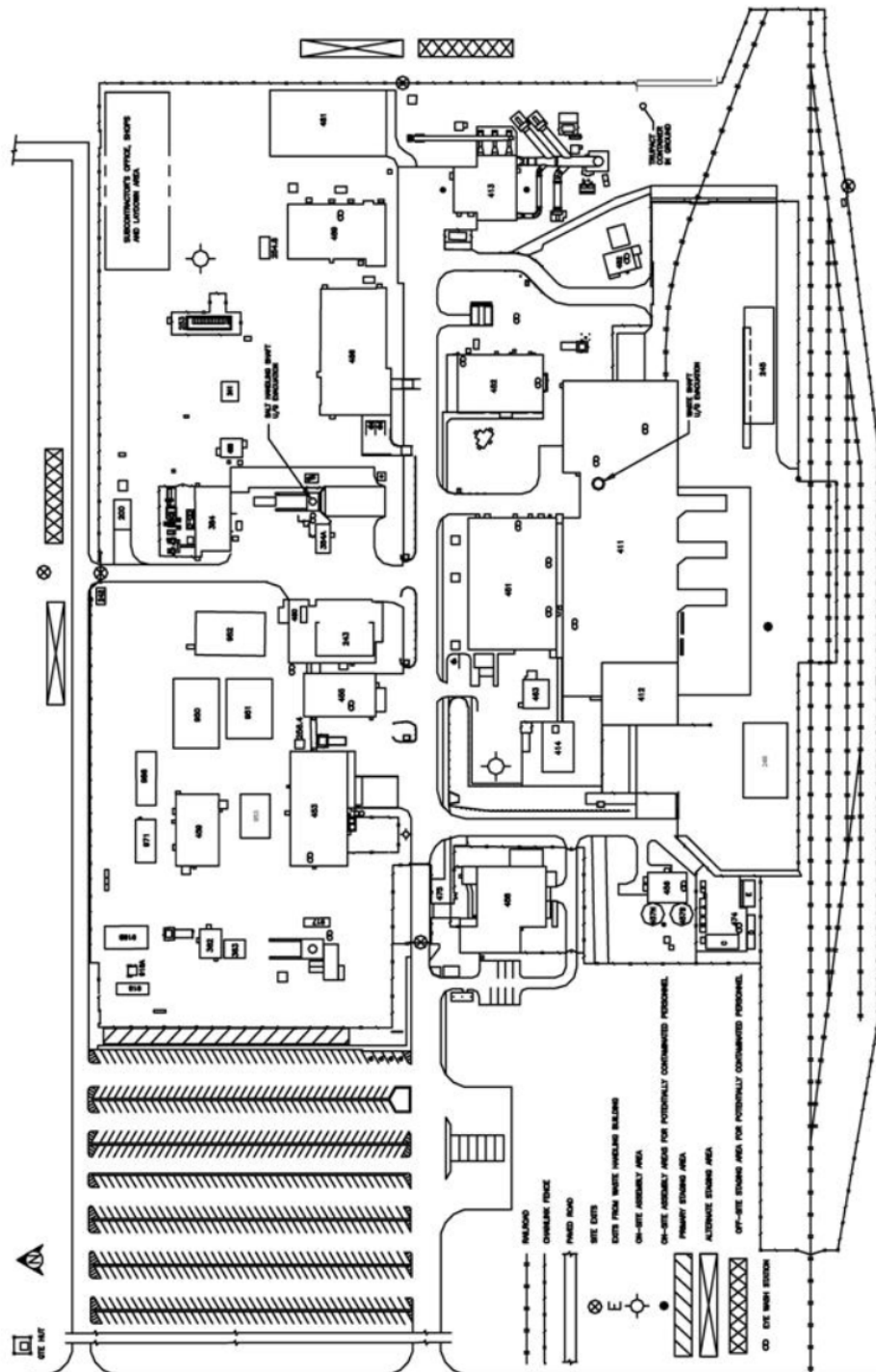


Figure D-68
 WIPP On-Site Assembly Areas and ~~WIPP-Off-Site~~ Staging Areas

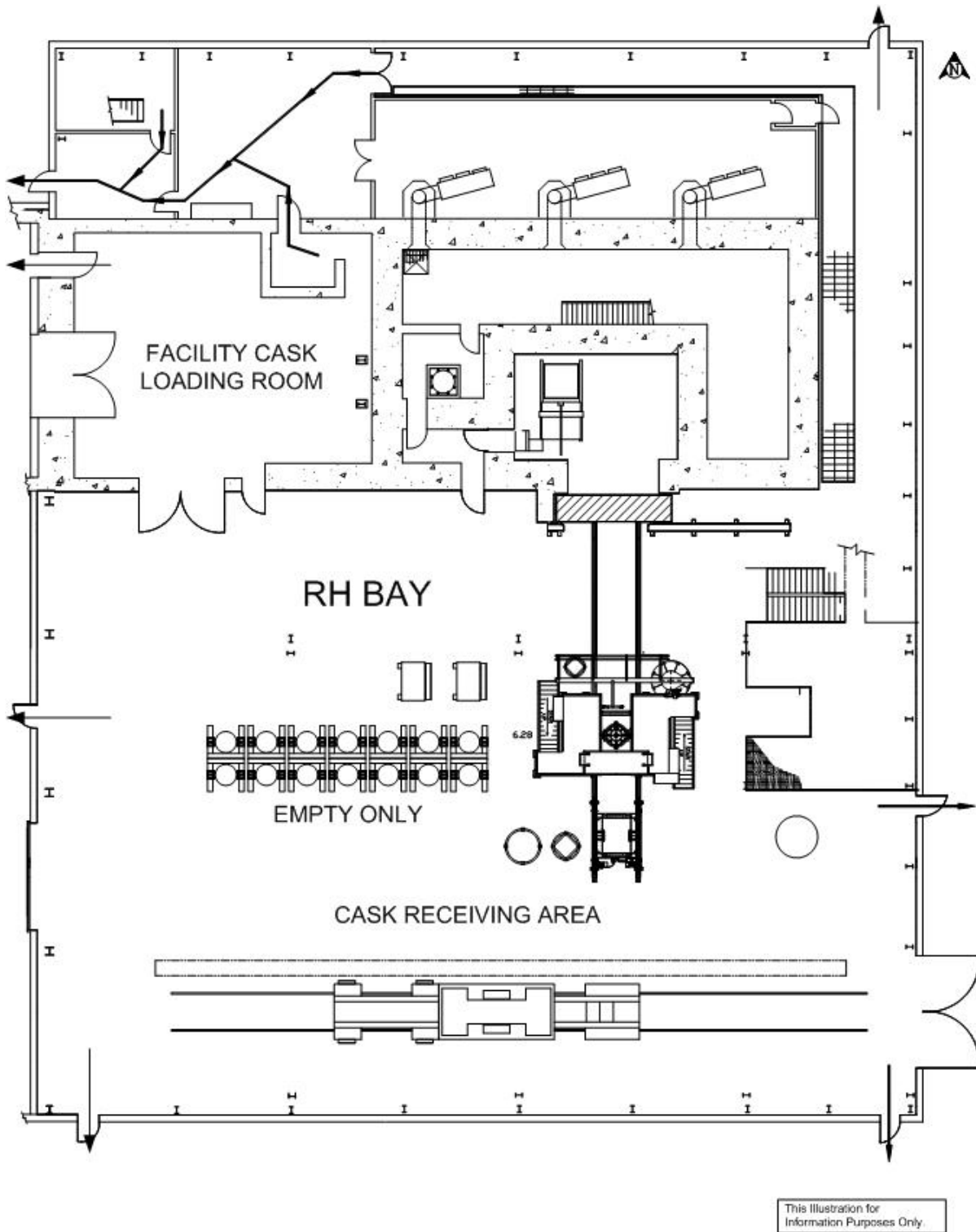


Figure D-68a
RH Bay Evacuation Routes

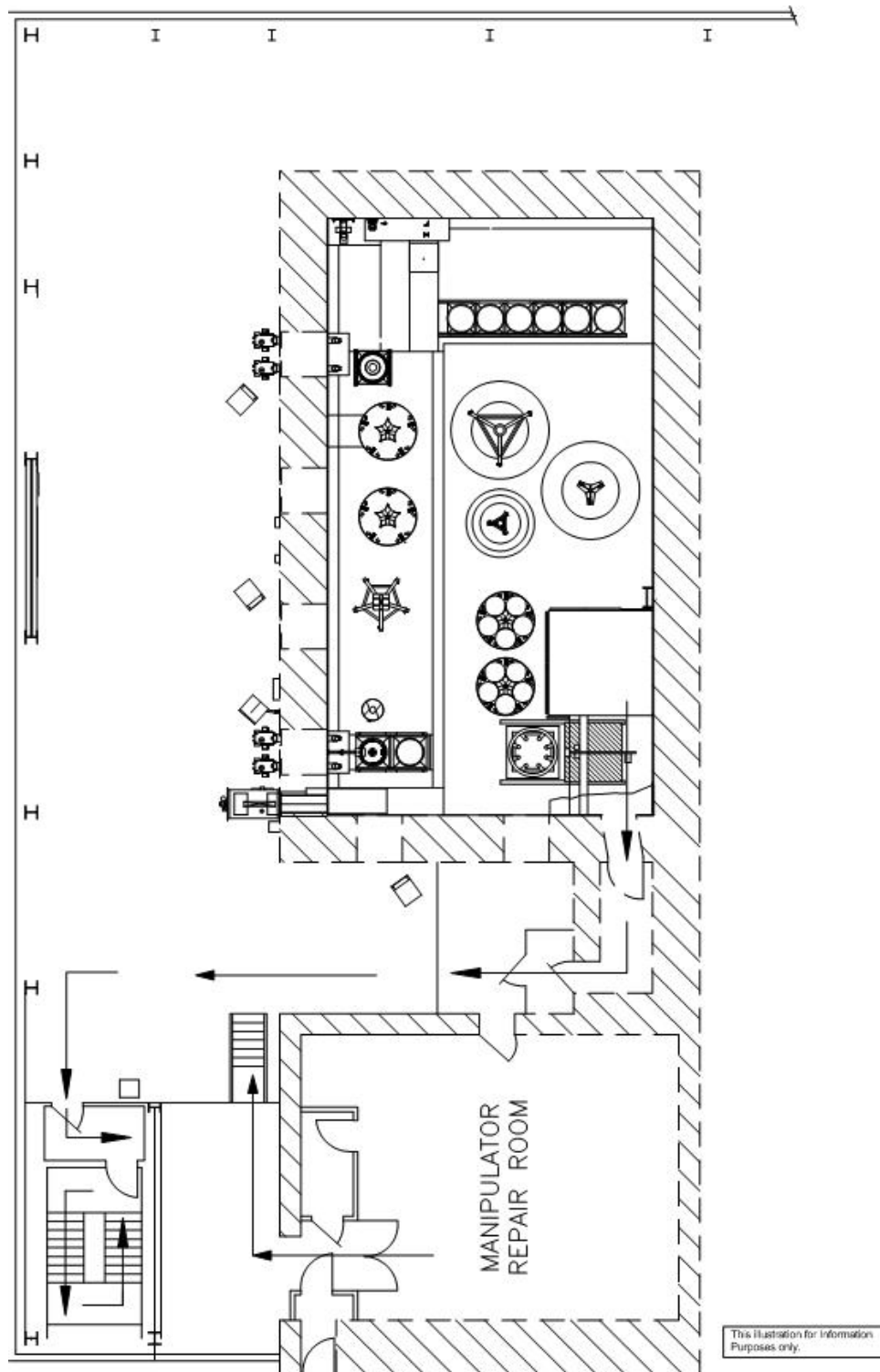


Figure D-68b
RH Bay Hot Cell Evacuation Route

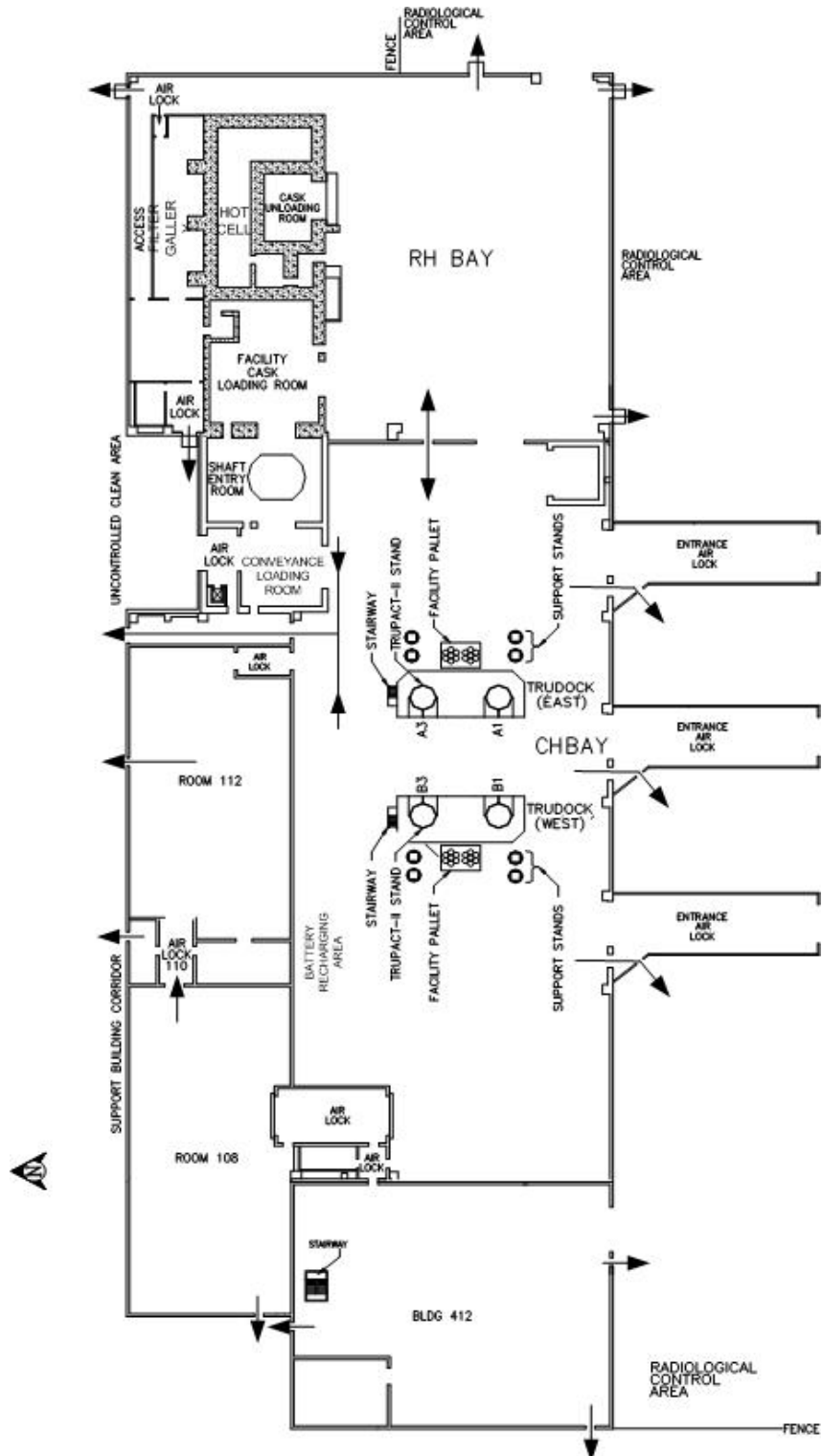


Figure D-68c
Evacuation Routes in the Waste Handling Building

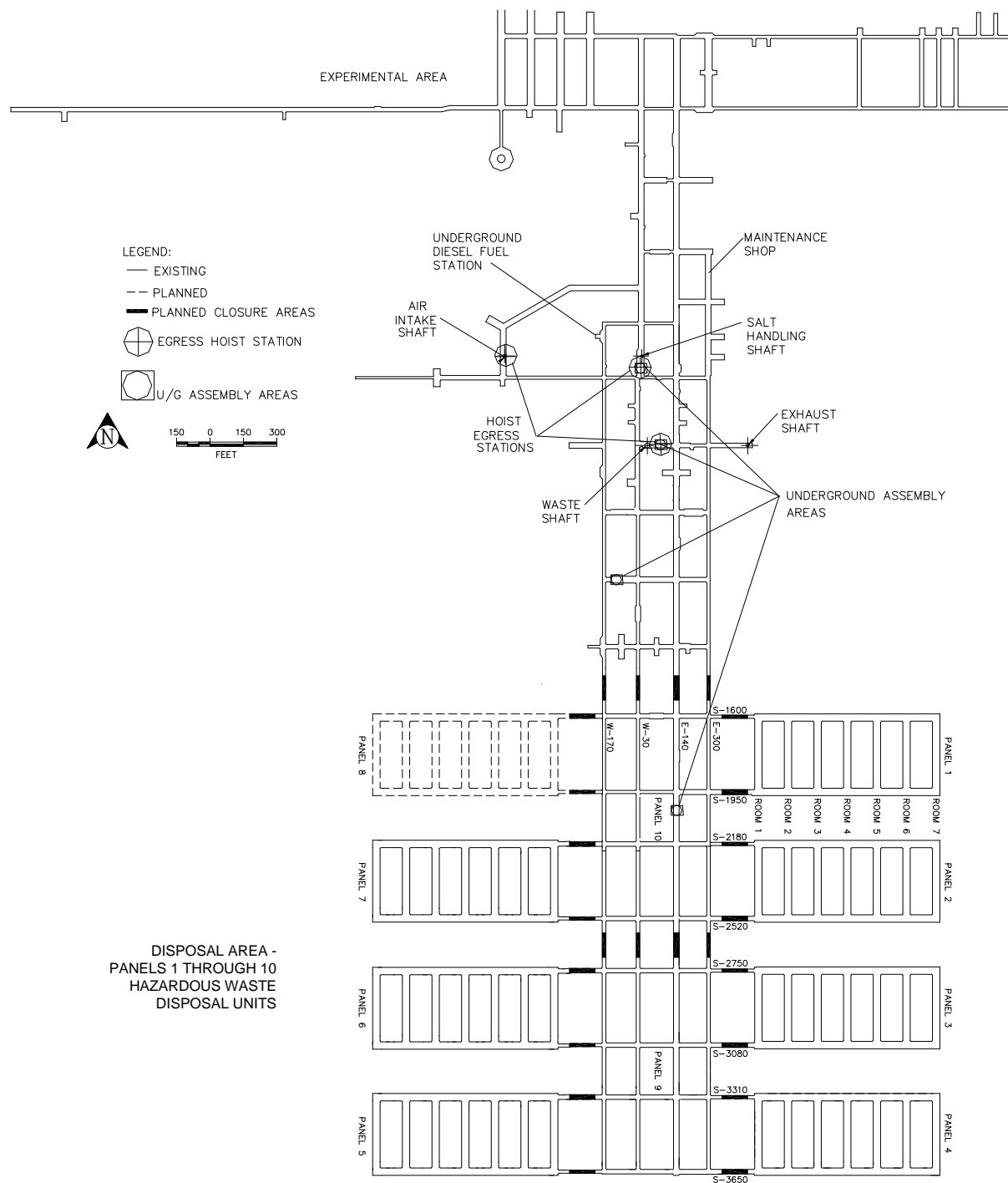


Figure D-79
Designated Underground Assembly Areas

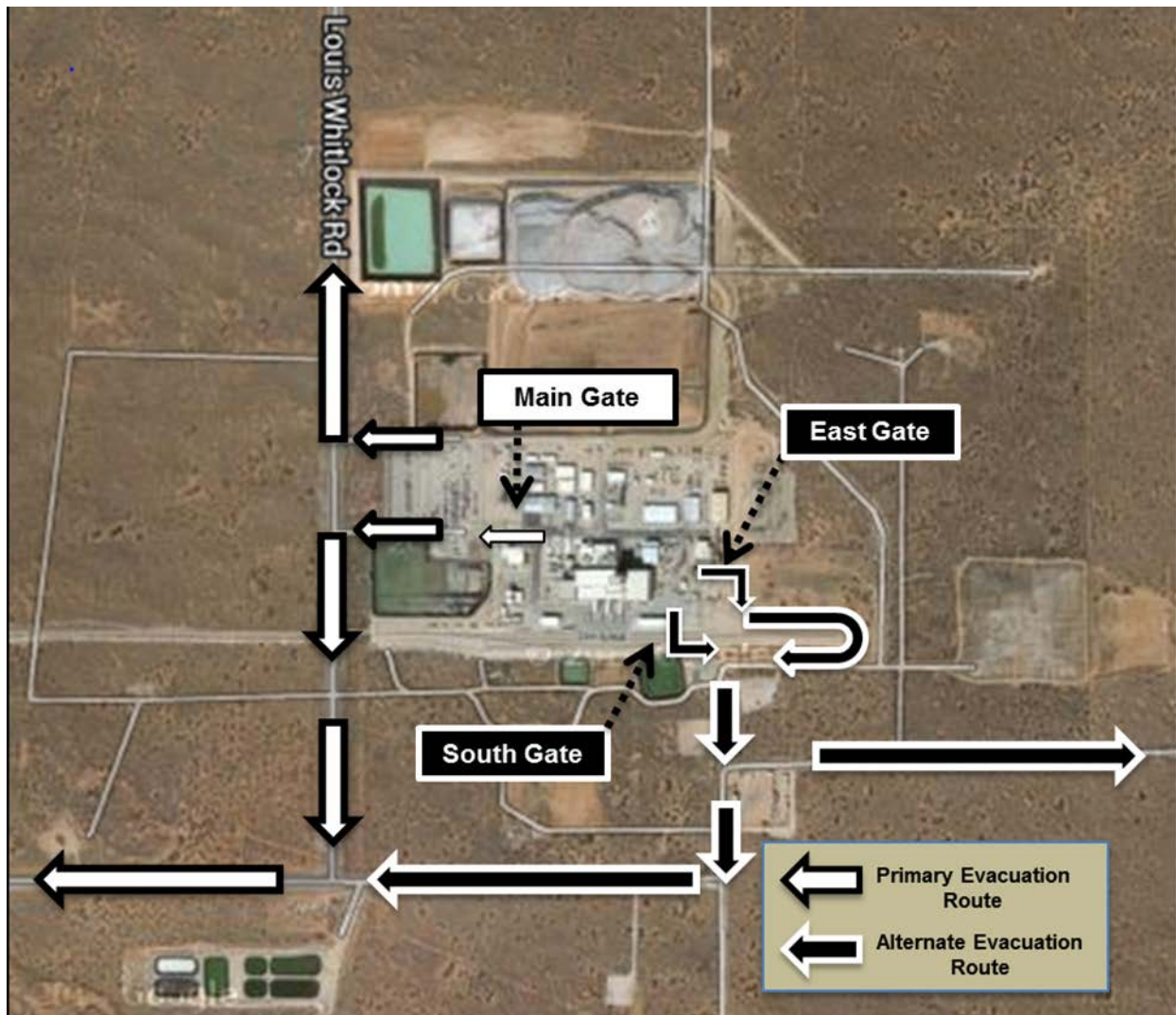


Figure D-8
WIPP Site Evacuation Routes

Pre-Fire Survey	
<ol style="list-style-type: none"> 1. Bldg. Name: <u>WASTE HANDLING BUILDING</u> 2. Address: <u>411 SITE</u> 3. Occ. Type: <u>MAINTENANCE AND OPERATIONS PERSONNEL</u> 4. Map #: <u>411-1</u> 5. Roof Const.: <u>METAL</u> 6. Floor Const.: <u>CONCRETE</u> 7. Date: <u>07/27/95</u> 8. Revision Date: <u>02/10/97</u> 9. Surrounding Bldgs.: <u>412, 451, 452, 463</u> 10. Fire Hydrants: <u>FH-#8 N. FH-#11 E. FH-#12 S. FH-#13 S. FH-#3</u> 	
<div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="width: 30%;"> <p>LEGEND</p> <ul style="list-style-type: none"> ELECTRICAL PANEL FLAMMABLE CABINET TD NON-SPRINKLERED AREA LADDER WITH OVERHEAD WALKWAY FP SD SPRINKLER RISER WITH F.D. CONNECTION COMP. GAS CYL. FENCE </div> <div style="width: 35%; text-align: center;"> <div style="border: 1px solid black; padding: 5px; display: inline-block; margin-bottom: 10px;">411</div> <div style="border: 1px solid black; padding: 5px; display: inline-block;">WASTE HANDLING BUILDING 1ST FLOOR</div> </div> <div style="width: 30%;"> </div> </div> <div style="text-align: center; margin: 10px 0;"> </div>	
<p>11. Comments: <u>WATER SHUT-OFF AT PIV #8, PIV #17, PIV #19, PIV #39</u></p> <p>_____</p> <p>_____</p> <p>_____</p>	

Figure D-10
Waste Handling Building Pre-Fire Survey (First Floor)

Pre-Fire Survey Cont.

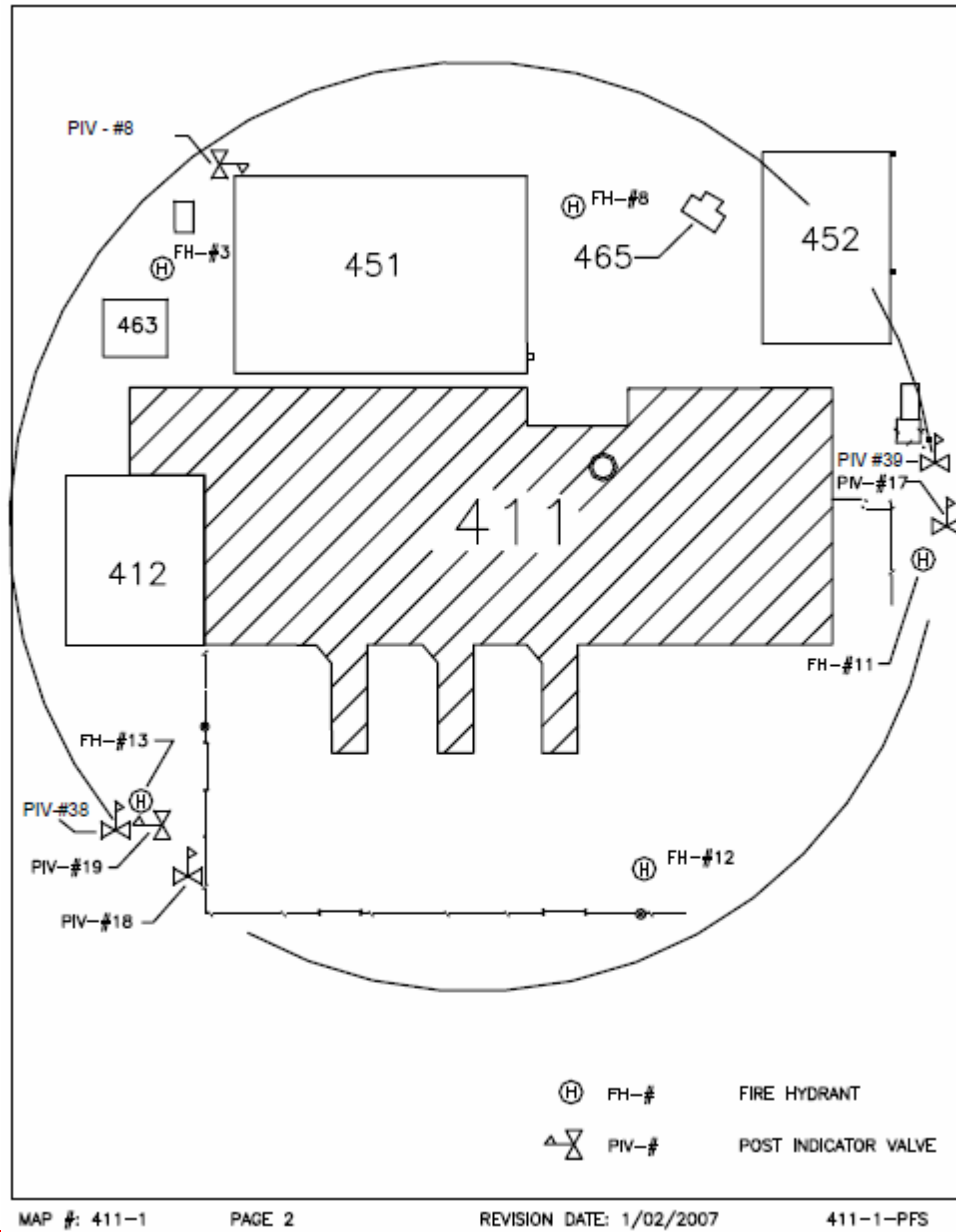


Figure D-10a
Waste Handling Building Pre-Fire Survey
(First Floor - Fire Hydrant/Post Indicator Location)

Pre-Fire Survey	
<ol style="list-style-type: none"> 1. Bldg. Name: <u>WASTE HANDLING BUILDING</u> 2. Address: <u>411 SITE</u> 3. Occ. Type: <u>MAINTENANCE AND OPERATIONS PERSONNEL</u> 4. Map #: <u>411-2</u> 5. Roof Const.: <u>METAL</u> 6. Floor Const.: <u>CONCRETE</u> 7. Date: <u>07/27/95</u> 8. Revision Date: <u>02/11/97</u> 9. Surrounding Bldgs.: <u>412, 451, 452, 463</u> 10. Fire Hydrants: <u>FH-#8 N, FH-#11 E, FH-#12 S, FH-#13 S, FH-#3</u> 	
<div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="width: 45%;"> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <div style="text-align: center; border: 1px solid black; width: 40px; margin: 0 auto;">411</div> <div style="border: 1px solid black; padding: 5px;"> <p style="margin: 0;">WASTE HANDLING BUILDING (2ND FLOOR)</p> <p style="margin: 0; text-align: center;">LEGEND</p> <div style="display: flex; flex-direction: column; gap: 5px;"> <div> ELECTRICAL PANEL</div> <div> FLAMMABLE CABINET</div> <div> TD THERMAL DETECTOR</div> <div> NONSPRINKLERED AREA</div> <div> LADDER & WALKWAY</div> <div> DSD INDUCT SMOKE DETECTOR</div> </div> </div> </div> </div> <div style="width: 50%;"> </div> </div> <div style="text-align: center; margin-top: 20px;"> </div>	
<p>11. Comments: <u>WATER SHUT-OFF AT PIV #8, PIV #17, PIV #19, PIV #39</u></p> <hr/> <hr/> <hr/> <hr/>	

Figure D-14
Waste Handling Building Pre-Fire Survey (Second Floor)

Pre-Fire Survey Cont.

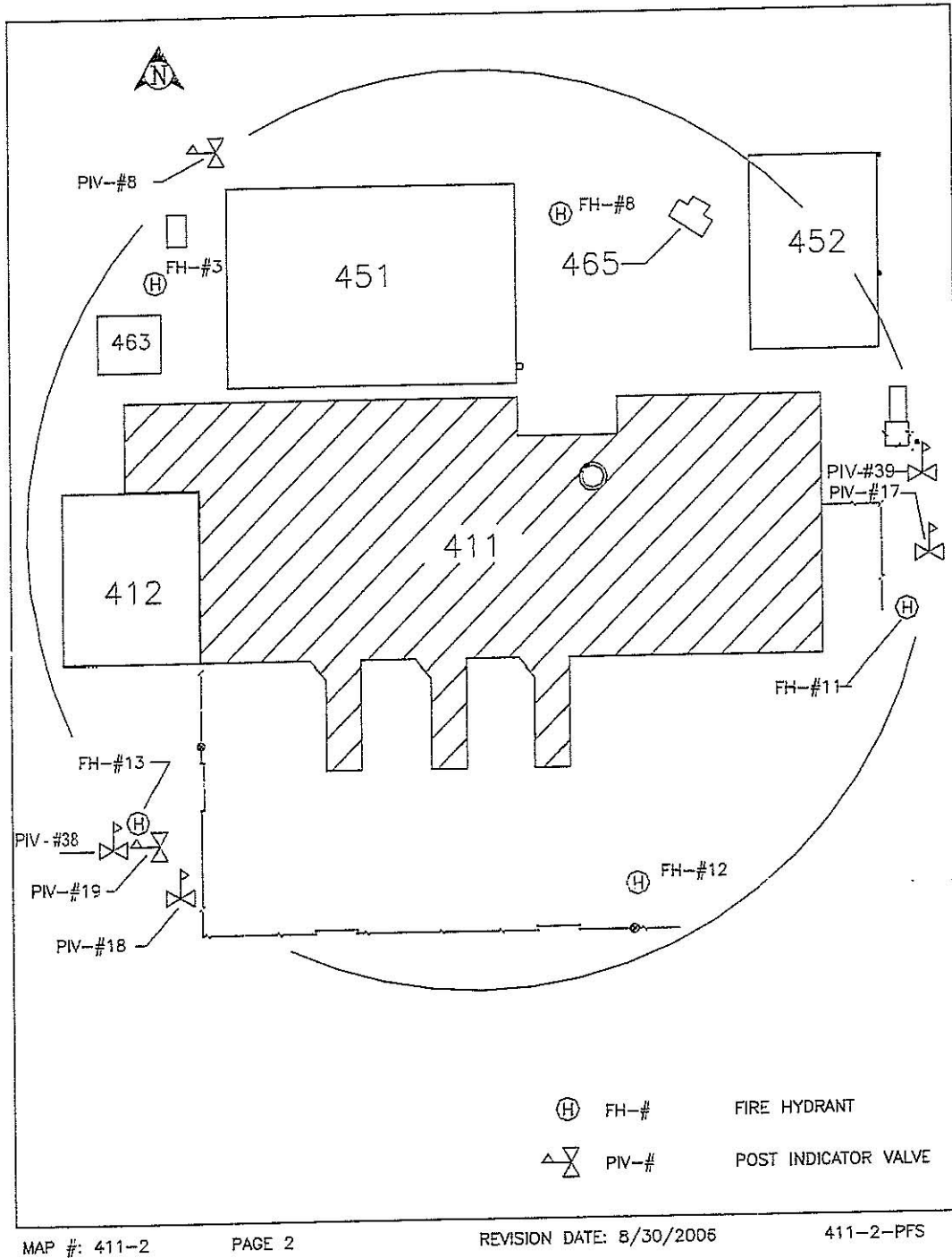


Figure D-11a
Waste Handling Building Pre-Fire Survey
(Second Floor--Fire Hydrant/Post Indicator Location)

WIPP HAZARDOUS MATERIAL INCIDENT REPORT				
Date: _____ Location: _____				
I. INITIAL INFORMATION DATE: _____ TIME: _____				
EST: _____ REPORTED LOCATION: _____				
REPORTED BY: _____ DEPT.: _____				
INITIALLY REPORTED TO: _____ DEPT.: _____				
RESPONSIBLE MANAGER: _____ DEPT.: _____				
II. WEATHER CONDITIONS WIND DIRECTION _____ WIND SPEED: _____ mph TEMP.: _____ F				
CONDITIONS (i.e., icy, snowing, raining, cloudy, sunny): _____				
III. TYPE OF INCIDENT (SPILL, LEAK, ETC.): _____ Fire involved: [] YES [] NO				
(If fire is involved attach a copy of the fire report)				
<u>MATERIALS INVOLVED</u>	<u>UN/NA NO.</u>	<u>QUANTITY</u>	<u>HAZARD CLASS</u>	<u>NFPA CLASS</u>
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
IV. PERSONNEL INVOLVED IN CLEAN-UP ACTIVITIES				
<u>PERSONNEL/DEPT</u>		<u>DECON METHOD/MEDICAL TREATMENT</u>		
_____		_____		
_____		_____		
_____		_____		
_____		_____		
_____		_____		
_____		_____		
_____		_____		
_____		_____		
_____		_____		
V. PERSONNEL CONTAMINATED NOT INVOLVED IN THE CLEANUP ACTIVITIES				
<u>PERSONNEL/DEPT.</u>	<u>MATERIAL CONTACTED</u>	<u>DECON/MEDICAL TREATMENT</u>		
_____	_____	_____		
_____	_____	_____		
_____	_____	_____		

Figure D-12
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[illegible]

Figure D-12 (Continued)
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WIPP HAZARDOUS MATERIAL INCIDENT REPORT			
Date: _____		Location: _____	
IX. INITIAL NOTIFICATION BY CMRO			
<u>DEPARTMENT</u>	<u>PERSON CONTACTED</u>	<u>TIME</u>	<u>NOTIFIED BY</u>
Facility Ops (FSM)	_____	_____	_____
Emerg. Mgmt (EST)	_____	_____	_____
EC	_____	_____	_____
Industrial Safety	_____	_____	_____
Facility Ops. (FM/FMD)	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
CMRO: _____			
Print name	Signature	Date	
FSM: _____			
Print name	Signature	Date	
X. CONTINGENCY PLAN IMPLEMENTATION			
Contingency Plan implemented [] YES [] NO			
FSM: _____			
Print name	Signature	Date	
XI. REVIEWS			
Report submitted by: _____			
Print name	Signature	Date	
Emergency Management Manger: _____			
Print name	Signature	Date	
EC Manager: _____			
Print name	Signature	Date	
COMMENTS: _____			

Figure D-12 (Continued)
WIPP Hazardous Materials Incident Report, Page 3 of 3

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DRAWINGS

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