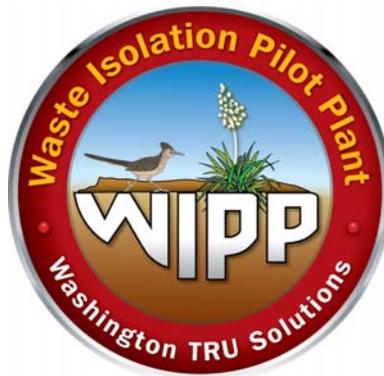


WP 12-9
Revision 30

WIPP Emergency Management Program

Cognizant Organization: Emergency Services

Approved by: Bob Paslay



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ABBREVIATIONS AND ACRONYMS

AEOC	Alternate Off-Site Emergency Operations Center
ALARA	as low as reasonably achievable
CBFO	DOE Carlsbad Field Office
CFR	<i>Code of Federal Regulations</i>
CH	contact-handled
CMC	Carlsbad Medical Center
CMR	Central Monitoring Room
CMRO	Central Monitoring Room Operator
CMT	Crisis Management Team
CTS	Commitment Tracking System
DOE	U.S. Department of Energy
DOE-HQ	DOE Headquarters
DSA	Documented Safety Analysis
EAL	emergency action level
ECSO	Eddy County Sheriff's Office
EOC	Emergency Operations Center
EPHA	Emergency Planning Hazards Assessment
EPZ	Emergency Planning Zone
ERAP	emergency readiness assurance plan
ERO	emergency response organization
ERPG	Emergency Response Planning Guidelines
ERT	Emergency Response Team
EST	emergency services technician
FBI	Federal Bureau of Investigation
FLIRT	First Line Initial Response Team
FMD	Facility Manager Designee
FPT	fire protection technician
FSM	Facility Shift Manager
HWFP	Hazardous Waste Facility Permit
IART	Incident/Accident Response Team
ICS	Incident Command System
JIC	Joint Information Center
LEPC	Local Emergency Planning Committee
LRMC	Lea Regional Medical Center
MOU	memorandum of understanding
MRT	Mine Rescue Team

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NCI-ETSG	NCI Information Systems, Inc.-Enterprise Technology Systems Group
NFPA	National Fire Protection Association
NNSA	National Nuclear Security Administration
OAT	Operational Assistance Team
OE	operational emergency
PA	public address (system)
PIO	Public Information Officer
RAP	Radiological Assistance Program
RCRA	Resource Conservation and Recovery Act
RCT	Radiological Control Technician
rem	Roentgen Equivalent in Man/Mammal
RH	remote-handled
TRU	transuranic
TRUPACT-II	Transuranic Packaging Transporter Model II
WHB	Waste Handling Building
WIPP	Waste Isolation Pilot Plant
WTS	Washington TRU Solutions LLC

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1.0 INTRODUCTION ¹

Washington TRU Solutions LLC (WTS) provides for the safety of employees, contractor personnel, visitors, and members of the general public during emergency conditions. Preparations to manage emergency conditions include (1) minimizing the risk of personnel injury, and (2) minimizing exposure of employees, the environment, and the public to radioactive or hazardous substances/wastes at an ALARA (as low as reasonably achievable) level. Additionally, preparations have been made to minimize facility or programmatic impacts during an emergency condition.

1.1 Purpose

The purpose of the Waste Isolation Pilot Plant (WIPP) Emergency Management Program is to provide the U.S. Department of Energy (DOE) Carlsbad Field Office (CBFO) with an effective and efficient emergency management operation that will provide required levels of emergency response capability. The WIPP Emergency Management Program provides the plan to ensure an efficient and effective response operation that, should an emergency occur, minimizes the impact of emergency events on the health and safety of workers, responders, the general public, the environment, and the WIPP mission. This program implements the requirements of DOE Order 151.1C, *Comprehensive Emergency Management System*, as well as emergency management requirements from the following:

- DOE Order 420.1B, Facility Safety
- DOE Order 231.1A, *Environment, Safety and Health Reporting*
- DOE Manual 231.1-1A, *ESH Reporting Guide and Manual*
- Title 10 *Code of Federal Regulations* (CFR) Part 835, "Occupational Radiation Protection"
- 10 CFR Part 851, "Worker Safety and Health Program"
- 29 CFR 1910.120, "Occupational Safety and Health Standards, Hazardous Materials Operations and Emergency Response"
- 30 CFR Part 49, "Mine Rescue Teams"
- 40 CFR Part 264, "Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities"
- U.S. Department of Transportation requirements for emergency response information (49 CFR §172.600 series) and hazardous materials training (49 CFR §172.700 series)

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- NM4890139088-TSDF, WIPP Hazardous Waste Facility Permit [HWFP], Attachment F, RCRA [Resource Conservation and Recovery Act, 42 *United States Code* §6901 et seq.] Contingency Plan

1.2 Scope

The Emergency Management Program at WIPP is implemented through the use of:

- Administrative procedures
- WP 12-ER series of Emergency Response procedures
- HWFP, Attachment F, RCRA Contingency Plan. The RCRA Contingency Plan applies to the programmatic actions relative to an operational emergency (OE) base program and an OE hazardous materials program. It does not apply to energy emergencies.

WTS provides off-site initial Transuranic Packaging Transporter Model II (TRUPACT-II), RH-TRU 72B, and CNS 10-160B transportation accident notifications in accordance with hazardous waste series procedures. The CBFO determines the appropriate DOE response for TRUPACT-II accidents and will initiate additional responses for these events.

Regardless of the off-site location of the accident, the CBFO is responsible for directing the deployment of DOE personnel and materials determined necessary to respond.

1.3 Concept of Operations

The WIPP Emergency Management Program provides an organized plan of action for dealing with emergencies at WIPP. This program identifies lines of authority, responsibilities of emergency response personnel and organizations, and the WIPP manpower and equipment resources available to deal with emergencies.

A hazards survey conducted as required by DOE Order 151.1C and DOE G 151.1-1, *Emergency Management Guide*, is documented in WP 12-RP.01, U.S. Department of Energy Waste Isolation Pilot Plant Emergency Planning Hazards Survey Report. The report concluded that an Emergency Planning Hazards Assessment (EPHA) was required for WIPP under the same provision.

DOE/WIPP-08-3378, *Waste Isolation Pilot Plant Waste Handling Emergency Planning Hazards Assessment*, analyzes the accident scenarios identified in DOE/WIPP-07-3372, *Waste Isolation Pilot Plant Documented Safety Analysis (DSA)*. In addition, malevolent acts were analyzed that reflected a moderate amount of material at risk. The spectrum of accidents analyzed in the DSA have been determined to be bounding for the WIPP site, hence they are used for emergency planning purposes. The EPHA evaluates the consequences of the DSA accidents and the malevolent acts. The EPHAs are reviewed annually and revised as necessary.

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1.4 Site Description

WIPP is a permanent disposal facility for transuranic (TRU) waste. In the process of performing this function, the DOE has designed the WIPP facility as a full-scale facility to demonstrate many technical and operational principles associated with the permanent disposal of TRU and mixed waste. Operational principles are those associated with receiving, handling, and emplacing TRU and TRU mixed wastes. WIPP is also designed to provide a facility in which studies and experiments related to radioactive waste disposal are conducted.

1.4.1 Detailed Facility Description

1.4.1.1 WIPP Site Structures

The WIPP facility surface structures accommodate the personnel, equipment, and support services required for the receipt, preparation, and transfer of waste from the surface to the underground. The surface structures are in a 35-acre area enclosed by a perimeter security fence (called the property protection area).

- Waste Handling Building (WHB) - The primary surface operations at the WIPP facility are conducted at the WHB, which is divided into several separate areas: the CH TRU waste handling area, the RH TRU waste handling area, and support areas.
- Support Structures
 - The Exhaust Filter Building contains banks of high-efficiency particulate air filters that are used to filter potentially contaminated air from the underground in the unlikely event of a release. The underground ventilation system fans are located on the surface adjacent to this building.
 - The Support Building provides office space, analytical laboratories, and change rooms, and houses the Central Monitoring Room (CMR).
 - The Safety and Emergency Services Building provides offices, a dosimetry laboratory, medical facilities, the Emergency Operations Center (EOC), and the emergency services vehicle bay.

The other surface structures include the warehouse buildings, Engineering Building, Guard and Security Building, Training Building, and other auxiliary buildings.

The underground structures are on the disposal horizon and consist of the waste disposal area and the shaft pillar area.

- Disposal Area - The waste disposal area, which is 2,150 feet underground, has two main entries (one for fresh air and one for return air), and a number of

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waste disposal rooms. The layout of the shafts and entries allows mining and disposal operations to proceed simultaneously.

A typical disposal panel consists of up to seven disposal rooms. Each room is approximately 33 feet wide, 13 feet high, and 300 feet long. The disposal rooms are separated by pillars of salt 100 feet wide and 300 feet long. Panel entries at each end of these rooms are also 33 feet wide and 13 feet high. These panel entries are used to dispose of waste, except in the first 200 feet from the main entry, which are of smaller size (22 feet by 14 feet), and are used to install the panel closures.

- **Underground Support Area** - A workshop and warehouse area is in the shaft pillar area at the disposal horizon. The shops consist of a repair bay, welding bay, lubrication bay, electrical shop, warehouse, and several parking areas. An office, electrical substation, lunchroom, and sanitary facilities are also at the disposal horizon.

1.4.2 Physical Attributes of the Site

1.4.2.1 Geography

WIPP is located in Eddy County in southeastern New Mexico, 26 miles southeast of Carlsbad. The site is approximately four miles square and covers an area of approximately 10,240 acres.

1.4.2.2 Topography and Geology

The land surface in the vicinity of the WIPP facility is a semiarid, windblown plain sloping gently to the west and southwest. Its surface is made somewhat hummocky with an abundance of sand ridges and dunes. The average slope within a three-mile radius is approximately 50 feet per mile from the east to west.

The WIPP facility is in the southwestern portion of the southern Great Plains physiographic region. This province is a broad highland belt that slopes gently eastward from the Rocky Mountains and basin and range province on the north and west to the central lowlands province on the east side. The majority of the terrain in southeastern New Mexico is characterized by a gentle southwesterly slope and hummocky surface marked by karst features, caliche, and sand dunes. The major permanent drainage of the area is the north-south flowing Pecos River, 14 miles west of the WIPP facility.

Structurally, the WIPP facility is situated at the southwestern margin of the central stable region of North America. It lies within a fairly underformed area, north and west of the Ouachita Tectonic Belt, which is characterized by broad arches, basins, platforms, and shelves. The immediate structural setting of the area around the WIPP facility is the Delaware Basin. Historical structural development of this basin began in the Pennsylvanian period and ceased in the late Permian period of geologic time, when it

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was filled with evaporates and covered by younger sediments. Since that time, the basin has undergone only broad regional tilting.

1.4.2.3 Population Distribution

The area has a low population density, with approximately sixteen permanent residents living within a 10-mile radius of the site. The nearest residents live at the J. C. Mills Ranch, approximately 3.5 miles from the center of the site. The area surrounding the site is used primarily for grazing, potash mining, and mineral exploration. No industrial areas, military installations, or airports exist within a five-mile radius of the site. The following communities lie within a 50-mile radius: Carlsbad, Loving, Otis, White's City, Lakewood, Black River Village, Hobbs, Eunice, and Jal.

1.4.2.4 Meteorology

The climate of the region is semiarid, with generally mild temperatures, low precipitation and humidity, and a high evaporation rate. Winds are moderate and most commonly from the southeast. During the winter months, the weather is dominated by a high-pressure system often situated in the central portion of the western United States and a low-pressure system commonly located in north central Mexico. During the summer, the region is affected by a low-pressure system normally situated over Arizona.

1.4.2.5 Hydrology

Neither the probable maximum flood for the Pecos River nor floods induced by dam failure represent a risk to the WIPP facility since the site is located 14 miles from the river and more than 400 feet above the Pecos River flood plain. Protection from flooding caused by intense local precipitation is provided by the diversion of water away from the WIPP facility by a system of peripheral interceptor diversions.

Additionally, grade elevations of roads, tracks, and surface facilities are designed so storm water will not collect on the site under the most severe conditions. Shaft collars prevent surface water from entering the shafts.

1.4.2.6 Natural Phenomena

The engineering design of the WIPP facility takes into account risks created by various natural phenomena. Specifically, protection against the following hazards is included in the design: earthquakes, high winds, tornadoes, and excessive snow loads.

- Earthquakes - The Design Basis Earthquake (DBE) is the most severe credible earthquake that could occur at the WIPP site. DBE structures, systems, and components (SSCs) are designed to withstand a free-field horizontal and vertical ground acceleration of 3.2 feet per second (0.1 g) based on a 1,000-year recurrence period, and will retain their safety functions. Structures and components at WIPP designed to withstand the design basis earthquake

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include the following: WHB, Support Building, Exhaust Filter Building, TRUPACT-II Maintenance Facility, RH waste handling system and equipment, and radiation monitoring and alarm systems.

- High winds - The design wind velocity for the WHB is 110 miles per hour at 30 feet above ground level, with a 1000-year mean recurrence interval. The design wind velocity for other WIPP structures is 91 miles per hour with a 50-year mean recurrence interval, except for the Support Building and the Exhaust Filter Building, which is 99 miles per hour with a 100-year mean recurrence interval.
- Tornadoes - The design basis tornado (DBT) is the most severe credible tornado that could occur at the WIPP site. DBT SCCs at the WIPP site are designed to withstand the 183 mile per hour winds with a translational velocity of 41 miles per hour, a maximum rotational velocity radius of 325 ft, a pressure drop of 0.5 pounds per square inch, and a pressure drop of 0.09 pounds per square inch generated by the DBT, based on a 1,000,000-year recurrence period, and will retain their safety function. The exterior metal siding of the WHB is not credited to withstand tornado driven objects therefore, the contents of the building could be subject to damage.
- Snow Loading - The design snow loading is derived from the 100-year recurrence snow load of 10 pounds per square foot. Roof snow loads are calculated by multiplying the design snow load by the appropriate coefficients. The WHB, the TRUPACT Maintenance Facility, and the waste hoist tower are designed for a snow load of 27 pounds per square foot.

1.4.2.7 Transportation System

New Mexico Highway 62/180 is approximately 11 miles north of the WIPP site. New Mexico Highway 128 is approximately 3 miles south of the WIPP site. New Mexico Highway 128 connects with New Mexico Highway 31, which leads to Highway 285, and provides access to Carlsbad. New Mexico Highway 128 is used by ranchers, school buses, potash miners, and oil and gas company vehicles. Several dirt roads in the area are maintained for ranching, pipeline maintenance, and access to drilling sites.

The DOE north/south access road to the WIPP site lies between New Mexico Highways 62/180 and 128. This access road is used by WIPP employees, oil and gas company vehicles, and ranchers. No other roads are located within a five-mile radius.

Except for the rail spur that serves the WIPP facility, no railroad lines lie within a five-mile radius of the facility.

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Transportation of employees to the WIPP site is by company-furnished buses or private vehicles. In the event of a site evacuation requiring employees to use transportation to leave the site, the following transportation is available:

- Buses/Vans - WIPP buses/vans are available for evacuation of personnel. The buses/vans are stationed in the employee parking lot and transport personnel to and from the site daily. The personnel who ride the buses/vans to the site would evacuate the site in the same manner.
- Personnel who travel in private vehicles to the site would evacuate the site in the same manner.
- WIPP vehicles - A number of passenger sedans, pickups, and vans are assigned to WIPP. Although these vehicles are not specifically assigned for evacuation purposes, they may be used in an emergency.

1.4.2.8 Utility System

The WIPP facility has water and electrical utilities provided by outside sources. Water is supplied from a connection with a commercial water system located approximately 30 miles north of the facility that is provided by the city of Carlsbad. Electrical power is supplied redundantly by the local electric company. The electrical system distributes and controls the electrical power requirements for the equipment and process loads, both on the surface and underground.

A backup diesel generator system is in place to provide power on the surface and underground if site power is lost. Additional information about the site utilities is available in the System Design Documents.

1.5 Categories of Unplanned Events

The WIPP EPHA analyzed event scenarios similar to the design basis accidents in the DSA, and standard workplace hazards. The Emergency Management Program applies to response actions relative to the following categories of emergencies, see Section 5.0 for details:

- Radiological or hazardous material emergencies
- Surface emergencies (medical and fire)
- Waste container breaches in the Waste Handling Building
- Underground emergencies (medical and fire)
- Waste container breaches in the underground
- Severe weather emergencies

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- Earthquakes/seismic events
- Security (malevolent acts) emergencies.

1.6 Plan Description

The WIPP Emergency Management Program Plan includes emergency preparedness planning activities encompassing ERO structure, off-site response interfaces, emergency facilities and equipment, emergency event categorizations and classifications, notifications and communications, consequence assessments, protective actions and reentries, emergency medical support, emergency terminations and recovery actions, public information processes, program administration, and training, drills, and exercises.

1.7 Emergency Planning Zones

The Emergency Planning Zone (EPZ) is the area within which the hazards assessment results indicate a need for specific and detailed planning to protect people from the consequences of hazardous material releases. WIPP supports the local, state, and/or tribal authorities in planning and preparedness activities to protect people working in the EPZ. Among these activities are identification of response organizations, establishment of effective communications to notify the public and the responsible authorities, development of public information and education materials, identification of predetermined response actions, and development and testing of response procedures.

Based on the analysis in the EPHA, and using a very conservative approach to ensure defense-in-depth protection of the public and the environment, it is concluded that the actual boundaries of the facility will be used to define the EPZ and emergency action level (EAL) areas.

The EPZ size was designed to give confidence that planning and preparedness will be sufficiently flexible and detailed to deal with a wide range of types and magnitudes of emergency conditions. The EPZ is large enough to provide a credible basis for extending response activities outside the EPZ if conditions warrant; it conforms to natural and jurisdictional boundaries, and other expectations and needs of off-site agencies are likely to be met by the selected EPZ, thus meeting DOE criteria for EPZ size determination. WP 12-ER3906, Categorization and Classification of Operational Emergencies for the Waste Isolation Pilot Plant, describes the EPZ. Incident termination guidance is provided in WP 12-ER3903, Termination, Reentry, and Recovery.

2.0 EMERGENCY RESPONSE ORGANIZATION

2.1 Organizational Structure

The CBFO Manager is responsible for the overall executive direction of emergency planning, preparedness, and response for WIPP. The CBFO Emergency Operations

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Program Manager and the Emergency Management Program Manager provide oversight for the program. During normal operations, management responsibility belongs to the WTS General Manager, who reports to the CBFO (see Figure 2.1).

Hazardous Waste Sampling Team

The sampling team will be on call to the Facility Shift Manager (FSM) in the event of a spill. Most spills will be identifiable by material safety data sheets (MSDSs) or the user. The FSM will determine spill mitigation in accordance with WP 12-ER4902, Hazardous Material Spill and Release Response. Only qualified personnel will respond to emergency incidents. Hazardous material responses and analyses will be conducted in accordance with 29 CFR §1910.120.

In the event of a spill in a radiological area, the hazardous waste sampling team may be called to collect a sample after radiological cleanup has been completed. RCTs will survey the known or suspected mixed waste spill and Site Environmental Compliance shall determine whether sampling for hazardous materials is needed.

Operations

The on-shift Facility Operations crew, under the supervision of the FSM, is responsible for facility operations at the WIPP site. Operations are conducted in accordance with approved operating procedures and good operating practices. Specific watchstander responsibilities are listed below:

- Facility Shift Manager - The FSM is in charge of plant operations and is the senior shift representative. The FSM is responsible for maintaining the facility in a safe configuration during normal and abnormal situations. The FSM is the individual in charge of directing activities at the WIPP site during emergency situations, including responsibilities as the primary RCRA Emergency Coordinator in accordance with the RCRA Contingency Plan.
- CMRO - The CMR is the coordination point for site activities and the focal point for all communications between the surface and underground facilities. The CMRO reports directly to the FSM.
- Facility Operations Roving Watch - The Roving Watch is responsible for carrying out the orders and directions of the FSM within the WIPP facility. The Roving Watch conducts an in-depth tour of the entire facility at least once per shift and makes reports directly to the FSM regarding plant equipment status and operation.
- Underground Facility Engineer (UFE) - The UFE is responsible for the activities in the underground. During an emergency event the UFE may be called upon to perform tasks or verify conditions in the underground at the direction of the FSM.

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Radiological Control

Upon notification of a potential for a radiological release, or when unexpected radiological conditions are encountered, the Radiological Control manager with support from the Radiological Control Technicians (RCTs) are responsible for site radiological monitoring and assessment activities. The responsibilities include personnel and equipment contamination surveys and radiological control. They provide guidance for the evaluation of radiological incidents and assist with the implementation of corrective actions.

RCTs are responsible for monitoring, sampling, and ensuring that the capability (e.g., procedures, equipment) to perform these responsibilities is maintained in a state of readiness.

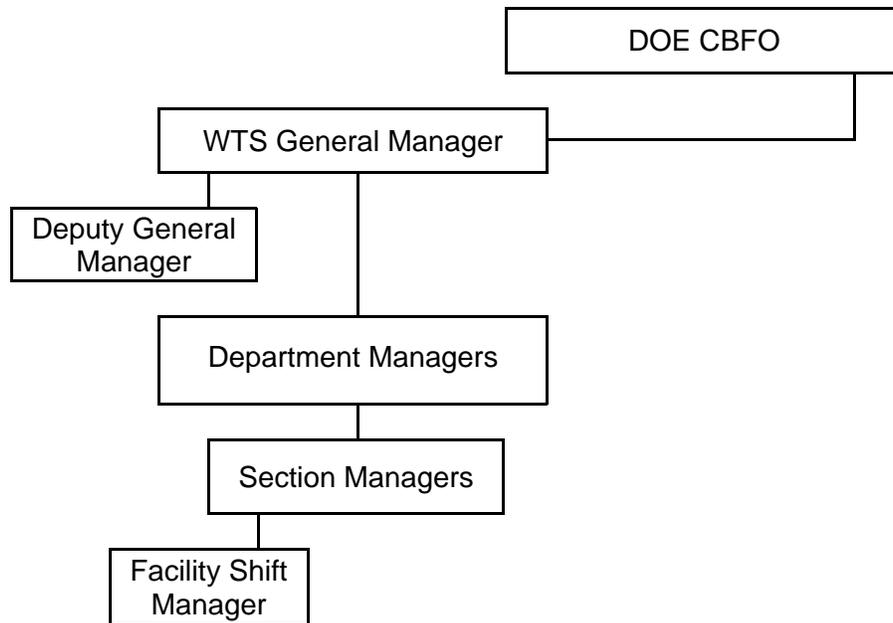


Figure 2.1. Chain of Command During Normal Conditions

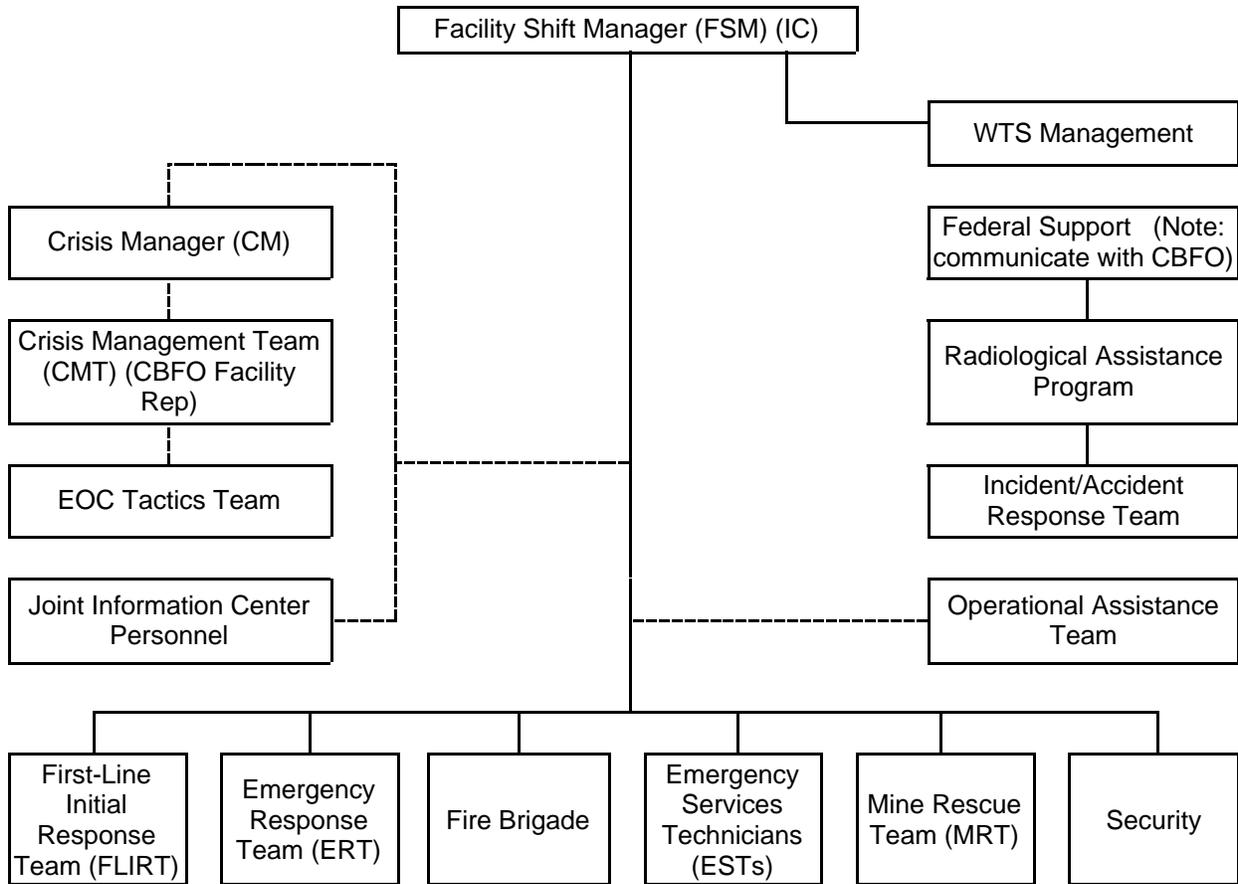
2.2 Emergency Direction and Control

During emergency conditions, the FSM is the Incident Commander (IC) in control of the facility (see Figure 2.2). The FSM functions as the IC and RCRA Coordinator who is in charge of mitigation activities and ensuring that proper emergency response activities are conducted. The FSM (IC) is responsible for activation of the emergency response and/or support teams as needed. The FSM (IC) shall activate the EOC for OEs.

The DOE is represented by the CBFO Emergency Representative (CER).

All available Emergency Response Team (ERT)/First Line Initial Response Team (FLIRT) members report to the IC and are responsible for following the WIPP emergency response procedures (WP 12-ER series), as applicable.

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2.3 Emergency Response Operations

The WIPP supports and uses the National Incident Management System (NIMS) during emergency incidents. NIMS will be applied to drills, exercises, and other situations that involve hazards similar to those encountered at actual emergency incidents and to simulated incidents that are conducted for training and familiarization purposes. The Emergency Director (ED)/IC at WIPP will be the FSM (or trained designee). The FSM (or designee) may appoint or become an on-scene IC to handle and direct response activities at the scene of the event. If the FSM appoints an on-scene IC, they become the ED. The on-scene IC will communicate information to the FSM/ED/designee as necessary.

The FSM/ED is responsible for the overall coordination and direction of all incident activities, unless relieved by another qualified person, state, or federal authorities. This includes overall responsibility for the safety and health of all personnel and for other persons operating within the incident management system, such as supplemental fire departments responding according to a memorandum of understanding (MOU).

Emergency response activities are directed by the FSM (IC) with the assistance of the Crisis Management Team (CMT), Operational Assistance Team (OAT), and other technical assistance as necessary to provide support to the FSM.

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2.4 Emergency Response Personnel

Emergency response and support groups consist of site organizations with appropriate expertise that may be called upon during an emergency. The personnel are trained to respond to emergency situations and/or have the expertise necessary to support emergency mitigation activities. The ERO exists to help safeguard the people and property of the WIPP site. The first consideration must be for the safety of the response personnel. Response personnel are not to extend beyond their capabilities, training, or the limitations imposed by the equipment with which they must operate. The following lists the response teams.

2.4.1 Response Personnel

Emergency Services Technician

ESTs are WTS employees whose job is that of full-time emergency responder. During nonemergency conditions, the EST conducts inspections of facility fire suppression systems and emergency equipment. The ESTs respond to emergencies that threaten lives or property at WIPP (e.g., medical, fire, hazardous material). The EST reports information pertaining to emergencies to the FSM, who is responsible for operation of the facility. ESTs are responsible for keeping the assigned emergency apparatus in good operating condition. ESTs are also responsible for the safe operation of the apparatus and the safety of others involved with the apparatus and removing equipment from service, as applicable, and reporting to the FSM.

Emergency Response Team

The ERT is a volunteer force that consists of site employees from many departments. In the event of an emergency, ERT members will leave their normally assigned duties and assume the duties of the ERT. This group is available on any shift, varying in number during normal working hours to assist the EST during emergency responses. The ERT responds to emergencies that threaten lives or property at WIPP (e.g., medical, fire, hazardous material). Managers provide written approval for their personnel to participate on the ERT. This approval documents that managers understand the time commitment necessary to complete training, qualifications, and certifications.

First Line Initial Response Team

The FLIRT is a volunteer force that consists of underground personnel as supplemental primary responders in the event of an underground event, and as backup for the ERT.

Fire Brigade

The Fire Brigade consists of a minimum of five responders per crew, which include full-time Emergency Services Technicians, full-time Security Fire Brigade personnel, and an IC. The Fire Brigade is supplemented by a volunteer organization of ERT

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members, varying in number and work shift. The Fire Brigade is maintained in accordance with National Fire Protection Association (NFPA) 600.

Mine Rescue Teams

The Mine Rescue Teams (MRTs) are responsible for underground reentry and rescue. The MRTs are trained in accordance with 30 CFR Part 49, "Mine Rescue Teams." MRT training includes breathing apparatus, barricading, first aid, gas detection, search and recovery, ventilation, fire control, and mine mapping. The MRTs participate in mine rescue competitions and site drills. Each MRT is composed of six to ten members and has a Team Captain. In an emergency, the FSM will contact the Team Captain or activate the MOUs.

Security

Upon discovery of or notification of a WIPP-related emergency, security personnel will respond in a manner consistent with the guidelines established in the WIPP Security Plan. The security manager (or designee) will verify that the necessary security actions have taken place, and will further respond to the event at the direction of the FSM. Security personnel may also respond as members of the WIPP site fire brigade. Security Protective Force and DOE Orders provide guidance on actions that will be taken in each type of credible security emergency.

2.4.2 Federal Support

Radiological Assistance Program

WIPP supports the regional Radiological Assistance Program (RAP) Team with approximately six people and equipment for responding to off-site radiological emergencies. A DOE RAP Team Leader will respond to an event with the WIPP RAP Team. The Team Leader may be from the CBFO or another facility. The team responds at the direction of the National Nuclear Security Administration (NNSA). The WIPP RAP Team is trained to respond, with other DOE assets, to radiological events, as directed by the NNSA. The WIPP RAP Team is one of four teams in the DOE Region 4. The other teams are Los Alamos National Laboratory, Sandia National Laboratories, and the Pantex plant.

RAP teams are deployed in support of the state authorities and are not intended to direct actions at the scene or to assume command and control. The team will not represent the state to public media unless requested to assist in this manner. The team provides resources, monitoring and assessment assistance in radiological emergencies.

Incident/Accident Response Team

The IART is a CBFO program administered by WTS for the purpose of providing expertise in packaging and transportation to safely expedite the recovery of any Type B transuranic (TRU) waste package involved in an incident/accident. The IART functions

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as an emergency response asset of the CBFO and receives programmatic and functional direction from CBFO management during emergency responses. The on-call CBFO Transportation Management Team is comprised of three to four individuals on a rotating on-call schedule. The on-call CBFO Transportation Manager is the IART Team Leader. The IART will have two to three alternate members who will respond in the event of an incident/accident.

The IART consists of voluntary members selected from CBFO and WTS employees for their expertise in leading the IART, packaging engineering, transportation engineering, and public affairs as appropriate. WTS External Emergency Management staff provide the administrative duties to maintain the readiness of the team. These duties include maintaining the IART equipment, conducting training, maintaining records, and other duties necessary to ensure the readiness posture of the team.

The primary function of the IART is to ensure the safe and uneventful recovery of any package with safety and protection of the team members, emergency responders, the public, and the environment taking priority over all other considerations.

2.4.3 Support Groups

Office Wardens

WIPP Office Wardens support the FSM for events involving sheltering-in-place or area/site evacuations. The FSMs provide instruction to site personnel and Office Wardens using the site public address (PA) system. When requested by the FSM (USING THE SITE PAGING SYSTEM), the Office Wardens assist with personnel accountability as requested. Office Wardens are trained to complete the necessary steps to effectively shelter-in-place or evacuate personnel.

The site uses a color coded designation for areas on-site. The on-site Assembly Area (located west of the Support Building) and the off-site Staging Area (located along the west chain-link fence) are posted with the appropriate color signs.

Office Wardens are assigned to specific areas of the site and maintain the accountability lists for their area. Personnel report to the assigned area and report to their Office Warden during the accountability.

When the event requires evacuation of a specific area or the site, the FSM will announce the evacuation route(s) to use. Office Wardens check the building(s) to ensure that all personnel have evacuated the area. Accountability is established at the site Assembly Area or the Staging area as determined by directions from the FSM.

Emergency Operations Center Personnel

The EOC is located in the Safety Building First Floor and includes the CMT room and the Technical Support room. The EOC CMT provides support to the FSM/ED. In order to declare the EOC activated, the following positions must be filled: Crisis Manager or

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Deputy Crisis Manager, Safety Representative, and Operations Representative. The EOC will be declared activated by the Crisis Manager/Deputy Crisis Manager when the minimum staffing is present. Although activated, the EOC is not fully staffed until the CBFO Emergency Representative, Crisis Manager, Deputy Crisis Manager, Safety Representative, Operations Representative, and EOC Coordinator are present.

To declare the EOC activated, the Crisis Manager must have the minimum staffing requirement and have received a situational briefing from the FSM/IC. This briefing generally will be conducted over the telephone, but can be conducted by any communications means available including face to face. A similar briefing would occur when the EOC operations are transferred to another facility (the alternate on-site or alternate off-site EOC). When transferring to another facility, the Crisis Manager will notify the Central Monitoring Room Operator (CMRO) that the alternate site is activated when the minimum staff is available at the alternate facility.

2.4.4 Crisis Management Team

The CMT is composed of the following personnel.

- Crisis Manager – The Crisis Manager (or alternate) will assist the IC/ED in ensuring that necessary emergency actions take place or will assist with further emergency actions according to WP 12-ER3002, Emergency Operations Center Activation, and other procedural actions requested by the IC/ED. A checklist is provided in WP 12-ER3002 to assist the Crisis Manager in actions.
- Deputy Crisis Manager - The Deputy Crisis Manager will be responsible for assisting the Crisis Manager as requested. This includes identification of problem areas, external contacts, and recommendations of EALs.
- Safety Representative - The Safety Representative is responsible for providing the technical expertise for implementation and mitigation actions taken, as well as safety overview. The Safety Representative's advisement will be based on conditions affecting life, property, and the environment. A checklist is provided in WP 12-ER3002 to assist the Safety Representative in actions.
- Operations Representative - The Operations Representative, is responsible for maintaining ongoing communications between the CMR and the EOC.
- EOC Coordinator - The EOC Coordinator is responsible for the coordination of WIPP emergency planning and preparedness activities and assisting the CM. In an emergency that requires activation of the EOC, the EOC Coordinator will act as the real-time controller to ensure that EOC equipment and systems operate in a smooth manner. The EOC Coordinator will immediately take draft press releases received from the Joint Information System (JIC) to the Crisis Manager and the DOE Management Representative for technical review and approval. Once reviewed and approved, the approved publicity release will be faxed to the JIC.

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- The DOE will provide a CER to the EOC Strategy Room during an EOC activation. The representative will maintain awareness and oversight coverage of emergency events, emergency management activities, and mitigative/recovery actions. The representative will inform CBFO management of events, as necessary. The CER will approve press releases for technical content after initial approval by the Crisis Manager and ensure that notifications have been made to heads of local governments.
- Consequence Assessment Support personnel - The hazardous materials representative and the radiological representative are responsible for providing the necessary information to support ongoing consequence assessment activities. Radiological consequence assessment personnel will provide ongoing, continuous assessment to the CM using HOTSPOT and NARAC as necessary.
- EOC Data Recorder - The Data Recorder is responsible for entering applicable information into the EOC Log (i.e., time EOC activated, accountability, categorization, and classification status). This position is normally filled on the day shift. The position may be filled at the request of the CM during backshift and weekends.

EOC Tactics Team

The following support personnel may or may not be located in the EOC.

- Public Affairs Coordinator - The WTS Public Affairs Coordinator is responsible for gathering event information from the EOC staff concerning the event and reporting that information to the JIC Manager at the Skeen-Whitlock facility. The Public Affairs Coordinator will maintain a direct line of communication with the JIC.
- Human Resources manager - In the event of an employee's injury or death, notification to the family will be made by the Human Resources manager (or designee). Release of information associated with the employee or identification of the employee will be provided by the Human Resources manager (or designee).
- Safety Coordinator - The WTS Industrial Safety and Hygiene manager or designee is responsible for evaluating the safety, health, and environmental aspects of an emergency response, and assists the Safety Representative in overall mitigation efforts when required.
- Security Coordinator - The Security manager, or designee, is the Security Coordinator and provides general security information and advice to the CMT.

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Operational Assistance Team

The OAT was established to provide assistance and advice to the FSM and the CMRO during the course of an event. The availability of designated primary or secondary OAT members is generally limited to normal weekday day shift hours. Some members of the OAT may be available on-site after normal weekday day shift hours due to alternate work schedules. As general guidance, the first two OAT members to arrive should expect to provide immediate assistance by manning the telephone and starting a log of events on the large marking board.

The OAT is composed of Operations Department managers and other personnel with the technical expertise and experience necessary to carry out the mission of assisting during emergency situations. The OAT is considered complete and functional when the FSM has the assistance necessary to enable them to carry out their duties under the existing conditions.

3.0 OFF-SITE RESPONSE INTERFACE

3.1 Overview

WIPP supports and participates in local emergency response groups to ensure that a working relationship exists. WIPP personnel meet with off-site emergency response groups on a regular basis. In the event that support is needed to implement protective actions between the exclusive use area and the outer boundary of the emergency planning zone, key community organizations are used. Depending upon the location, severity, and type of emergency, the FSM has MOUs and mutual aid agreements (MAAs), that can be activated. The MOUs and MAAs between the WIPP and key community organizations are important aspects of the available protective actions governed by legal cooperation agreements.

A listing and descriptions of the MOUs and MAAs with state and local agencies and other mines, as required by RCRA under 40 CFR Part 264, "Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities," and Part 265, "Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities," are contained in Section 3.5.

3.2 Law Enforcement Agencies

The Federal Government and the state of New Mexico have concurrent jurisdiction on the 16 sections of land covered in the Land Withdrawal Act. WIPP has an MOU with the Eddy County Sheriff's Office (ECSCO) for law enforcement assistance. The ECSCO will provide the first response for illegal activities involving the WIPP site.

The Federal Bureau of Investigation (FBI) will be the lead agency in investigations of activities involving terrorism, organized crime, or crimes against the persons of federal employees during the conduct of business. The FBI and the ECSCO will perform liaison and coordination functions in these events.

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3.3 State of NM Agencies

The CBFO will coordinate through the New Mexico Department of Public Safety concerning mutual assistance and emergency management.

3.4 Local Organizations

Eddy County Local Emergency Planning Committee

WIPP is represented by a member of Emergency Management on the Eddy County Local Emergency Planning Committee (LEPC), which meets monthly. The purpose of the LEPC is to participate in carrying out Eddy County LEPC responsibilities pursuant to Public Law 99-499, Superfund Amendments and Reauthorization Act of 1986, Title III, and related regulations.

Fifth Judicial Law Enforcement Association

WIPP participates in the Fifth Judicial Law Enforcement Association functions to enhance off-site interface with the law enforcement agencies that may respond to incidents at WIPP.

3.5 Mutual Aid Agreements/Memoranda of Understanding

- The agreement between the DOE; Intrepid Potash, Inc., and Mosaic Potash provides for mutual aid and assistance in the form of MRTs in the event of a mine disaster or other circumstance at any of the six facilities. This provision ensures that WTS will have two MRTs available at all times when miners are underground, as required by DOE Order 5480.4, *Environmental Protection, Safety, and Health Protection Standards*, which requires compliance with 30 CFR §49.2(a), "Availability of Mine Rescue Teams." The agreement will be binding upon the facilities until such time as any of the parties elect to terminate the agreement. Termination will require a thirty-day notice in writing. Mutual Aid Agreements and Memoranda of Understanding are formally reviewed annually and updated as necessary.

- The Joint Powers Agreement between the DOE, the city of Carlsbad, New Mexico; county of Eddy, New Mexico; and the New Mexico Energy, Minerals, and Natural Resources Department for a joint-use Alternate EOC (AEOC) provides for the coordination of emergency plans, including emergency radiological response plans; participation in periodic exercises, drills, and training; and establishment and maintenance of an AEOC at the Living Desert State Park; and assigns responsibilities to the participants. The agreement will continue unless it is terminated by all parties upon mutual agreement or by any party or upon written notice at least ninety days prior to the intended date of termination.

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- The MOU between the DOE and Carlsbad Medical Center (CMC) for the Emergency Radiological Treatment Center for the WIPP, provides for the treatment of radiologically contaminated personnel who have incurred injuries beyond the treatment capabilities at the WIPP site. WIPP provides transport of the patient(s) to the treatment center for decontamination and medical treatment. The MOU will continue until modified upon mutual agreement or terminated by either party giving written notice of termination to the other party.
- The MOU between the DOE and the Lea Regional Medical Center (LRMC) Emergency Radiological Treatment Center for WIPP provides for the treatment of radiologically contaminated personnel who have incurred injuries beyond the treatment capabilities at WIPP. WIPP provides transport of the patients to the treatment center for decontamination and medical treatment. This MOU will end upon final decommissioning of the WIPP Project or when either party will serve the other party written notice of its intent to terminate at least 270 days prior to its intended date of termination.
- The Mutual Aid Fire Fighting Agreement between the Eddy County Commission and the DOE provides for the actual assistance of the parties in furnishing fire protection for the Eddy County Fire District and the WIPP site. Upon request to a representative of the Eddy County Fire Department by the WIPP, fire fighting equipment and personnel of the Eddy County Fire Department will be dispatched to any specified location within WIPP. This agreement is reciprocal. This agreement will be effective until modified upon mutual agreement or terminated by either party giving written notice of termination.
- The Mutual Aid Agreement between the city of Hobbs, New Mexico, and the DOE provides for mutual ambulance, medical, fire, rescue, and hazardous material response services; joint exercises; use of WIPP radio frequencies by the city during emergencies; and mutual security and law enforcement services, within the appropriate jurisdiction limits of each party. The agreement will continue until modified by written agreement of the parties or terminated by either party giving thirty days' written notice to the other party.
- The Mutual Aid Agreement between the city of Carlsbad, New Mexico, and the DOE provides for the coordination of emergency services activities to be engaged in by the city and WIPP during times of declared emergency. The services covered by this agreement include ambulance and medical services, and fire, rescue, and hazardous material response. The agreement will continue until modified by written agreement of the parties or terminated by either party giving thirty days' written notice to the other party.
- The MOU between the DOE, represented by the CBFO, and the U.S. Department of the Interior, represented by the Bureau of Land Management, Roswell District, provides for a fire management program that will ensure a timely, well-coordinated, and cost-effective response to suppress wildfires within the withdrawal area. In addition, the MOU provides for

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

- The MOU between the DOE and the New Mexico Department of Public Safety concerning mutual assistance and emergency management. The MOU applies to any actual or potential emergency or incident that (1) involves a significant threat to employees, or the public; (2) involves DOE property; (3) involves a threat to the environment that is reportable to an off-site organization; (4) requires combined resources of the DOE and the state; (5) requires DOE resources unavailable from the state or vice versa; or (6) involves any other incident for which a joint determination has been made by the DOE and the state that the provisions of the MOU will apply.
- The Interagency Agreement between the U.S. Bureau of Land Management and the DOE, and the U.S. National Park Service, and the U.S. Forest Service, provides for assistance in search and rescue missions and training. The purpose of this agreement is to facilitate future cooperation and assistance in confined space and high angle rescue training and missions. The agreement is terminated upon thirty days' written notice to the other agencies.
- The MOU between the CBFO and the sheriff of Eddy County provides for law enforcement support.
- The Interagency Agreement between the DOE and the U.S. Department of Defense provides for the temporary parking (safe haven) of transuranic waste shipments at military installations. DOE-AL has the maintenance responsibility for this interagency agreement.

3.6 Off-Site Medical Facilities

Contaminated patients who have incurred injury beyond the treatment capabilities at WIPP will be transported to the CMC or the LRMC. Prior to transport, patients will be treated and decontaminated to the extent allowed by the nature of their injuries. During transport, precautions will be taken to control the spread of contamination from the patient while still allowing for stabilization efforts.

4.0 EMERGENCY FACILITIES AND EQUIPMENT

4.1 Emergency Facilities

WIPP maintains a number of emergency facilities as described below. The facilities are inspected by the Emergency Services Technicians in accordance with preventative maintenance activities and routine checks.

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4.1.1 Central Monitoring Room

The CMR, located in the Support Building, is the coordination point for site activities and the focal point for communications between the surface and underground facilities. On-site emergencies are reported immediately to the CMR operator, who gathers specific information relating to the incident, notifies on-site ERT(s) and support groups, as needed based on the severity of the event, and notifies the FSM.

The CMR operator reports directly to the FSM.

4.1.2 Emergency Operations Centers

The EOC provides a CMT room to support the FSM for emergency situations and is activated as needed per WP 12-ER3002. The EOC is in the Safety and Emergency Services Building as a permanent facility.

When the EOC is activated, the EOC Coordinator may secure the facility at the direction of the Crisis Manager. The EOC Coordinator or the Crisis Manager can approve access to the EOC for personnel requested in the EOC.

The on-site AEOC is in the Guard and Security Building, which is a secured area. In the event the primary EOC cannot be activated, the FSM will direct the CMRO to activate the on-site AEOC. The on-site AEOC is used by Security during normal conditions.

The AEOC is located on the first floor of the Skeen Whitlock Building in Carlsbad, New Mexico. In addition to the AEOC's primary purpose of serving the needs of WIPP, the AEOC, located in the Skeen Whitlock Building may provide assistance to the city of Carlsbad, Eddy County, and the state of New Mexico if assistance is requested as part of the MOUs with these entities.

4.1.3 Joint Information Center

The JIC, located at the Skeen-Whitlock Building, provides the Public Affairs Management Team a gathering place for generating and dispensing public information during emergency situations, and is activated as needed. Access to the JIC during emergencies will be controlled.

4.1.4 Assembly Areas

Assigned assembly and staging areas have been established for the WIPP site. If it becomes necessary to evacuate personnel from buildings, the site assembly area is the west side of the Support Building parking lot. The employee parking lot, west of the main personnel entrance gate, is the designated primary staging area with alternate areas north and east of the site.

If the FSM determines that site personnel evacuation to other than the primary staging area is necessary, the most favorable evacuation route will be selected.

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4.2 Emergency Equipment

WTS has identified, procured, and maintained equipment resources to mitigate credible emergency events that may occur at the WIPP site or within the WIPP vicinity. Emergency Services Technicians perform inspections on emergency equipment and document results in inspection reports. Emergency equipment at the WIPP site includes two fully equipped pumper engines; a surface ambulance, with capabilities to respond to off-site emergencies; and an underground ambulance. The surface emergency equipment is stationed in the Safety Building. Radiological and hazardous materials detection equipment are also maintained. A detailed list of equipment appears in RCRA Attachment F, Table F-6.

Permanent facilities have detection and alarm systems and portable fire extinguishers. In addition, most permanent facilities have automatic sprinkler systems and hose stations.

Emergency response equipment and response personnel for in-town WIPP administrative offices are provided by the city of Carlsbad.

In the event that sensitive telephone conversations could occur, the EOC is equipped with three STU-III encrypted telephones. These phones require encoding, which is performed by NCI-ETSG (NCI Information Systems, Inc.-Enterprise Technology Systems Group) staff personnel.

Emergency Management conducts regular inventory and inspection of emergency facilities and equipment using a checklist to document the inspections. In addition, periodic inspections of the emergency response radio, pager, and plectron systems are conducted. Emergency Management maintains records of inspections performed by Emergency Management.

5.0 EMERGENCY EVENT CATEGORIZATION AND CLASSIFICATIONS

Operational emergencies are unplanned, significant events or conditions that involve or affect DOE facilities and activities by causing or having the potential to cause serious health and safety or environmental impacts; require resources from outside the immediate/affected area or local event scene to supplement the initial response; and require time-urgent notifications to initiate response activities at locations beyond the event scene.

Categorization and classification of operational emergencies is based on DOE/WIPP-08-3378, *Waste Isolation Pilot Plant Emergency Planning Hazards Assessment* (EPA), and is implemented by the FSM in accordance with WP 12-ER3906.

The EPA is revised per WP 12-11, Development and Maintenance of an Emergency Planning Hazards Survey. The spectrum of accidents analyzed in the DSA has been determined to be bounding for the WIPP site and, therefore, are used for emergency

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planning. The EPHA identifies and describes the postulated events and conditions in accordance with DOE Order 151.1C. These scenarios are the basis for WP 12-ER3906.

OEs involving the release of hazardous materials on or from DOE sites or facilities are classified according to the severity to ensure rapid response communications and notifications commensurate to the degree of hazard presented by the event. The primary focus of the classification process is the initiation of preapproved responses to protect the personnel on-site and off-site. A graded approach is used based on the severity of the event or conditions.

5.1 Protective Action Criteria for Hazardous Materials Operational Emergencies

The hazards assessment process provides the foundation used to develop EALs and the corresponding event classifications through the development of accident and emergency event scenarios and the determination of the consequences. The results of the EPHA is used to identify specific event indicators (e.g., alarms, monitor readings).

Protective action criteria (PAC) are levels of hazardous material impact that indicate action is necessary to prevent or limit exposure to personnel. Protective actions have been developed for all scenarios identified in the EPHA and are grouped according to the physical location of personnel when the event occurs. The protective actions are specified for each incident and implemented by WP 12-ER3906.

5.2 Criteria for Operational Emergencies

Operational emergencies are unplanned, significant events or conditions that require time-urgent response from outside the immediate/affected site/facility or area of the incident. WP 12-ER3906 describes the criteria for operational emergencies.

5.3 Categorization of Operational Emergencies

Operational emergencies are CATEGORIZED according to the requirements in DOE G 151.1C, Chapter 5. There are five types of Operational Emergencies: (1) Health and Safety, (2) Environmental, (3) Security and Safeguards, (4) Off-Site DOE Transportation activities, and (5) Hazardous Biological Agent or Toxins.

Operational emergencies involving the release of hazardous materials are differentiated according to the severity of the potential release. EALs are the criteria used to classify hazardous materials emergencies. An OE is CATEGORIZED according to the following types.

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5.3.1 Health and Safety Operational Emergency

WIPP has identified the following events as Health and Safety Operational Emergencies that represent, cause, or have the potential to cause serious health and safety impacts to workers or members of the public:

- An off-site hazardous materials event not associated with DOE NNSA operations that is observed to have or predicted to have an impact on a DOE site, such that protective actions are required for on-site workers.
- An occurrence (e.g., earthquake, tornado, aircraft crash, fire, and explosion) that causes or can reasonably be expected to cause significant structural damage to DOE facilities, with confirmed or suspected personnel injury or death.
- Any facility evacuation in response to an actual occurrence that requires time-urgent response by specialist personnel, such as hazardous material responders or mutual aid groups not normally assigned to the affected facility.
- Any mass casualty event.

5.3.2 Security and Safeguards Operational Emergency

WIPP has identified the following events as Security and Safeguards Operational Emergencies:

- Actual unplanned detonation of an explosive device or a credible threat of detonation resulting from locating a confirmed or suspicious explosive device.
- An actual terrorist attack or sabotage event involving the WIPP site or operation.
- Kidnapping or the taking of hostage(s) involving WIPP facility personnel.

5.3.3 Environmental Operational Emergency

WIPP has identified the following as Environmental Operational Emergencies:

- Any actual or potential release of hazardous materials or regulated pollutants to the environment in a quantity greater than five times the Reportable Quantity specified for such material in 40 CFR Part 302, "Designation, Reportable Quantities, and Notification," that could result in significant off-site consequences such as a major wildfire, wetland degradation, aquifer contamination, or the need to secure downstream water supply intakes.

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- Any actual or potential airborne release of radiological material or hazardous material to the environment that could result in consequences to personnel or the environment.

5.3.4 Off-Site DOE Transportation Emergencies

WIPP has identified the following as Off-Site DOE Transportation Operational Emergencies:

Any accident/incident involving an off-site DOE/NNSA shipment containing hazardous materials that causes the initial responders to take protective actions at locations beyond the immediate/affected area.

Drivers are trained in the appropriate response for emergency situations. The CBFO has entered into agreements with the Joint Nuclear Accident Coordination Center and the Western Governors' Association for the safe parking for WIPP trucks and their payloads in the event that weather conditions, civil disobedience, or other events interfere with travel.

The CBFO will direct and deploy response personnel and materials for a transportation emergency. The following participants maintain defined responsibilities with respect to an emergency of the WIPP transportation system:

CBFO Manager - provides direction for the CBFO, the WIPP facilities, and the National TRU Waste Transportation System.

CBFO Security Manager - provides security oversight and direction as authorized for the CBFO, the WIPP facilities, and the National TRU Waste Program (includes the TRU Waste Transportation System).

Shipper - responsible for the packaging and documentation of TRU materials; input of the bill of lading; and the transfer of the designated facility in the Transportation Tracking and Communications System.

Contract Carrier - responsible for the safe and cost-effective transport of TRU materials and the maintenance of the government-furnished equipment associated with the WIPP transportation system.

Contract Drivers - follow the duties outlined in the Carrier Management Plan and are responsible for the safe operation and inspection of the vehicles on a day-to-day basis.

Local Law Enforcement - follow normal response procedures established for their respective agencies.

CMR - provides Transportation Tracking and Communications System control and tracking of TRU shipments, communicates with drivers per

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procedures, and makes call-outs and notifications for emergency response.

IART - responds to TRU transportation incidents and accidents in accordance with the IART guide.

5.4 Criteria for Operational Emergencies Requiring Classification

If an OE involves a significant release or loss of control of a hazardous material, it requires further classification. It is then CLASSIFIED according to the following EALs as described in DOE O 151.1C and implemented in WP 12-ER3906:

(a) Alert. An Alert must be declared when events are predicted, are in progress, or have occurred that result in one or more of the following.

1. An actual or potential substantial degradation in the level of control over hazardous materials.
 - a. The radiation dose from any release to the environment of radioactive material or a concentration in air of other hazardous material is expected to exceed either-
 - i. A site-specific criterion corresponding to 10 percent of the applicable protective action criterion [see Base Order, paragraph 4a(14)] at or beyond the facility boundary; or
 - ii. The applicable protective action criterion at or beyond 30 meters from the point of release to the environment.
 - b. It is not expected that the applicable protective action criterion will be exceeded at or beyond the facility boundary (100meters).
2. An actual or potential substantial degradation in the level of safety or security of a nuclear weapon, component, or test device that would not pose an immediate threat to workers or the public.
3. An actual or potential substantial degradation in the level of safety or security of a facility or process that could, with further degradation, produce a Site Area Emergency or General Emergency.

(b) Site Area Emergency. A Site Area Emergency must be declared when events are predicted, in progress, or have occurred that result in one or more of the following situations.

1. An actual or potential major failure of functions necessary for the protection of workers or the public. The radiation dose from any release of radioactive material or concentration in air from any release of other

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hazardous material is expected to exceed the applicable protective action criterion at or beyond the facility boundary (100 meters). The protective action criterion is not expected to be exceeded at or beyond the site boundary (300 meters) as defined by the EPHA.

2. An actual or potential threat to the integrity of a nuclear weapon, component, or test device that may adversely impact the health and safety of workers in the immediate area, but not the public.
3. Actual or potential major degradation in the level of safety or security of a facility or process that could, with further degradation, produce a General Emergency.

(c) General Emergency. A General Emergency must be declared when events are predicted, in progress, or have occurred that result in one or more of the following situations.

1. Actual or imminent catastrophic reduction of facility safety or security systems with potential for the release of large quantities of hazardous materials to the environment. The radiation dose from any release of radioactive material or a concentration in air from any release of other hazardous material is expected to exceed the applicable protective action criterion at or beyond the site boundary (300 meters) as defined by the EPHA.
2. Actual or likely catastrophic failures in safety or security systems threatening the integrity of a nuclear weapon, component, or test device that may adversely impact the health and safety of workers and the public.

5.5 Declaration of Operational Emergencies

The FSM or designee determines if an event is to be categorized as an OE and, if a hazardous material (radiological and/or nonradiological) OE needs to be classified as an Alert, SAE, or GE. Classification of OEs is required for events that represent a specific threat to workers and the public due to the release or potential release of hazardous materials. If the OE is classified as an Alert, SAE, or GE, WP 12-ER3906 identifies the EALs and the protective actions required for each type of event classification.

6.0 NOTIFICATIONS AND COMMUNICATIONS

6.1 Notification Systems and Equipment

Multiple independent communication and notification systems and equipment are used at the WIPP site to notify on-site and off-site populations.

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The plant monitoring and communications systems include onsite and plant-to-off-site coverage and are designed to provide immediate instructions to ensure personnel safety, facility safety and security, and efficient operations under normal and emergency conditions. Plant monitoring and communications systems include the following:

Central Monitoring System

The Central Monitoring System collects and monitors real-time site data, automatically and manually, during normal and emergency conditions. The underground and surface data monitored by the Central Monitoring System are gathered, processed, stored, logged, and displayed. The data are collected continuously from approximately 1,500 remote sensors.

Plant Communications

Touch-tone phones - The touch-tone phone system includes a private automatic branch exchange network providing conventional on-site and off-site telephone services. Major uses of this subsystem include the reporting of occurrences (DOE Order 231.1A, Change 1, *Environment, Safety and Health Reporting*) and communications between the CMR and other plant or security personnel or the EOC.

Mine pager phones - The mine pager phones are an independent, hard-wired, battery-operated system for communications throughout the underground and between the surface and underground. Mine pager phones are located throughout the underground and in surface structures to support daily operations and emergencies. Surface locations include, but are not limited to, the hoists, the CMR, the FSM's desk in the Support Building, the EOC, and the mine rescue room of the Safety Building.

Plant PA system - The plant PA and alarm systems provide for the initiation of surface and underground evacuation alarms and PA announcements from the CMR and local stations. The plant PA and alarm systems includes the sitewide PA and intercom installations and the site notification system for remote locations. These alarms are supplied with backup power if the off-site power supply fails. The PA system master control console is located in the CMR, with paging stations located throughout the facility.

Underground evacuation signal system - The underground evacuation signal is separate from the PA system and includes electric horns and strobe lights. An underground evacuation signal is initiated automatically by an underground fire alarm signal via the Central Monitoring System or manually by the CMR operator or from pushbuttons in the salt handling shaft hoist house and waste shaft hoist control room. The underground evacuation signal is reset from any of the three manual pushbutton stations.

Radio - Radio includes two-way and paging on-site and off-site radio systems. These systems include base stations in the CMR, security control room, Emergency Operations Center, and mobile and portable units.

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6.2 On-Site Notifications

All on-site emergencies will be reported immediately to the CMRO at Extension 8111. All notifications should include, at a minimum, the following information, as appropriate:

- Name and telephone number of the caller
- Location of the incident and the caller
- Time and type of the incident
- Severity of the incident
- Magnitude of the incident
- Cause of emergency (if known)
- Assistance needed to deal with or control the incident
- Areas or personnel affected by the incident

The CMRO notifies the FSM of the incident. The FSM then declares the emergency and categorizes and classifies it according to the processes described within WP 12-ER3906. If the FSM declares an OE, the FSM becomes the IC.

DOE Order 231.1A addresses reporting and notification requirements for events, occurrences, and/or emergencies. These requirements are specific to the FM/FMD. In addition, all site personnel receive an overview of the process in General Employee Training, including their required actions, if any.

Primary notification of emergencies at WIPP facilities in Carlsbad (during on- or off-shifts) will be reported to the appropriate city of Carlsbad response agencies.

6.2.1 WIPP Management and/or CMT Notification

Senior Operations management, and DOE management, as required, will be notified promptly by the FSM of any emergency, and given the details of the emergency situation. The FSM may request that the CMRO activate the EOC or AEOC.

6.2.2 Joint Information Center Personnel Notification

The communication on-call representative will be notified by the FSM or Crisis Manager of an emergency and given details of the situation. Notification of required personnel is made via the telephone and/or paging system.

6.2.3 Emergency Warning System/Evacuation Notification

Depending upon the type of emergency and level of response required, the FSM may deem it necessary to evacuate part or all of the affected facilities including the underground. Emergency alarms and notifications are transmitted using the site PA system. The action required by personnel is to proceed immediately to the designated staging areas in accordance with evacuation plans and as directed by the FSM.

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If the emergency warning system fails to operate when activated, as in a total power outage, Security/CMR will be notified at Extension 8111, provided with details concerning the emergency, and requested to initiate the contingency evacuation plan. Security Officers will then instruct personnel to evacuate the area and inform them of designated staging areas.

All WIPP employees and site visitors are responsible for complying with directions of the emergency personnel, alarm system notification, and emergency evacuation routes and exits.

6.2.4 On-Call List Notifications

Emergency Management maintains a list of personnel on call 24 hours a day. The on-call list provides the names and contact numbers of site personnel whose assistance might be needed in resolving, investigating, and mitigating any abnormal event or emergency. The on-call personnel will be available by pager, telephone, or cellular phone at all times and be able to respond in a timely manner.

In the event of a mine emergency requiring the WIPP MRT to be activated, the FSM will notify the MRT captain(s). If the WIPP MRTs cannot be activated, the FSM will approve the contact of local potash mines to activate their MRTs through the applicable MOUs.

6.2.5 Emergency Response Group Notifications

The fire brigade will be notified in emergency situations by the CMRO, using the PA system or the radio. The ERT will be notified in emergency situations by the CMRO, using the PA system or ERT pagers. The ERT will supplement the FLIRT as necessary and as directed by the FSM.

The CMRO will activate the FLIRT using the mine pager phone. Once activated, the FLIRT will use any communication system available to assist in the response.

The off-site monitoring team and Radiological Control personnel will be notified by the CMRO, by pager and/or telephone.

Additional support can be activated by the FSM using pagers and/or telephones.

During an emergency, the CMRO will notify site employees using the site PA system. The CMRO will announce the nature of the emergency and actions for the employees to take. If a site evacuation is called for, the CMRO will sound the evacuation alarm and Office Wardens will be notified of the actions to take. Instructions will be broadcast over the site PA system and plectrons.

In the event the CMRO is challenged with loss of power, notification systems may be limited. The CMRO will use the available PA system, U/G Mine Phone, direct radio frequencies and/or use Security personnel for notification actions.

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6.2.6 Medical Notification

The emergency response organization (ERO) will be notified of the medical emergency by the CMRO using the PA system or pager.

6.3 Off-Site Notification

During any OE, the FSM will ensure that verbal notification of the event is made to the DOE-Headquarters (HQ) EOC and local and state authorities in accordance with WP 12-ER3906. When emergency circumstances dictate immediate notification, WTS is authorized to notify state and local officials without prior approval from the DOE.

The WIPP site is equipped for both on-site and off-site communications. The WIPP communication systems include a telephone system, a mine/surface phone system, the site automated notification system, hand-held radio system, pagers, and plectrons.

6.3.1 Off-Site Response Notifications

When the CMR receives a request for off-site assistance, the CMR will make the following notifications:

- FSM will be notified and approve the response.
- Notify the Facility Manager Designee (FMD).

The FMD will make the following notifications:

- DOE Facility Representative
- WTS Communication on-call representative

Subsequent notifications should be made to the appropriate management of personnel providing support to ensure they are aware of their personnel involved in the current response. The notification to the above will provide the personnel with a general knowledge of the incident.

In the event that off-site assistance is required at WIPP, the FSM will identify the agencies to be contacted as identified in Section 3.5.

Mutual Aid Mine Rescue

- Mosaic
- Intrepid

Mutual Aid Medical Response

- Carlsbad Fire Department
- Hobbs Fire Department

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Mutual Aid Hospital Services

- Carlsbad Medical Center - Carlsbad
- Lea Regional Medical Center - Hobbs

Mutual Aid Fire Fighting Response

- Carlsbad Fire Department
- Department of the Interior - Bureau of Land Management
- Hobbs Fire Department
- Loving Fire Department

Mutual Aid Law Enforcement Response

- Carlsbad Police Department
- Eddy County Sheriff's Office
- FBI
- Hobbs Police Department
- Lea County Sheriff's Office
- New Mexico State Police

6.3.2 Public Information

It is the policy of the DOE to provide accurate and timely information to the public, by the most expeditious means possible, concerning emergency situations at WIPP that may affect on-site personnel, public health and safety, and/or the environment.

During a response, personnel will make every attempt to defer questions from the public to a PIO. If there is no PIO on the scene, questions will be deferred according to WP 11-EA.01, Joint Information Center Operations Program Plan.

Notification to the general public will be under direction of the FSM, in conjunction with the CMT, the JIC or the Communication on-call representative.

6.4 Communications

The WIPP site is equipped for both on-site and off-site communications. The WIPP communication systems include a telephone system, a mine/surface phone system, hand-held radio system, pagers, cell phones, and UHF (ultrahigh frequency) two-way radios. Radio frequencies for local law enforcement, ambulance, and fire departments are available at the WIPP site. The communication systems are used to monitor emergency situations, relay information to the CMR, the FSM, Security, and facilities in Carlsbad and Hobbs.

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7.0 CONSEQUENCE ASSESSMENT

7.1 Consequence Determination

Consequence assessment is the process used to evaluate the impacts of a release, or potential release, of radioactive or hazardous materials. The process of performing timely initial assessments are necessary to support critical first decisions. The continual assessment of consequences is the evaluation and interpretation of all available information concerning an actual or potential release of hazardous materials to the environment for the purpose of estimating personnel exposure/dose. These estimates are then compared to human health and/or Protective Action Guides and used as the basis for management decision-making (e.g., event classification, protective action levels, notification, public information).

Consequence assessments estimate the potential or actual on-site and off-site consequences of an emergency. These assessments are performed by consequence assessment personnel (radiological representative or HAZMAT representative) in the EOC. WP 12-ER3906 provides direction to the FSM, or designee, that ensures timely assessments throughout the emergency. This is integrated with the event classification and protective action processes in WP 12-ER4916, Consequence Assessment Dose Projection, which incorporates monitoring of specific indicators and field measurements. Appropriate responses are then coordinated with federal, state, and local organizations

Field measurements are performed by Radiological Controls Technicians and are conducted in accordance with WP 12-HP1100, Radiological Surveys; and WP 12-HP3500, Airborne Radioactivity. WIPP maintains the capability of collecting bioassay samples as circumstances warrant.

The use of WP 12-IH.02-4 enables the sampling team the use of specific instrumentation for obtaining field samples and or measurements that provide the user with a method for comparing field conditions to the applicable ERPGs or other occupational exposure limits.

7.2 Coordination

Consequence assessment is conducted in three phases during an emergency response. The following information contains WIPP specifics related to all three phases of consequence assessment:

- During the first phase, immediately upon recognition of the emergency, the events and event symptoms are recognized through direct observation and/or the monitoring of various site indicators. These indicators are evaluated to determine the level of severity, resulting in event categorization and classification to ensure an appropriate level of response. EALs were developed based on consequence estimates, and calculations, for postulated events and preselected default input parameters.

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- The second phase is the timely initial assessment when actions are taken to improve the quantitative understanding of the impacts. The goal is a rapid assessment that yields a conservative estimate of the upper bound of the potential consequences. In addition, Radiological Control personnel are contacted to perform radiological monitoring, and surveying as necessary. Dose estimates and locations are provided by consequence assessment personnel.
- The third phase consists of continuous assessment and ongoing assessment performed by the designated ERO personnel, and continues throughout the response. As the various emergency response personnel, facilities, and resources are activated, additional information is gathered and emergency conditions become better understood. This is the "continuous" phase of the assessment process.

8.0 PROTECTIVE ACTIONS

Protective actions are measures, such as evacuation or sheltering, taken to prevent or minimize potential health and safety impacts on workers, responders, or the public.

For Hazardous Materials Operational events, additional protective actions such as decontamination, access control, and berming may be applicable. Once the level of hazard is identified and the consequences of a release are identified, the actions necessary to protect the health and safety of the workers and the public can be established. The Hazards Assessment provides an analysis of those hazards and consequences resulting in the development of preplanned protective actions. Additional protective actions are developed as needs are identified. These are then directly linked to the categorization/classification process so that the issuance of protective actions is automatic upon declaration of an OE. WIPP's protective actions are defined in the appropriate implementing procedures.

During continuous consequence assessment, reevaluation of protective actions will begin. The reevaluation of protective actions/recommendations is a product of continuous consequence assessment and is performed throughout the response. The FSM will perform an evaluation to remain sheltered in place, relocate or evacuate. Evaluation of habitability for areas being used by responders and sheltered personnel is part of the continuing evaluation for protective actions.

8.1 Protective Action Guides/Emergency Response Planning Guidelines

Emergency Response Planning Guidelines (ERPGs) for nonradiological releases, are provided in accordance with DOE Order 151.1C, for hazardous materials in quantities exceeding the lower of the threshold quantities listed in 29 CFR §1910.119, "Process Safety Management of Highly Hazardous Chemicals"; or 40 CFR §68.130, "List of Substances." A review of the site hazardous material inventory is included in the EPHA and, accordingly, the hazards are evaluated and protective action levels are provided in the EPHA. Protective actions are communicated to site personnel through various

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communication systems. Off-site notifications are made to required agencies for protective actions on off-site events. The implementation of public protective actions is coordinated with off-site agencies.

8.2 Records

Records are kept in accordance with WP 15-PR, WIPP Records Management Program. The Records Inventory and Disposition Schedules were established to meet the intent of this plan.

8.3 Personnel Accountability/Evacuation

Accountability is performed during a site evacuation or sheltering in place by the implementation of appropriate procedures. Accountability in the underground is achieved by the use of the brass tag system, which is verified in the lamp room. Surface accountability is achieved through the Office Warden Program. Office Wardens are responsible for the evacuation of their specific work area.

Accountability for personnel during an evacuation or sheltering in place depends on the Office Wardens or managers or supervisors trained as Office Wardens (on backshifts) ensuring that all personnel are accounted for. Office Wardens should search their assigned areas and direct personnel to designated assembly areas. If any personnel are not accounted for and believed to be in danger, the Office Warden must report this immediately to the CMR or the FSM. The ESTs/ERTs/FLIRT are trained to perform search and rescue activities if someone is missing. The FSM will initiate search and rescue activities immediately if personnel are reported missing.

8.4 Shelter-In-Place

As a result of an emergency event (radiological event, hazardous materials event, fire, security event, etc) the CMRO is directed by the FSM to shelter in place. WP 12-ER4907, Evacuation/Sheltering in Place, provides the processes and immediate actions/communications necessary to instruct plant personnel to shelter in place.

8.5 Evacuation

The FSM, upon determining that an area of site evacuation is necessary, will designate staging area and evacuation route(s) to be used based on existing or potential hazards (including radiological hazards) and weather conditions. WP 12-ER4907 provides the processes and immediate actions/communications necessary to instruct plant personnel to evacuate. Security will maintain access control to the facility in accordance with Security Protective Force orders.

8.6 Exposure Controls

WIPP protects workers through administrative controls and sets the control at one REM per year. This is performed through ALARA and RWPs to control exposure levels.

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Monitoring of emergency worker exposure is accomplished through the use of thermoluminescent dosimeters and electronic personnel dosimeters as described in WP 12-3, Dosimetry Program.

In extremely rare cases, emergency exposure to ionizing radiation may be necessary to rescue personnel or to mitigate the emergency. Guidelines for determining the levels to which these personnel may be exposed are as follows:

- Whenever possible, emergency exposures will be controlled within the limits established in WP 12-5, Waste Isolation Pilot Plant Radiation Safety Manual.
- To prevent health effects to workers and nearby populations and to protect major property, individual exposures will be limited to 10 rem (Roentgen Equivalent in Man/Mammal). Emergency responder exposure is monitored by Dosimetry via thermoluminescent dosimeters.
- If an emergency operation is expected to result in individual exposures greater than 25 rem, the expected health effects to the rescue personnel will be weighed against the probability of success and the rescue personnel will be advised of these conditions.

8.7 Monitoring and Decontamination

Personnel monitoring and decontamination is performed by Radiological Control Technicians in accordance with WP 12-HP3400, Contamination Control, and WP 12-HP4000, Emergency Radiological Control Response.

8.8 Termination of Protective Actions

Protective actions remain in place until the FSM determines the need to increase or modify the actions taken according to WP 12-ER3906.

9.0 EMERGENCY MEDICAL SUPPORT

9.1 System

The WIPP Occupational Health Program gives information on the policies, objectives, and functions of the program. It interprets and implements the requirements of 10 CFR Part 851, per WP 15-GM.02, WTS Worker Safety and Health Program Description, which states that contractors must establish and provide comprehensive occupational medicine services to employees who work on a DOE site for more than 30 days in a 12 month period and/or are enrolled for any length of time in a medical or exposure monitoring program. This program serves as a resource for WIPP Occupational Health Services (Health Services) to:

- Give readily accessible direction for Health Services' staff.

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- Establish and maintain uniform health services practices.
- Describe responsibilities for administration and delivery of medical services.
- Protect employees from health hazards in their work environments.
- Ensure that workers are placed in jobs that can be done reliably and safely consistent with the Americans with Disabilities Act of 1990 (Public Law 101-336).
- Promote the early detection, treatment, and rehabilitation of employees who are ill, injured, or otherwise impaired.
- Give support to management in the medical, mental, and substance abuse aspects of personnel reliability and fitness for duty.
- Promote the maintenance of optimal physical and mental health of employees through health promotion and education.
- Give professional guidance and consultation to management on health-related issues.
- Give employees, as appropriate, medical evaluations, guidance, counseling, and referrals to specialists in support of physical and mental health.
- Coordinate in advance the sharing of patient information between onsite and offsite health care providers during emergencies, while providing protection of employee medical information and records consistent with the requirements of Health Insurance Portability and Accountability Act of 1996 [42 USC 300] as described in 15 HS.02, Occupational Health Program.
- Give support to DOE management and the Assistant Secretary of Environment, Safety, and Health, through their field offices, of suspected excesses of illnesses or injuries that require epidemiologic analyses to decide if the excesses are work-related.

9.2 Staff

The site medical staff complies with applicable standards and regulations of the agencies governing licensing and certification of emergency medical technicians and nurses.

The WIPP Occupational Health program is maintained under the guidelines of the following organizations:

- New Mexico State Board of Pharmacy
- American Board of Occupational Health Nurses, Mequon, WI.
- American Association of Occupational Nurses

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- American College of Occupational and Environmental Medicine.
- U.S. Department of Health and Human Services, Public Health Services, Division of Occupational Medicine

WIPP Health Services Organization includes:

- Occupational Medical Director (contracted)
- Occupational Health Nurses
- Licensed Practical Nurses
- Emergency Medical Technicians
- Office Coordinator
- Consultant Pharmacist (contracted)
- Health Services Manager

Staffing for the site emergency medical program ensures adequate coverage for all shifts. An EST is available 24 hours a day. A licensed nurse is available during regular working hours. WP 15-HS.02, Occupational Medical Program, describes the site health services functions. Site health services is located on the first floor of Building 452 (Safety Building).

9.3 Equipment

The WIPP site is equipped with a medical rescue unit that is fully equipped according to Federal Standard KKK-A-1822A, *Ambulances*, and New Mexico Emergency Medical Services Act General Order 35 specifications.

The emergency equipment at the WIPP site includes two fully equipped pumper engines, a surface ambulance, with capabilities to respond to off-site emergencies and an underground ambulance. The surface emergency equipment is stationed in the Safety Building.

A detailed list of WIPP emergency equipment is contained in the WIPP HWFP, Attachment F (New Mexico Environment Department 2008).

9.4 Medical Facility

The site medical treatment room is located on the first floor of Building 452 (Safety Building) and is equipped with supplies to handle emergencies ranging from first aid to medical/trauma situations. In addition, the WIPP site has MOU's (See Section 3.5) to treat mass casualties and contaminated personnel with Carlsbad and Hobbs medical facilities.

9.5 Transportation and Evacuation

Evacuation of casualties is accomplished using the site ambulance or requesting off-site assistance as necessary from local ambulance, fire, and rescue departments. MOUs are in place that would support a WIPP mass casualty event.

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9.6 Communications

The ESTs are in contact with the CMR and FSM through the use of UHF/VHF radios. Cell phones are also used to maintain contact during emergency transport.

10.0 EMERGENCY TERMINATION AND RECOVERY

Once an OE has been declared, only the FSM has the authority to declare the emergency terminated. The FSM will terminate the event after proper notification and coordination with off-site authorities has been completed.

An investigation of the event must take place following stabilization and termination of the emergency; therefore, the incident scene must be preserved and no recovery actions (aside from rescue and/or shutdown of systems to prevent further loss or damage) will be attempted until authorized by the FSM.

An event may be terminated when the following conditions are met:

- The initiated condition is stabilized or corrected.
- The facility is in a safe configuration.
- Airborne concentrations in all areas are stable or decreasing.
- Any site damage is under control.
- A recovery manager has been appointed as necessary.
- A recovery plan has been developed and approved.

Once an event is terminated, the Emergency Management manager will ensure that a self assessment of the response is performed in accordance WP 15-GM1000, Management Assessments and will provide the assessment report for submission to the Director, Office of Emergency Operations, in conjunction with the Final Occurrence Report prepared according to WP 12-ES3918, Reporting Occurrences in Accordance with DOE Order 231.1A.

Reentry is a planned activity to accomplish a specific objective that involves reentering a facility or affected area that has been evacuated or closed to personnel access during the course of the emergency. Reentry planning includes contingency planning to ensure the safety of reentry personnel. All individuals involved in reentry receive a hazards/safety briefing prior to emergency reentry activities, consistent with federal, state, and local laws and regulations. The FSM must approve all reentry plans. All reentry activities must be authorized with written approval of anticipated doses/exposures that may approach occupational or administrative limits.

10.1 Termination of Emergency

Protective actions remain in place until the FSM determines the need to increase or modify the actions taken according to WP 12-ER3906. Incident termination guidance is provided in WP 12-ER3903.

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10.2 Reentry

Guidance for reentry and recovery is based on regard for human life and on the hazardous conditions existing at the time. The recovery process is detailed in WP 12-ER3903. The decision-making process considers the proposed action by weighing the risks of the hazards, actual or potential, against the potential benefits to be gained. The exposure probability, biological consequences related to dose, and the number of people involved are the essential elements to be evaluated in making a risk determination.

Reentry into an evacuated facility or into an established control area under emergency conditions will be approved by the FSM. The FSM will ensure that the rescue teams involved have had the proper training and briefings before reentry.

No person will reenter the following situations unless suitable precautions have been taken (e.g., preplanning, prebriefing, proper work permits issued):

- Possible radiation fields
- Possible toxic or radioactive atmospheres
- Possible oxygen-deficient atmospheres
- Areas where sudden fire flare-ups, explosions, or structure collapses are possible

Exceptions to the above situations are made to rescue injured or unconscious persons and to secure critical equipment or systems. In such cases, with the approval of the IC, volunteers may enter such zones using proper precautions, including the use of supplied air breathing apparatus for possible toxic atmospheres and radiologically hazardous areas.

If possible, rescuers entering a high-radiation zone will be backed up by an RCT with high-range instruments. The technician may remain outside the maximum field, communicate estimated dose rates to the rescuers, and terminate the rescue attempt, if necessary.

10.3 Recovery

The recovery phase of an accident or emergency is that portion of the response designed to restore order to the affected area. Recovery may involve cleaning up the emergency scene, securing the scene for investigation purposes, or restoring the area to preaccident or preemergency conditions.

Recovery teams must be formed at the completion of the emergency phase of an incident. The FSM appoints a recovery team leader who then identifies the recovery team members. The makeup of the recovery team will be comprised of individuals with the expertise to evaluate and investigate the emergency and to secure the area or return it to preemergency conditions. WP 12-ER3903 provides the detailed requirements for recovery operations.

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11.0 PUBLIC INFORMATION

DOE Order 151.1C, *Comprehensive Emergency Management System*, in its directed responses to OEs, states that DOE sites or facilities will promptly notify employees, the public, news media, local and state elected officials, tribal governments, DOE Headquarters, regulators, and regulatory agencies when events are categorized as operational emergencies."

The CBFO and its contractor at WIPP, WTS, have a policy to quickly communicate information about emergency events that could impact public and employee health and safety, and the environment.

The Joint Information Center (JIC), managed by the CBFO management and WTS, is prepared to respond to actual or perceived emergencies that generate local, regional, and national attention. Any event at the WIPP site, or along its transportation corridors, that generates public and news media attention generally will result in the activation of the JIC to address employee, public, and news media questions and concerns.

The JIC is authorized to issue emergency public information in a timely and accurate manner to employees, affected communities, the general public, news media, and elected officials.

The Communications Department provides information to support public education for WIPP and its activities during emergencies and nonemergency events. Public education material is available and distributed through the Communications Department.

11.1 Responsibilities

The WIPP Emergency Public Information organization is reflected in the structure and reporting responsibilities identified in WP 11-EA.01. The positions authorized to release and present emergency public information concerning emergency conditions, responses, and recovery efforts are the DOE Spokesperson and/or the JIC Manager. However, all protective action recommendations made to the public will be made by a representative of the affected city and/or county. That information will also be provided to members of the telephone teams so they can advise callers (public and news media) on the recommended protective actions.

11.2 Emergency Operations

The JIC is part of the overall site ERO. As part of the WIPP ERO, the JIC serves as a common emergency public information center for the project, including the CBFO and their on-site contractors; affected states, counties, and community response organizations; and other federal agencies.

The JIC participates in actual emergencies (with and without activation of the EOC), annual training, and periodic drills and exercises. All logs, inquiry forms, news releases,

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and other documents resulting from the activation of the EOC and JIC will be provided to WTS Emergency Management for retention.

The JIC can be activated during an emergency by the FSM or the EOC Crisis Manager when the EOC is activated.

The JIC can be activated either in whole or in part as directed by the JIC Management Team as warranted, based on the event, news media attention, or public concern.

The JIC is considered activated when all members of the JIC Management Team and the JIC Writer are signed in and present, and, if applicable, an open telephone connection has been established with the EOC. Area news media are notified of JIC activation through telephone calls placed by the News Media Information Manager, followed by an initial news release briefly stating the purpose of the activation.

The News Media Information Manager will encourage the news media to come to the JIC, and will provide them with a phone number to call for information. The operational objective of the JIC is to issue initial emergency information within 25 minutes of activation.

The initial news release, and all subsequent news releases, will explain the reason for JIC activation, list the telephone number for the News Media Phone Team, and encourage news media to gather at the JIC for updates.

11.3 Joint Information Center

The primary JIC is in the Skeen-Whitlock Building at 4021 National Parks Highway, Carlsbad, New Mexico.

JIC procedures and position checklists are contained in WP 11-EA3000, Joint Information Center Operations.

Before, during, and after any emergency event at WIPP, or along its transportation corridors, the following audiences will be the focus of JIC communications:

- News Media
- Local Community
- On-site Employees and Emergency Workers
- Elected Federal, State, and Local Officials
- Federal, State, and Local Agencies
- Special Interest Groups
- Public Education

The JIC Management Team is comprised of the DOE Spokesperson, JIC Manager, Assistant JIC Manager, Technical Spokesperson, News Media Information Manager, and Public Information Manager.

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The following is a list of JIC positions and responsibilities:

DOE Spokesperson - The DOE Spokesperson provides JIC policy guidance, makes certain notifications, and conducts briefings for news media and stakeholders.

JIC Manager - The JIC Manager manages staffing and operation of the JIC.

Technical Spokesperson - The Technical Spokesperson presents technical information in lay terms at news conferences, briefings, and news interviews, in support of the DOE Spokesperson.

Public Information Manager - The Public Information Manager manages staffing and operation of the Public Inquiry Phone Team, JIC Support Team, and JIC Receptionist Team.

Assistant JIC Manager - The Assistant JIC Manager notifies key local, state, and federal elected officials about emergency events at the WIPP site or along its transportation corridors. This involves contacting stakeholders and providing them with information about the emergency.

City, County, and State Spokespersons - Off-site agencies implement protective action recommendations and conduct other emergency response public information activities. They are encouraged to participate in the JIC.

News Media Information Manager - The News Media Information Manager develops and relays emergency public information to the news media and oversees the staffing and operations of the JIC Writer, News Media Phone Team, and the News Media Team.

EOC Public Affairs Coordinator - The EOC Public Affairs Coordinator, who is a member of the EOC CMT, compiles and relays emergency information to the JIC staff for release to the news media, public, and elected officials. The EOC Public Affairs Coordinator ensures that information released to the news media and public is reviewed by the Crisis Manager for technical accuracy.

NOTE: WP 12-ER3002 contains the instructions for this position.

News Media Phone Team - The News Media Phone Team provides responses to incoming news media phone inquiries and reports rumors and inaccuracies to the JIC Management Team. Their role lessens public concern by providing accurate information and preventing the spread of misinformation.

JIC Writer - The JIC Writer prepares news releases from information provided by the EOC Public Affairs Coordinator. The JIC Writer also writes background information relevant to the emergency, as directed by the JIC Manager or the News Media Information Manager.

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Public Inquiry Phone Team - The Public Inquiry Phone Team answers phone calls from the public, employees, their families, and other callers. Their role lessens public concern by providing accurate information and preventing the spread of misinformation.

JIC Support Team - The JIC Support Team prepares the JIC for operation, reconfigures the area and equipment once the JIC is deactivated, and provides clerical support to the JIC.

JIC Receptionist Team - The JIC Receptionist Team badges, ensures security, and makes PA announcements to employees not associated with the JIC (as directed by the Public Information Manager).

News Media Team - The News Media Team monitors and analyzes news broadcasts for inaccuracies and concerns that can be clarified or resolved at news conferences; distributes emergency information to the JIC staff/teams, employees, news media, and on-site agencies; provides logistical support, including graphics, for news conferences; and escorts news media in the JIC, the WIPP site, or vantage points near the site. This team includes an employee communicator responsible for internal electronic distribution.

11.3.1 Rumor Control

During any emergency there is potential for rumors or incorrect information. News media monitoring will be performed to detect incorrect emergency information. This involves monitoring and taping of local television and radio news programs and periodic reviewing and printing out of Internet news sites.

Telephone team members will also detect rumors. When incorrect information is detected through monitoring or other means, this information will be provided on an emergency response log through the News Media Information Manager or the Public Information Manager to the JIC Manager.

11.3.2 JIC Deactivation

Following the conclusion of the emergency, the JIC will enter a deactivation and recovery phase.

The decision to deactivate will be made by the DOE Spokesperson in conjunction with the JIC Manager, EOC Crisis Manager (for an emergency at the WIPP site), and off-site agency representatives in the JIC.

The news media will be notified by the DOE Spokesperson in the final JIC news conference that the JIC is being deactivated.

News media will be referred to the DOE and its contractor communication representatives for follow-up questions about the emergency events.

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11.3.3 JIC Training

Training is provided annually to all of the JIC participants in the form of formal classroom training or self-paced instruction, and drill/exercise participation. The JIC training is designed to ensure proficiency in each job function and to provide an in-depth overview of each job function to other JIC members. The JIC training is also designed to assist the trainee in developing the following skills:

- Organizational knowledge required for understanding duties, functions, and responsibilities.
- Operational knowledge required for understanding interface with other team members to complete functional activities.
- Skills or abilities identified within the JIC Program Plan and associated implementing procedures.
- Proficiency in the performance of JIC functional duties or activities.
- Public Information is implemented in accordance with WP 11-EA.01.

12.0 PROGRAM ADMINISTRATION

12.1 Emergency Management Program Administration

The WIPP Emergency Management Program is administered by the WTS Emergency Management manager under the jurisdiction of the CBFO Emergency Operations Program Manager and the Emergency Management Program Manager. The WTS Emergency Management manager develops and maintains this plan, develops the ERAP and annual updates, ensures emergency management related training is developed and conducted, develops and conducts a drill and exercise program, coordinates emergency management program assessment activities, develops related documentation, and coordinates emergency resources.

The program is reviewed annually and revised as needed in accordance with DOE Order 151.1C. In addition, this program is revised to incorporate changes in emergency planning or site operations. This program is reviewed and approved by the CBFO prior to issuance.

The EPHS and the EPHA are reviewed at least every three years and updated prior to significant changes to the site/facility or hazardous materials inventories. Protective actions are also reviewed to support effective emergency response.

ERO training requirements and materials are reviewed biannually to ensure that mitigation measures are an integral part of training for emergency management positions, and that training requirements are updated to include components identified as needed to enhance performance and competency.

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12.2 Document Control

The Emergency Management Program and the implementing procedures are controlled through the WIPP document control process. Documentation for WP 12-9, the list of controlled copy distribution locations, and the implementing procedures are maintained by Document Services.

The EOC(s) contain controlled sets of all emergency response manuals and applicable procedures. WP 12-ER.02, WIPP Vital Documents Protection Program, provides the requirements for documents that require retention protection.

12.3 Readiness Assurance

WTS implements a readiness assurance program consisting of evaluations, improvements and emergency readiness assurance plans (ERAPs).

12.3.1 Evaluations

WTS conducts an annual self assessment of the emergency management program to verify program status and to identify program weaknesses in accordance with WP 15-GM1000, Management Assessments. Self-assessment results are included in the ERAP submitted to the CBFO annually.

Exercise performance is evaluated and critiqued as described in Section 14.1. WTS Emergency Management monitors performance of the emergency management program in key functional areas through the use of performance indicators.

WIPP is available for participation in the No-Notice Exercise Program, conducted at the discretion of DOE. WTS will provide trusted agents to plan and conduct the exercise and will respond when the exercise is conducted.

12.3.2 Improvements

Continuous Improvement: WTS supports continuous improvement in the emergency management program through the implementation of corrective actions for findings (e.g., deficiencies, weaknesses) in all types of evaluations, including both internal and external evaluations. Items identified will be processed for prioritization, preparation of corrective action plans, and tracking of corrective actions through completion.

Lessons Learned: Readiness assurance includes incorporating and tracking lessons learned from training, drills, actual responses, and the WTS Lessons Learned Program. The WTS Lessons Learned Program, described in WP 15-MD3100, Operating Experience Program, provides guidance on use of the system.

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12.3.3 Emergency Readiness Assurance Plan

WTS submits an ERAP to the CBFO by September 30 of each year. This report identifies what the goals were for the fiscal year that ended, and the degree to which these goals were accomplished. This report also identifies the goals for the next fiscal year. The ERAP is prepared, and submitted in accordance with MP 1.47, Preparation and Submittal of the Annual Emergency Readiness Assurance Plan.

13.0 TRAINING

Training is provided to all of the ERO in the form of formal classroom or self-paced instruction, on-the-job training, drills and exercises, and/or a qualification system. The purpose of this training is to ensure safety during emergency responses and to provide skilled emergency response personnel. To meet this goal, Emergency Management will ensure that training courses are developed through Technical Training.

The ERO training is designed to assist the trainee in developing the following:

- Theoretical knowledge applicable in performing their emergency management functions
- Organizational knowledge required for understanding their duties, functions, and responsibilities
- Organizational knowledge required for understanding their interface with other team members for completing functional activities
- Organizational knowledge required for understanding organizational control deficiencies that may require immediate corrective action to ensure that the Emergency Management organization efficiently and effectively copes with emergency events
- Skills or abilities identified within the emergency program and associated implementing procedures
- Proficiency in the performance of ERO functional duties or activities

13.1 Courses

The list of courses is maintained by Technical Training. Descriptions of the courses, including the length of the courses and any prerequisites, are provided.

13.2 Training Requirements

The following are the specific Emergency Management related training requirements for the respective emergency response and support groups. All personnel receive significant additional training for their routine work assignments, the training

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requirements identified below are in addition to any training requirements imposed by other WIPP programs. Refresher training includes, as necessary: changes to the program, changes to procedures, lessons learned from drills and/or exercises, lessons learned from other facilities, and other topics as specified by the Emergency Management Manager.

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EMERGENCY RESPONSE REQUIRED TRAINING										
POSITION	COURSES									
Emergency Response Organization	EM-102	SAF-645	JPM*	Drill/ Exercise	ICS-100	ICS-200	ICS-300	ICS-400	FEMA IS-700	FEMA IS-800
Facility Shift Manager	R/A			P	R	R	R	R	R	R
CMR Operator					R				R	
Crisis Manager	R/A	R/A	R/A	P	R	R	R	R	R	R
Deputy Crisis Manager	R/A	R/A	R/A	P	R	R	R	R	R	R
Safety Representative	R/A		R/A	P	R	R			R	
Operations Representative	R/A		R/A	P	R	R			R	
EOC Coordinator	R/A			P	R	R			R	
Emergency Response Personnel	ERT-01	MRT-01	FLIRT-01	Basic Fire Response	ICS-100	ICS-200	ICS-300	ICS-400	FEMA IS-700	FEMA IS-800
Emergency Response Team	R/A			R/A	R	R			R	
First Line Incident Response Team			R/A	R/A	R	R			R	
Mine Rescue Team		R/A			R	R			R	
Mine Rescue Captains		R/A			R	R	R		R	R
Security Officers					R	R			R	
Security Captains					R	R			R	
Joint Information Center	JIC Overview			Drill/Exercise	ICS-100	ICS-200	ICS-300	ICS-400	FEMA IS-700	FEMA IS-800
JIC Staff	R/A			P	R	R				
Fire Brigade	Brigade-01				ICS-100	ICS-200	ICS-300	ICS-400	FEMA IS-700	FEMA IS-800
Fire Brigade (non EST/FPT)	R/A				R	R			R	
Office Wardens	SAF-632				ICS-100	ICS-200	ICS-300	ICS-400	FEMA IS-700	FEMA IS-800
Office Warden	R/A									

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EMERGENCY RESPONSE REQUIRED TRAINING										
POSITION	COURSES									
Emergency Response Organization	EM-102	SAF-645	JPM*	Drill/ Exercise	ICS-100	ICS-200	ICS-300	ICS-400	FEMA IS-700	FEMA IS-800
Professional Response Personnel	EST-01	FPT-01			ICS-100	ICS-200	ICS-300	ICS-400	FEMA IS-700	FEMA IS-800
Emergency Services Technicians	R/A				R	R			R	
Fire Protection Technicians		R/A			R	R			R	

Table Notes:
 * – Annual Participation
 R – Required
 R/A – Required, Annual Refresher
 P – Participation required annually
 EM-102, Crisis Management Team
 SAF-645, RCRA Emergency Coordinator
 JPM = Job Performance Measure
 ICS-100: Introduction to ICS
 ICS-200: Basic ICS
 ICS-300: Intermediate ICS
 ICS-400: Advanced ICS
 FEMA IS-700: NIMS, An Introduction
 FEMA IS-800: National Response Framework, An Introduction
 ERT-01, Emergency Response Team Authorization Card
 MRT-01, Mine Rescue Team Authorization Card
 Brigade-01, Fire Brigade Entry Team Member Authorization Card
 SAF 632, Office Warden Training
 FLIRT-01, First Line Incident Response Team Qualification Card
 EST-01, Emergency Services Technician Qualification Card
 FPT-01, Fire Protection Technician Qualification Card

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13.3 Examination

Written and practical exams (Job Performance Measures, qualification cards) are administered and controlled by Technical Training. WP 14-TR3307, Qualification Program, provides the requirements associated with qualifications.

13.4 Record Keeping

Training records for the ERO are maintained by WTS Technical Training. Records are maintained and processed in accordance with WP 15-PR.

Training records will include, but are not be limited to, courses completed, refresher courses completed, participation in drills and exercises, and other evaluations of skills and knowledge. Training records will be maintained by the Technical Training Records Coordinator and be available for review by the Emergency Management manager (or designee).

If emergency response personnel's training is not current, a RCRA lapse in training form is completed and the qualification card is revoked. Once the requirements are current, the RCRA lapse in training form is completed and given to Technical Training.

13.5 Off-Site Personnel

Personnel not assigned to WIPP on a full-time basis (e.g., vendors and visitors) who require unescorted facility access of greater than one day and up to thirty days, must complete General Employee Training course.

13.6 Off-Site Training Support

Off-site training can substitute or complement existing training with the approval of the Technical Training manager and the Emergency Management manager.

13.7 Off-Site Personnel Training

Off-site personnel may attend WIPP emergency training with the approval of the Technical Training manager and the Emergency Management manager.

13.8 Instructor Training and Qualification

Instructors providing formal training at WIPP will be qualified in accordance with Technical Training requirements.

- Level I - Subject Matter Expert
- Level II - Classroom Instructor
- Level III - Classroom, Evaluation, and Performance-Based Training

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14.0 EXERCISES AND DRILLS

Emergency Management establishes and maintains a formal exercise program that validates all elements of the WIPP Emergency Management Program over a five-year period. The exercise program validates both facility and site level emergency management program elements by initiating a response to a simulated, realistic event or condition in a manner that replicates an integrated response to an actual event. DOE-HQ and the CBFO are notified of, and may participate in, the annual exercise. Emergency Management will extend a written invitation to MOU agencies listed in Section 3.5 to participate in the annual WIPP full-scale exercise.

14.1 Exercise Planning Function

Development and conduct of an exercise requires a structured and coordinated process, WIPP Emergency Management accomplishes this in accordance with WP 12-ER3004, WIPP Drills and Exercises. Contents of an exercise plan should include: scope, specific objectives, scenario narrative, design and development guidelines, safety and security planning, time line, and exercise data. Additional Functions are outlined in WP 12-ER3004.

14.2 Exercises

WP 12-ER3004 defines the exercise program for WIPP. The program enhances the response capability of specialized teams and individual personnel to potential adverse situations, thus reducing the risk of personal injury, property damage, and adverse environmental impact. A coordinated program of drills and exercises is an integral part of the WIPP Emergency Management Program. Emergency Management conducts exercises in accordance with the Annual Drill and Exercise Plan and as directed by current events.

Exercises are conducted in a manner that emphasizes facility-specific emergency events and response activities. The emergency scenarios used are developed with the aid of the WIPP EPHA.

Members of the ERO are required to participate in at least one drill or exercise annually to demonstrate proficiency in assigned response duties and responsibilities.

A full-participation exercise is conducted annually to demonstrate an integrated emergency response capability. These annual exercises are designed to validate all elements of the Emergency Management Program over a five-year period.

A control group is used for each exercise to ensure that events occur which address the objectives of the exercise. An evaluation group is used to assess the performance of the exercise participants against the objectives. Exercise performance is graded by the evaluators according to the objectives and under the guidance of the Senior Controller.

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14.3 Drills

Drills are used to develop and maintain personnel skills, expertise, and response capabilities. Drills are of sufficient scope and frequency to ensure adequate response capabilities in all applicable areas.

A control group is used for each drill to ensure that events occur which address the objectives of the drill. An evaluation group is used to assess the performance of the drill participants against the objectives.

Drill performance is graded by the evaluators according to the objectives and under the guidance of the Senior Controller. A critique containing a summary of the drill and identifying findings is submitted to the Emergency Management manager. All findings and the corrective actions associated with a drill are tracked through the site CTS. WP 12-ER3004, defines the drill program for WIPP. Drill participation for designated positions is documented and the records are provided to Technical Training for inclusion into the individuals' training records

14.4 Critiques

A critique containing a summary of the exercise and identifying findings is submitted to the Emergency Management manager. The Emergency Management manager schedules a review with senior management and evaluators to review the exercise findings, weaknesses, and observations. Findings, as a result of the senior management review, are processed according to WP 04-IM1000, Issues Management Processing of WIPP Forms.

14.5 Corrective Actions

WIPP Forms are reviewed by a management committee and are assigned to a responsible manager to develop a corrective action plan. The corrective action plan is reviewed by appointed reviewers on the WIPP Form Committee when the actions are completed and must approve the corrective action plan completion package prior to closure.

15.0 IMPLEMENTING DOCUMENTS

The following are additional documents that implement requirements in the emergency management program, but are not necessarily referenced in the text of this document.

MP1.47, Preparation and Submittal of the Annual Emergency Readiness Assurance Plan

WP 04-IM1000, Issues Management Processing of WIPP Forms

WP 11-EA.01, Joint Information Center Operations Program Plan

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- WP 11 EA3000, Joint Information Center Operations
- WP 12-5, Waste Isolation Pilot Plant Radiation Safety Manual
- WP 12-10, WIPP Incident/Accident Response Team Plan
- WP 12-11, Development and Maintenance of an Emergency Planning Hazards Survey
- WP 12-12, Development and Maintenance of an Emergency Planning Hazards Assessment
- WP 12-13, Development and Maintenance of Emergency Action Levels
- WP 12-ER, Emergency Response series procedures
- WP 12 ER.01, WIPP Mine Rescue Program Plan
- WP 12 ER.02, WIPP Vital Documents Protection Program
- WP 12-ER3002, Emergency Operations Center Activation
- WP 12-ER3004, WIPP Drills and Exercises
- WP 12-ER3903, Termination, Reentry, and Recovery
- WP 12-ER3906, Categorization and Classification of Operational Emergencies for the Waste Isolation Pilot Plant
- WP 12 ER4901, Severe Weather Response
- WP 12-ER4902, Hazardous Material Spill and Release Response
- WP 12 ER4903, Radiological Event Response
- WP 12 ER4905, Security Emergency Response
- WP 12 ER4906, Surface Medical Emergency Response
- WP 12 ER4907, Evacuation/Sheltering In Place
- WP 12 ER4908, Surface Fire Response
- WP 12 ER4910, Earthquake/Seismic Response
- WP 12 ER4911, Underground Fire Response
- WP 12 ER4912, Underground Medical Emergency Response

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- WP 12 ER4913, Event Response Skeen-Whitlock Building
- WP 12 ER4915, Event Response Carlsbad Field Office/Records
- WP 12-ER4916, Consequence Assessment Dose Projection
- WP 12-ES3918, Reporting Occurrences in Accordance with DOE Order 231.1A
- WP 12-HP1100, Radiological Surveys
- WP 12-HP3400, Contamination Control
- WP 12-HP3500, Airborne Radioactivity
- WP 12-HP4000, Emergency Radiological Control Response
- WP 12-IH.02-4, WIPP Industrial Hygiene Program – Hazard Communication and Hazardous Materials Management Plan
- WP 12-RP.01, U. S. Department of Energy Waste Isolation Pilot Plant Emergency Planning Hazards Survey
- WP 15 GM.02, WTS Worker Safety and Health Program Description
- WP 15-GM1000, Management Assessments
- WP 15-HS.02, Occupational Health Program
- WP 15-MD3100, Operating Experience Program
- WP 15-PR, WIPP Records Management Program

16.0 REFERENCES

- 42 *United States Code* §6901 et seq., Resource Conservation and Recovery Act of 1976
- Title 29 CFR §1910.119, "Process Safety Management of Highly Hazardous Chemicals"
- Title 29 CFR §1910.120, "Hazardous Waste Operations and Emergency Response"
- Title 30 CFR Part 49, "Mine Rescue Teams"
- Title 30 CFR §49.2(a), "Availability of Mine Rescue Teams."
- Title 40 CFR §68.130, "List of Substances"

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Title 40 CFR Part 264, "Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities"

Title 40 CFR Part 265, "Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities"

Title 40 CFR Part 302, "Designation, Reportable Quantities, and Notification"

Title 49 CFR Part 172, "Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information, and Training Requirements"

DOE Order 151.1C, *Comprehensive Emergency Management System*

DOE Order 231.1A, *Environment, Safety and Health Reporting*

DOE Order 5480.4, *Environmental Protection, Safety, and Health Protection Standards*

DOE G 151.1-1, *Emergency Management Guide*

DOE G 151.1-1, Volume 3, Section 3, "Categorization and Classification of Operational Emergencies"

DOE Manual 231.1-1A, *ESH Reporting Guide and Manual*

DOE/WIPP-07-3372, *Waste Isolation Pilot Plant Documented Safety Analysis*

DOE/WIPP-08-3378, *Waste Isolation Pilot Plant Emergency Planning Hazards Assessment*

Federal Standard KKK-A-1822A, *Ambulances*

Hazardous Waste Facility Permit, NM4890139088-TSDF, issued to WIPP by the New Mexico Environment Department

New Mexico Emergency Medical Services Act General Order 35

National Fire Protection Association 600 Standard on Industrial Fire Brigades

Public Law 99-499, Superfund Amendments and Reauthorization Act (SARA) of 1986, Title III

RCRA Contingency Plan, Attachment F to WIPP Hazardous Waste Facility Permit NM4890139088-TSDF

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Security Protective Force Orders

System Design Documents