ATTACHMENT F

FACILITY PERSONNEL PERMIT TRAINING PROGRAMPERSONNEL TRAINING

Waste Isolation Pilot Plant Hazardous Waste Permit March 2018September 2017

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ATTACHMENT F

FACILITY PERSONNEL PERMIT TRAINING PROGRAM PERSONNEL TRAINING

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ATTACHMENT F

FACILITY PERSONNEL PERMIT TRAINING PROGRAM PERSONNEL TRAINING

4 F-0 Introduction

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- 5 This attachment describes the Facility Personnel Permit Training Programpersonnel training
- 6 program for the Waste Isolation Pilot Plant (WIPP) in accordance with the requirements of the
- 7 Resource Conservation and Recovery Act (RCRA) and the New Mexico Hazardous Waste Act
- as described in 20.4.1.500 New Mexico Administrative Code (NMAC) (incorporating 40 CFR
- 9 §264.16), and 20.4.1.900 NMAC (incorporating 40 CFR §270.14(b)(12)).
- The primary objective of the Facility Personnel Permit WIPP facility training program Training
- Program is to prepare facility personnel to operate and maintain the WIPP facility in a safe and
- environmentally sound manner in compliance with 20.4.1.500 NMAC (incorporating 40 CFR
- 13 §264.16). To achieve this objective, the program provides WIPP facility employees with training
- relevant to their positions.
- 15 Every-WIPP facility employees, including those not directly involved in transuranic (TRU) mixed
- waste handling activities or emergency response, receives an introduction to the RCRA
- andregulations and emergency preparedness within 30 days of employment in their General
- 18 Employee Training (GET) class. General Employee Training emphasizes that WIPP facility
- 19 personnel and site visitors are required to comply with directions from emergency personnel and
- 20 <u>alarm system notifications and to follow instructions concerning emergency equipment,</u>
- 21 <u>shutdown procedures, signage, and emergency evacuation routes and exits.</u> In this way
- 22 <u>everyoneemployees</u> at the WIPP facility <u>isare</u> given, at a minimum, a basic understanding of the
- regulatory requirements and emergency procedures. This ensures that facility employees know
- 24 how to respond effectively to emergencies through familiarization with emergency procedures,
- emergency equipment, and emergency systems. Employees in hazardousTRU mixed waste
- management or emergency response positions receive additional classroom and on-the-job
- training designed specifically to teach them how to perform their duties safely and in
- conformance with regulatory requirements of 20.4.1.500 NMAC (incorporating 40 CFR Part
- 29 264). HazardousTRU mixed waste management personnel receive the required training before
- being allowed to work unsupervised, and emergency response personnel receive appropriate
- training before being called upon to respond to actual emergencies.
- The training requirements of the Facility Personnel Permit Training Program are implemented
- 33 <u>via the WIPP Training Program and apply to all-appropriate employees facility personnel</u> of the
- U.S. Department of Energy (**DOE**) and contractors, subcontractors, and bargaining-unit
- 35 members who;

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- <u>+R</u>egularly work at the facility that may come in contact with and/or manage hazardousTRU mixed waste, or
 - Oversee the operations of the facility that may come in contact with and/or manage TRU mixed waste, or
 - Supervise individuals who may come in contact with and/or manage TRU mixed waste, or

Provide emergency response capabilities.

- 2 The WIPP Project training program is comprehensive and applies to all areas of personnel
- 3 performance and development. This attachment Facility Personnel Permit Training Program
- describes the introductory and continuing training provided to personnel at the WIPP facility,
- with emphasis on those facility personnel and their supervisors whose jobs are such that their
- 6 actions or failure to act could result in a spill or release, or the immediate threat of a spill or
- 7 release of hazardousTRU mixed waste. These personnel are directly involved with hazardous
- 8 waste management at the WIPP facility. Their training allows them to operate the facility safely
- 9 and in compliance with hazardous waste regulations.
- 10 This Facility Personnel Permit Training Program does not apply to facility employees who
- manage site-generated hazardous waste, low-level waste, universal waste, or other forms of
- hazardous waste that are not categorized as TRU mixed waste.
- 13 F-1 Outline of the Facility Personnel Permit Training Program
- Employee training for the purpose of hazardous TRU mixed waste management and emergency
- response at the WIPP facility is the overall responsibility of the Management and Operating
- 16 Contractor (MOC) Project Manager, with responsibility for implementation delegated to
- 17 Technical Training. Technical Training is managed by the Technical Training Manager. The
- 18 <u>Technical Ttraining Manager (or designee)</u> who has the responsibility for directing the training
- 19 program Facility Personnel Permit Training Program. The list of job titles in Attachment Table F-
- 20 1 showspresents the personnel with keyidentified responsibilities for TRU mixed waste
- 21 management and emergency response.
- 22 F-1a Facility Personnel Permit Training Program Design
- 23 In developing the WIPP Training Program, Technical Training has used The WIPP facility uses
- a modified version of the Systematic Approach to Training (SAT) to analyze, design, develop,
- 25 implement, and evaluate training which has
- 26 This approach employs five distinct phases to develop training programs. These phases are:
- Analysis
- Design

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- Development
- Implementation
- Evaluation
- 32 In "analysis," technical training and line management identify job performance requirements.
- These requirements are derived by studying job duty areas, related tasks, and required skills
- 34 and knowledge. These derived skills and knowledge, in turn, form the blueprint for the "design"
- 35 phase. In "design" these requirements are translated into learning objectives, performance
- 36 standards, and test items. In "development" the products of design are incorporated into new
- 37 training programs or, if appropriate, incorporated into revisions of existing programs. Products of
- 38 development are lesson plans, qualification cards, student materials, and examinations.
- 39 Implementation of these programs then occurs. This may be through classroom instruction, on-
- 40 the-job-training, self-paced study, or any combination of the three. "Evaluation" is the final phase
- 41 of the SAT process. Evaluation uses feedback derived from several sources to improve or

- enhance the training. The WIPP Technical Training utilizes extensive guidance provided within
- the DOE Handbooks, "Training Program Handbook: A Systematic Approach to Training (DOE-
- 3 HDBK-1078-94)," and "Alternative Systematic Approaches to Training (DOE-HDBK-1074-95)" to
- 4 direct-all program analysis, design, development, implementation, or evaluation. Further details
- of these processes may be derived by reviewing this manual these five phases.
- 6 Technical Training ensures that Permit-required Resource Conservation and Recovery Act
- 7 (RCRA)-related training is conducted by qualified instructors as indicated in the WIPP Training
- 8 Program. On-the-job training is conducted by Level I instructors. Level I instructors are subject
- 9 matter experts; members of line organizations who have qualified on the related equipment and
- 10 have attended the on-the-job training course. Classroom instruction is provided by Level II and
- 11 Level III instructors. Level II instructors are members of Technical Training and line
- organizations that are qualified to conduct limited classroom training in their technical area of
- 13 expertise. Level III instructors are members of Technical Training who are qualified to conduct
- 14 classroom training, skills evaluation, and needs assessment. Level II and III instructors are
- 15 required to attend a train-the-trainer course and periodic refresher training.
- 16 Cognizant line managers provide significant input on training requirements for the WIPP facility
- to qualified instructors who develop the following, as required:
 - Classroom Instruction
- 19 Objectives
- 20 -Lesson Plans
- 21 -Student Materials
- 22 -Examinations
 - Required reading, structured self-study, eLearning, computer based training

 On the Leb Training
- 24 On-the-Job Training
- 25

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-Qualification Cards

Technical training materials are approved by the Technical Training Manager and the cognizant line manager.

- Upon completion of the specific classroom, computer based training, eLearning or structured
- 27 self-studyFollowing technical training courses, trainees must successfully complete written
- 28 examinations or oral examinations conducted by boards made up of cognizant personnel
- 29 (referred to as "oral boards") to demonstrate competency. The records of oral examinations are
- 30 called "oral board sheets". These examinations are based on objectives and/or competency
- 31 statements. Oral boards are based on knowledge learned in the on-the-job training process.
- 32 Trainees also provide feedback on the content and quality of instruction, at this time, in the form
- 33 of course critiques and verbal input.
- Technical training documentation isand records are maintained by Technical Training located at
- the WIPP facility. <u>Documents and records required by 20.4.1.500 NMAC (incorporating 40 CFR</u>
- 36 §264.16(d)(1), (2), (3), and (4) are maintained in WIPP facility files and include the
- 37 following: These technical training records include:
 - Job titles for positions related to TRU mixed waste management and emergency response and names of the employee filling those positions

Written job descriptions for the applicable positions 1 Written description of the type and amount of introductory and continuing training 2 given for each applicable position 3 Records documentation that the training or job experience required has been 4 given to or completed by facility personnel include as appropriate: 5 Course Attendance 6 7 Completed Qualification Cards 8 Off-Site Training Documentation 9 10 Training or job experience given and completed for each position Oral Board 11 Sheets 12 A database Documentation is maintained which records included records of training 13 14 qualifications, and course attendance. The databasedocumentation is used to identify course refresher and requalification dates. Training records on current personnel are kept in the 15 Technical Training files until facility closure. Technical training records on former employees are 16 kept by Technical Training for at least three years from the date of employment termination from 17 the WIPP facility. Training documentation for emergency response training received by 18 personnel called out in the RCRA Contingency Plan (Permit Attachment D) is also maintained 19 by Technical Training. The documents which define the process by which these training 20 activities are managed are maintained by Technical Training and are part of the Operating 21 Record. 22 To ensure the safe and efficient operation of the WIPP facility, certain positions require formal 23 qualification. Department managers identify these positions based upon safety, complexity, and 24 involvement with hazardous waste handling operations. A document known as a "qualification 25 card" is prepared to identify required training for each designated position. In the case of 26 27 equipment and system/procedure qualification, a "qualification card" is prepared that specifies the required knowledge and practical skills needed in such areas as equipment maintenance 28 and safety. Individual participation in the qualification card system is varied and is dependent on 29 an incumbent's specific job duties. A complete listing of active qualifications, as they apply to 30 any individual position, may be determined by review of the WIPP Training Database. The list of 31 active WIPP Qualification cards is maintained at the WIPP facility. 32 When the qualification card is completed, that particular qualification is recorded. Successful 33 completion of formal classroom training is documented on the individual's qualification card. 34 When requirements are met, both for classroom instruction and on-the-job training, and oral 35 board, if applicable, the qualification card is signed by the manager certifying that the employee 36 is fully competent to perform all aspects of the associated qualification. Qualification cards are 37 included in the training records maintained by Technical Training. Qualification cards are living 38 documents subject to change as the scope and content of training changes to meet new and 39 revised regulatory requirements and modifications in job scope. 40 The hazardous waste management training program described in Section F-1b consists of a 41 42 series of courses designed to ensure that hazardous waste management employees at the WIPP facility receive initial and continuing training relevant to their positions. These courses 43 include instruction on the RCRA and Occupational Safety and Health Administration regulations, 44

- 1 emergency procedures, and procedures for handling both site-generated hazardous waste and
- 2 TRU mixed waste. Visitors, temporary personnel, and contractors are trained commensurate
- 3 with the nature of their visit or duties. For visitors, this includes basic site safety and emergency
- 4 notification procedures. Visitors who require unescorted access are also required to take an
- 5 examination covering the material in the training they are given. Visitor records are maintained
- by security. Temporary or subcontract personnel, if hired to fill a hazardous waste management
- 7 position, are required to complete the same training as permanent personnel. Record of this
- 8 training is maintained by Technical Training.

F-1ba Job Title/Job Description

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- 10 Employees at the WIPP fFacility personnel who are involved in hazardous TRU mixed waste
- management and emergency response activities receive the same core <u>RCRA</u> training. A list of
- hazardous TRU mixed waste management and emergency response job titles and position
- descriptions are is provided in Permit Attachment Table F-1. An up-to-date list of personnel
- assigned to these positions is maintained <u>n WIPP facility files</u> by the Permittees in accordance
- with 20.4.1.500 NMAC (incorporating 40 CFR §264.16(d)(1)). These core hazardous TRU mixed
- waste management and emergency response training courses are described briefly in Section
- 17 F-1(b)(1) and outlines of the core classes, as well as other job specific training classes, are
- included in Permit Attachment F2 indicated in Table F-2. Any changes to the Facility Personnel
- 19 Permit Training Program specified training course materials (contained in WIPP facility
- 20 <u>files)training plan</u> that <u>affect the Table F-2 training course content will be evaluated to determine</u>
- 21 <u>if a permit modification is required</u> decrease the type or amount of training that is given to
- 22 employees will be handled as a Class 2 modification, as specified in 20.4.1.900 NMAC
- 23 (incorporating 40 CFR §270.42). Other changes to the training plan will be handled as Class 1
- 24 modifications. In accordance with 20.4.1.500 NMAC (incorporating 40 CFR §264.16(d)(2)), the
- 25 job descriptions include hazardous and TRU mixed waste management and emergency
- ²⁶ response job duties, required skills, qualifications, and experience, as well as educational
- 27 requirements. These job descriptions are approved by the cognizant staff managers. Included in
- 28 the appendices are management and supervisory positions that are considered to be critical
- 29 from the standpoint of hazardous waste management or emergency response. These include
- the following positions The job titles listed in Tables F-1 include:
 - RCRA Emergency Coordinator
 - TRU Mixed Waste Worker
 - TRU Mixed Waste Worker Supervisor
- Inspector
 - RCRA Training Director
 - Emergency Responder
 - Manager, Hoisting Operations
 - Manager, Radiation Control
 - Manager, Waste Handling
 - Team Leader, Inspection Services
 - Manager, Environmental Compliance
 - Manager, Technical Training
- 37 F-1b Training Content, Frequency, and Techniques
- 38 The WIPP training program includes a comprehensive combination of classroom training
- 39 courses and on-the-job training. Each training course is carefully developed and periodically
- 40 reevaluated to ensure relevancy to the course objectives and to ensure its support of the goal of

- safe and environmentally sound operations at the WIPP facility. On-the-job training is 1 2 accomplished and documented through the use of qualification cards. Before an employee is considered qualified to operate certain equipment, the person must pass a prescribed set of 3 performance standards. 4 F-1b(1) Training Content 5 WIPP facility employees, who will be on site longer than 30 days, including personnel in 6 management and supervisory positions and personnel not directly involved with hazardous 7 waste management, receive facility-specific training in the following areas: 8 General Employee Training (GET) Overview (procedures and policies) 9 WIPP Facility Description 10 Radiation Safety 11 Emergency Preparedness (including RCRA Contingency Plan implementation) 12 13 Fire Protection 14 Quality Assurance 15 Occurrence Reporting 16 Industrial Safety 17 RCRA 18 Hazard Communication 19 This training is provided in GET-19X/GET-20X/GET-21X ¹, conducted by the WIPP qualified 20 instructors, and must be completed within 30 days of employment. 21 Annual refresher training on the topics taught in GET-19X/GET-20X/GET-21X is given in the 22 General Employee Training Annual Refresher (GET-19XA/GET-20XA/GET-21XA). This self-23 paced module provides employees with a review and update of the topics covered in GET-24 19X/GET-20X/GET-21X. 25 WIPP employees involved in managing site-generated, nonradioactive waste, or TRU mixed 26 waste will receive the Hazardous Waste Worker course (HWW-101). This comprehensive 27 course will provide job specific training required to safely receive, transfer, or handle waste at 28 the WIPP facility. Review and update of HWW-101 topics is provided annually in the Hazardous 29 Waste Worker refresher course (HWW-102). 30
- 31 Course outlines for GET-19X/GET-20X/GET-21X, GET-19XA/GET-20XA/GET-21XA, HWW-
- 32 101, and HWW-102 are provided in Permit Attachment F2.

- To ensure that facility personnel are knowledgeable in responding effectively to emergency
- situations, every employee, regardless of whether they hold a position in TRU mixed waste
- management or emergency response, receives GET and an annual refresher training on topics
- relevant to the management of TRU mixed waste and emergency response that include:
 - Emergency Preparedness and Response
 - RCRA (including the Permit and the RCRA Contingency Plan)

⁴-The "X" in the course number is assigned the last number of the current year (e.g., GET-19<u>5</u> is General Employee Training for 1995, GET-20<u>0</u> is for the year 2000). Course content is updated annually to provide the latest information available to students.

• Fire Protection

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- Safety Signage
- 3 Training course updates are identified by periodically reviewing the Table F-2 Permit-required
- 4 <u>training courses to ensure the content remains consistent with applicable Federal and State</u>
- 5 regulations. This review will be performed in accordance with the WIPP Training Program and
- 6 the review will be documented in the WIPP facility files.
- 7 To facilitate identification of changes to Table F-2 Permit-required training courses, changes to
- training course materials, which will be maintained in the WIPP facility files, will have revision
 - numbers and a change history summary. This training course information will be available for
- 10 <u>NMED inspection upon request.</u>

11 F-1b(2) Training Frequency

- 12 Hazardous TRU mixed waste management and emergency response courses are offered at a
- frequency that ensures new hires or transfers can receive relevant training within six months of
- assuming their new position (although some emergency response training may require
- longer time periods to complete certifications). Employees do not work unsupervised in
- hazardousTRU mixed waste management positions until they have completed the required
- initial training. The Human Resources Department cognizant manager notifies the cognizant
- managerHuman Resources Department and who notifies the training staff when any employee
- is transferred into or out of a position associated with hazardousTRU mixed waste management
- 20 <u>or emergency response</u>.

21 F-1b(3) Training Techniques

- A variety of instructional techniques are used at the WIPP facility depending on the subject
- matter and the techniques that best suit the learning objectives. Many courses may include a
- combination of classroom, on-the-job training, eLearning, self-paced study, laboratory work,
- 25 and/or comprehensive examinationslectures, demonstrations, visual aids (such as video tapes,
- slides, and viewgraphs), and exercises. Most equipment operation courses include hands-on
- 27 practical instruction.
- Written examinations are used as a technique to test and document the knowledge level of
- 29 individuals participating in classroom training courses. The length and content of each exam
- varies according to its objective. Calculation, multiple-choice, and fill-in-the-blank, or other
- 31 approved formats, may be used. If individuals fail a written examination, they must be
- reexamined in identified areas of weakness. Personnel filling positions requiring qualification
- 33 cards to perform job functions will be requalified at least biennially in those specific areas.
- On-the-job training at the WIPP facility follows a prescribed set of standards specific to the job
- to be performed. Typically, to become qualified to operate a piece of equipment or system,
- 36 employees must be able to demonstrate the location and purpose of specified controls and
- gauges, describe proper startup and shutdown procedures, describe specific safety features
- and limitations of the equipment, and, in some cases, perform maintenance functions. They
- must also demonstrate the ability to operate the equipment or system. On-the-job training may
- also be function specific, such as performing a specific administrative function that is regulated.
- The terms "on-the-job-training," "on-the-job-evaluation," and "job performance measures" are
- considered equivalent with respect to training courses or qualification cards in accordance with

1 DOE-HDBK-1074-95.

- In addition to on-the-job training, some positions require the trainee to attend an oral board. The
- oral board is given upon completion of on-the-job training and prior to operating any equipment
- 4 unsupervised. In the oral board, the trainee is quizzed on knowledge learned in on-the-job
- training. The purpose of the oral board is to determine if the trainee fully understands and can
- 6 apply the knowledge learned in the training process.
- 7 <u>Individuals who provide evidence of equivalency for specific requirements or prerequisites</u>
- 8 identified in the Table F-2 Permit-required training courses may be granted an exception from
- 9 <u>further training to those requirements in accordance with the WIPP Training Program. Requests</u>
- for exceptions/equivalences are made and evaluated in accordance with the WIPP Training
- 11 <u>Program. Training exceptions/equivalences must be approved by the RCRA Training Director</u>
- with concurrence of the Environmental Compliance Manager. Each exception/equivalency
- request is evaluated per specific criteria, such as 1) completion of previous training (transcripts,
- training completion records), 2) previous experience (resume) that demonstrate the application
- of knowledge and/or skills presented by course objectives, and 3) satisfactory completion of an
- examination having equivalent course objectives. Each exception/equivalency will be granted in
- writing and documented in the individual's training record.

18 <u>F-1c Training Manager</u>

- The Technical Training Manager (or designee) directs the Facility Personnel Permit Training
- 20 Program, implemented via the WIPP Training Program, training program and is responsible for
- establishing technical training requirements in cooperation with the line managers. Specifically,
- this includes analysis, design, development, implementation, and evaluation of technical
- training. The Technical Training Manager (or designee) is trained in hazardous waste
- management procedures and receives train-the-trainer and instructor training. The Technical
- Training Manager (or designee) is also required to be knowledgeable of the applicable
- regulations, orders, guidelines, and the specific training process employed at the WIPP facility.
- 27 The name and qualifications of the current Technical Training Manager are documented at their
- 28 WIPP facility files.

29 F-1d Relevance of Training to Job Position

- The WIPP Training Program WIPP facility training program provides employees and their
- 31 supervisors with training relevant to their positions. The SAT process mentioned in Section F-1a
- is a systematic method for determining the proper training for each hazardousTRU mixed waste
- management position. It compels managers and training staff to look critically at each position
- and determine the necessary training program for each employee to perform their work in a
- manner that protects human health and the environment and complies with the Permitfully
- 36 develop their necessary expertise.
- 37 Several training coursestopics are determined to be so basic to the WIPP Project mission that
- they are considered relevant for all WIPP facility employeespersonnel. The basic philosophy at
- the WIPP facility is that, as a RCRA-regulated facility, employees facility personnel must
- 40 understand the basic regulatory requirements under which the WIPP facility must operate as
- well as emergency actions required of facility personnel. Therefore, all WIPP facility
- 42 <u>employeespersonnel</u> receive an introduction to the RCRA during their <u>introductoryGET</u> <u>training</u>.

- Beyond these-core universalcourses topics, training is designed and implemented relevant to
- the specific job functions being performed. For example, employees who operate key pieces of
- equipment necessary to manage contact-handled (CH) or remote-handled (RH) TRU mixed
- waste (such as e.g., forklifts, hoists, bridge cranes, cask transfer cars, etc.) must be trained to
- 5 perform their duties in a way that ensures the WIPP facility compliance with the Permitte
- 6 operate and inspect equipment and to recognize maintenance problems before a specific job
- 7 function is performed. These employees must-receive on-the-job training and demonstrate the
- ability to operate the equipment, as appropriate, and must at a minimum be able to respond
- 9 <u>effectively to emergencies that might arise while performing their duties, before being qualified.</u>
- 10 Emergency response personnel receive training, commensurate with their duties, that ensures
- their familiarity with emergency procedures, emergency equipment, and emergency systems
- including, but not limited to:
 - Procedures for using and inspecting facility emergency equipment:
 - Communications and alarm systems; and
 - Response to fires or explosions.
- 16 This process is controlled and documented by the qualification process described in Section F-
- 17. A complete listing of active qualification cards, along with descriptions of training courses, is
- on file at the WIPP facility. Summaries of qualification cards and other job specific training
- 19 courses are included in Permit Attachment F2. Waste handling personnel performing CH or RH
- 20 TRU mixed waste handling tasks will be qualified to the applicable specific equipment or system
- 21 qualification card on file at the WIPP facility.
- As there are no automatic waste feed systems at the WIPP facility, training on parameters for
- 23 <u>waste feed cut-off systems is not required. Similarly, as there is no potential for groundwater</u>
- 24 contamination incidents at the WIPP facility, training for responding to such incidents is not
- 25 required.

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- 26 Managers who have direct responsibility for supervising hazardous waste management
- 27 personnel receive hazardous waste management training relevant to their positions. This
- 28 training will include GET-19X/GET-20X/GET-21X and its refresher GET-19XA/GET-20XA/GET-
- 29 21XA, which is required for all employees, and the Hazardous Waste Worker Supervisor course
- 30 HWS-101 and its refresher HWS-101A. In addition, a manager may also take HWW-101 and its
- 31 refresher HWW-102 if these courses are determined to be useful for his/her position. These
- 32 course descriptions are included in Permit Attachment F2. Managers who do not have direct
- 33 hazardous waste management supervisory responsibilities receive training sufficient to ensure
- 34 their awareness of hazardous waste management requirements and procedures; however, they
- 35 do not perform hazardous waste management duties and their positions are not included in the
- 35 do not perform nazardous waste management duties and their positions are not included in the
- appendices. As is the case with all WIPP facility employees, all managers receive RCRA
- 37 overview training in GET-19X/GET-20X/GET-21X.
 - F-1e Training for Emergency Response
- 39 The WIPP facility training program ensures that personnel are able to respond appropriately and
- 40 effectively to emergency situations. WIPP facility employees receive GET-19X/GET-20X/GET-
- 41 21X, which includes instruction on hazard awareness, emergency preparedness, spill control,
- 42 and the RCRA Contingency Plan (Permit Attachment D). This training ensures that every
- 43 employee understands how to recognize real or potential emergencies and how to report such

- 1 incidents to the proper WIPP facility officials. It also ensures that employees will not endanger
- 2 themselves or others by taking actions beyond their ability. Emergency response personnel
- 3 receive more extensive training as described in the subsequent paragraphs.
- 4 The WIPP facility emergency response organization is capable of providing emergency
- 5 response services both above ground and underground. The WIPP Fire Department Firefighters
- 6 serve as first responders to surface and underground emergencies, including fires, medical
- 7 emergencies, and releases of hazardous materials. Firefighters are trained in accordance with
- 8 NFPA 1001, Standard for Fire Fighting Professional Qualification, and other NFPA qualification
- 9 standards. This training is administered by qualified individuals/organizations in accordance with
- 10 the WIPP Fire Department Training Plan.
- 11 The Emergency Response Team (ERT) is an Industrial Fire Brigade which supplements the
- capabilities of the WIPP Fire Department. Members of the ERT are trained to respond to
- 13 surface and underground emergencies on site, including fires, medical emergencies, and
- 14 releases of hazardous materials. The Mine Rescue Team (MRT) is responsible for emergency
- 15 rescue and recovery of trapped or missing personnel in the underground and underground fire
- 16 suppression once the underground has been evacuated. The responsibilities of emergency
- 17 response personnel and associated training are described in the RCRA Contingency Plan,
- 18 Permit Attachment D, Section D-2. These teams receive thorough emergency response training
- before they are called upon to perform in real emergencies. The ERT members are trained to
- 19 before they are called upon to perform in real emergencies. The EXT members are trained to
- 20 NFPA standards, including NFPA 1081, Standard for Industrial Fire Brigade Member
- 21 Professional Qualifications, which addresses the training requirements established by NFPA
- 22 600, Standard on Industrial Fire Brigades. The MRT consists of personnel who have been
- 23 trained to the applicable requirements of 30 CFR Part 49, Mine Rescue Team. A list of required
- training and associated duties is included in each job position description in Permit Attachment
- 25 F1. These training requirements must be met prior to an unsupervised individual serving in an
- 26 associated emergency response function. Training records for these individuals are maintained
- 27 in each individual's training file in Technical Training located at the WIPP facility.
- 28 Emergency response personnel receive training, commensurate with their duties that ensures
- 29 their familiarity with emergency procedures, emergency equipment, and emergency systems
- 30 including, but not limited to:
 - Procedures for using and inspecting facility emergency equipment;
 - Communications and alarm systems; and
 - Response to fires or explosions.

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The RCRA Emergency Coordinator receives training relevant to the RCRA Contingency Plan and must be familiar with the contents of the RCRA Contingency Plan prior to serving as RCRA Emergency Coordinator. Documentation of this training is maintained in the RCRA Emergency

- Coordinator's training file. All individuals qualified to serve as RCRA Emergency Coordinators
- 39 are required to complete RCRA Contingency Plan training (SAF-645). The RCRA Emergency
- 40 Coordinator is provided with updated copies of the RCRA Contingency Plan in accordance with
- 41 permit Attachment D, Section D-9, whenever changes are made. In addition, the training
- requirements of the Central Monitoring Room (CMR) Operator are included in Permit
- 43 Attachment F1. The CMR Operator is listed in Permit Attachment D, Section D-2, as an
- 44 emergency response related position.

- 1 As there are no automatic waste feed systems at the WIPP facility, training on parameters for
- 2 waste feed cut-off systems is not required. Similarly, as there is no potential for groundwater
- 3 contamination incidents at the WIPP facility, training for responding to such incidents is not
- 4 required.
- 5 F-2 Implementation of Facility Personnel Permit Training Program
- 6 The WIPP Training Program has been formulated to implement the requirements of this Facility
- 7 Personnel Permit Training Program, thereby ensuring TRU mixed waste management and
- 8 emergency response personnel employed at the facility receive the training necessary to
- 9 comply with the requirements of 20.4.1.500 NMAC (incorporating 40 CFR Part 264.16). The
- 10 WIPP facility training program has been implemented to ensure that hazardous waste
- 11 management and emergency response personnel employed at the WIPP facility receive the
- 12 training indicated within the respective qualification cards.
- Personnel are made aware of the RCRA Contingency Plan and its intended purpose through
- 14 general employee training. Newly hired employees, whose job positions are listed in Attachment
- 15 F1Table F-2, receive the indicated training within six months of their date of hire or their transfer
- to a new position pursuant to 20.4.1.500 NMAC (incorporating 40 CFR §264.16(b). Personnel
- do not work in unsupervised unsupervised in hazardousTRU mixed waste management or
- emergency response positions until they successfully complete the indicated training
- requirements. (Note that some emergency responder certifications may take more than six
- 20 months to complete.) HazardousTRU mixed waste management and emergency response
- personnel attend annual refresher courses that review the initial training received and document
- 22 knowledge transfer.
- 23 Records relating to the Facility Personnel Permit Training ProgramWIPP facility training
- 24 program for hazardous TRU mixed waste management and emergency response personnel are
- maintained by WIPP Technical Training as personally identifiable information. These records
- are located at the WIPP facility and include a roster of employees in hazardous waste
- 27 management positions; a list of courses required for each position; course descriptions;
- documentation when each employee has received and completed appropriate training; and
- 29 backup information regarding qualification and examination. Training records of current
- personnel are kept by Technical Training until closure of the WIPP facility. Records of former
- employees are kept by Technical Training for at least three years from the date the employee
- last worked at the facility.

- 2 References
- 3 Nuclear Waste Partnership LLC, "WIPP Training Program," WP 14-TR.01, Rev. 15, 201519-
- 4 FRI, 2017.
- 5 Nuclear Waste Partnership LLC, "WIPP Fire Department Training Plan," WP 12-FP.04, Rev. 92,
- 6 20152016
- 7 U.S. Department of Energy, "Training Program Handbook: A Systematic Approach to Training
- 8 (DOE-HDBK-1078- 94)"
- 9 <u>U.S. Department of Energy, "Alternative Systematic Approaches to Training (DOE-HDBK-1074</u>
- 10 95)"

TABLES

TABLE F-1 TRU MIXED WASTE MANAGEMENT AND EMERGENCY RESPONSE JOB TITLES AND DESCRIPTIONS

JOB TITLE	POSITION DESCRIPTION
TRU Mixed Waste Worker	Responsible for or involved in the surface processing, transport, and underground emplacement of contact-handled (CH) and remote-handled (RH) transuranic (TRU) mixed waste. May come into contact with TRU mixed waste while carrying out job duties, actions or failure to act could result in a spill or release of TRU mixed waste at the WIPP facility, and job is important for operating the facility safely and in compliance with the hazardous waste regulations. Depending upon the TRU Mixed Waste Worker's specific job position, this may involve one or more of the following: Operating waste handling equipment and support systems to unload, handle, and emplace TRU mixed waste into the repository Performing spot decontamination of shipping casks, waste containers, and waste handling equipment Performing waste container overpacking operations Conducting routine inspections of incoming shipping containers for contamination and damage Conducting routine contamination surveys during waste handling activities Operating the Waste Shaft Hoist Loading and unloading of the Waste Shaft Conveyance above and below ground Managing and dispositioning of waste resulting from releases of TRU mixed waste or TRU mixed waste constituents Cleaning and restoring emergency response equipment after a release of TRU mixed waste or TRU mixed waste constituents and prior to resumption of normal operations
TRU Mixed Waste Worker Supervisor	Supervisors of TRU Mixed Waste Workers are directly responsible for day-to-day operations related to TRU mixed waste. Depending upon the TRU Mixed Waste Worker Supervisor's specific job position, job duties may involve one or more of the following: Overseeing TRU mixed waste management activities performed by TRU Mixed Waste Workers Coordinating and directing the daily operation and maintenance of the Waste Shaft Hoist and Waste Shaft
Emergency Responder	Emergency responders provide expertise and support to the Incident Command. Depending upon the Emergency Responder's specific job position, job duties may involve one or more of the following: Responding to fires, explosions, or emergencies involving releases of TRU mixed waste or TRU mixed waste constituents Performing technical rescue operations Performing emergency medical response Operating emergency vehicles and equipment Establishing conditions at the incident scene

JOB TITLE	POSITION DESCRIPTION
	Managing incident operations, personnel, and resources
	 Ensuring that fires, explosions, and releases of TRU mixed waste do not occur, recur, or spread to other hazardous waste at the facility by stopping processes and operations, collecting and containing released TRU mixed waste, and removing or isolating containers, as applicable
	 Performing decontamination of contaminated personnel and providing oversight to emergency medical response personnel, if injured person is contaminated
	 Conducting contamination surveys, establishing hot lines/cold zones, and performing decontamination following a release of TRU mixed waste or TRU mixed waste constituents
	 Overpacking or plugging/patching of waste containers associated with release of TRU mixed waste or TRU mixed waste constituents
	 Performing containerization of released TRU mixed waste or TRU mixed waste constituents
	Terminating field emergency response
Emergency Coordinator	In the event of a fire, explosion, release of TRU mixed waste or TRU mixed waste constituents that could threaten human health or the environment, the Emergency Coordinator is responsible for carrying out the implementation of the <i>RCRA Contingency Plan</i> . Emergency Coordinators ensure emergency responders have current and specific information to properly address the incident and minimize hazards to human health and the environment. Emergency Coordinators implement measures and procedures to ensure the safety of personnel, such as ensuring that alarms have been activated, personnel have been accounted for, and evacuation of personnel has occurred, if necessary. Upon implementation of the <i>RCRA Contingency Plan</i> , depending upon the Emergency Coordinator's specific job position, the job duties may involve one or more of the following:
	Providing notification to emergency response personnel
	 Ensuring that alarms have been activated, personnel have been accounted for, any injuries have been attended to, and evacuation of personnel has occurred, if necessary
	 Restricting personnel not needed for response activities from the scene of the incident and curtailing nonessential activities in the area
	 Identifying released material and assessing the extent of the emergency
	 Assessing any hazards to human health or the environment associated with a fire, explosion, or release of TRU mixed waste or TRU mixed waste constituents
	 Notifying appropriate State and local agencies with designated response roles if their help is needed
	 Ensuring that fires, explosions, and releases do not occur, recur, or spread to other hazardous waste at the facility by taking measures such as stopping processes and operations, collecting and containing released waste, and removing or isolating containers
	 Documenting the implementation of the RCRA Contingency Plan
	 Ensuring immediate notification to the New Mexico Environment Department is provided for incidents requiring implementation of the RCRA Contingency Plan
	 Making post-assessment notifications if it has been determined that the incident could threaten human health or the environment outside the facility
	Providing for treating, storing, or disposing of recovered waste, contaminated soil or surface water, or any other material that results from a release, fire, or explosion at the facility
	 Ensuring that no waste that may be incompatible with the released material is

JOB TITLE	POSITION DESCRIPTION
	treated, stored, or disposed of until cleanup procedures are completed
	Ensuring that emergency equipment listed in the RCRA Contingency Plan is cleaned and fit for its intended use before operations are resumed
Inspector	Responsible for routine inspection and maintenance (including repairing and replacement, as appropriate) of equipment instrumental in preventing, detecting, or responding to environmental or human health hazards, such as monitoring equipment, safety and emergency equipment, and operating or structural equipment. Inspections are performed at the facility to detect malfunctions, deterioration, operator errors, and discharges that may cause or lead to releases of TRU mixed waste or TRU mixed waste constituents to the environment or that could be a threat to human health. Depending on the Inspector's specific job position, job duties may involve one or more of the following: • Performing functional and operational checks of waste handling equipment and support systems as well as conducting waste container storage inspections • Conducting routine inspections of emergency response equipment and vehicles, on site • Performing routine inspections of the hoisting equipment for the Air Intake Shaft, Salt Handling Shaft, and Waste Shaft • Conducting routine inspections and testing of facility fire suppression and detection systems • Inspecting and testing of communication systems, site notification system, the public address system, and alarm systems for proper function • Performing routine inspections of the backup power supply diesel generators • Performing routine inspections of the eye wash and shower equipment • Performing routine inspections of the underground geomechanical instrumentation system • Performing routine inspections of the central uninterruptible power supply • Performing routine inspections of the ventilation exhaust fans
RCRA Training Director	Responsible for directing the hazardous waste management training at the WIPP facility. To meet the 20.4.1.500 NMAC (incorporating 40 CFR §264.16(a)(3)) requirements, the RCRA Training Director must be a person trained in hazardous waste management procedures.

<u>Table F-2</u> <u>PERMIT-REQUIRED TRAINING COURSES</u>

<u>Course</u>	TRU Mixed Waste Worker	TRU Mixed Waste Worker Supervisor	Inspector	Emergency Responder	Emergency Coordinator	RCRA Training Director
General Employee Training – WIPP facility employees must be escorted at the WIPP facility until this course has been completed. Course content contains information on RCRA, the Permit, the WIPP RCRA Contingency Plan, emergency preparedness, emergency response and evacuation procedures, fire protection, and safety signage. There is an annual refresher required for this course.	X	X	<u>X</u>	X	<u>X</u>	X
RCRA Regulations/Hazardous Waste Facility Permit Overview — This course includes an overview of 40 CFR Parts 260-282; New Mexico Hazardous Waste Act (Title 20 of the NMAC, Part 4.1); protocol for facility and waste handling equipment inspections; overview of communication systems; overview of security systems; overview of RCRA Contingency Plan; overview of WIPP emergency equipment use, inspection, and repair; overview of training requirements; overview of Permit recordkeeping requirements; overview of NMED facility inspections; and consequences of Permit noncompliance. This course also provides an overview of the screening process (for procedures, facility configuration changes, training program changes, etc.) to ensure compliance with the Permit, along with an overview of the Permit modification process. There is an annual refresher required for this course.	X	X	X	X	X	X

<u>Course</u>	TRU Mixed Waste Worker	TRU Mixed Waste Worker Supervisor	Inspector	Emergency Responder	Emergency Coordinator	RCRA Training Director
Hazardous Waste Worker – This course addresses regulatory requirements for personnel who manage hazardous waste, including an in-depth review of the Hazard Communication Standard, principles of toxicology, hazard identification, and an overview of personal protective equipment for work activities associated with TRU mixed waste management. It also prepares emergency response personnel for hazardous waste handling, containment, and decontamination. There is an annual refresher required for this course.	X	X		X		X
Hazardous Waste Responder – Employees must complete Hazardous Waste Worker training before taking this course. Upon successful completion of the course and its prerequisites, a trainee will be able to respond to emergencies involving TRU mixed waste. Course curriculum includes an overview of the regulatory requirements, incident evaluation, overview of response operations, maintaining safety during an emergency response, and an overview of the Incident Command System at the WIPP facility. There is an annual refresher required for this course.				X		
Hazardous Waste Worker Supervisor – This course addresses manager and/or supervisor responsibilities for TRU mixed waste management. It addresses individual and corporate liability under applicable hazardous waste regulations. Course discusses impacts that decisions made during emergency situations may have, some with serious legal and safety consequences directly impacting the entities involved. There is an annual refresher required for this course.		X				

<u>Course</u>	TRU Mixed Waste Worker	TRU Mixed Waste Worker Supervisor	Inspector	Emergency Responder	Emergency Coordinator	RCRA Training Director
Permit Inspections/Recordkeeping – These technical work documents are			X			
under the purview of the responsible						
organization identified in Table E-1 of						
Permit Attachment E, Inspection						
Schedule, Process and Forms. This						
course addresses protocols for						
conducting Permit-specified						
inspections to detect malfunctions,						
deterioration, operator errors, and						
discharges; completion of inspection						
records; Permit-specified inspection						
frequencies; and corrective actions, including notifications and						
establishment of compensatory						
measures. This course also addresses						
review of the completed inspection						
record for completeness and accuracy;						
and the Permit-specified						
recordkeeping requirements. There is						
an annual refresher required for this						
course.						
RCRA Contingency Plan - This					X	
course provides an in-depth review of					_	
the WIPP RCRA Contingency Plan						
addressing when the Plan is to be						
implemented, appropriate emergency						
response actions, required						
notifications, evacuation plan details,						
and post-emergency RCRA-required						
activities. This course also addresses						
where copies of the Plan are required to be located and when the Plan must						
be amended. There is an annual						
refresher required for this course.						
remeation required for this course.						