Department of Energy
Carlsbad Area Office
P. O. Box 3090
Carlsbad, New Mexico 88221

May 28, 1998

Dr. Robert S. (Stu) Dinwiddie
Hazardous & Radioactive Materials Bureau
New Mexico Environment Department
P.O. Box 26110
Santa Fe, New Mexico 87502

Subject: Waste Isolation Pilot Plant comments on the Waste Isolation Pilot Plant Draft Permit No. NM4890139088-TSDF

Dear Dr. Dinwiddie:

In accordance with your recent Fact Sheet and the Legal Notice No. 98-02 dated May 15, 1998 the Carlsbad Area Office (CAO) of the United States Department of Energy and Westinghouse Waste Isolation Division (WID) are submitting comments on the Waste Isolation Pilot Plant (WIPP) Resource Conservation and Recovery Act draft permit issued by the New Mexico Environment Department on May 15, 1998.

Attached to this letter is the CAO and WID first submittal of comments on the draft permit issued by the Hazardous and Radioactive Materials Bureau. These comments, which represent the first submittal, identify items that have been enhanced since the latest revision of the permit application. These enhancements were facilitated by the operational readiness reviews (ORRs) conducted at the WIPP and are being made to assure that the WIPP operations are fully compliant with applicable regulations and DOE orders. Since these items are also reflected in the draft permit, we are providing them to you in order to facilitate their implementation at the WIPP facility. In all cases, the enhancements were made to clarify, supplement, or modify the language in the application and in the associated WIPP implementing program. Pertinent discussion is included along with the specific comment.

If you have any questions, please contact Michael H. McFadden at (505) 234-7486.

Sincerely,

George E. Dials, Manager
Carlsbad Area Office
U.S. Department of Energy

Joe Epstein, General Manager
Waste Isolation Division
Westinghouse Electric Company

Attachment

CAO:ORCA:CAS 98-1204 (UFC 5486.00)

Summary of Implemented Changes
for
Submittal to NMED as Draft Permit Initial Comments

Attachment B
Pg. B-26 and B-27
Lines 26, 12, and 27
Comment
Change "Environmental Compliance & Support" to "ES&H."
Justification
Modify text to reflect proper organization responsible for review of the Waste Stream Profile Form.

Attachment B
Pg. B-30
Line 16
Comment
Change "will" to "may" in line 41 so that the sentence will read as follows: "If it becomes necessary to return waste containers to the generator site, a new EPA Uniform Hazardous Waste manifest may be prepared."
Justification
Modify text to allow the DOE to use the original manifest or a photocopy to return waste to the generator rather than prepare a new manifest.

Attachment D
Pg. D-9
Line 21
Comment
Change responsible person for eye wash/shower station inspections from "Building Landlord" to "equipment custodian."
Justification
Modify text to reflect who is responsible to perform the inspection

Attachment D
Pg. D-9 and D-10
Lines 23, 1 and 4
Comment
Change "Industrial Safety" to "Emergency Management."
Justification
Modify text to reflect proper organization responsible for the inspection.

Attachment D
Pg. D-9
Line 23
Comment
Change "annual" to "semi-annual and annual."
Justification
Modify text to reflect changes in Standard NFPA 72.

Attachment D, and Attachment E
Pg. D-10 and Pg. E-8
Lines 6 and 18
Comment
Add "(electric and diesel forklifts, and Loron attachment)", and in Attachment E, change "battery powered forklift" to "forklift and attachments."
Justification
Modify attachments to include use of diesel forklift and Loron attachment to safely emplace backfill super sacks.

Attachment D
Pg. D-10 and D-11
Lines 11 and 14
Comment
Change frequency of Mine Pager Phone checks from "quarterly" to "monthly." Delete "monthly battery change check" wording in "other" column. Change "Mine Operations" to "Geotechnical Engineering."
Justification
Clarify frequency for mine pager phone inspections and responsible organization for inspection of the Geomechanical Instrumentation System.

Attachment D
Pg. D-11
Lines 10, 11, 12, and 13
Comment
Combine "Underground Openings - Roof Bolts" and "Underground Openings - Travelways" into one line titled "Underground openings - Roof Bolts and Travelways"; Inspection frequency - "weekly - see list 1a"; responsible organization' "Underground Operations".
Justification
Modify text to reflect that the monthly and weekly inspections have been combined into one weekly inspection encompassing all the criteria of the two inspections.

Attachment D and Attachment F
Pg. D-11 and Pg. F-65
Lines 25 and Line 7
Comment
Modify the inspection schedule to include the upender for packaging materials in a ten drum overpack (TDOP). Add "upender," "Overpack Containers," and "TDOP Upender".
Justification
Modify the text to reflect that the upender will improve the process for packaging TDOPs.

Attachment D1
Pg. All
Comment
Update this attachment with the attached pages. See Attachment 1.
Justification
Modify the contents of Attachment D to reflect the current version of procedures, forms, and logs.

Attachment E
Pg. E-3
Line 28
Comment
Change "The remaining...routing modes fails" to "In the unlikely event that both routing modes are inoperable, direct dial telephone capability still exists via cellular telephone or satellite communication (SATCOM) linkage in the Emergency Operations Center."
Justification
Clarify text to reflect actual routing

Attachment E
Pg. E-3
Line 33
Comment
Change "with the CMR..." to "with the CMR, the Eddy County Sheriff's Department, the New Mexico State Police, and the Otis fire response teams. Communication is available with the Lea County Sheriff's Department, the Hobbs Fire Department, the Carlsbad Medical Center, and the Columbia Regional Hospital via the Eddy County Dispatcher."
Justification
Modify text to reflect current conditions. Direct radio contactwith some organizations is not allowed.

Attachment E and Attachment F
Pg. E-5 and Pg. F-61
Lines 6 and 1
Comment
Change "Fire hoses connected to the system" to "fire hose connections" and "hoses" to "fire hose connections."
Justification
Modify text to allow for removal of permanent fire hoses due to increased risk to Emergency Response personnel. Hoses will be transported to the building from fire trucks in the event of a fire.

Attachment E, Attachment G, and Attachment M1
Pg. E-7, G-2, M1-22
Lines 6, 35, and 4
Comment
Change "5-ton" to "6-ton" and "10,000 lbs" to "12,000 lbs"
Justification
Modify the text to reflect the new crane capacity.

Attachment F
Pg. F-8
Line 2
Comment
Change "and TRUDOCKS do" to "does"
Justification
Waste can be stored outside of TRUPACTs at TRUDOCKS (but on a facility pallet). Modify text to designate the areas adjacent to the TRUDOCKs as a permitted storage area. This increases productivity and reduces the unnecessary movement of the payloads.

Attachment F
Pg. F-16
Line 13 and 20 and 27
Comment
Change the following phone numbers: Hobbs Fire Department (505) 397-9265, Department of Public Safety WIPP Coordinator (505) 476-9628, National Response Center 1-800-424-9300.
Justification
Modify the text to reflect the current phone numbers.

Attachment F
Pg. F-41 and F-46
Lines 13, 18, and 16
Comment
Change "Columbia (formerly Guadalupe)" to "Carlsbad" Medical center
Justification
Modify text to reflect current hospital names

Attachment F
Pg. F-43
Comment
Insert "Assistant Office Wardens" between "Office Wardens" and "ACOWS"
Justification
Modify text to reflect that Assistant Office Wardens have pagers for emergency announcements.

Attachment F
Pg. F-54 and F-55
Lines 3 and 3
Comment
Change "solution" to "solid"
Justification
Modify text to correct error.

Attachment F
Pg. F-56
Line 15
Comment
In the "Location" column, change "underground" to "S550/W30, S100/W30, S1950/E140, Salt shaft station, Waste shaft station." Also add "Lamp Room"
Justification
Clarify text to indicate that these phones are located at the underground assembly areas and are the ones inspected monthly.

Attachment F, Attachment G, Attachment M1, and Attachment O
Pg.F-88, G-13, M1-25, M1-31, M1-33, M1-37, and O-27
Comment
Move the Waste Handling Field Office to the southwest corner of the CH Bay.
Justification
Modify the figure to reflect the new field office location. This new location will keep occupants away from the radioactive waste, reducing their exposure.

Attachment H, H1, and H2
Pg. "All"
Comment
Remove nomenclature such as "certification" as shown on Attachment 2.
Justification
Modify nomenclature to reflect the modification to DOE Order 5280.20A

Attachment H
Pg. H2-147 and Pg. H2-148
Lines 22 and 23
Comment
Change qualification card to improve content and remove inconsistencies between training and duties performed by the Waste Handling Hoist Equipment Operator. See Attachment 3.
Justification
Modify text to remove inconsistencies between training and duties performed.

Attachment H1
Pg. H1-i
Comment
Add new Hazardous Waste Management Job Descriptions and related information. See Attachment 4.
Justification
Modify text to reflect new hazardous waste management positions..

Attachment H1
Pg. H1-i, H1-2, H1-10,H1-25, H1-26, H1-15, H1-H1-7
Comment
Modify functional job descriptions. See Attachment 5.
Justification
Modify text to provide for a more complete list of functional job descriptions.

Attachment H1
Pg. H1-2
Line 36
Comment
Change "until full certification" to "unsupervised until full qualification."
Justification
Modify text to be consistent with RCRA and reflect the time required to qualify vs. through-put.

Attachment H1
Pg. H1-17and H1-18
Lines 4, 21, and 22
Comment
Change "Operations engineer" to "Facility Shift Engineer," change "FO-FOSS-3" to "FO-FOSE-3," and "FO-FOSS-3R" to "FO-FOSE-3R."
Justification
Modify text to reflect new position names which better reflect duties.

Attachment H2
Pg. H2-91
Line "All"
Comment
Modify pages with new course description. See Attachment 6.
Justification
Modify the text to reflect enhancements in the Contingency Plan procedure.

Attachment H2
Pg. H2-68
Line 4
Comment
Replace the wording under "Scope" with: "This course is designed to instruct the trainee in the basic concepts of applying DOT Transportation regulations involving shipments from the WIPP site. This course will inform the trainee of information that may be required when responding to an emergency involving transportation of hazardous materials and hazardous waste from the WIPP site." Replace the wording under "Objectives", with: "Upon completion of this lesson, the trainee will be able to respond to phone request from emergency personnel when hazardous materials or hazardous waste are in transit from the WIPP site that may have been involved in a transportation accident. Mastery of the terminal objective will be demonstrated by scoring a minimum of 80% on the course examination." See Attachment 7: "Overview" and "Terminal Objectives."
Justification
Modify the text to reflect programmatic enhancements

Attachment H2
Pg. H2-128
Comment
Modify nomenclature of QA Inspector Certification Card. See Attachment 8.
Justification
Modify text to reflect the "Systematic Approach to Training" methodology

Attachment M1
Pg. M1-36
Line "All"
Comment
Change "Spot decontaminate" to "Decontaminate." (This change is in two places on Figure M1-12). See mark-up noted as Attachment 9.
Justification
Clarify the practice of decontamination. Decontamination will occur as contamination is detected.

Attachment M1
Pg. M1-2
Line 3
Comment
Change "7,265 pounds (lbs)" to "6,700 pounds (lbs)"
Justification
Modify text to state that the maximum weight of a TDOP is 6,700 lb. (gross) per the test and evaluation document for DOT spec. 7A, Type A packaging DOE/RL-96-57.

Attachment M
Pg. M1-4 and M1-11
Lines 14 and 6
Comment
Change "on the TRUDOCK" and "at the TRUDOCK" to "in the area in which it is detected."
Justification
Modify text to reflect that it would be unwise to return contaminated material from where it was detected to the TRUDOCK because: 1) of the increased probability of the spread of contamination, thereby creating a larger de-con effort, and 2) of the possibility of contaminating the TRUDOCK, which, because of its construction, would be very difficult to de-con.

Attachment 1

- Classroom Instruction

  Objectives
  Lesson Plans
  Student Materials
  Examinations

- On-the-Job Training

  ~~Certification Cards~~
  Qualification Cards

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

Following technical training, trainees must successfully complete written examinations or oral examinations conducted by boards made up of cognizant personnel (referred to as "oral boards") to demonstrate competency. The records of oral examinations are called "oral board sheets" (Figure H-2). These examinations are based on objectives and/or competency statements. Oral boards are based on knowledge learned in the on-the-job training process. Trainees also provide feedback on the content and quality of instruction, at this time, in the form of course critiques and verbal input.

Technical training documentation is maintained by the Technical Training Group located at the WIPP facility. These technical training records include:

- Course Attendance (Figure H-3)
- Completed Qualification Cards
- Off-Site Training Documentation
- ~~Completed Certification Cards~~
- Oral Board Sheets

A database is maintained which records training qualifications, ~~certifications~~, and course attendance. The database is used to identify course refresher and requalification dates. Training records on current personnel are kept in the Technical Training files. Technical training records on former employees are kept by the Technical Training Group for at least three years from the date of employment termination from the WIPP facility. Training documentation for emergency response training received by personnel called out in the WIPP Contingency Plan (Permit Attachment F) is maintained by the Technical Training Group.

To ensure the safe and efficient operation of the WIPP facility, certain positions require formal ~~certification~~ qualification. Department managers identify these positions based upon safety, complexity, and involvement with hazardous waste handling operations. A document known as a ~~"certification card"~~ "qualification card" is prepared to identify required training for each designated position. In the case of equipment and system/procedure qualification, ~~a document called~~ a "qualification card" is prepared that specifies the required knowledge and practical skills needed in such areas as

equipment maintenance and safety. Over 256 qualification/~~certification~~ cards are utilized by WIPP personnel. Individual participation in the qualification/~~certification~~ card system is varied and is dependent on an incumbent's specific job duties. A complete listing of active qualifications ~~or certifications~~, as they apply to any individual position, may be determined by review of the WIPP Training Database. The list of active WIPP Qualification ~~or Certification~~ cards is maintained at the WIPP facility.

When the qualification card is completed, that particular qualification is recorded ~~on the certification card~~. Successful completion of formal classroom training is documented on the individual's ~~certification~~ qualification card. When requirements are met, both for classroom instruction and on-the-job training, and oral board, the ~~certification~~ qualification card is signed by the department manager certifying that the employee is fully competent to perform all aspects of the associated job position. ~~Certification~~ Qualification cards are included in the training records maintained by the Technical Training Group. ~~Certification~~ Qualification cards are living documents subject to change as the scope and content of training changes to meet new and revised regulatory requirements and modifications in job scope.

The hazardous waste management training program described in Section H-1b consists of a series of courses designed to ensure that hazardous waste management employe the WIPP facility receive initial and continuing training relevant to their positions. These ses include instruction on the RCRA and Occupational Safety and Health Administration regulations, emergency procedures, and procedures for handling both site-generated hazardous waste and TRU mixed waste. Visitors, temporary personnel, and contractors are trained commensurate with the nature of their visit or duties. For visitors, this incl. sic site safety and emergency notification procedures. Visitors who require unescorte: ss are also required to take an 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 position, are required to complete the same training as permanent personnel. Record of this training is maintained by Technical Training.

H-1a Job Title/Job Description

Employees at the WIPP facility who are involved in hazardous waste management activities receive the same core training. A list of hazardous waste management job titles and position descriptions are provided in Attachment H-1. An up-to-date list of personnel assigned to these positions is maintained by Environmental Compliance & Support in accordance with 20 NMAC 4.1.500 (incorporating 40 CFR §264.16). These core hazardous waste management training courses are described briefly in Section H-1(b)(1) and outlines of the core classes, as well as other job specific training classes, are included in Attachment H-2. Any changes to the training plan that decrease the type or amount of training that is given to employees will be handled as a Class 2 modification, as specified in 20 NMAC 4.1.900 (incorporating 40 CFR §270.42). Other changes to the training plan will be handled as Class 1 modifications. In accordance with 20 NMAC 4.1.500 (incorporating 40 CFR §264.16(d)(2)), the job descriptions include hazardous and TRU mixed waste management job duties, required skills, qualifications, and experience, as well as educational requirements. These job descriptions are approved by the cognizant staff managers. Included in the appendices are management and supervisory

positions that are considered to be critical from the standpoint of hazardous waste management or emergency response. These include the following positions:

- Shift Manager, Facility Operations
- Supervisor, Hoisting Operations
- Manager, Radiation Control
- Manager, Waste Operations
- Team Leader, Inspection Services
- Manager, Environmental Compliance & Support
- Manager, Technical Training

H-1b Training Content, Frequency, and Techniques

The WIPP training program includes a comprehensive combination of classroom training courses and on-the-job training. Each training course is carefully developed and periodically 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 accomplished and documented through the use of ~~certification and~~ qualification cards. Before an employee is considered qualified to operate certain equipment, the person must pass a prescribed set of performance standards.

H-1b(1) Training Content

WIPP facility employees who will be on site longer than 30 days, including personnel in management and supervisory positions and personnel not directly involved with hazardous waste management, receive facility-specific training in the following areas:

- General Employee Training (GET) Overview (procedures and policies)
- WIPP Facility Description
- Radiation Safety
- Emergency Preparedness (including RCRA Contingency Plan implementation)
- Security
- Fire Protection
- Quality Assurance
- Occurrence Reporting
- Industrial Safety
- RCRA
- Hazard Communication

This training is provided in GET-19X[1], conducted by the WIPP certified instructors, and must be completed within 30 days of employment.

[1] The "X" in the course number is assigned the last number of the current year (e.g., GET-19**5** is General Employee Training for 1995). Course content is updated annually to provide the latest information available to students.

Annual refresher training on the topics taught in GET-19X is given in the General Employee Training Annual Refresher (GET-19XA). This self-paced module provides employees with a review and update of the topics covered in GET-19X.

WIPP employees involved in managing site-generated, nonradioactive waste, or TRU mixed waste will receive the Hazardous Waste Worker course (HWW-101). This comprehensive course will provide job specific training required to safely receive, transfer, or handle waste at the WIPP facility. Review and update of HWW-101 topics is provided annually in the Hazardous Waste Worker refresher course (HWW-102).

Course outlines for GET-19X, GET-19XA, HWW-101, and HWW-102 are provided in Permit Attachment H-2.

H-1b(2) Training Frequency

Hazardous waste management courses are offered at a frequency that ensures new hires or transfers can receive relevant training within six months of assuming their new position. Employees do not work unsupervised in hazardous waste management positions until they have completed the required initial training. The Human Resources Department notifies the cognizant manager and training staff when any employee is transferred into or out of a position associated with hazardous waste management.

H-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 include a combination of lectures, demonstrations, visual aids (such as video tapes, slides, and viewgraphs), and exercises. Most equipment operation courses include hands-on practical instruction.

Written examinations are used as a technique to test the knowledge level of 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 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 ~~or certification~~ 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, 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 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.

In addition to on-the-job training, some positions require the trainee to attend an oral board. The oral board is usually given upon completion of on-the-job training and prior to operating any equipment. 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 apply the knowledge learned in the training process.

H-1c Training Manager

The Technical Training Manager directs the 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 is trained in hazardous waste management procedures and receives train-the-trainer and instructor training. The Technical Training Manager is also required to be knowledgeable of the applicable regulations, orders, guidelines, and the specific training process employed at the WIPP facility.

The name and qualifications of the current Technical Training Manager are documented at the WIPP facility.

H-1d Relevance of Training to Job Position

The WIPP facility training program provides employees and their supervisors with training relevant to their positions. A functional chart showing positions that receive training related to hazardous waste management or emergency response is included as Figure H-1. This figure also shows the next level manager for these positions. The SAT process mentioned in Section H-1 is a systematic method for determining the proper training for each hazardous 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 fully develop their necessary expertise.

Several training courses are determined to be so basic to the WIPP Project mission that they are considered relevant for all WIPP facility employees. The basic philosophy at the WIPP facility is that, as a RCRA-regulated facility, employees must understand the basic regulatory requirements under which the WIPP facility must operate. Therefore, all WIPP facility employees receive an introduction to the RCRA during their introductory training.

Beyond these core courses, training is designed and implemented relevant to the specific job functions being performed. For example, employees who operate key pieces of equipment (such as forklifts, hoists, etc.) must be trained to operate and inspect equipment and to recognize maintenance problems before a specific job function is performed. These employees must receive on-the-job training and demonstrate the ability to operate the equipment, as appropriate, before being qualified. This process is controlled and documented by the ~~certification~~/qualification process described in Section H-1. A complete listing of active ~~certification~~/qualification cards, along with descriptions of training courses, are on file at the WIPP facility. Summaries of qualification/~~certification~~ cards and other job specific training courses are included in Permit Attachment H-2.

training indicated within the respective authorization cards. These authorization cards record training that the individual team members have completed. Personnel are trained on the RCRA Contingency Plan through their basic training. Newly hired employees receive the indicated training within six months of their date of hire or their transfer to a new position. Personnel do not work in unsupervised positions until they successfully complete the indicated training requirements. Hazardous waste management personnel attend annual refresher courses that review the initial training received.

Records relating to the WIPP facility training program for hazardous waste management and emergency response personnel are maintained by the WIPP Technical Training Group located at the WIPP facility. These records include a roster of employees in hazardous waste management positions; a list of courses required for each position; course descriptions; documentation when each employee has received and completed appropriate training; and all of the backup information regarding ~~certification~~ qualification and examination. Training records of current personnel are kept by the Technical Training Group until closure of the WIPP facility. Records of former employees are kept by the Technical Training Group for at least three years from the date the employee last worked at the facility.

RCRA Hazardous Waste Management Job Descriptions

Position Title: TRU Waste Handlers

Duties:

- Operates waste handling equipment and support systems to unload, handle and emplace TRU mixed waste and backfill into the repository
- Performs functional and operational checks of waste handling equipment and support systems as well as conduct waste container storage area inspections
- Performs spot decontamination of shipping casks, waste containers, and waste handling equipment
- Perform waste container overpacking operations

Requisite Skills, Experience and Education:

Academic or vocational high school graduate with courses in algebra and physics or chemistry, or equivalent, plus two years of college-level technical study with courses in nuclear waste management and health physics, or equivalent.

Training (Type/Amount):

- General Employee Training (GET 19X)
- General Employee Training Refresher (GET 19XA)
- Waste Handling Operations ~~Certification~~ Qualification Card Signature Record (WH-01 Technicians or WH-02 Engineers) and Waste Handling Operations Guidebook (WH-GUIDE-1)
- Radworker II (RAD-201)
- Hazardous Waste Worker (HWW-101/102)
- Respiratory Protection (SAF-630/631)
- Hazardous Waste Responder (HWR-101, 101A)
- Hazardous Waste Transportation (HMT-102)

NOTE: Waste Handling Technicians will not participate in TRU waste handling activities and integrated system functions until full ~~certification~~ qualification is acquired.

RCRA Hazardous Waste Management Job Descriptions
(continued)

Training (Type/Amount):

- General Employee Training (GET 19X)
- General Employee Training Refresher (GET 19XA)
- Health Physics Technician ~~Certification~~ Qualification (RCT-01/02)
- Radiological Worker II (RAD-201)
- Respiratory Protection (SAF-630/631)
- Hazardous Waste Worker (HWW-101/102)
- Hazardous Waste Responder (HWR-101/101A)
- Conduct of Shift Operations (OPS-115)
- First Aid/CPR (MED-101 or 101A)
- Fundamental Academic Lessons
- Site-Specific Academic Lessons

RCRA Hazardous Waste Management Job Descriptions

Position Title: Emergency Services Technician

Duties:

- Responds to hazardous waste spills in emergency situations
- Provides emergency fire-response services
- Conducts routine inspections and maintains all response equipment on site
- Serves as incident commander
- Directs emergency teams to control hazardous situations

Requisite Skills, Experience and Education:

Vocational or commercial high school graduate, or equivalent, plus additional training in emergency fire and medical response, or equivalent.

Training (Type/Amount):

- General Employee Training (GET 19X)
- General Employee Training Refresher (GET 19XA)
- EST Certification Card (EST-01)
- Subject Matter Expert/On-The-Job Training (TRG-293/298)
- Level II Trainer (TRG-300)
- Hazardous Waste Worker (HWW-101/102)
- Respiratory Protection (SAF-630/ 631)
- Firefighter I (SAF-621)
- Hazardous Waste Responder (HWR-101/101A)

NOTE: The trainee may perform duties prior to ~~certification~~ qualification only for those evolutions and/or operations for which training has been completed.

RCRA Hazardous Waste Management Job Descriptions

Position Title: Quality Assurance Technician

Duties:

- Observes waste handling operations and verifies adherence with hazardous waste handling procedures

Requisite Skills, Experience and Education:

Vocational, technical or high school graduate, or equivalent, plus two years of technical training with courses in inspection techniques, or equivalent.

Training (Type/Amount):

- General Employee Training (GET 19X)
- General Employee Training Refresher (GET 19XA)
- Hazardous Waste Worker (HWW-101/102)
- Quality Assurance Inspector ~~Certification~~ Qualification Card

RCRA Hazardous Waste Management Job Descriptions

Position Title: Operations Engineer

Duties:

- Notifies emergency response personnel and on-call facility manager during emergency occurrences
- Serves as backup RCRA Emergency Coordinator

Requisite Skills, Experience and Education:

Associate degree in engineering or scientific discipline, or equivalent, and five years related practical experience, or equivalent.

Training (Type/Amount):

- General Employee Training (GET 19X)
- General Employee Training Refresher (GET 19XA)
- Facility Operations Shift Supervisor ~~Certification~~ Qualification Card (FO-FOSS-3 or FO-FOSS-3R)
- Roving Watch ~~Certification~~ Qualification (FO-RW-1)
- Central Monitoring Room Operator ~~Certification~~ Qualification (FO-CMRO-2)
- Conduct of Shift Operations (OPS-115)
- Hazardous Materials Emergency Response (HMT-104)
- Root Cause Analysis (TRG-296)
- WIPP Occurrence Reporting for Facility Managers (OPS-110)
- WIPP Contingency Plan Procedure (SAF-645)
- Hazardous Waste Worker (HWW-101)

NOTE: Full ~~Certification~~ qualification must be completed prior to the candidate operating any equipment or performing any operating evolutions without the direct supervision of a ~~certified~~ qualified operator.

RCRA Hazardous Waste Management Job Descriptions

Position Title: Facility Shift Manager

Duties:

- Serves as RCRA Emergency Coordinator
- Notifies emergency response personnel and on-call facility manager during emergency occurrences

Requisite Skills, Experience and Education:

Academic or vocational high school (mechanical/electrical) graduate and eight years of nuclear plant operating experience, or equivalent.

Training (Type/Amount):

- General Employee Training (GET 19X)
- General Employee Training Refresher (GET 19XA)
- Facility Operations Shift Supervisor ~~Certification~~ Qualification Card (FO-FOSS-3 or FO-FOSS-3R)
- Roving Watch ~~Certification~~ Qualification (FO-RW-1)
- Central Monitoring Room Operator ~~Certification~~ Qualification (FO-CMRO-2)
- Conduct of Shift Operations (OPS-115)
- Hazardous Materials Emergency Response (HMT-104)
- Root Cause Analysis (TRG-296)
- WIPP Occurrence Reporting for Facility Managers (OPS-110)
- WIPP Contingency Plan Procedure (SAF-645)
- Hazardous Waste Worker (HWW-101)

NOTE: Full ~~Certification~~ qualification must be completed prior to the candidate operating any equipment or performing any operating evolutions without the direct supervision of a ~~certified~~ qualified operator.

RCRA Hazardous Waste Management Job Descriptions

Position Title: Central Monitoring Room Operator

Duties:

- Notifies emergency response personnel
- Documents emergency actions

Requisite Skills, Experience and Education:

Vocational or academic high school graduate, or equivalent.

Training (Type/Amount):

- General Employee Training (GET 19X)
- General Employee Training Refresher (GET 19XA)
- Roving Watch ~~Certification~~ Qualification (FO-RW-1)
- Central Monitoring Room Operator (FO-CMRO-2 or FO-CMRO-2R)
- Hazardous Materials Emergency Response (HMT-104)
- Conduct of Shift Operations (OPS-115)

NOTE: Full ~~Certification~~ qualification must be completed prior to the candidate operating any equipment or performing any operating evolutions without the direct supervision of a ~~certified~~ qualified operator.

ATTACHMENT H2

TRAINING COURSE AND QUALIFICATION/~~CERTIFICATION~~ CARD OUTLINES

ATTACHMENT H2

TRAINING COURSE AND QUALIFICATION/~~CERTIFICATION~~ CARD OUTLINES

TABLE OF CONTENTS

COURSE: TRG-293/298 Subject Matter Expert and On-the-Job Training

DURATION: ≈4 hours

PREREQUISITES: Manager Approval

TYPE: Classroom

SCOPE: The instructor will provide the training skills and knowledge necessary to perform the role of subject matter expert (SME)/on-the-job trainer (OJT).

OBJECTIVE: Upon completion of this course the student will be able to perform the instructional duties of a Level I Instructor (SME/OJT trainer) In compliance with WIPP training policies.

Mastery of the terminal objective will be demonstrated by scoring 80 percent or higher on the course examination.

REFRESHER: Biannual

COURSE DESCRIPTION (by lesson)

1. Requirements for ~~Certification~~ Qualification
   ≈.5 hour
   a. Qualification card
   b. Designation letter to training
   c. Training course
   d. SME Certification Board
   e. Arranging the SME Board
   f. Conduct of the Board
   g. Maintaining ~~certification~~ qualification
   h. Lapses in ~~certification~~ qualification

2. Role of the Level I Instructor
   ≈1 hour
   a. Conduct formal OJT
   b. Develop/revise qualification cards
   c. Maintaining files related to area of expertise
   d. Limitations of Level I Instructors

		b. Hazard reporting lines of authority
		1. General safety issues
		a. Organization
		b. Reporting proce: es
		2. Imminent danger issue
		c. Summary
6.	Self-Rescuer ≈1 hour	a. Purpose
		b. Service life
		c. Inspection
		d. Mine operator quarterly inspection
		e. The self-rescuer
		1. Features
		2. The assembly
		f. Operation
		g. Demonstration
		h. Practical application
		i. Summary
7.	Respirators ≈.5 hour	a. Respiratory protection
		1. The WIPP program
		2. Requirements
		b. Lung capacity testing
		c. Physical examination
		d. Respiratory fit testing
		1. Fitting of respirator
		2. Selection of respirator
		e. Types of respirators
		1. Dust mask
		2. Cartridge
		3. Supplied air
		f. Training
		g. Hazards
		h. Summary
8.	Entering and Leaving the Mine ≈1 hour	a. Access requirements
		1. Miner training Qualification
		b. Certification period
		c. Lamproom location
		1. Miner color code
		2. Proper safety equipment
		3. Sign-in procedure
		4. Brass tag
		d. Summary

COURSE: Radiological Control Technician Fundamental Academic Lessons

DURATION: ~ 52 hours
Students may elect to test out of these courses with Radiological Control Manager approval

PREREQUISITES: Lesson specific

SCOPE: Lesson specific

REFRESHER: ~~Recertification~~ Requalification every two years

COURSE DESCRIPTION (by module)

1. Basic Mathematics and Algebra (CL1.01) ≈4 hours

   a. Prerequisites - None
   b. Scope - This lesson is a review of arithmetic and algebraic methods used to perform various radiological control calculations required by the RCT to perform his/her daily duties. These calculations include scientific notation, unit analysis and conversion, radioactive decay calculations, dose rate/distance calculations, shielding calculations, and stay-time calculations.
   c. Outline - Introduction
      - Basic math operations with fractions
      - Basic math operations with decimals
      - Convert fractions to decimals and vice-versa
      - Convert percent to decimal and vice-versa
      - Basic math operations with signed numbers
      - Basic math operations with exponents
      - Find rational square roots
      - Convert scientific notation to standard form and vice-versa
      - Basic math with scientific notation
      - Solving equations using the "Order of Mathematical Operations"
      - Performing algebraic functions
      - Solving equations with common and natural logarithms
      - Exam

Qualification

~~Certification~~ Cards

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QUALIFICATION CERTIFICATION CARD: CH Waste Handling Technician (WH-01)
CH Waste Handling Engineer (WH-02)

DURATION: Nine to twelve months

CLASSROOM TRAINING: Various classroom courses are utilized to provide operators the requisite training as part of the certification process. The candidate must satisfactorily complete the classroom training courses prior to completion of the certification card.

SCOPE: The CH Waste Handling Technician Certification Card (WH-01) and CH Waste Handling Engineer Certification Card (WH-02) provide the minimum knowledge and competency requirements for certification. The requirements of the applicable certification must be completed by the candidate prior to performing those duties without direct supervision.

REFERENCES: CH Waste Handling Technician Certification Card (WH-01)
CH Waste Handling Engineer Certification Card (WH-02)
Waste Handling Operations Certification Card Guide Book (WH-GUIDE-1)

QUALIFICATION CERTIFICATION CARD DESCRIPTION (by category)

1. Equipment Knowledge Requirements

Demonstrate knowledge of the following for the various pieces of CH waste handling equipment and systems:

- General principle of equipment operation
- Understanding of alarms, indications, and readings
- Proper response to abnormal equipment conditions
- Precautions and limiting conditions of operation
- Basic safety requirements for equipment operation

2. Equipment Operation Practical Requirements

Demonstrate competency in conducting CH waste handling equipment and system functional and operational inspections.

Demonstrate competency in standard operation of CH waste handling equipment and systems.

3. Integrated Process Knowledge Requirements

Demonstrate knowledge of the following for the various integrated support functions.

- Administrative activities for equipment/system isolation, modification and control
- Management of site derived waste
- Proper response to abnormal facility conditions
- Container storage area inspections
- Facility support systems

4. Integrated Process Practical Requirements

Demonstrate competency in performing administrative duties for equipment/system isolation and control.

Demonstrate competency in management of site derived waste

Demonstrate competency in performing container storage area inspections

Walkdown the various facility support systems that affect waste handling

~~CERTIFICATION~~ Qualification CARD: Radiological Control Technician (RCT)

DURATION: ≈9 working months

CLASSROOM TRAINING: Various classroom courses are utilized to reinforce the training received as part of the ~~certification~~ qualification card. The candidate is required to complete

SCOPE:

REFERENCES: WP 12-5, WIPP Radiological Control Manual
WP 12-HP, WIPP OHP Procedures Manual
WP 12-RE, Rad Engineering Procedures Manual

~~CERTIFICATION~~ Qualification CARD DESCRIPTION (by category)

1. Academics Training

There are 13 lessons associated with the core academics program and 15 lessons and two labs associated with the site academics program.

2. Practical Training

There are 33 job performance measures associated with the practical training element of the RCT ~~certification~~ qualification program covering the following areas:

Demonstrate generation of a Radiological Work Permit.

Demonstrate how a radiological area should be posted.

Demonstrate applicable emergency response to various events.

Demonstrate competency in operating various types of monitoring equipment

3. Written Examination

This exam is administered after successful completion of academic lessons and practical lessons. Successful completion of the comprehensive written exam is necessary prior to participation in the oral examinations.

4. Oral Examination Board

The oral board consists of members of Radiation Safety, Operational Health Physics, Facility Operations, and Technical Training. This board will assess the candidate's response to normal and emergency situations encountered by a Radiation Control Technician.

QUALIFICATION CARD: EST-01 Emergency Services Technician

DURATION: 2 Years

PREREQUISITES: The candidate must be currently certified in CPR and possess an EMT-I License.

CLASSROOM TRAINING: Additional classroom training courses are required prior to completion of this qualification card.

SCOPE: This qualification card must be completed by all candidates prior to standing a watch unsupervised. Qualification is a six month process. The individual may perform duties without direct supervision only for those evolutions and/or operations for which training has been completed.

All signatures must be made by an approved Subject Matter Expert. The signatures indicate that the trainee has demonstrated satisfactory knowledge and performance of the task(s) indicated.

REFERENCES: Emergency Services Technician Qualification Card Guide Book (EST-01G)
WIPP Emergency Management Program (WP 12-9)

QUALIFICATION CARD DESCRIPTION (by category)

1. Knowledge Requirements

Demonstrate basic knowledge of emergency management procedures and protocols such as:

- The purpose and types of dry chemicals utilized in large and portable dry chemical systems.
- Inspection and testing principles of sprinkler systems, buildings, pull boxes, and fire detection systems.
- The general operation and hazards of fixed halon systems.
- Principles and procedures for operation of various fire and rescue apparatus.
- Selection and use of personal protective equipment.
- Selection and use of hazardous material equipment and supplies for control and mitigation.

2. Practical Requirements

Demonstrate competency in the following areas:

- Use of fire suppression apparatus and equipment.
- Use of rescue apparatus and equipment.
- Inspection and testing techniques and completion of corresponding forms.
- Operation of ambulance and operation and application of all ambulance equipment and supplies.
- Application of all hazardous materials equipment and supplies for control and mitigation.

QUALIFICATION ~~CERTIFICATION~~ CARD: Quality Assurance Inspector

DURATION: Six to nine months

CLASSROOM TRAINING: Various formal classroom courses are utilized to support the training received as part of the ~~certification~~ qualification card. The candidate is required to complete the classroom training courses, satisfactorily, prior to completion of the ~~certification~~ qualification card.

SCOPE: The Quality Assurance ~~Certification~~ Qualification card establishes the minimum education, skill, training, knowledge, and experience requirements for Quality Assurance personnel who perform inspection activities.

REFERENCES: WP 13-1, WID QA Program Manual
QAI PD2-3, Qualification ~~and Certification~~ of Inspection Personnel

QUALIFICATION ~~CERTIFICATION~~ CARD DESCRIPTION (by category)

1. General Knowledge

   Demonstrate knowledge of the minimum site specific procedures:

   - ASME NQA-1
   - WID QA Program Manual
   - Safety Manual
   - Hoisting and Rigging Procedures
   - Work Authorization Procedures
   - Document Control Procedures

2. On-the-Job Training

   Perform at least 20 hours of the following activities while supervised by a ~~certified~~ qualified inspector:

   - Receiving inspection
   - Dimensional inspection
   - Mechanical inspection
   - Electrical inspection
   - Civil inspection

3. Job Performance Measure

Perform the following tasks:

- Receipt inspection
- Conduct an inspection
- Hold/witness point inspection
- Issuance of a corrective action request
- Hold tag issuance
- Verification of corrective action
- Conduct a corrective action receipt inspection

~~CERTIFICATION~~ QUALIFICATION CARD: Facility Operations Roving Watch

DURATION: Six to nine months

CLASSROOM TRAINING: Various classroom courses are utilized to reinforce the training received as part of the ~~certification~~ qualification card. The candidate is required to complete the classroom training courses, satisfactorily, prior to completion of the ~~certification~~ qualification card.

SCOPE: The Facility Operations Roving Watch ~~certification~~ qualification is the foundation for all of the Facility Operations ~~certifications~~ qualifications. The ~~certifications~~ qualifications developed utilizing the Facility Operations Roving Watch ~~certification~~ qualification are the Central Monitoring Room Operator ~~Certification~~ Qualification (FO-CMRO-2) and the Facility Operations Shift Supervisor ~~Certification~~ Qualification (FO-FOSS-3) (for FSM). This ~~certification~~ qualification is used by all Facility Operations personnel certifying qualifying. All of the requirements of the applicable ~~certifications~~ qualifications must be completed by the candidate before operating any equipment or performing any operating evolutions without direct supervision of a ~~certified~~ qualified operator.

REFERENCES: Facility Operations Roving Watch ~~Certification~~ Qualification Card (FO-RW-1)
WIPP Operations Watchstation ~~Certification~~ Qualification Card Guide Book (FO-GUIDE-1)

~~CERTIFICATION~~ QUALIFICATION CARD DESCRIPTION (by category)

1. System Knowledge

Demonstrate knowledge of the critical facility operating systems, such as:

- Theory of the system and equipment
- System design
- Differences in the various building systems around the facility
- Alarms and sequence of actions that follow alarms

The systems covered include:

- Facility electrical and backup electrical systems
- Heating, air conditioning, and ventilation systems
- Underground ventilation systems
- Domestic water and fire protection systems

2. System Operation Practical Evaluation

Demonstrate system startup/shutdown for the various facility systems according to procedures.

Demonstrate maintenance of applicable records pertaining to the operation of facility systems.

Demonstrate ability to conduct periodic required testing of facility systems.

Demonstrate competency to respond to alarms and emergency situations according to procedures.

3. Integrated Plant Knowledge

Discuss the site policies on equipment lockout/tagout.

Discuss the process of notifications and authorizations that is involved in making temporary plant modifications.

Discuss the site process for work authorization.

Discuss the role and responsibilities of Facility Operations on the site.

Discuss Conduct of Operations as it applies to Facility Operations.

4. Integrated Plant Practical Evaluation

Demonstrate the lockout/tagout process.

Prepare paperwork associated with a temporary plant modification.

Demonstrate ability to maintain the Facility Operations logs.

Demonstrate the actions that are taken in various facility emergencies.

Demonstrate ability to stand watch as RW during various shifts.

5. Oral Certification Exam

This final portion of the ~~certification~~ qualification consists of an oral board exam conducted by board members who are knowledgeable in the ~~certification~~ qualification program areas.

CERTIFICATION CARD: Central Monitoring Room Operator

DURATION: Three to five months

CLASSROOM TRAINING: Various classroom courses are utilized to reinforce the training received as part of the certification card. The candidate is required to complete the classroom training courses satisfactorily, prior to completion of the certification card.

SCOPE: The Facility Operations Central Monitoring Room Operator Certification (FO-CMRO-2) in conjunction with the Roving Watch certification make up the support for the Facility Operations Shift Supervisor Certification (FO-FOSS-3). This certification is used by Facility Operations personnel certifying as CMR operators or Facility Operations Shift Supervisors. All of the requirements of the applicable certifications must be completed by the candidate prior to operating any equipment or performing any operating evolutions without direct supervision of a certified operator. Certifications are valid for two years.

REFERENCES: Central Monitoring Room Operator Certification Card (FO-CMR-2)
WIPP Operations Watchstation Certification Card Guide Book (FO-GUIDE-1)

CERTIFICATION CARD DESCRIPTION (by category)

1. System Knowledge

Demonstrate knowledge of the following for the various systems in the Central Monitoring Room:

- Theory of the system and equipment
- System design
- Alarms and sequence of actions that follow the alarms

2. System Operation Practical Evaluation

Demonstrate competency in standard operation of the systems in the Central Monitoring Room including obtaining various pieces of information such as:

- System status
- Alarm Status
- Meteorological data

Demonstrate what actions are to take place in the event of an alarm.

Demonstrate storage of information and subsequent retrieval.

3. Integrated Plant Knowledge

State the actions that must be taken to remove a CMS point scan/alarm check.

Discuss the sequence of events that must occur during a facility emergency.

4. Integrated Plant Practical Evaluation

Demonstrate how the CMR log is maintained.

Demonstrate the sequence of events that are involved in CMS point scan/alarm check removal.

Demonstrate ability to stand watch as CMRO during different shifts.

Demonstrate the sequence of events involved in a facility emergency.

5. Oral Certification Exam

This final portion of the ~~certification~~ qualification consists of an oral board exam conducted by board members who are knowledgeable in the ~~certification~~ qualification program areas.

QUALIFICATION CARD: Facility Operations Shift Supervisor

DURATION: Three to five months

CLASSROOM TRAINING: Various classroom courses are utilized to reinforce the training received as part of the qualification card. The candidate is required to complete the classroom training courses satisfactorily, prior to completion of the qualification card.

SCOPE: The Facility Operations Shift Supervisor Qualification (FO-FOSS-3) is the final qualification developed from the Central Monitoring Room Operator Qualification and Roving Watch Qualification. This qualification is used by Facility Operations personnel, Facility Operations Engineer, and Facility Shift Manager. The candidate must be recommended by the Facility Operations Manager to perform this qualification. All of the requirements of the applicable qualifications must be completed by the candidate prior to operating any equipment or performing any operating evolutions without direct supervision of a qualified operator. Qualifications are valid for two years.

REFERENCES: Facility Operations Shift Supervisor (FO-FOSS-3)
WIPP Operations Watchstation Qualification Card Guide Bc (FO-GUIDE-1)

QUALIFICATION CARD DESCRIPTION (by category)

1. System Knowledge

   Completed qualification through Central Monitoring Room Operator Qualification and Roving Watch Qualification

2. System Operation Practical Evaluation

   Completed qualification through Central Monitoring Room Operator Qualification and Roving Watch Qualification

3. Integrated Plant Knowledge

Discuss the site work authorization process and the role of the FSM.

Discuss the use of operator aids.

Discuss the responsibilities of the FSM.

Discuss the use of shift instructions.

Discuss the role of the FSM in facility emergencies and the actions that are to be taken by the FSM.

Discuss the role of the Quality Assurance and Safety programs on the site.

Discuss the Contingency Plan and its implementation.

Discuss site regulatory compliance as it applies to hazardous waste and hazardous materials.

4. Integrated Plant Knowledge Evaluation

Complete the required documentation for a lockout/tagout.

Complete the proper documentation relating to temporary plant modifications.

Perform various work authorization actions.

Demonstrate a review of the Facility Operations logs.

Demonstrate the response required for various facility emergencies.

Demonstrate ability to stand watch as FSM during different shifts.

5. Oral Certification Exam

This final portion of the ~~certification~~ qualification consists of an oral board exam conducted by board members who are knowledgeable in the ~~certification~~ qualification program areas.

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~~Qualification Cards~~

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QUALIFICATION CARD: WWIS Data Administrator

DURATION: Two years

CLASSROOM TRAINING: Various classroom courses are utilized to provide the WWIS Data Administrator with the knowledge and background on the WIPP waste operations. OJT connected with the everyday operation of the database will be provided by the WWIS SME. The candidate must satisfactorily complete the classroom training courses and the OJT prior to qualification.

SCOPE: The WWIS Certification Card provides the minimum knowledge and competency requirements for qualification. The requirements of the qualification must be completed to the satisfaction of the current WWIS SME prior to the candidate performing any of the WWIS data functions without direct supervision by a qualified WWIS DA.

REFERENCES: WWIS Data Administrator Qualification Card

QUALIFICATION CARD (by category)

1. Equipment Knowledge Requirements

Demonstrate knowledge of the following WWIS hardware and software systems:

- General computer operation principles and communication terminal techniques
- IBM PC and Internet techniques
- Bar Code Reader System operation

2. Equipment Operation Practical

- Obtain and maintain local and Internet IDs
- Access WWIS and produce reports
- Demonstrate operation of bar code reader interface to WWIS

3. Integrated Process Knowledge Requirements

Demonstrate knowledge of the following project document data requirements:

- WIPP Waste Acceptance Criteria
- WIPP Quality Assurance Program Plan
- Waste Analysis Plan

Demonstrate knowledge of the following WWIS Specific documentation:

- WWIS Software Requirements Specification
- WWIS Software Configuration Management Plan
- WWIS Software Quality Assurance Plan
- WWIS Software Design Description

4. Integrated Process Practical Requirements

Demonstrate competency in performing the administrative duties of the WWIS DA

Demonstrate competency in accessing the local area network (LAN) and the Internet.

Demonstrate the WIPP data interface to the WWIS via a walkdown of the receipt and emplacement operations that provide data to the database.

QUALIFICATION CARD: Radioactive Transportation (TE-01)
Federal Motor Carrier Safety Regulations (TE-02)
Hazardous Materials (TE-03)
Hazardous Waste Shipments by Public Highway (TE-05)

DURATION: Six to twelve months

CLASSROOM TRAINING: Various classroom courses are utilized to provide candidates the requisite training as part of the qualification process. The candidate must satisfactorily complete the classroom training courses listed on the individual qualification card as a prerequisite to beginning that process.

SCOPE: The Transportation Engineer qualification cards (TE-01 through TE-05) provide the minimum knowledge and competency requirements for qualification. The requirements of the individual qualification cards must be completed by the candidate prior to performing those duties without direct supervision.

REFERENCES: Radioactive Transportation (TE-01)
Federal Motor Carrier Safety Regulations (TE-02)
Hazardous Materials (TE-03)
Hazardous Waste Shipments by Public Highway (TE-05)

QUALIFICATION CARD DESCRIPTION (by category)

1. Knowledge Requirements

Demonstrate knowledge of the following regulatory arenas:

- Radioactive Material Transportation
- Federal Motor Carrier Safety Regulations
- Hazardous Materials
- Hazardous Waste Shipments by Public Highway

2. Practical Requirements

Demonstrate competency in performing the following for a given shipment:

- Determine the proper shipping name
- Determine the proper labeling and placement requirements
- Determine the proper application and marking requirements
- Prepare the proper shipping documents (i.e., Hazardous Waste Manifest, Bill of Lading, LDR notification form, etc.)

QUALIFICATION CARD: Sampling Team (ST-01)

DURATION: 1 month

PREREQUISITES: HWW-101 - Hazardous Waste Worker

SCOPE: This qualification card must be completed by all candidates prior to performing sampling tasks without the direct supervision of a qualified person. This qualification ensures that the sampler will collect samples in a way that will protect the sampler and the integrity of the sample collected.

REFERENCES: WIPP Sampling Team Qualification Guide ST-01G
WP 02-EC.05 Quality Assurance Project Plan for WIPP Site Effluent and Hazardous Materials Sampling
WP 02-EC.06 WIPP Site Effluent and Hazardous Materials Sampling Plan

QUALIFICATION CARD DESCRIPTION (by category)

1. Knowledge Requirements

Demonstrate basic knowledge of hazardous waste sampling protocol such as:

- Preventing cross-contamination of samples and equipment
- Importance of the a chain-of-custody
- Purpose of the field logbook and documentation
- Labeling and sealing procedures
- Methods of obtaining various sample types (i.e. TCLP organics, volatile organic compounds, TCLP metals)

2. Safety Requirements

Demonstrate knowledge of the safety requirements for sampling activities such as:

- Level of personal protective equipment (PPE) needed for various sampling situations
- Actions to take when encountering damaged or bulging containers
- Importance of the "Buddy System"

3. Practical Requirements

- Correct and safe use of sampling equipment
- Collection of a given sample preventing cross-contamination
- Labeling and sealing sampling containers
- Completion of the Chain-of-Custody form

QUALIFICATION CARD: Equipment Tagout/Lockout Procedure, Authorizing Supervisor (OPS-01)

DURATION:

CLASSROOM TRAINING: Various classroom courses are used to reinforce the training received as part of this qualification card. The candidate is required to complete the classroom training courses, satisfactorily, prior to completion of the qualification card.

SCOPE: All requirements of this Qualification Card must be completed by the candidate prior to performing any tagout/lockout evolutions without the direct supervision of a qualified operator or supervisor.

REFERENCES: WP 04-AD3011, Equipment Tagout/Lockout
WP 10-AD3005, Control and Use of Maintenance Locks

~~CERTIFICATION~~ QUALIFICATION **CARD DESCRIPTION** (by category)

1. Knowledge requirements

   A. Know the purpose of:

   - Danger tag
   - Caution tag

   B. Know:

   - Conditions that require Operations lock
   - What sources may be utilized to determine proper placement of danger tags
   - Personnel authorized to place Operations locks and tags
   - When Operations locks and tags are placed/removed with respect to maintenance locks
   - Precautions observed while placing tags
   - Conditions to be met if maintenance lock is to be removed and technician is not available
   - Requirements for stored energy devices
   - Requirements for tagging mobile equipment
   - Conditions required for removal of a tagout/lockout
   - Consequences of intentionally violating a tagout/lockout
   - Actions taken if a discrepancy is found during tagout/lockout audit
   - Frequency of tagout/lockout audit performance
   - How to add work packages to Tagout/Lockout Control Sheet

C. Know the concurrence requirements for:

- Tagouts involving fire protection systems
- Tagouts involving operational safety requirement equipment or controlled area/radioactive materials boundaries

2. Practical Requirements

- Prepare an equipment Tagout/Lockout Control Sheet per WP 04-AD3011
- After tagout/lockout is authorized, place equipment tagout/lockout on per WP 04-AD3011
- Remove the equipment tagout/lockout per WP 04-AD3011
- Perform tagout/lockout audit per WP 04-AD3011
- Authorize a Tagout/Lockout Control Sheet for placement in the facility per WP 04-AD3011
- Authorize an equipment tagout/lockout removal per WP 04-AD3011

QUALIFICATION CARD: Equipment Tagout/Lockout Procedure, Operations Technician (OPS-01T)

DURATION:

CLASSROOM TRAINING: Various classroom training courses are utilized to reinforce the training received as part of this qualification card. The candidate is required to complete the classroom training courses, satisfactorily, prior to completion of the qualification card.

SCOPE: All requirements of this Qualification Card must be completed by the candidate prior to performing any tagout/lockout evolutions without the direct supervision of a qualified operator or supervisor.

REFERENCES: WP 04-AD3011, Equipment Tagout/Lockout
WP 10-AD3005, Control and Use of Maintenance Locks

~~CERTIFICATION~~ QUALIFICATION CARD DESCRIPTION (by category)

1. Knowledge Requirements

A. Know the purpose of:

- Danger tag
- Caution tag

B. Know:

- Conditions requiring an Operations lock to accompany tagout
- What sources may be utilized to determine proper placement of danger tags
- Personnel authorized to place Operations locks and tags
- When Operations locks and tags are placed/removed with respect to maintenance locks
- Precautions observed while placing tags
- Conditions to be met if maintenance lock is to be removed and technician is not available
- Requirements for stored energy devices
- Requirements for tagging mobile equipment
- Conditions required for removal of a tagout/lockout
- Consequences of intentionally violating a tagout/lockout
- Actions taken if a discrepancy is found during tagout/lockout audit
- Frequency of tagout/lockout audit performance
- How to add work packages to Tagout/Lockout Control Sheet

C. Know the Concurrence Requirements for:

- Tagouts involving fire protection systems
- Tagouts involving Operational Safety Requirement equipment or Controlled Area/Radioactive Materials boundary

2. Practical Requirements

- Prepare equipment Tagout/Lockout Control Sheet per WP 04-AD3011
- Place equipment tagout/lockout on specified component per WP 04-AD3011
- Remove equipment tagout/lockout per WP 04-AD3011

QUALIFICATION CARD: Waste Handling Hoist Equipment Operator

DURATION: Approximately 12 to 15 months

SCOPE: The Waste Handling Hoist Equipment Operator Qualification (M-30) prepares the candidate to be a qualified man-hoist operator. All of the requirements for the applicable qualification must be completed prior to operating the Waste Handling Hoist unless under the direct supervision of a qualified operator.

REFERENCES: Waste Handling Hoist Equipment Operator Qualification Card Guide (M-30G)
Waste Handling Shaft Operation Procedure

QUALIFICATION CARD DESCRIPTION (by category)

1. Equipment Knowledge

Demonstrate knowledge of the following systems associated with the Waste Hoist:

- Major components of the Waste Hoist in the headframe and collar areas
- Major components of the Waste Hoist electrical systems
- Be able to describe the correct operations of all Waste Hoist systems and their interrelationships

2. Equipment Safety

Demonstrate knowledge of all safety systems associated with the Waste Hoist and how their functions affect hoist operation.

Describe the correct response of the operator when safety features are actuated.

3. Equipment Maintenance

Describe the maintenance activities and requirements for the Waste Hoist systems.

State the actions of the Waste Hoist operator during the performance of maintenance activities.

4. Equipment Practical

Perform normal startup and shutdown of all Waste Hoist systems.

Perform normal hoisting operations for material and personnel in all modes of operation.

5. Oral Qualification Exam

This final portion of the ~~certification~~ qualification consists of an oral board exam conduced by board members who are knowledgeable in the ~~certification~~ qualification program areas.

QUALIFICATION CARD: Waste Handling Shaft Tender Operator

DURATION: Approximately 7 months

SCOPE: The Waste Handling Shaft Tender Operator Qualification (M-31) prepares the candidate to operate controls and systems located at both the collar area (surface) and the station area (underground) at the Waste Shaft. All the requirements for this qualification must be completed prior to operation of Waste Shaft systems unless under the direct supervision of a qualified operator.

REFERENCES: Waste Handling Shaft Tender Qualification Guide (M-31G)
Waste Handling Shaft Operation Procedure

QUALIFICATION CARD DESCRIPTION (by category)

1. Equipment Knowledge

   Demonstrate knowledge of the following Waste Shaft equipment at the collar and station:

   - Waste Shaft controls
   - Communication systems
   - Conveyance control panels
   - Cage and its capacity

2. Equipment Safety

   Demonstrate knowledge of all safety systems and devices associated with the Waste Hoist.

   Describe the position responsibilities with regard to shaft safety and who to contact during abnormal conditions.

3. Personnel Safety

   Demonstrate knowledge of the requirements for all personnel who wish to enter the underground via the Waste Shaft.

   Demonstrate knowledge of actions required during all work in and around the Waste Shaft or surrounding areas.

4. Equipment Maintenance

   Describe the maintenance and inspection duties of both the collar and station tender.

5. Equipment Practical

Perform pre-shift inspections of the collar and station areas.

Perform all record keeping duties of the shaft tender.

Demonstrate proper operation of the Local Control Stations, Pivot Rail System, and Bell Systems.

6. Oral Qualification Exam

This final portion of the qualification consists of an oral board exam conducted by board members who are knowledgeable in the ~~certification~~ qualification program areas.