



**Department of Energy**

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**DEC 12 2012**

Mr. John E. Kieling, Chief  
Hazardous Waste Bureau  
New Mexico Environment Department  
2905 Rodeo Park Drive East, Building 1  
Santa Fe, New Mexico 87505-6303

Subject: Notification of Class 1 Permit Modification to the Waste Isolation Pilot Plant  
Hazardous Waste Facility Permit Number: NM4890139088-TSDF

Dear Mr. Kieling:

Enclosed is the following Class 1 Permit Modification Request:

- Contingency Plan Update

We certify under penalty of law that this document and all attachments were prepared under our direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on our inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of our knowledge and belief, true, accurate, and complete. We are aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

If you have any questions, please contact Mr. George T. Basabilvazo at (575) 234-7488.

Sincerely,

**Original Signatures on File**

~~Jose R. Franco, Manager  
Carlsbad Field Office~~

~~M. F. Sharif, Project Manager  
Nuclear Waste Partnership LLC~~

Enclosure

cc: w/enclosure  
T. Kliphuis, NMED \*ED  
J. Davis, NMED ED  
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CBFO M&RC  
\*ED denotes electronic distribution

**Class 1 Permit Modification Notifications**

**Contingency Plan Updates**

**Waste Isolation Pilot Plant  
Carlsbad, New Mexico**

**NM4890139088-TSDF**

**December 2012**

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## Overview of the Permit Modification Request

This document contains some Class 1 Permit Modification Notifications (**PMNs**) to modify the Hazardous Waste Facility Permit (**Permit**) at the Waste Isolation Pilot Plant (**WIPP**), Permit Number NM4890139088-TSDF.

These PMNs are being submitted by the U.S. Department of Energy (**DOE**) and Nuclear Waste Partnership (**NWP**), collectively referred to as the Permittees, in accordance with Permit Part 1.3.1 (20.4.1.900 New Mexico Administrative Code (**NMAC**) incorporating Title 40 of the Code of Federal Regulations (40 **CFR**) §270.42(a)). The PMNs in this document are necessary to notify the New Mexico Environment Department (**NMED**) of changes which impact the WIPP facility. These changes do not reduce the ability of the Permittees to provide continued protection to human health and the environment.

The requested modification to the Permit and any related supporting documents are provided in these PMNs. The proposed modification to the text of the Permit has been identified using **red** text and double underline and a ~~strikeout~~ font for deleted information.

**Attachment A**  
**Description of the Class 1 Permit Modification Notifications**

**Table 1. Class 1 Hazardous Waste Facility Permit Modification Notifications**

Affected Permit Section	Change Description	Category	Attachment A Page #
1. Attachment D, Section D-4a(1)	This modification to Attachment D, Section D-4a(1) clarifies that the Central Monitoring Room Operator ( <b>CMRO</b> ) may monitor pertinent facility information remotely from locations other than the Central Monitoring Room ( <b>CMR</b> ).	A.1 A-3	
2. Attachment D, Section D-4d(6) Attachment D, Section D-4d(8)	This modification to Attachment D, Section D-4d(6) and Section D-4d(8), Item 5, updates the examples of materials used in the underground in the event of a spill.	A.1 A-5	
3. Attachment D, Section D-7a Attachment D, Section D-7c	The modification to Attachment D, Section D-7a and D-7c clarifies the methods for communications and notifications. This modification also clarifies in Attachment D, Section D-7c who the Emergency Response Team ( <b>ERT</b> ) members report to during an evacuation.	A.1 A-7	
4. Attachment D, Table D-1	This modification to Attachment D, Table D-1 clarifies that there is an Underground ( <b>U/G</b> ) Fuel Station used to store diesel fuel. Also, Trailer 911F has been removed from the surface; therefore Table D-1 is being updated to reflect this.	A.1 A-9	
5. Permit Part 2, Section 2.12.2, Attachment D, Section D-9 Attachment F, Section F-1e	This modification updates the method described in Permit Part 2, Section 2.12.2, Permit Attachment D, Section D-9, and Permit Attachment F, Section F-1e used to distribute copies of the Contingency Plan to applicable facility personnel and locations.	A.1 A-11	
6. Attachment E, Table E-1 (Continued)	This modification to Attachment E, Table E-1 (Continued) updates footnote "n" to the correct table reference, "Table D-6" instead of "Table F-6".	A.1 A-13	
7. Attachment D, Table D-6	Attachment D, Table D-6, Emergency Equipment Maintained at the Waste Isolation Pilot Plant has been updated to provide current information. The individual changes to Table D-6 are specified in the Revised Permit Text and Explanation of Changes to Table D-6, Emergency Equipment Maintained at the Waste Isolation Pilot Plant.	A.1 A-15	

## Item 1

### Description

This modification to Attachment D, Section D-4a(1) clarifies that the Central Monitoring Room Operator (**CMRO**) may monitor pertinent facility information remotely from locations other than the Central Monitoring Room (**CMR**).

### Basis

The change is classified as an “Administrative and informational change” and is, therefore, a Class 1 modification pursuant to 20.4.1.900 NMAC (incorporating 40 CFR 270.42, Appendix I, A.1).

### Discussion

This change is needed because there may be situations where the CMR is not accessible due to emergency situations or in the event the CMR is not operational. Currently the backup location is the Guard and Security Building. Other locations may be configured as needed for the CMRO to continuously monitor (24 hours a day) the status of mechanical, electrical, and/or radiological conditions at selected points on the site, both above and below ground as required by the Permit Attachment D, Section D-4a (1).

## Revised Permit Text

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

In addition to receiving incident reports, the CMRO, ~~who is located in the Support Building (Building 451) (Figure D-1),~~ continuously monitors (24 hours a day) the status of mechanical, electrical, and/or radiological conditions at selected points on the site, both above and below ground. Alarms to indicate abnormal conditions are located throughout the WIPP facility. The alarm(s) (e.g., fire, radiation) may be the first notification of an emergency situation received by the CMRO. The CMRO monitors alarms, takes telephone calls and radio messages, and initiates outgoing calls to emergency staff and outside agencies.

## Item 2

### Description

This modification to Attachment D, Section D-4d(6) and Section D-4d(8), Item 5, updates the examples of materials used in the underground in the event of a spill.

### Basis

The change is classified as an “Administrative and informational change” and is, therefore, a Class 1 modification pursuant to 20.4.1.900 NMAC (incorporating 40 CFR 270.42, Appendix I, A.1).

### Discussion

This change is needed to update the examples of materials used in the underground in the event of a spill because polyvinyl alcohol (**PVA**) is not used in the underground to cover a spill area. Therefore, it is being deleted from Attachment D, Section D-4d(6) and Section D-4d(8), Item 5. Paint is being added as material that can be used to cover a spill in Section D-4d(8), Item 5. Plastic sheets, fabric sheets and paint are examples of materials used as a cover when a spill occurs.

## Revised Permit Text

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

#### CH TRU Mixed Waste

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

### D-4d(8) Roof Fall

#### Spalling-of-Ground Actions

5. Cover the spill area with material such as plastic or fabric sheets or ~~paint~~ PVA, in a way that would safely isolate the area.

### Item 3

#### Description

The modification to Attachment D, Section D-7a and D-7c clarifies the methods for communications and notifications. This modification also clarifies in Attachment D, Section D-7c who the Emergency Response Team (**ERT**) members report to during an evacuation.

#### Basis

The change is classified as an “Administrative and informational change” and is, therefore, a Class 1 modification pursuant to 20.4.1.900 NMAC (incorporating 40 CFR 270.42, Appendix I, A.1).

#### Discussion

This change is needed because there are additional means of communications (in addition to radios and pagers as currently described) that are available for communications between Chief Office Wardens (**COWs**) and Assistant Chief Office Wardens (**ACOW**) and the CMRO. Although radios and pagers are utilized as methods of communication in the event of an evacuation or sheltering in place, other communication methods (such as the public address system) are used as well.

The primary method for notifying the Office Wardens, Assistant Office Wardens, ACOWs, and COWs for evacuations or sheltering in place is by a public address announcement. Other available devices may also be used. Therefore Attachment D, Section D-7a is being clarified to indicate that the public address system or other available devices are used as a means of notification for these personnel for evacuations and sheltering in place.

This change is also needed to clarify the reporting requirements in Attachment D, Section D-7c to ensure that the ERT members and the Emergency Services Technician/Fire Protection Technician (EST/FPT) report to the Facility Shift Manager (FSM) during a site evacuation for instructions and accountability.

## Revised Permit Text

### D-7a Surface Evacuation On-site and Off-site Staging Areas

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

### D-7c Plan for Surface Evacuation

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

## Item 4

### Description

This modification to Attachment D, Table D-1 clarifies that there is an Underground (**U/G**) Fuel Station used to store diesel fuel. Also, Trailer 911F has been removed from the surface; therefore Table D-1 is being updated to reflect this.

### Basis

The change is classified as an “Administrative and informational change” and is, therefore, a Class 1 modification pursuant to 20.4.1.900 NMAC (incorporating 40 CFR 270.42, Appendix I, A.1).

### Discussion

This change is needed to update Attachment D, Table D-1 to include current information. Specifically, an U/G Fuel Station has been added in the column entitled “Building Location” and Trailer 911F has been deleted from the column “Building Location” because it has been removed from the WIPP site.

**Revised Permit Text**

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

<b>Chemical Description</b>	<b>Building Location</b>	<b>Hazard Category</b>
Ethylene Glycol Solution - 35%	Buildings 411; 412; 451; 452; 486; 463; 474C; FAC 414	Immediate (acute) Delayed (chronic)
Gasoline, Unleaded GASC0001	FAC 480	Fire Immediate (acute) Delayed (chronic)
No. 1 Diesel Fuel Oil GASC0210	<u>U/G Fuel Station:</u> Oil Depot U/G; FACs 480, 255.1 & 255.2; Transport Tank; Building 456 <del>Trailer 911F</del>	Fire Immediate (acute) Delayed (chronic)
Multiple containers of TRU Waste as described in Permit Section 3.3.1	WHB Waste Shaft U/G	Delayed (chronic)
Hazardous materials in quantities that exceed 5 times the Reportable Quantity (Per DOE O 151.1) values as defined in 40 CFR 302	It should be noted that WIPP is not expected to possess such quantities.	Fire Immediate (acute) Delayed (chronic)

## Item 5

### Description

This modification updates the method described in Permit Part 2, Section 2.12.2, Permit Attachment D, Section D-9, and Permit Attachment F, Section F-1e used to distribute copies of the Contingency Plan to applicable facility personnel and locations.

### Basis

The change is classified as an “Administrative and informational change” and is, therefore, a Class 1 modification pursuant to 20.4.1.900 NMAC (incorporating 40 CFR 270.42, Appendix I, A.1).

### Discussion

This change is needed to update the method used to distribute revised (current) versions of the Contingency Plan to applicable WIPP facility personnel and locations. When the Contingency Plan is revised, updated copies are manually distributed (electronically or via site mail) or hand delivered to applicable WIPP facility emergency personnel and locations. The updated method is being added to the Permit Attachment D, Section D-9. The current method is being deleted from Permit Part 2, Section 2.12.1, Permit Attachment D, Section D-9, and Permit Attachment F, Section F-1e. It is only being added to Permit Attachment D, Section D-9 in order to minimize redundancy.

## Revised Permit Text

### 2.12.2. Copies of Plan

The Permittees shall maintain copies of the Contingency Plan and all revisions and amendments to the Contingency Plan as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.53). The Permittees shall provide copies of the current Contingency Plan ~~and all revisions to the Contingency Plan through an electronic controlled document distribution system or in appropriate controlled document locations at the facility,~~ and to the Secretary and all entities with which the Permittees have emergency MOUs or MAAs, as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.53(b)). The Permittees shall maintain at least one current ~~controlled document~~ paper copy of the Contingency Plan at the facility in a location readily accessible to the Emergency Coordinator specified in Permit Section 2.12.4.

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

The owner/operator of the WIPP facility will ensure that copies of this Contingency Plan are available ~~through the WIPP electronic controlled document distribution system or in appropriate controlled document locations throughout the facility, and the alternate Emergency Operations Center and the Joint Information Center at the Skeen Whitlock Building, and are, consequently,~~ available to all emergency personnel and organizations described in Section D-2. When the Contingency Plan is revised, updated copies are manually distributed (electronically or via site mail) or hand delivered to applicable WIPP Facility emergency personnel and alternate Emergency Operations Center and Joint Information Center. In addition, the owner/operator will make copies available to the following outside agencies:

### F-1e Training for Emergency Response

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 are required to complete Contingency Plan training (SAF-645). The RCRA Emergency Coordinators is provided with updated copies of the Contingency Plan in accordance with Permit Attachment D, Section D-9 whenever changes are made. ~~are notified of changes to the contingency plan by a document change notice, which is distributed weekly. This notice lists all of the controlled documents that have been changed during the week.~~ Office wardens receive Office Warden Training (SAF-632) and are required to take an annual refresher. In addition, the training requirements of the Central Monitoring Room (**CMR**) operator are included in Permit Attachment F1. The CMR operator is listed in Permit Attachment D as an emergency response related position.

## Item 6

### Description

This modification to Attachment E, Table E-1 (Continued) updates footnote “n” to the correct table reference, “Table D-6” instead of “Table F-6”.

### Basis

The change is classified as an “Administrative and informational change” and is, therefore, a Class 1 modification pursuant to 20.4.1.900 NMAC (incorporating 40 CFR 270.42, Appendix I, A.1).

### Discussion

This change is needed to update Attachment E, Table E-1 (Continued), footnote “n”, to the correct Permit table. The current Permit text references “Table F-1”. Attachment F was changed to Attachment D in the 2010 Permit Renewal. The text should read “Table D-1”.

## Revised Permit Text

**Table E-1 (Continued)**  
**Inspection Schedule/Procedures Notes**

- a Inspection may be accomplished as part of or in addition to regularly scheduled preventive maintenance inspections for each item or system. Certain structural systems of the WHB, Waste Hoist and Station A are also subject to inspection following severe natural events including earthquakes, tornados, and severe storms. Structural systems include columns, beams, girders, anchor bolts and concrete walls.
- b Deterioration includes: obvious visible cracks, erosion, salt build-up, damage, corrosion, loose or missing parts, malfunctions, and structural deterioration.
- c "Preoperational" signifies that inspections are required prior to the first use during a calendar day. For calendar days in which the equipment is not in use, no inspections are required. For an area this includes: area is clean and free of obstructions (for emergency equipment); adequate aisle space; emergency and communications equipment is readily available, properly located and sign-posted, visible, and operational. For equipment, this includes: checking fluid levels, pressures, valve and switch positions, battery charge levels, pressures, general cleanliness, and that all functional components and emergency equipment is present and operational.
- e These weekly inspections apply to container storage areas when containers of waste are present for a week or more.
- g In addition, the water tank levels are maintained by the CMR and level readouts are available at any time.
- h This organization is responsible for obtaining licenses for radios and frequency assignments. They do periodic checks of frequencies and handle repairs which are performed by a vendor.
- i Radios are not routinely "inspected." They are operated daily and many are used in day-to-day operations. They are used until they fail, at which time they are replaced and repaired. Radios are used routinely by Emergency Services, Security, Environmental Monitoring, and Facility Operations.
- j Fire extinguisher inspection is paperless. Information is recorded into a database using barcodes. The database is then printed out.
- k Surface CH TRU mixed waste handling areas include the Parking Area Unit, the WHB unit, and unloading areas.
- l No log forms are used for daily readings. However, readings that are out of tolerance are reported to the CMR and logged by CMR operator. Inspection includes daily functional checks of portable equipment.
- m Mechanical Operability means that the equipment has been checked and is operating in accordance with site safety requirements (e.g. proper fluid levels and tire pressure; functioning lights, alarms, sirens, and power/battery units; and belts, cables, nuts/bolts, and gears in good condition), as appropriate.
- n Required Equipment means that the equipment identified in Table ~~F~~D-6 is available and usable (i.e. not expired/depleted and works as designed).
- \* Positions are not considered RCRA positions (i.e., personnel do not manage TRU mixed waste).

## Item 7

### Description

Attachment D, Table D-6, Emergency Equipment Maintained at the Waste Isolation Pilot Plant has been updated to provide current information. The individual changes to Table D-6 are specified in the Revised Permit Text and Explanation of Changes to Table D-6, Emergency Equipment Maintained at the Waste Isolation Pilot Plant.

### Basis

The change is classified as an “Administrative and informational change” and is, therefore, a Class 1 modification pursuant to 20.4.1.900 NMAC (incorporating 40 CFR 270.42, Appendix I, A.1).

### Discussion

The explanation for why each specific change is needed is in the Revised Permit Text and Explanation of Changes to Table D-6, Emergency Equipment Maintained at the Waste Isolation Pilot Plant facility found below.

The changes that are administrative and informational changes include updates such as the location of a mine page phone at the EST Station and clarifications including explanation that the fire water pump capacities of 125 pounds per square inch is a rated capacity and not an operational parameter.

Revised Permit Text

Table D-6  
Emergency Equipment Maintained at the Waste Isolation Pilot Plant

Exp                      Explanation of Changes

Equipment	Description and Capabilities	Location	Why Change is needed	Basis for Change
Communications				
Mine Page Phones	Battery-operated paging system	CMR, Mine Rescue Room, EOC, lamproom, underground at S550/W30, S100/W30, S1950/E140, SH Shaft Collar and Underground Station, Waste Shaft Collar and Underground Station, FSM desk-, <u>EST Station</u>	The EST station has a mine page phone. This change is required to update the location for mine pager phones.	A.1
Fire Detection and Fire Suppression Equipment				
Fire Water Pumps	Fire suppression water supply; <u>pumps are rated at</u> 125 pounds per square inch, 1,500 gallons per minute centrifugal pump, one with electric motor drive, the other with diesel engine; pressure maintenance pump	Pumphouse	This change is required to make it clear that the term “125 pounds per square inch,” corresponds to the rated pump capacity and is not direction regarding the pump operation.	A.1
Emergency Medical Equipment				
<del>Zoll 1600</del> Heart Monitor and Defibrillator	Heart Monitor/defibrillator	Ambulance # 1 and # 2	This change is needed to delete “Zoll 1600” because this is a brand name.	A.1
General Plant Emergency Equipment				
Emergency Shower	For emergency flushing of <del>contaminated</del> <u>chemical contact or injury</u> individual	Surface	This change is needed to clarify the use of emergency showers.	A.1

Table D-6

Emergency Equipment Maintained at the Waste Isolation Pilot Plant

Explanation of Changes

Equipment	Description and Capabilities	Location	Why Change is needed	Basis for Change
			Emergency showers are not meant for decontamination of individuals, therefore, "contaminated" and "individual" was deleted.	
Decon Shower Equipment	Self-contained decon shower trailer, portable decon shower unit, <del>disposable decon shower</del>	Surface	This change is needed to clarify that there is no need to delineate a separate disposable decon shower since the portable decon shower can be disposed if necessary.	A.1
Polyvinyl Alcohol or Paint <u>or Fixative</u>	1 - 5 gallon bucket of approved fixative to be used during recovery.	Building 481	This change is needed because Polyvinyl Alcohol is not planned to be used as a fixative. Other fixatives such as paint will be used.	A.1