



Department of Energy
Carlsbad Field Office
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DEC 15 2016

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

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

Dear Mr. Kieling:

Enclosed is a Notification of Class 1 Permit Modification for the following item:

- Revise Emergency Shower Location

Please note that the change in location of the emergency shower that services the Waste Handling Building (411) is effective immediately, as this change has already been implemented at the WIPP facility.

We certify under penalty of law that this document and all attachments were prepared under our direction or supervision according to 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,

Signatures on File

Todd Shrader, Manager
Carlsbad Field Office

Philip J. Breidenbach, Project Manager
Nuclear Waste Partnership LLC

Enclosure

cc: w/enclosure
R. Maestas, NMED * ED
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*ED denotes electronic distribution

Class 1 Permit Modification Notification

Revise Emergency Shower Location

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

WIPP Permit Number - NM4890139088-TSDF

December 2016

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Acronyms and Abbreviations

CFR	Code of Federal Regulations
NMAC	New Mexico Administrative Code
NMED	New Mexico Environment Department
Permit	Waste Isolation Pilot Plant Hazardous Waste Facility Permit
Permittees	DOE and Nuclear Waste Partnership LLC
PMN	Permit Modification Notification
PMR	Permit Modification Request
WIPP	Waste Isolation Pilot Plant

Overview of the Permit Modification Notification

This document contains a Class 1 Permit Modification Notification (**PMN**) for the Waste Isolation Pilot Plant (**WIPP**) Hazardous Waste Facility Permit (**Permit**) Number NM4890139088-TSDF.

This PMN is being submitted by the U.S. Department of Energy and Nuclear Waste Partnership LLC, collectively referred to as the **Permittees**, in accordance with Permit Part 1, Section 1.3.1. (20.4.1.900 New Mexico Administrative Code (**NMAC**) incorporating Title 40 of the Code of Federal Regulations (**CFR**) §270.42(a)(2)). The PMN in this document is necessary to notify the New Mexico Environment Department (**NMED**) of a change which impacts the Permit. This change does 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 this PMN. The proposed modifications to the text of the Permit have been identified using **red** text and double underline and a ~~strikeout~~ font for deleted information. Direct quotations are indicated by italicized text.

Attachment A
Description of the Class 1 Permit Modification Notification

Table 1. Class 1 Hazardous Waste Facility Permit Modification Notification

Item No.	Affected Permit Section	Change Description	Category
1.	Attachment D, Table D-2, Page D-32 of 46	This modification revises the "Emergency Showers" line item by adding "is served by the decontamination shower trailer located north of Building 411, in front of Building 952, between Buildings 243 and 455;" after "Waste Handling Building (Building 411)" in the "Location" column.	B.6.b.

Item 1

Description

This modification revises Permit Attachment D, Table D-2, *Emergency Equipment Maintained at the Waste Isolation Pilot Plant*.

The “Emergency Showers” line item has been revised to add “is served by the decontamination shower trailer located north of Building 411, in front of Building 952, between Buildings 243 and 455;” after “Waste Handling Building (Building 411)” in the “Location” column of Table D-2.

Basis

The change described above is classified as “Replacement with functionally equivalent equipment, upgrade, or relocate emergency equipment listed” and is, therefore, a Class 1 modification pursuant to 20.4.1.900 NMAC (incorporating 40 CFR 270.42, Appendix I, B.6.b.).

Discussion

This change is needed to correctly reference the location of the emergency shower used for the flushing of personnel chemical contact in the event of an emergency occurring in the Waste Handling Building (Building 411). There is no emergency shower located in the Waste Handling Building (Building 411). Instead there is a decontamination shower located north of this building in the decontamination trailer which serves the Waste Handling Building (Building 411).

The Class 2 Permit Modification Request (**PMR**) submitted by the Permittees on June 3, 2016, misidentified the location of the emergency shower that serves the Waste Handling Building (Building 411). The Class 2 Permit Modification Request was subsequently approved by NMED on September 19, 2016, with an effective date of October 19, 2016, for the permit modifications. Prior to October 19, 2016, the “Emergency Showers” line items specified “Surface” as the location of the equipment in Table D-6. During the Class 2 PMR development, additional specificity was provided for some of the emergency equipment identified in the newly-proposed Table D-2. In addressing this, the location of the emergency shower equipment serving the Waste Handling Building (Building 411) was misidentified in the Class 2 PMR. The emergency shower equipment that serves the Waste Handling Building (Building 411) is in a decontamination trailer just north of the Waste Handling Building (in front of Building 952, between Buildings 243 and 455). This central location allows the decontamination trailer to serve surface locations such as the Waste Handling Building (Building 411) and the underground areas (e.g. personnel brought up from the underground via the Salt Handling Shaft).

Revised Permit Text:

**Table D-2
Emergency Equipment Maintained at the Waste Isolation Pilot Plant**

Equipment	Description and Capabilities	Location
Communications		
Building Fire Alarms	Fire alarm panels, fire alarm transmitter, audible alarm devices (e.g., horns, bells, tones) that provide notification of fires; transmitted to the CMR	Guard and Security Building (Building 458), Water Pumphouse (Building 456), Warehouse/Shops Building (Building 453), Exhaust Shaft Filter Building (Building 413), Support Building (Building 451), CMR/Computer Room, Waste Handling Building (Building 411), TRUPACT Maintenance Building (Building 412), Salt Handling (SH) Shaft Hoisthouse (Building 384), Auxiliary Warehouse Building (Building 455), Engineering Building (Building 486), Training Building (Building 489), Safety and Emergency Services Facility (Building 452), and surface Hazardous Waste Staging Areas (Buildings 474A and 474B)
Underground Fire Alarms	Fire alarm panels, fire alarm transmitter, and audible/visual alarm devices (e.g., horns, bells, strobes) that provide notification of fires; transmitted to the CMR	Fire detection and control panel locations: Waste Shaft Underground Station, SH Shaft Underground Station, Between E-140 and E-300 in S-2180 Drift, Fuel Station (N150/W170)
Site Notification System; Underground Evacuation Alarm System	For surface, alarms and notifications transmitted over paging channel of the public address system, manually initiated; for underground, audible alarm	Site-wide
Public Address System	Includes intercom phones; handset stations and loudspeaker assemblies	Site-wide

Equipment	Description and Capabilities	Location
Mine Pager Phones	Battery-operated paging system	Underground at S550/W30, S1000/W30, S1950/E140, SH Shaft Collar and Underground Station Waste Shaft Collar and Underground Station; – surface at Support Building (Building 451, FSM desk, CMR, lamproom), Safety and Emergency Services Facility (Building 452, Fire Department workstation area, Mine Rescue Room)
Portable Radios	Two-way, portable; transmits and monitors information to/from other transmitters	Issued to individuals
Plant Base Radios	Two-way, stationary; transmits and monitors information to/from other transmitters	Safety and Emergency Services Facility (Building 452), Guard and Security Building (Building 458), Support Building (Building 451, CMR, FSM desk)
Mobile Phones	Provide communications link between emergency response personnel, as needed	Issued to individuals plus emergency vehicles
Spill Response Equipment and Materials		
HAZMAT Equipment	Spill response equipment and supplies, PPE, and decontamination supplies stored and maintained in accordance with NFPA 1901 and as documented in WIPP facility files	Surface, in designated areas near Safety and Emergency Services Facility (Building 452)
Absorbent Materials	Containment or cleanup of spills, including: Pressurized spill-response gun; Absorbent sheets and/or dikes for containment or cleanup of spills of oil, petroleum-based chemicals, and general liquids; Spill-control material for solvents and neutralizing absorbents and for acids/caustics	Surface, in designated areas near Safety and Emergency Services Facility (Building 452)
Medical Resources		
Ambulance	A minimum of one ambulance, maintained and equipped in accordance with the New Mexico Ambulance Standard, 18.3.14 NMAC, and as documented in WIPP facility files	Surface at Safety and Emergency Services Facility (Building 452, Vehicle Bay)
Medical Cart	A minimum of one medical cart, equipped to provide basic life support operations, as documented in WIPP facility files	Underground (Emergency Vehicle Parking/Charging Area at S700/E140)
Miners First Aid Stations	Equipped per 30 CFR 57.15001	Underground (Salt Shaft Area, Waste Shaft Area, E300 Maintenance Shop, and at S1000/W30, S1300/W30, and S1950/E140)

Equipment	Description and Capabilities	Location
Fire Detection and Fire Suppression Equipment		
Building Smoke, Thermal Detectors, or Manual Pull Stations	Devices that trigger an alarm and/or fire suppression system	Guard and Security Building (Building 458), Warehouse/Shops Building (Building 453), Support Building (Building 451, CMR/Computer Room), Waste Handling Building (Building 411), TRUPACT Maintenance Building (Building 412), Underground Fuel Station (N150/W170), SH Shaft Hoisthouse (Building 384), Engineering Building (Building 486), Safety and Emergency Services Facility (Building 452), and Training Building (Building 489)
Fire Trucks	A minimum of two fire trucks to assist in fighting fires; firefighter equipped in accordance with NFPA 1901 and/or 1906 and as documented in WIPP facility files	Surface at Safety and Emergency Services Facility (Building 452, Vehicle Bay)
Rescue Cart/Truck	A minimum of two special-purpose vehicles, one on the surface and one in the underground; light rescue units, equipped in accordance with the NFPA 1901 and as documented in WIPP facility files	Surface at Safety and Emergency Services Facility (Building 452, Vehicle Bay) and Underground (Emergency Vehicle Parking/Charging Area at S700/E140)
Fire Suppression Cart	A minimum of one special-purpose electric cart to assist in fighting fires; equipped with a minimum of one fire extinguisher	Underground (Emergency Vehicle Parking/Charging Area at S700/E140)
Fire Extinguishers	Hand-held fire extinguishers; located throughout the facility in accordance with NFPA-10	Surface and underground locations used for hazardous waste management, as documented in WIPP facility files
Automatic Dry Chemical Extinguishing Systems	Automatic; actuated by thermal detectors or by manual pull stations	Underground fuel station (N150/W170)
Automatic Fire Suppression Systems on liquid fueled vehicles	Individual automatic fire suppression systems installed on applicable liquid-fueled vehicles, as determined by a fire risk assessment performed in accordance with NFPA 122	Surface and underground locations used for hazardous waste management, as documented in WIPP facility files

Equipment	Description and Capabilities	Location
Sprinkler Systems	NFPA water-based fire suppression systems	Water Pumphouse (Building 456), Guard and Security Building (Building 458), Waste Handling Building (Building 411, CH Bay, RH Bay, and Overpack Repair Areas only), TRUPACT Maintenance Building (Building 412), Exhaust Shaft Filter Building (Building 413), and surface Hazardous Waste Staging Areas (Buildings 474A and 474B)
Water Tanks, Hydrants	Fire suppression water supply; one 180,000-gallon capacity tank, plus a second tank with 100,000 gallon reserve	Tanks are at southwestern edge of WIPP facility; pipelines and hydrants are throughout the surface
Fire Water Pumps	Fire suppression water supply; pumps are minimally rated at 125 pounds per square inch, 1,500 gallons per minute centrifugal pump, one with electric motor drive, the other with diesel engine; pressure maintenance jockey pump	Water Pumphouse (Building 456)
Personal Protection Equipment		
Head Lamps	Mounted on hard hat; battery operated	Each person underground
Underground Self-Rescuer Units	Short-term rebreathers per 30 CFR 57.15030	Each person underground
Self-Contained Self-Rescuer	Air supply; a minimum of 12 caches in the underground; self-contained rescue units shall be adequate to protect an individual for one hour or longer or, alternatively, sufficient to allow the employee time to reach an additional self-contained self-rescue device in the underground per NMSA 69-8-16	Cached throughout the underground
Mine Rescue Self-Contained Breathing Apparatus (SCBA)	Oxygen supply; 4-hour closed circuit units consistent with 30 CFR 49.6; a minimum of 12 units, one for each Mine Rescue Team member	Safety and Emergency Services Facility (Building 452, Mine Rescue Training Room)
Fire Department Self-Contained Breathing Apparatus (SCBA)	Air supply; a minimum of 12 units; SCBAs shall meet the minimum requirements established per NFPA 1981	Surface Fire Trucks and Rescue Truck; Underground Rescue Cart
General Plant Emergency Equipment		
Emergency Lighting	For employee evacuation, and fire/spill containment; linked to main power supply, and selectively linked to back up diesel power supply and/or battery-backed power supply	Waste Handling Building (Building 411); TRUPACT Maintenance Building (Building 412), and Exhaust Shaft Filter Building (Building 413)
Backup Power Sources	A minimum of two diesel generators, and battery-powered uninterruptible power supply (UPS)	Generators are east of Safety and Emergency Services Facility (Building 452); UPS is located at the essential loads
Emergency Hoist	Hoist in Air Intake Shaft	Air Intake Shaft (Building 361)

Equipment	Description and Capabilities	Location
Emergency Showers	For emergency flushing of chemical contact or injury	Waste Handling Building (Building 411) <u>is served by the decontamination shower trailer located north of Building 411, in front of Building 952, between Buildings 243 and 455;</u> and surface Hazardous Waste Staging Areas (Building 474A)
Emergency Eyewash Equipment	For emergency flushing of affected eyes	Waste Handling Building (Building 411, RH Bay, Site Derived Waste Area, Waste Shaft Collar, and Room 108 TRUPACT III only), TRUPACT Maintenance Building (Building 412), Exhaust Shaft Filter Building (Building 413), surface, Hazardous Waste Staging Areas (Building 474A , Waste Oil Retainer Area), and the underground Hazardous Waste Staging Area (S550/E140)
Overpack containers for TRU Mixed Waste	85 Gallon drums SWBs TDOP	Warehouse Annex (Building 481)
Aquaset or Cement	Material for solidification of liquid waste generated as a result of fire fighting water or decontamination solutions	Surface Connex A, located south of Waste Handling Building (Building 411)
TDOP Upender	Upender facilitates overpacking standard waste boxes	Waste Handling Building (Building 411)
Non hazardous Decontaminating Agents	For decontamination of surfaces, equipment, and personnel	Waste Handling Building (Building 411); Surface Connex A, located south of Building 411