PART 4 - GEOLOGIC REPOSITORY DISPOSAL

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PART 4 - GEOLOGIC REPOSITORY DISPOSAL

4.1 DESIGNATED DISPOSAL UNITS

This Part authorizes the management and disposal of contact-handled (**CH**) and remote-handled **(RH**) transuranic (**TRU**) mixed waste containers in the Underground Hazardous Waste Disposal Units (**Underground HWDUs**) identified herein. Specific facility and process information for the management and disposal of CH and RH TRU mixed waste in the Underground HWDUs is incorporated in Permit Attachment A2 (Geologic Repository).

4.1.1 Underground Hazardous Waste Disposal Units

The Underground HWDUs are located at the WIPP facility approximately 2,150 feet (665 meters) below the ground surface within the Salado formation. An Underground HWDU is a single excavated panel, consisting of seven rooms and two access drifts, designated for disposal of TRU mixed waste containers.

The Permittees may dispose TRU mixed waste in the Underground HWDUs, provided the Permittees comply with the following conditions:

4.1.1.1 Disposal Containers

The Permittees shall dispose TRU mixed waste in containers specified in Permit Section 4.3.1.

4.1.1.2 Disposal Locations and Quantities

The Permittees shall dispose TRU mixed waste containers in ten Underground HWDUs, as specified in Table 4.1.1 below and depicted in Permit Attachment M, Figure M-43. The Permittees may dispose quantities of TRU mixed waste containers in these locations not to exceed the maximum capacities specified in Table 4.1.1 below. The Permittees may increase these capacities for a specific HWDU subject to the following conditions:

i. The Permittees may submit a Class 1 permit modification requiring prior approval of the Secretary in accordance with 20.4.1.900 NMAC (incorporating 40 CFR §270.42(a)) to increase the CH TRU mixed waste capacity by 35,300 ft^3 (1,000 m^3) or less, and the RH TRU mixed waste capacities to a maximum of 22,950 ft^3 (650 m^3).

   At least 15 calendar days before submittal to NMED, the Permittees shall post a link to the Class 1 permit modification on the WIPP Home Page and inform those on the e-mail notification list.

ii. Notwithstanding Permit Section 4.1.1.2.i, any Underground HWDU CH TRU waste capacity may be increased by up to 25 percent of the total maximum capacity in Table 4.1.1 by

submitting a Class 2 permit modification request in accordance with 20.4.1.900 NMAC (incorporating 40 CFR §270.42(b)).

iii. Notwithstanding Permit Sections 4.1.1.2.i and ii, future capacity in Table 4.1.1 shall be requested through the submittal of a renewal application which describes the final facility footprint.

Table 4.1.1 - Underground HWDUs

Description[1]	Waste Type	Maximum TRU Mixed Waste Capacity[2]	Final TRU Mixed Waste Volume[3]	Final LWA TRU Waste Volume[4]
Panel 1	CH TRU	636,000ft^3 (18,000 m^3)	370,685.70 ft^3 (10,496.65 m^3)	267,096.48 ft^3 (7,563.33 m^3)
Panel 2	CH TRU	636,000 ft^3 (18,000 m^3)	635,581.72 ft^3 (17,997.67 m^3)	462,712.19 ft^3 (13,102.55 m^3)
Panel 3	CH TRU	662,150 ft^3 (18,750 m^3)	603,600.40 ft^3 (17,092.06 m^3)	348,299.73 ft^3 (9,862.75 m^3)
Panel 4	CH TRU	662,150 ft^3 (18,750 m^3)	503,500.27 ft^3 (14,257.54 m^3)	367,973.88 ft^3 (10,419.86 m^3)
	RH TRU	12,570 ft^3 (356 m^3)	6,223.15 ft^3 (176.22 m^3)	2,974.91 ft^3 (84.24 m^3)
Panel 5	CH TRU	662,150 ft^3 (18,750 m^3)	562,454.22 ft^3 (15,926.93 m^3)	427,749.61 ft^3 (12,112.52 m^3)
	RH TRU	15,720 ft^3 (445 m^3)	8,297.53 ft^3 (234.96 m^3)	5,416.21 ft^3 (153.37 m^3)
Panel 6	CH TRU	662,150 ft^3 (18,750 m^3)	510,911.06 ft^3 (14,467.39 m^3)	403,569.65 ft^3 (11,427.82 m^3)
	RH TRU	18,860 ft^3 (534 m^3)	7,578.53 ft^3 (214.60 m^3)	3,990.20 ft^3 (112.99 m^3)
Panel 7	CH TRU	662,150 ft^3 (18,750 m^3)	372,020.59 ft^3 (10,534.45 m^3)	254,609.57 ft^3 (7,209.74 m^3)
	RH TRU	22,950 ft^3 (650 m^3)	914.30 ft^3 (25.89 m3)	393.05 ft^3 (11.13 m^3)
Panel 8	CH TRU	662,150 ft^3 (18,750 m^3)		
	RH TRU	22,950 ft^3 (650 m^3)		
Panel 11	CH TRU	662,150 ft^3 (18,750 m^3)		
	RH TRU	22,950 ft^3 (650 m^3)		
Panel 12	CH TRU	662,150 ft^3 (18,750 m^3)		
	RH TRU	22,950 ft^3 (650 m^3)		
Total	CH TRU	6,569,200 ft^3 (186,000 m^3)		
	RH TRU	138,950 ft^3 (3,935 m^3)		

1. The area of each panel is approximately 124,150 ft^2 (11,533 m^2).

2. Maximum TRU Mixed Waste Capacity is the maximum TRU mixed waste volume that may be emplaced in each panel. This volume is calculated based on the gross internal volume of the outermost disposal containers.

3. Final TRU Mixed Waste Volume is calculated based on the gross internal volume of the outermost disposal containers. The volume listed here is reported pursuant to Permit Part 6, Section 6.10.1.

4. Final LWA TRU Waste Volume is calculated based on the volume of TRU waste inside a disposal container. The volume listed here is tracked and reported by the DOE internally pursuant to the WIPP Land Withdrawal Act total capacity limit of 6.2 million ft^3 (175,564 m^3) of TRU waste (Pub. L. 102-579, as amended) and is included here for informational purposes. A link to the LWA TRU Waste Volume is posted on www.wipp.energy.gov.

Note: The final TRU mixed waste and final LWA TRU waste volumes in Table 4.1.1 are reported to the nearest hundredth ft^3 and m^3.

4.2 PERMITTED AND PROHIBITED WASTE IDENTIFICATION

4.2.1 Permitted Waste

The Permittees may dispose TRU mixed waste in the Underground HWDUs, provided the Permittees comply with the following conditions:

4.2.1.1 Waste Analysis Plan

The TRU mixed waste shall be characterized to comply with the waste analysis plan specified in Permit Section 2.3.1.

4.2.1.2 TSDF Waste Acceptance Criteria

The TRU mixed waste shall comply with the treatment, storage, and disposal facility (**TSDF**) waste acceptance criteria specified in Permit Section 2.3.3.

4.2.1.3 Hazardous Waste Numbers

The TRU mixed waste shall contain only hazardous waste numbers specified in Permit Section 2.3.4.

4.2.1.4 Prioritization and Risk Reduction of New Mexico Waste

Pursuant to 20.4.1.900 NMAC (incorporating 40 CFR 270.10.k), within 15 days of publishing the Annual Transuranic Waste Inventory Report (ATWIR), the Permittees shall certify to the NMED that there is sufficient TRU Mixed Waste Volume capacity in permitted HWDUs to dispose of the New Mexico generator/storage site waste detailed in this report. The certification shall contain the underlying calculations and data used to validate the certification. While this permit remains in effect, the Permittees shall prioritize by so certifying the emplacement at WIPP of stored (including buried) TRU mixed waste from the clean-up activities at the Los Alamos National Laboratory (LANL).

4.2.1.5 Legacy TRU Waste Disposal Plan

The Legacy TRU Waste Disposal Plan previously developed by the Permittees shall be publicly posted on the WIPP website. To the extent practicable as articulated in the final Plan, Panel 12 will be reserved for the disposal of legacy TRU mixed waste.

Derived waste may be disposed in the Underground HWDUs as specified in Permit Section 2.3.5.

4.2.2 Prohibited Waste

4.2.2.1 General Prohibition

The Permittees shall not dispose any TRU mixed waste that fails to comply with Permit Section 4.2.1.

4.2.2.2 Specific Prohibition

After this Permit becomes effective, the Permittees shall not dispose non-mixed TRU waste in any Underground HWDU unless such waste is characterized in accordance with the requirements of the WAP specified in Permit Section 2.3.1. The Permittees shall not dispose TRU mixed waste in any Underground HWDU if the Underground HWDU contains non-mixed TRU waste which was disposed of after this Permit became effective and was not characterized in accordance with the requirements of the WAP.

4.3 DISPOSAL CONTAINERS

4.3.1 Acceptable Disposal Containers

The Permittees shall use containers that comply with the requirements for U.S. Department of Transportation shipping container regulations (49 CFR §173 - Shippers - General Requirements for Shipment and Packaging, and 49 CFR §178 - Specifications for Packaging) for disposal of TRU mixed waste at WIPP. The Permittees are prohibited from disposing TRU mixed waste in any container not specified in Permit Attachment A1 (Container Storage), Section A1-1b, as set forth below:

4.3.1.1 Standard 55-gallon (208-liter) Drum

Standard 55-gallon drums are configured as a 7-pack or as an individual unit.

4.3.1.2 Standard Waste Box (**SWB**)

An SWB is configured as an individual unit.

4.3.1.3 Ten-drum Overpack (**TDOP**)

A TDOP is configured as an individual unit.

4.3.1.4 85-gallon (322-liter) Drum

85-gallon drums are configured as a 4-pack or as an individual unit.

4.3.1.5 100-gallon (379-liter) Drum

100-gallon drums are configured as a 3-pack or as an individual unit.

4.3.1.6 RH TRU Canister

An RH TRU canister is configured as an individual unit.

4.3.1.7 Standard Large Box 2 (**SLB2**)

An SLB2 is configured as an individual unit.

4.3.1.8 Shielded Container

Shielded containers are configured as either a three-pack, a two-pack, or a single unit. The SC-30G1 is configured as a three-pack. The SC-30G2 and SC-55G1 are configured as two-packs. The SC-30G3 and SC-55G2 are configured as single units.

4.3.2 Condition of Containers

If a container holding TRU mixed waste is not in good condition (e.g., severe rusting, apparent structural defects) or if it begins to leak prior to disposal in an Underground HWDU, the Permittees shall manage the TRU mixed waste containers specified in Permit Section 4.3.1 as specified in Permit Attachment A1 and in compliance with 20.4.1.500 NMAC (incorporating 40 CFR §264.171).

4.4 VOLATILE ORGANIC COMPOUND LIMITS

The Permittees shall limit releases to the air of volatile organic compound waste constituents (**VOCs**) as specified by the following conditions, as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.601(c)):

4.4.1 Room-Based Limits

The measured concentration of VOCs in any open (active) room and in each closed room in active panels within an Underground HWDU shall not exceed the limits specified in Table 4.4.1:

Table 4.4.1 - VOC Room-Based Limits

	VOC Room-Based Concentration Limit (PPMV)		
Compound	**Panels 1-7**	**Panel 8**	**Panels 11-12**
Carbon Tetrachloride	9,625	3,208	5,775
Chlorobenzene	13,000	13,000	13,000
Chloroform	9,930	3,310	5,958
1,1-Dichloroethylene	5,490	1,830	3,294
1,2-Dichloroethane	2,400	800	1,440
Methylene Chloride	100,000	33,333	60,000
1,1,2,2-Tetrachloroethane	2,960	986	1,776
Toluene	11,000	8,023	11,000
1,1,1-Trichloroethane	33,700	11,233	20,220

Table 4.4.1 - VOC Room-Based Limits

Compound	VOC Room-Based Concentration Limit (PPMV)		
	Panels 1-7	**Panel 8**	**Panels 11-12**
Trichloroethylene	48,000	16,000	28,800

There are no maximum concentration limits for other VOCs.

4.4.2 Determination of VOC Room-Based Limits

The Permittees shall confirm the VOC concentration and emission rate limits identified in Permit Section 4.4.1 using the VOC Monitoring Plan specified in Permit Attachment N (Volatile Organic Compound Monitoring Plan). The Permittees shall conduct monitoring of VOCs as specified in Permit Sections 4.6.2 and 4.6.3.

4.5 DESIGN, CONSTRUCTION, AND OPERATION REQUIREMENTS

The Permittees shall design, construct, and operate the Underground HWDUs as specified by the following conditions and as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.601):

4.5.1 Repository Design

The Permittees shall construct each Underground HWDU in conformance with the requirements specified in Permit Attachment A2.

4.5.2 Repository Construction

4.5.2.1 Construction Requirements

Subject to Permit Section 4.5.1, the Permittees may excavate the following Underground HWDUs, as specified in Section A2-2a(3), “Subsurface Structures (Underground Hazardous Waste Disposal Units (HWDUs))”:

- Panel 10 (Disposal area access drift)
- Panel 8
- Panel 11
- Panel 12

Prior to disposal of TRU mixed waste in a newly constructed Underground HWDU, the Permittees shall comply with the certification requirements specified in Permit Section 1.7.11.2.

4.5.2.2 Notification Requirements

At least 30 calendar days prior to the projected start date of excavation of each Underground HWDU, the Permittees shall provide written notification to the Secretary stating the projected start date of excavation, along with supporting rationale (e.g., projected waste receipt rate, etc.). The Permittees shall post a link to the notification transmittal letter on the

WIPP Home Page and inform those on the e-mail notification list as specified in Permit Section 1.11.

4.5.3 Repository Operation

4.5.3.1 Underground Traffic Flow

The Permittees shall restrict and separate the ventilation and traffic flow areas in the underground TRU mixed waste handling and disposal areas from the ventilation and traffic flow areas for mining and construction equipment, except that during waste transport in W-30, ventilation need not be separated north of S-1600.

The Permittees shall designate routes for the traffic flow of TRU mixed waste handling equipment and construction equipment as required by Permit Attachment A3 (Traffic Patterns), Section A3-4, “Underground Traffic.” These routes will be recorded on a mine map that is posted in a location where persons entering the underground can read it. Whenever the routes are changed, the map will be updated. Maps will be available in facility files until facility closure.

4.5.3.2 Ventilation

The Permittees shall maintain a minimum active room ventilation rate of 35,000 standard ft^3/min (scfm) in each active room when waste disposal is taking place and workers are present in the room, as specified in Permit Attachment A2, Section A2-2a(3), “Subsurface Structures (Underground Ventilation System Description),” and as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.601(c)). If an active room ventilation rate of 35,000 scfm cannot be met, actions as described in WIPP standard operating procedures shall be taken. The Permittees shall notify NMED by e-mail within 15 calendar days of commencement of waste emplacement operations taking place below 35,000 scfm. The notification shall include the date, start time, end time, reason and implementing measure taken, as applicable. If the Permittees have not completed the waste emplacement activity by the time of this notification, a follow-up email shall be provided within 15 calendar days to notify NMED of the end of the waste emplacement activity and other relevant information not previously provided.

4.5.3.3 Ventilation Barriers

The Permittees shall construct ventilation barricades in active Underground HWDUs to restrict the flow of mine ventilation air through full disposal rooms, as specified in Permit Attachment A2, Section A2-2a(3), “Subsurface Structures (Underground Ventilation System Description)” and as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.601(c)).

4.6 MAINTENANCE AND MONITORING REQUIREMENTS

The Permittees shall maintain and monitor the Underground HWDUs as specified by the following conditions and as required by 20.4.1.500 NMAC (incorporating 40 CFR §§264.601 and 264.602):

4.6.1 Geomechanical Monitoring

4.6.1.1 Implementation of Geomechanical Monitoring Program

The Permittees shall implement a geomechanical monitoring program in each Underground HWDU as specified in Permit Attachment A2, Section A2-5b(2), “Geomechanical Monitoring” and as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.602).

4.6.1.2 Reporting Requirements

The Permittees shall submit to the Secretary an annual report in October evaluating the geomechanical monitoring program and shall include geomechanical data collected from each Underground HWDU during the previous year, as specified in Permit Attachment A2, Section A2-5b(2), “Geomechanical Monitoring”, and shall also include a map showing the current status of HWDU mining.

4.6.1.3 Notification of Adverse Conditions

When evaluation of the geomechanical monitoring system data identifies a trend towards unstable conditions which requires a decision whether to terminate waste disposal activities in any Underground HWDU, the Permittees shall provide the Secretary with the same report provided to the WIPP Operations Manager within seven calendar days of its issuance, as specified in Permit Attachment A2, Section A2-5b(2)(a), “Description of the Geomechanical Monitoring System”. The Permittees shall post a link to the adverse condition notice transmittal letter on the WIPP Home Page and inform those on the e-mail notification list as specified in Permit Section 1.11.

4.6.2 Repository Volatile Organic Compound Monitoring

4.6.2.1 Implementation of Repository VOC Monitoring

The Permittees shall implement repository VOC monitoring and proficiency testing, as specified in Permit Attachment N (Volatile Organic Compound Monitoring Plan) and as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.602 and §264.601(c)). The Permittees shall implement repository VOC monitoring until the certified closure of all Underground HWDUs.

4.6.2.2 Reporting Requirements

The Permittees shall report to the Secretary annually in October the data and analysis of the VOC Monitoring Plan from the prior calendar year.

4.6.2.3 Notification Requirements

After each sampling event for the compounds listed in Table 4.6.2.3, the Permittees shall calculate the total and running annual averages for the carcinogenic and the total non-carcinogenic risk to the non-waste surface worker, using the methodology in Attachment N and the recommended EPA risk factors listed in Table 4.6.2.3.

The Permittees shall notify the Secretary in writing, within seven calendar days of obtaining validated analytical results, whenever the total and/or the running annual average carcinogenic risk to the non-waste surface worker exceeds 10^{-5} or the total and/or the running annual average non-carcinogenic risk as measured by the hazard index exceeds 1.0.

The Permittees shall post a link to any exceedance notice transmittal letter on the WIPP Home Page and inform those on the e-mail notification list as specified in Permit Section 1.11.

The Permittees shall review EPA risk factors and the tentatively identified compound list annually and will submit the appropriate permit modification to update Table 4.6.2.3 as needed.

Table 4.6.2.3 - Recommended EPA Risk Factors

Compound	Carcinogenic IUR $(ug/m^3)^{-1}$	Non-carcinogenic RfC (mg/m^3)
Carbon Tetrachloride	6.0×10^{-6}	1.0×10^{-1}
Chlorobenzene	N/A	5.0×10^{-2}
Chloroform	2.3×10^{-5}	1.95×10^{-3}
1,1-Dichloroethylene	N/A	3.96×10^{-3}
1,2-Dichloroethane	2.6×10^{-5}	7.0×10^{-3}
Methylene Chloride	1.0×10^{-8}	6.0×10^{-1}
1,1,2,2-Tetrachloroethane	5.8×10^{-5}	N/A
Toluene	N/A	5.0
1,1,1-Trichloroethane	N/A	5.0
Trichloroethylene	4.1×10^{-6}	2.0×10^{-3}

IUR = Inhalation Unit Risk from EPA Integrated Risk Information System (IRIS) Database and/or EPA Regional Screening Levels Generic Tables

RfC = Reference Concentration from EPA IRIS Database and/or EPA Regional Screening Levels Generic Tables

N/A = not applicable (No value published in the IRIS Database)

4.6.2.4 Remedial Action

If the running annual average for the total carcinogenic risk due to releases of VOCs specified in Table 4.6.2.3 exceeds 10^{-5}, or if the running annual average for the total non-carcinogenic hazard index due to releases of VOCs specified in Table 4.6.2.3 exceeds 1.0, the

Permittees shall cease disposal in the active CH waste disposal room and install ventilation barriers as specified in Permit Section 4.5.3.3. Alternatively, prior to reaching these action levels, the Permittees may propose an alternative remedial action plan to the Secretary. The Permittees may implement such plans in lieu of closing the active room only after approval by the Secretary.

If the running annual average for the total carcinogenic risk due to releases of VOCs specified in Table 4.6.2.3 exceeds 10^{-5} or if the running annual average for the total non-carcinogenic hazard index due to releases of VOCs specified in Table 4.6.2.3 exceeds 1.0 for six consecutive months, the Permittees shall close the affected Underground HWDU as specified in Permit Section 4.1.1. Alternatively, prior to reaching these action levels for six consecutive months, the Permittees may propose an alternative remedial action plan to the Secretary. The Permittees may implement such plans in lieu of closing the active HWDU only after approval by the Secretary.

For any remedial action taken under this Permit Section, the Permittees shall submit to the Secretary written quarterly status reports, beginning 30 calendar days after the Permittees submit the initial notification in Permit Section 4.6.2.3 which resulted in the remedial action. The quarterly status report shall analyze the cause of exceedance, describe the implementation and results of the remedial action, and describe measures taken to prevent future exceedances. The Permittees shall submit such reports until the Secretary determines the remedial action has been completed in accordance with all applicable requirements of this Permit.

4.6.3 Disposal Room Volatile Organic Compound Monitoring

4.6.3.1 Implementation of Disposal Room VOC Monitoring

The Permittees shall implement disposal room VOC monitoring as specified in Permit Attachment N and as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.602 and §264.601(c)) and Section 310 of Public Law 108-447.

4.6.3.2 Notification Requirements

The Permittees shall notify the Secretary in writing, within seven calendar days of obtaining validated analytical results, whenever the concentration of any VOC specified in Table 4.4.1 in any closed room in an active panel, or in the immediately adjacent closed room exceeds the action levels specified in Table 4.6.3.2. The Permittees shall post a link to the exceedance notice transmittal letter on the WIPP Home Page and inform those on the e-mail notification list as specified in Permit Section 1.11.

Table 4.6.3.2 - Action Levels for Disposal Room Monitoring

Compound	50% Action Level for VOC Constituents of Concern in Any Closed Room, ppmv	95% Action Level for VOC Constituents of Concern in Active Open or Immediately Adjacent Closed Room, ppmv
Panels 1-7		
Carbon Tetrachloride	4,813	9,145
Chlorobenzene	6,500	12,350
Chloroform	4,965	9,433
1,1-Dichloroethylene	2,745	5,215
1,2-Dichloroethane	1,200	2,280
Methylene Chloride	50,000	95,000
1,1,2,2-Tetrachloroethane	1,480	2,812
Toluene	5,500	10,450
1,1,1-Trichloroethane	16,850	32,015
Trichloroethylene	24,000	45,600
Panel 8		
Carbon Tetrachloride	1,604	3,047
Chlorobenzene	6,500	12,350
Chloroform	1,655	3,144
1,1-Dichloroethylene	915	1,738
1,2-Dichloroethane	400	760
Methylene Chloride	16,665	31,665
1,1,2,2-Tetrachloroethane	493	936
Toluene	4,011	7,621
1,1,1-Trichloroethane	5,616	10,671
Trichloroethylene	8,000	15,200
Panels 11-12		
Carbon Tetrachloride	1,604	3,047
Chlorobenzene	6,500	12,350
Chloroform	1,655	3,144
1,1-Dichloroethylene	915	1,738
1,2-Dichloroethane	400	760
Methylene Chloride	16,665	31,665
1,1,2,2-Tetrachloroethane	493	936
Toluene	4,011	7,621
1,1,1-Trichloroethane	5,616	10,671
Trichloroethylene	8,000	15,200

4.6.3.3 Remedial Action

Upon receiving validated analytical results that indicate one or more of the VOCs specified in Table 4.4.1, in any of the closed rooms in an active panel has reached the "50% Action Level" in Table 4.6.3.2, the sampling frequency for such closed rooms will increase to once per week. The once per week sampling will continue either until the concentrations in the closed room(s) fall below the "50% Action Level", or until closure of Room 1 of the panel, whichever occurs first. If one or more of the VOCs in Table 4.4.1, in the active open room or immediately adjacent closed room reaches the "95% Action Level" in Table 4.6.3.2, another sample will be taken to confirm the existence of such a condition. If the second sample confirms that one or more of VOCs in the immediately adjacent closed room have reached the "95% Action Level", the active open room will be abandoned, ventilation barriers will be installed as specified in Permit Section 4.5.3.3, waste emplacement will proceed in the next open room, and monitoring of the subject closed room will continue at a frequency of once per week until commencement of panel closure. Alternatively, prior to reaching these action levels, the Permittees may propose an alternative remedial action plan to the Secretary. The Permittees may implement such plans in lieu of closing and abandoning the active room only after approval by the Secretary.

4.7 INSPECTION SCHEDULES AND PROCEDURES

The Permittees shall inspect the Underground HWDUs at least weekly, as specified in Permit Attachment E (Inspection Schedule, Process and Forms), Tables E-1 and E-1a, and as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.15). The Permittees shall perform these inspections to detect malfunctions, signs of deterioration, operator errors, discharges, or any other factors which have caused or may cause a release of hazardous wastes or hazardous waste constituents to the environment or which may compromise the ability of any Underground HWDU to comply with the environmental performance standards in 20.4.1.500 NMAC (incorporating 40 CFR §264.601).

4.8 RECORDKEEPING

4.8.1 Underground HWDU Location Map

The Permittees shall maintain, in the operating record, a map containing the exact location and dimensions of each Underground HWDU with respect to permanently surveyed benchmarks.

4.8.2 Disposal Waste Type and Location

The Permittees shall maintain, in the operating record, a record identifying the types and quantities of TRU mixed waste in each Underground HWDU and the disposal location of each container or container assembly (e.g., a 7-pack of standard 55-gallons drums) within each Underground HWDU, using the following fields from the WWIS data dictionary:

1. Panel Number
2. Room Number or Drift Number

3. Row Number (for CH TRU mixed waste) or Borehole Number (for RH TRU mixed waste)
4. Column Number (for CH TRU mixed waste)
5. Column Height (for CH TRU mixed waste)
6. Container Type Code
7. Container Identification Number
8. Manifest Document Number
9. Disposal Date

The Permittees shall also maintain, in the operating record, a map or diagram depicting the location and quantity of each waste. The map or diagram shall include a cross reference to specific manifest document numbers, if the waste was accompanied by a manifest, as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.73(b)(2)).

4.8.3 Ventilation Rate

The Permittees shall maintain, in the operating record, a record identifying any non-conformance to the ventilation rate specified in Permit Section 4.5.3.2.