

III. MODULE III - CONTAINER STORAGE

III.A. DESIGNATED CONTAINER STORAGE UNITS

This Module authorizes the storage and management of transuranic (**TRU**) mixed waste containers in the Waste Handling Building and Parking Area Container Storage Units described below. Specific facility and process information for the storage and management of TRU mixed waste in these Container Storage Units is incorporated in Permit Attachment M1 (Container Storage).

III.A.1. Waste Handling Building Container Storage Unit

The Waste Handling Building Container Storage Unit (**WHB Unit**) is located in the Waste Handling Building (**WHB**) at the WIPP facility. The WHB Unit consists of the WHB contact-handled (**CH**) Bay and the remote-handled (**RH**) Complex. The areas and storage capacities for the WHB unit are defined in Table [III.A.1](#).

The Permittees may store and manage TRU mixed waste in the WHB Unit, provided the Permittees comply with the following conditions:

- III.A.1.a. Storage containers - the Permittees shall store TRU mixed waste in containers specified in Permit Condition [III.C.1](#).
- III.A.1.b. Storage locations and quantities - the Permittees may store TRU mixed waste containers in the locations in the WHB Unit, as specified in Table [III.A.1](#) below and depicted in Permit Attachment M1, Figures M1-1 and M1-17a, b, and c. The Permittees may store quantities of TRU mixed waste containers in these locations not to exceed the maximum capacities specified in Table [III.A.1](#) below.
- III.A.1.c. Use of CH Bay Surge Storage - The Permittees may use the CH Bay Surge Storage Area in Table [III.A.1](#) below only as specified in Permit Attachment M1, Section M1-1c(1).
- III.A.1.d. Notification of CH Bay Surge Storage Use - The Permittees shall notify the Secretary in writing upon using the CH Bay Surge Storage Area and provide justification for its use. Within 5 (five) calendar days of using Surge Storage, the Permittees shall post a link to the notice of CH Bay Surge Storage Area use on the WIPP Home Page, and inform those on the e-mail notification list. The Permittees shall

submit a report to the Secretary by October 27 of each year summarizing CH Bay Surge Storage Area usage.

Table III.A.1 - WHB Unit			
Description	Area	Maximum Capacity	Container Equivalent
CH Bay Storage Area	26,151 ft ² (2,430 m ²)	4,800 ft ³ (135.9 m ³)	13 loaded facility pallets and 4 CH Packages at the TRUDOCKS
CH Bay Surge Storage Area	included in CH Bay Storage Area	1,600 ft ³ (45.3 m ³)	5 loaded facility pallets
Derived Waste Storage Area	included in CH Bay Storage Area	66.3 ft ³ (1.88 m ³)	1 Standard Waste Box
Total for CH Waste	26,151 ft² (2,430 m²)	6,466.3 ft³ 183.1 m³	
RH Bay	12,552 ft ² (1,166 m ²)	156 ft ³ (4.4 m ³)	2 loaded casks and 1 drum of derived waste
Cask Unloading Room	382 ft ² (36 m ²)	74 ft ³ (2.1 m ³)	1 loaded cask
Hot Cell	1,841 ft ² (171 m ²)	94.9 ft ³ (2.7 m ³)	12 drums and 1 drum of derived waste
Transfer Cell	1,003 ft ² (93 m ²)	31.4 ft ³ (0.89 m ³)	1 canister
Facility Cask Loading Room	1,625 ft ² (151 m ²)	31.4 ft ³ (0.89 m ³)	1 canister
Total for RH Waste	17,403 ft² (1,617 m²)	387.7 ft³ (11.0 m³)	
Facility Total	43,554 ft² (4,047 m²)	6,854 ft³ (194.1 m³)	-

III.A.1.e.

Storage on pallets - the Permittees shall store TRU mixed waste containers unloaded from the Contact-Handled Packages (**TRUPACT-II** or **HalfPACT** shipping containers) on pallets in the WHB Unit, as described in Permit Attachment M1, Section M1-1c(1).

- III.A.1.f. Storage of derived waste - the Permittees shall store containers of TRU mixed derived waste only in the Derived Waste Storage Area, the RH Bay, and the RH Hot Cell. The Permittees shall store the derived waste containers on a pallet that provides secondary containment and elevates the containers at least 6 inches above the floor to protect them from contact with accumulated liquid.
- III.A.1.g. CH TRU mixed waste storage time limit - the Permittees shall not store a CH TRU mixed waste container in the WHB Unit for more than sixty (60) calendar days, with the exception of the Derived Waste Storage Area, where derived waste may be accumulated and stored until the container is full.
- III.A.1.h. Minimum aisle space - the Permittees shall maintain a minimum aisle space of 44 inches (1.1 m) between facility pallets in the CH Bay of the WHB Unit. The Permittees shall maintain adequate aisle space of 44 inches (1.1 m) between loaded casks in the RH Bay of the WHB Unit. For other locations within the RH Complex, sufficient aisle space will be maintained to assure that emergency equipment can be accessed or moved to the necessary locations.
- III.A.1.i. Storage of RH TRU mixed waste containers - the Permittees shall store RH TRU mixed waste in casks, canisters, or drums in the RH Complex as described in Permit Attachment M1, Section M1-1c(1).
- III.A.1.j. RH TRU mixed waste storage time limit - the Permittees shall not store a RH TRU mixed waste container in the RH Complex for more than sixty (60) calendar days, with the following exceptions:
- i. Derived Waste Storage Areas, where derived waste may be accumulated and stored until the container is full; and
 - ii. Hot Cell, where 55-gallon drums may be stored for no more than twenty five (25) of the sixty (60) calendar days.
- III.A.1.k. Hot Cell RH TRU mixed waste processing capacity - the processing capacity of the Hot

Cell is limited to 13,773 ft³ (390 m³) of RH TRU mixed waste.

III.A.2. Parking Area Container Storage Unit

The Parking Area Container Storage Unit (**Parking Area Unit**) is an asphalt and concrete surface extending from north of the rail sidings to the WHB, within the Controlled Area. The Parking Area Unit shall be enclosed by chain link fence. The Parking Area Unit shall comprise a surface area of no more than 137,050 ft² (12,730 m²), as depicted in Permit Attachment M1, Figure M1-2.

The Permittees may store and manage TRU mixed waste in the Parking Area Unit, provided the Permittees comply with the following conditions:

- III.A.2.a. Storage containers - the Permittees shall store TRU mixed waste in containers specified in Permit Condition [III.C.1](#). These TRU mixed waste containers shall be stored within the sealed Contact-Handled or Remote-Handled Packages described in Permit Attachment M1.
- III.A.2.b. Storage locations and quantities - the Permittees shall store TRU mixed waste containers in any location within the Parking Area Unit, as specified in Table [III.A.2](#) below. The Permittees may store quantities of TRU mixed waste containers within sealed Contact-Handled or Remote-Handled Packages in these locations not to exceed the maximum capacities specified in Table [III.A.2](#) below.
- III.A.2.c. Use of Parking Area Surge Storage - The Permittees may use the Parking Area Surge Storage in Table [III.A.2](#) below only when the maximum capacity in the Parking Area is reached and as specified in Permit Attachment M1, Section M1-1c(2).
- III.A.2.d. Notification of Parking Area Surge Storage Use - The Permittees shall notify the Secretary in writing upon using the Parking Area Surge Storage and provide justification for its use. Within 5 (five) calendar days of using Surge Storage, the Permittees shall post a link to the notice of Parking Area Surge Storage use on the WIPP Home Page, and inform those on the e-mail notification list. The Permittees shall submit a report to the Secretary by October 27 of each year summarizing Parking Area Surge Storage usage.

Table <u>III.A.2</u> - Parking Area Unit			
Description	Area	Maximum Capacity	Container Equivalent
Parking Area	137,050 ft ² (12,730 m ²)	6,734 ft ³ (191 m ³)	40 Contact- Handled Packages containing waste and 8 Remote-Handled Packages containing waste. The total number of Contact-Handled Packages containing waste in the Parking Area Unit cannot exceed 50.
Parking Area Surge Storage	included in Parking Area	2,129 ft ³ (60 m ³)	12 Contact-Handled Packages and 4 Remote-Handled Packages. The total number of Contact-Handled Packages containing waste in the Parking Area Unit cannot exceed 50.

III.A.2.e. Prohibition on opening shipping containers - the Permittees shall keep the Contact-Handled or Remote-Handled Packages sealed at all times while in the Parking Area Unit.

III.A.2.f. Storage time limit - the Permittees shall not store sealed Contact-Handled or Remote-Handled Packages in the Parking Area Unit for more than fifty-nine (59) days after the date the Inner Containment Vessel (**ICV**) of the Package was sealed at the generator site. Prior to storing a sealed Package, the Permittees shall verify that the ICV Closure Date for each Package is recorded in the WIPP Waste Information System (**WWIS**) database described in Permit Attachment B.

III.A.2.g. Minimum aisle space - the Permittees shall maintain a minimum spacing of 4 ft (1.2 m) between loaded Contact-Handled or Remote-Handled Packages.

III.B. PERMITTED AND PROHIBITED WASTE IDENTIFICATION

III.B.1. Permitted Waste

The Permittees may store and manage TRU mixed waste in the WHB Unit and Parking Area Unit, provided the Permittees comply with the following conditions:

- III.B.1.a. Waste analysis plan - the TRU mixed waste shall be characterized to comply with the waste analysis plan specified in Permit Condition II.C.1.
- III.B.1.b. TSDF Waste acceptance criteria - the TRU mixed waste shall comply with the treatment, storage, and disposal facility (**TSDF**) waste acceptance criteria specified in Permit Condition II.C.3.
- III.B.1.c. Hazardous waste numbers - the TRU mixed waste shall contain only hazardous waste numbers specified in Permit Condition II.C.4.

III.B.2. Prohibited Waste

The Permittees shall not store or manage any TRU mixed waste that fails to comply with Permit Condition [III.B.1](#).

III.C. 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, the Permittees shall manage the TRU mixed waste containers specified in Permit Condition [III.C.1](#) as specified in Permit Attachment M1 and in compliance with 20.4.1.500 NMAC (incorporating 40 CFR §264.171).

III.C.1. Acceptable Storage 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 storage of TRU mixed waste at WIPP. The Permittees are prohibited from storing TRU mixed waste in any container not specified in Permit Attachment M1, Section M1-1b, as set forth below:

- III.C.1.a. Standard 55-gallon (208-liter) drum - with a gross internal volume of 7.3 ft³ (0.21 m³).
- III.C.1.b. Standard waste box (SWB) - with a gross internal volume of 66.3 ft³ (1.88 m³).
- III.C.1.c. Ten-drum overpack (TDOP) - with a gross internal volume of 160 ft³ (4.5 m³). TDOPs may be used to contain up to ten standard 55-gallon drums or one SWB. TDOPs may be direct loaded or used to overpack drums or SWBs containing CH TRU mixed waste.

- III.C.1.d. 85-gallon (322-liter) drum - with a gross internal volume of up to 11.3 ft³ (0.32 m³). 85-gallon drums may be direct loaded or used for overpacking 55-gallons drums containing CH TRU mixed waste and for collecting and storing derived waste.
- III.C.1.e. 100-gallon (379-liter) drum - with a gross internal volume of 13.4 ft³ (0.38m³). 100-gallon drums may be direct loaded with CH TRU mixed waste.
- III.C.1.f. RH TRU canister - with a gross internal volume of 31.4 ft³ (0.89 m³). RH TRU canisters contain RH TRU mixed waste packaged in small containers (e.g., 55-gallon drums) or waste loaded directly into the canister.

III.C.2. Derived Waste Containers

The Permittees shall use standard 55-gallon drums, SWBs, or 85-gallon drums to collect, store, and dispose of derived waste.

III.D. COMPATIBILITY OF WASTE WITH CONTAINERS

The Permittees shall use containers made of or lined with materials which will not react with, and are otherwise compatible with, the TRU mixed waste to be stored, so that the ability of the container to contain the waste is not impaired, as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.172).

III.E. MANAGEMENT OF CONTAINERS

The Permittees shall manage all containers as specified in Permit Attachment M1 and shall keep all containers closed during storage, except when it is necessary to add waste to derived waste containers. The Permittees shall not open, handle, or store containers in a manner which may rupture the container or cause it to leak, as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.173).

III.F. CONTAINMENT SYSTEMS

The Permittees shall maintain the secondary containment systems for all containers managed in the WHB Unit and Parking Area Unit as specified in Permit Attachment M1, Section M1-1f, and as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.175).

III.G. INSPECTION SCHEDULES AND PROCEDURES

The Permittees shall inspect the WHB Unit and Parking Area Unit TRU mixed waste container storage and management areas at least weekly, in accordance with the Inspection Schedule/Procedures (Permit Attachment D,

Tables D-1 and D-1a) and Permit Attachment M1, Section M1-1e, to detect leaking containers and deterioration of containers and the containment system caused by corrosion and other factors, as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.174).

III.G.1. Inspection of 55-Gallon Drum Seven-Packs

The Permittees shall not be required to inspect the center drum of a 55-gallon seven-pack assembly, as depicted in Permit Attachment M2, Figure M2-6.

III.G.2. Inspection of Sealed Contact-Handled or Remote-Handled Packages

The Permittees shall not be required to inspect the contents of sealed Contact-Handled or Remote-Handled Packages stored in compliance with Permit Condition [III.A.2](#) and Permit Attachment M1, Section M1-1e(2). The Permittees shall attach a clearly legible sign to each Contact-Handled and Remote-Handled Package indicating whether the Contact-Handled or Remote-Handled Package contains TRU mixed waste.

III.H. CLOSURE

At closure of the WHB Unit and Parking Area Unit, the Permittees shall remove all hazardous waste and hazardous waste residues from the containment system, in accordance with the procedures in the Closure Plan, Permit Attachment I and Permit Condition II.L, as required by 20.4.1.500 NMAC (incorporating 40 CFR §§264.111 and 264.178).

III.I. RECORDKEEPING

The Permittees shall place the results of waste analyses in the operating record as specified in Permit Condition II.K and Permit Attachment B.

PERMIT ATTACHMENTS

Permit Attachment B (as modified from WIPP RCRA Part B Permit Application, "Waste Analysis Plan" - Chapter C).

Permit Attachment D (as modified from WIPP RCRA Part B Permit Application, "Procedures to Prevent Hazards" - Chapter F).

Permit Attachment I (as modified from WIPP RCRA Part B Permit Application, "Closure Plans, Post-Closure Plans, and Financial Requirements" - Chapter I).

Permit Attachment M1 (as modified from WIPP RCRA Part B Permit Application, "Facility and Process Information" - Chapter D).

Permit Attachment M2 (as modified from WIPP RCRA Part B Permit Application, "Facility and Process Information" - Chapter D).