

MODULE 4
BULK SOLIDS TANKS AND CONTAINMENT BUILDING

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4.A. APPLICABILITY

- 4.A.1. The requirements of this module pertain to the storage of hazardous waste in the Bulk Solids Tanks and Containment Building. The Permittee shall comply with all requirements established in this permit and the applicable requirements in Utah Administrative Code (UAC) R315-264-190 through 200 and R315-264-1100 through 1101 when storing any waste in these units.
- 4.A.2. The building on Unit 106 (Building 106) may be permitted to operate either as a Containment Building or as a container storage unit.
- 4.A.3. The Permittee shall not operate Building 106 as a Containment Building when containers are being stored in the building.
- 4.A.4. As of November 2020, Building 106 is permitted as a container storage unit. Container storage requirements are in permit Module 3 (Storage and Processing in Containers) and Attachment 8 (Waste Management, Processing and Storage).
 - 4.A.4.a. Changeover from container storage to a Containment Building must be done in accordance with Permit Conditions I.D.2 and 4.L.3.
- 4.A.5. When Building 106 is permitted as a Containment Building, the Permittee will operate it according to the requirements in Module 4 (Containment Building) and Attachment 10 (Management of Waste in the Bulk Solids Tanks and Containment Building).
 - 4.A.5.a. Changeover from a Containment Building to container storage must be done in accordance with Permit Conditions I.D.2, 4.L.1 and 4.L.2.
- 4.A.6. The Permittee may store wastes in the Bulk Solids Tanks and Containment Building specified below:
 - 4.A.6.a. Tank 251-TK-031 (located inside Unit 251)
 - 4.A.6.b. Tank 251-TK-032 (located inside Unit 251)
 - 4.A.6.c. Tank 251-TK-033 (located inside Unit 251)
 - 4.A.6.d. Building 106 - Containment Building (when permitted as such)

4.B. PERMITTED AND PROHIBITED WASTE IDENTIFICATION

- 4.B.1. The Permittee may store hazardous waste identified in Condition 2.C.1 in the Bulk Solids Tanks and Containment Building subject to the terms of this Permit and as described below:

BULK SOLIDS STORAGE CAPACITY			
Containment Building Designation	Capacity	Description of Hazardous Waste	Hazardous Waste Codes

251-TK-031	85,278 gal. or 422 cy.	Bulk Solids Waste having less than 500 ppmw volatile organic compound (VOC) emissions, as determined using method EPA Method 21.	Reference: Conditions 2.C.1. and 2.C.2.
251-TK-032	85,278 gal. or 422 cy.		
251-TK-033	85,278 gal. or 422 cy.		
Enclosed Area of Subunit 1 of Unit 106 (Building 106)	448,440 gal. or 2,583 cy.	Bulk solids, without any free liquids, having less than 500 ppmw VOCs emissions, as determined utilizing EPA Method 21.	

4.B.2. The Permittee is prohibited from storing waste identified in Condition 2.C.3 of the Permit in the Bulk Solids Tanks and the Containment Building.

4.C. CONDITION OF WASTE IN THE BULK SOLIDS TANKS AND CONTAINMENT BUILDING

4.C.1. The Permittee shall maintain the waste in the Bulk Solids Tanks and Containment Building in a manner that prevents contact with precipitation so that neither run-off nor leachate is generated.

4.C.2. The Permittee shall protect the Bulk Solids Tanks and Containment Building from surface water run-on.

4.D. SPECIAL PROVISIONS FOR IGNITABLE OR REACTIVE WASTE IN THE BULK SOLIDS TANKS AND CONTAINMENT BUILDING

The Permittee shall not place ignitable or reactive waste in the Bulk Solids Tanks or Containment Building.

4.E. COMPATIBILITY OF WASTE

4.E.1. In accordance with UAC R315-264-1101(a)(3), the Permittee shall not place incompatible wastes in the Bulk Solids Tanks or the Containment Building if the wastes could cause the Bulk Solids Tanks, Containment Building, or secondary containment to leak, corrode or otherwise fail.

4.E.2. The Permittee shall not place incompatible waste or materials in the Bulk Solids Tanks or Containment Building unless they have met the requirements of Condition 4.E.1. and have conducted compatibility testing in accordance with EPA-600/2-80-076 or ASTM D5058-90 Test Method A. The Permittee shall document all compatibility testing results in the operating record.

4.F. OPERATION AND MAINTENANCE OF WASTE IN THE BULK SOLIDS TANKS AND CONTAINMENT BUILDING

4.F.1. The Permittee shall maintain the waste in the Bulk Solids Tanks and Containment Building in accordance with the drawings in Attachment 9 (Design Drawings).

4.F.2. The Permittee shall incorporate any modifications to any drawings in Attachment 9 (Design Drawings) in accordance with the permit modification requirements in Condition 1.D.

4.F.3. The Permittee shall comply with the provisions of Attachment 10 (Management of Waste in the Bulk Solids Tanks and Containment Building).

4.F.4. The Permittee shall not store waste in the Containment Building higher than 9.5 feet.

4.G. TRACKING AND VOC REQUIREMENTS FOR THE BULK SOLIDS TANKS AND CONTAINMENT BUILDING

4.G.1. The Permittee shall assign a unique identifying number to each load of waste that is to be dumped into the Bulk Solids Tank or placed in the Containment Building as soon as the waste arrives at the facility.

4.G.2. The Permittee shall comply with the waste tracking provisions of Attachment 10 (Management of Waste in the Bulk Solids Tanks and Containment Building).

4.G.3. The Permittee shall verify that each container or bulk transport vehicle containing waste being considered for placement in the Bulk Solids Tanks or Containment Building has less than 500 ppmw VOCs.

4.G.3.a. VOCs verification must be completed prior to removing the cover from the waste and prior to placing it in the Bulk Solids Tanks or Containment Building.

- 4.G.3.b. The Permittee shall analyze a minimum of one sample per container for VOCs using EPA Method 21 in accordance with UAC R315-264-1063(b)(1).
- 4.G.3.c. The Permittee shall document all VOC measurements in the operating record.
- 4.G.4. The Permittee shall not place waste into the Bulk Solids Tanks or Containment Building if it has a VOC concentration of 500 ppmw or greater.
- 4.G.5. The Permittee shall verify that all facility personnel measuring the VOC concentrations of containers are trained to conduct EPA Method 21. The Permittee shall incorporate verification of training into the employee's training record in accordance with Attachment 4 (Personnel Training).

4.H. OPERATING REQUIREMENTS FOR BULK SOLIDS TANKS

- 4.H.1. At least every four years, the Permittee shall empty, visually inspect, measure the corrosion in each Bulk Solids Tank, and certify that each tank can safely manage hazardous waste. Inspections and tests must be certified by an independent, qualified, Utah-registered professional engineer.
- 4.H.2. The Permittee shall maintain the level of waste in each Bulk Solids Tank at or below the top of the tank.
- 4.H.3. The Permittee shall prevent spills and overflows from the Bulk Solids Tanks and containment system.
- 4.H.4. Smoking shall be prohibited within 50 feet of any of the Bulk Solids Tanks.
- 4.H.5. The Permittee shall take precautions to prevent accidental ignition or reaction of waste. The waste shall be separated and protected from sources of ignition or reaction, including, but not limited to; open flames; smoking; cutting and welding; hot surfaces; frictional heat; sparks (static, electrical, or mechanical); spontaneous ignition (e.g., from heat-producing chemical reactions); and radiant heat. Such sources of ignition shall be allowed only after adequate additional precautions have been taken to prevent ignition of waste or other materials and a hot work permit has been issued.
- 4.H.6. If bulk waste is to be unloaded directly to one of the Bulk Solids Tanks rather than being accepted into storage in one of the bulk container storage areas, then the waste shall be unloaded to a tank within 15 days of receipt at the facility (after compatibility has been verified in accordance with Condition 4.E). If an unforeseen circumstance occurs, the 15-day time frame may be extended by written authorization from the Director.
- 4.H.7. The Permittee may bulk-up (i.e., dump the contents of a container or place the entire container and contents) into the Bulk Solids Tanks as long as the waste meets Permit Conditions 4.B. and 4.E.

4.I. OPERATING REQUIREMENTS FOR THE CONTAINMENT BUILDING

- 4.I.1.

- 4.I.2. The Permittee shall not place hazardous waste or materials with free liquids in the Containment Building. If free liquids are documented upon off-loading, the Permittee shall immediately solidify the liquid with absorbent and document the solidification in the operating record.
- 4.I.3. The Permittee shall allow transport vehicles carrying loads of waste that are to be placed in the Containment Building to enter the building through the south truck door and exit via the north truck door.
 - 4.I.3.a. The Permittee shall close the south truck door except when waste is being added to or removed from the Containment Building.
 - 4.I.3.b. The Permittee shall maintain, at a minimum, a ten-foot-wide truck lane on the west side of the Containment Building.
 - 4.I.3.c. The Permittee shall use Jersey-style barricades between the waste in the Containment Building and the truck lane. At a minimum, the barricades shall extend five feet beyond the northern-most point of the waste in the Containment Building.
 - 4.I.3.d. The Permittee shall not store waste in the northern most 40 feet of the Containment Building. The 40-foot mark shall be marked on the floor of the Containment Building. This area shall be used for truck access for the loading and unloading of waste and shall always be kept clean.
 - 4.I.3.e. The Permittee shall place waste in the Containment Building starting from the south end.
 - 4.I.3.f. Prior to bringing a vehicle into the building, the Permittee shall ensure that the truck lane and the area north of the waste in the Containment Building are clean to prevent waste from contacting the tires of the transport vehicle.
 - 4.I.3.g. The Permittee shall keep the floor clean a minimum of five feet beyond the rear of the transport vehicle.
 - 4.I.3.h. The Permittee shall ensure that the working face of the waste in the Containment Building is approximately perpendicular to the longitudinal axis of the building to minimize the risk of waste contact with the transport vehicle.
 - 4.I.3.i. The Permittee shall not allow the toe of the waste in the Containment Building to exceed six inches in height at the compliance point, which is the point of contact between the concrete berm and the Jersey-style truck lane barricade.
- 4.I.4. The Permittee shall immediately clean up any waste that spills outside of the concrete zone onto compacted soil between the containment area and the walls of the Containment Building. The Permittee shall document the location of all spills on a plan view drawing of the Containment Building and incorporate the drawing into the operating record.

- 4.I.5. Prior to allowing the waste transport vehicle to leave the building, the Permittee shall minimize tracking of waste from the area by replacing the cover on all containers or end dumps, cleaning the exterior of the transport vehicle and waste container, and sweeping up all waste that was cleaned from the vehicle. All waste from the cleaning process will be managed as hazardous waste.
- 4.I.6. The Permittee shall inspect all containers and transport vehicles for cleanliness as it exits the Containment Building via the north truck door. The Permittee shall incorporate the results of each inspection into the operating record. The inspection parameters shall include, at a minimum: barcode/tracking number (unique identifier); truck number, whether vehicle and the container are clean; whether the container is properly closed; the inspector's name; and the date and time when the inspection occurred.
- 4.I.7. The Permittee shall station a pressure washer by the north truck door of the Containment Building. Should waste exit the Containment Building on a transport vehicle, the Permittee shall prevent the vehicle from leaving until decontamination has been completed using the pressure washer or other tools as necessary. The Permittee shall remove any water and waste accumulated during decontamination procedures prior to the end of the shift in which it was accumulated. The Permittee shall manage any rinsate and sediment as hazardous waste.
- 4.I.8. Waste stored polypropylene sacks in the Containment Building are subject to the requirements of Section 4.0 of Attachment 10 (Management of Waste in the Bulk Solids Tanks and Containment Building).

4.J. CONTAINMENT

- 4.J.1. The Permittee shall operate and maintain the concrete containment system so that it is free of both cracks and gaps and is sufficiently impervious to contain leaks, spills, and accumulated precipitation until the collected material is detected and removed.
- 4.J.2. When the facility is staffed, the Permittee shall empty all liquids from the secondary containment areas immediately, but no later than 24 hours after discovery. The Permittee shall manage all liquids and other materials collected from a sump or secondary containment area as hazardous waste.

4.K. CONTAINMENT SHALL BE PROVIDED FOR EACH BULK SOLIDS TANK AREA. THE AMOUNT OF CONTAINMENT REQUIRED SHALL BE BASED ON CONTAINING EITHER 10% OF THE ENTIRE VOLUME OF WASTE HELD WITHIN THE CONTAINMENT AREA, OR 100% OF THE VOLUME OF THE LARGEST TANK IN THE CONTAINMENT AREA, WHICHEVER IS GREATER. RESPONSE TO LEAKS OR SPILLS

- 4.K.1. If a Bulk Solids Tank leaks or spills, or if a Bulk Solids Tank becomes unfit for continued use, the Permittee shall remove the tank system from service immediately and complete the following actions:

- 4.K.1.a. Stop the flow of hazardous waste into the tank system and inspect the system to determine the cause of the release.
 - 4.K.1.b. Remove waste and accumulated precipitation from the Bulk Solids Tank containment system within 24 hours of detecting the leak or spill to prevent further release and allow inspection and repair of the system. If the Permittee is unable to meet this deadline, they shall orally notify the Director, then provide written notification with information to demonstrate that more time is required.
 - 4.K.1.c. Manage the collected material as hazardous waste in accordance with all applicable requirements of UAC R315-262.
 - 4.K.1.d. The Permittee shall make any necessary repairs to fully restore the integrity of the Bulk Solids Tanks before returning them to service.
 - 4.K.1.e. For all major repairs to eliminate leaks or restore the integrity of the tank system, the Permittee shall obtain a certification by an independent, qualified, Utah-registered professional engineer that the repaired system is capable of handling hazardous wastes without release for the intended life of the system before returning the system to service. Examples of major repairs are installation of an internal liner, repair of a ruptured tank, or repair or replacement of a secondary containment vault.
- 4.K.2. If the secondary containment system for the Bulk Solids Tanks leaks or spills, the Permittee shall complete the following actions in addition to those required by Condition 4.K.1.
- 4.K.2.a. The Permittee shall immediately visually inspect all releases to the environment, and based on that inspection, shall:
 - (i) Prevent further migration of the leak or spill to soils or the surface water.
 - (ii) Remove and properly dispose of all contaminated soil or surface water.
- 4.K.3. If the Permittee replaces a component of a Bulk Solids Tank to eliminate a leak, that component must satisfy the requirements for new tank systems or components in accordance with UAC R315-264-192 and 193.
- 4.K.4. If a tank system cannot be repaired or is otherwise unfit for continued use, the Permittee shall close the Bulk Solids Tanks in accordance with Attachment 7 (Closure Plan).

4.L. CLOSURE OF CONTAINMENT BUILDING

- 4.L.1. The Permittee shall close the Containment Building by removing all hazardous waste and hazardous waste residues from the floor in accordance with the procedures in the Closure Plan (Attachment 7) and as specified in UAC R315-264-110 through R315-264-120 and R315-264-1102.

- 4.L.2. If the Permittee wishes to discontinue the operation of the Containment Building and return the enclosed portion of Unit 106 to container storage, the Permittee shall submit a Class 1 permit modification request for Director approval upon completion of the steps specified in Condition 4.I.1.
- 4.L.3. If the Permittee wishes to commence operation of the Containment Building, changing the service in the building from container storage to a Containment Building, the Permittee shall submit a Class 1 permit modification that does not require prior written approval from the Director.