

**Tooele Army Depot-South Area
Attachment 12
Container Management**

Container Management

- 1.0** **General** [Utah Admin. Code R315-8-9.1 through 9.10;] Module III.B.1.a. contains a list of permitted waste codes.
- 1.1 The Tooele Army Depot-South Area (TEAD-S or Facility) stores and maintains Recovered Chemical Weapons Material, waste conventional munitions and components, and non-agent-related wastes derived from support activities. Attachment 12 (Container Management) describes the management practices and storage facilities at TEAD-S. Utah Admin. Code provides the regulatory basis for TEAD-S hazardous waste management procedures.
- 1.2 Reserved.
- 1.3 Attachment 1 (Waste Analysis Plan) provides a listing of all waste streams approved for storage at the Facility.
- 1.4 Reserved.
- 1.5 Wastes generated at the Facility are stored in 90-day storage areas or permitted storage Area 10 and the OB/OD Conex, and then are shipped to a licensed Treatment, Storage, and Disposal Facility (TSDF).
- 1.6 Containers used to store hazardous waste in the Facility Storage Areas shall include any portable device in which material is stored, transported, treated, disposed of, or otherwise handled, as defined in Utah Admin. Code R315-1-1. Examples of containers used in permitted storage facilities include: munition bodies, overpacks, and other Department of Transportation (DOT)-approved containers listed in Section 2.
- 1.7 The Permittee shall maintain a written inventory of hazardous waste in storage. The inventory shall be updated when a new waste is generated or existing waste is disposed of. It shall contain information about the quantity and location of hazardous wastes stored in permitted storage units.
- 2.0** **Containers with Free Liquids** [Utah Admin. Code R315-8-9.6]
- 2.1 Waste containers with free liquids managed at the Facility include: munitions declared waste by the Army; overpacked, Recovered Chemical Weapons Material; containers holding agent-related secondary waste, and other hazardous wastes.
- 2.2 Recovered conventional munitions and components may be stored in approved containers of various sizes in permitted storage areas. Containerized hazardous wastes shall be stored in DOT-approved containers in appropriate storage areas.
- 3.0** **Description of Containers** [Utah Admin. Code R315-8-9.2 and 9.3, Utah Admin. Code R315-3-2.6]
- 3.1 Recovered Chemical Weapons Material (RCWM)

3.2 Recovered Chemical Weapons Material (RCWM) shall be managed in accordance with the Utah Admin. Code, as well as Facility Standing Operating Procedures (SOPs). In most instances, the munition body acts as the container for the chemical agent contained within.

3.3 Of the current munitions inventory at the Facility, only overpacked, RCWM and munitions declared waste by the Army's Designated Disposition Authority (DDA) are hazardous wastes. The inventory for permitted storage units is maintained in a database and the Facility Operating Record. RCWM shall be overpacked into an Army approved container.

4.0 Reserved

5.0 Non-Munitions-Related Waste

5.1 The Permittee shall use DOT-approved containers for storing non-munitions-related free liquids in onsite storage facilities. Other containers specified in the Hazardous Materials Table (49 CFR § 172.101) may also be used.

6.0 Container Management Practices [Utah Admin. Code R315-8-9, Utah Admin. Code R315-3-2.5(b)(5)]

6.1 The Permittee shall store hazardous waste to ensure safe operations and protection of the environment. Facility SOPs shall describe procedures for packaging RCWM-related waste, and the Facility Hazardous Waste Management Plan (HWMP) describes procedures for non-RCWM-related hazardous wastes, labeling containers, and performing waste inventories. Other management practices related to waste munitions storage and handling shall be provided in the current Department of Defense Explosives Safety Board (DDESB) storage standards. Containerized hazardous wastes shall be managed according to Utah Admin. Code R315-8-9.

6.2 The Facility property line is well over the required minimum 50-foot distance from the nearest permitted storage building or igloo, so ignitable or reactive waste may be stored in these facilities in compliance with Utah Admin. Code R315-8-9.7.

6.3 An Operating Record shall be maintained for the life of the facility that specifies the location of each waste container and correlates waste analysis results to waste containers, as required by Utah Admin. Code R315-8-5.3. The contents of leaking or damaged containers shall be repackaged in DOT-compliant containers. Headspace shall be left in all containers storing volatile liquid to avoid damage caused by expansion or contraction of wastes because of temperature changes.

7.0 Container Management

7.1 Container management activities for RCWM in permitted storage igloos shall include air monitoring for leak detection, visual inspections, labeling and inventorying containers in use, and overpacking leaking containers.

7.2 A hazardous waste label shall be placed on each container or pallet with the following information:

- 7.4.1 Waste stream numbers
 - 7.4.2 Nomenclature,
 - 7.4.3 Date of accumulation, and
 - 7.4.4 Facility Information.
- 7.3 Area 10 igloos used to store RCWM shall be inspected in accordance with Attachment 2 (Inspection Plan).
- 7.4 Non-Munitions-Related Waste
- 7.4.1 Sources of ignition or reaction, such as open flames, welding torches, hot surfaces, frictional heat, sparks, spontaneous ignition sources, and radiant heat shall be excluded from hazardous waste storage areas.
 - 7.4.2 Primary container management activities shall include container inspections, labeling, inventory, and compatibility. Containers shall be labeled in accordance with the Facility HWMP. Labels shall include:
 - 7.7.2.1 Nomenclature;
 - 7.7.2.2 Date of accumulation;
 - 7.7.2.3 DOT shipment label;
 - 7.7.2.4 Facility Information; and
 - 7.7.2.5 Waste stream numbers.
 - 7.4.3 Container inspection schedules and log sheets for documenting the inspections are contained in Attachment 2 (Inspection Plan). Containers and spill equipment shall be inspected weekly as described in Attachment 2 (Inspection Plan), and the results shall be noted on inspection forms. If significant deterioration of a container is observed or a ruptured container is identified, the wastes stored in the container shall either be overpacked or transferred to a new container.
- 8.0 Secondary Containment System Design and Operation** [Utah Admin. Code R315-8-9.6]
- 8.1 In lieu of a conventional secondary containment system, a combination of container storage area design features, individual container storage apparatuses, igloo and individual munition monitoring procedures, and procedures to prevent hazards as described in paragraphs 8.2 through 8.3 are used to contain any potential releases of hazardous waste.
 - 8.2 Igloo Headwall Monitoring
 - 8.2.1 Headwall monitoring of the air inside igloos shall be conducted to ensure that any released chemical agent liquids or vapors are promptly detected to prevent the release of chemical agent to the environment. This program shall consist of sampling the air inside of igloos through sample ports located in the headwall (the front wall) of each igloo.
 - 8.3 Secondary Containment

- 8.3.1 Drip pans shall provide secondary containment for containerized hazardous wastes containing free liquids. These drip pans shall conform to the secondary containment volume requirements found in Utah Admin. Code R315-8-9.6. The following is a description of storage practices that shall be used in the storage of hazardous waste.
 - 8.3.1.1 Containers shall be stored on pallets unless the design of the container incorporates skids to elevate it above the storage base or the containers upon which it may be stacked. Each pallet shall have no more than four 55-gallon drums, or the equivalent volume of four, 55-gallon drums. The containers in storage shall be placed so they can be easily inspected on all sides to ensure the containers are sound and there are no leaks.
 - 8.3.1.2 55-gallon drums shall be stacked no more than two high.
 - 8.3.1.3 The maximum number of rows per igloo side shall be 12 (i.e., 24 rows per igloo). The maximum number of pallets per row shall be four (2 stacks, each 2 pallets high), and the maximum number of 55-gallon containers per row shall be 16 or the equivalent volume of 16, 55-gallon drums if containers with different volumes are used.
 - 8.3.1.4 Containers of hazardous wastes with free liquids shall be placed in secondary containment drip pans if the container is the primary container for the waste. This shall include, at a minimum, all 55-gallon drums without removable heads. All other containers storing liquid hazardous waste shall be provided with secondary containment, either by drip pans or storage unit base design.
 - 8.3.1.5 No more than 16, 55-gallon drums shall be stored in each drip pan (i.e. one drip pan per row).

9.0 Requirements for the Base or Liner to Contain Liquids

- 9.1 Liquids shall be contained by use of drip pans or storage unit base design. A professional engineer shall certify that the containment system design and completed construction meets secondary containment requirements of Utah Admin. Code R315-8-9.6.

10.0 Containers without Free Liquids

- 10.1 The Facility shall use DOT approved containers, or other various RCRA-compliant containers (boxes and other bulk containers). These containers shall meet the criteria specified in Utah Admin. Code R315-8-9 and the definition of “container” in Utah Admin. Code R315-1-1(b). Other containers that meet these criteria may also be used in permitted storage. Wastes without free liquids may also be stored in any permitted Hazardous Waste Management Unit (HWMU) at the Facility in compliance with Attachment 12 (Container Management).
- 10.2. The Facility shall store containers holding only wastes without free liquids in accordance with Utah Admin. Code R315-8-9.6(b), provided that there is no potential for waste container contact with precipitation.

11.0 Reserved

12.0 Description of Containers [Utah Admin. Code R315-8-9.2 and 9.3]

- 12.1 The Facility shall use DOT approved containers and containers approved by the Army for munitions and component related wastes that shall consist of:
- 12.1.1 Ammunition Container (i.e. M2A1 and M548) made of compatible materials for the waste being stored;
 - 12.1.2 Prop charge can; and
 - 12.1.3 Single and Multiple Round Container (SRC & MRC).
- 12.2 Containers shall be approved in accordance with 49 CFR § 173.24, 173.24a, 178, and 179. Containers shall be selected for each type of waste in accordance with the Hazardous Materials Table in 49 CFR § 172.101.

13.0 Container Management Practices

- 13.1 Containers shall be kept closed while in storage, except to add or remove waste, or to perform measurements or inspections. All container lids shall be sealed with either threaded fasteners (open-topped drums), or nails (wooden crates). Damaged or corroded containers shall be overpacked in 85-gallon drums made of either polyethylene or steel. Containers in storage shall be inspected on a weekly basis and in compliance with Tables 2-1 through 2-6, and Figures 2-1 through 2-4 of Attachment 2 (Inspection Plan). The storage arrangements used in all permitted waste storage facilities shall provide for maximum storage capacity and allow for ease in material handling.
- 13.2 All permitted storage units at the Facility shall be designed and operated to prevent containerized waste from coming into contact with precipitation and accumulated liquid.