

**ATTACHMENT 12**  
**CONTAINERS**

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### **List of Acronyms**

CFR	Code of Federal Regulations
PPE	Personal Protective Equipment
RCRA	Resource Conservation and Recovery Act

12.1 **Applicability**

12.1.1 Site-generated waste may be stored in containers in the S-2 warehouse and will be managed per the requirements of R315-8-9.6.

12.2 **Description of Containers**

12.2.1 Reserved.

12.2.2 Reserved.

12.2.3 Reserved.

12.2.4 Reserved.

12.2.5 In the S-2 Warehouse, containers (e.g., 55-gallon drums, etc.) will be stored and will remain closed except when adding or removing waste (includes periodically monitoring the vapor space within the container). The waste stored in the S-2 warehouse will be site-generated waste, which includes, but is not limited to, the following:

12.2.5.1 miscellaneous parts/equipment

12.2.5.2 wipe rags

12.2.5.3 decontamination solution

12.2.5.4 miscellaneous debris (e.g., metal and metal shavings, floor sweepings, contaminated soil, concrete, plaster, decontamination residues, etc.)

12.2.5.5 miscellaneous fluids (e.g., paint, grease, oil, solvents, hydraulic fluids, coolants, etc.)

12.2.5.6 miscellaneous solids (e.g., paper products, spill containment materials, filter residues, plastics, rubber, Personal Protective Equipment (PPE), solder, glassware, rags, etc.)

12.2.5.7 laboratory monitoring samples

12.3 **Reserved**

12.4 **Reserved**

12.5 **Description of the S-2 Warehouse**

12.5.1 The S-2 Warehouse enclosure is a steel-frame building with insulated metal roofing and insulated siding panels. This storage area is sized to store 704 55-gallon drums (double stacked). Secondary containment for containers with free liquids will be provided by portable secondary containment pallets. Although not part of the secondary containment system, the floor of the S-2 Warehouse is constructed of reinforced concrete and is coated. The building is equipped with a recirculation fan and duct.

12.6 **Reserved**

12.7 **Reserved**

12.8 **Container Management S-2 Warehouse**

12.8.1 The S-2 Warehouse will be used to store site-generated waste. Trucks at the S-2

Warehouse building will be unloaded at the east or west end of the building by forklift or hand dolly. While in the S-2 Warehouse, the containers will remain closed except when adding or removing waste (includes periodically monitoring the vapor space within the container). Container movement to and from the S-2 Warehouse may occur 24 hours per day, seven days per week.

12.8.2 If a leaking container is found in the S-2 Warehouse, the leaking container is placed into a larger container that is subsequently closed. This larger container then provides primary containment. The larger container, along with the enclosed leaking container, will be stored in the S-2 Warehouse and transferred off-site for treatment, disposal, or both. If this larger container is stored in the S-2 Warehouse, it will be placed on a secondary containment pallet with a secondary containment capacity greater than or equal to the volume of the enclosed leaking container.

12.9 **Reserved**

12.10 **Reserved**

12.11 **Reserved**

12.12 **Secondary Containment System Design and Operation (S-2 Warehouse)**

12.12.1 Secondary containment for containers with free liquids will be provided by portable secondary containment pallets. A secondary containment pallet is a portable box with a grate on top that supports and elevates the containers while allowing drainage to the box below. One secondary containment pallet has a deck surface area sufficient to store four 55-gallon drums and has a minimum of 60 gallons of secondary containment capacity. Therefore, the facility could store four 55-gallon containers per pallet (single-stacked) or eight 55-gallon containers per pallet (double-stacked) and be in compliance with R315-8-9.6 (b)(3). In fact, the facility could store up to 600 gallons of containerized waste per secondary containment pallet, provided that the volume of the largest container is equal to or less than 60 gallons, and be in compliance with R315-8-9.6 (b)(3). However, due to stability concerns, 55-gallon drums (or larger containers) will not be stacked more than two high.

12.12.2 The grate on top of the secondary containment pallet elevates the containers and therefore prevents contact between the containers and any accumulated liquids as required by R315-8-9.6 (b)(2). As required by R315-8-9.6 (b)(4), run-on into the secondary containment pallets is prevented by the wall height of each pallet. The secondary containment pallets are constructed of high density polyethylene (HDPE), carbon steel painted with an epoxy based coating, or carbon steel fitted with an HDPE liner. The secondary containment pallets are therefore free of cracks and gaps, impervious, and can contain spills until removed via built-in drains as required by R315-8-9.6 (b)(1). As required by R315-8-9.6 (b)(5), accumulated liquid will be removed from the secondary containment systems in as timely a manner as necessary to prevent overflow of the secondary containment pallet. The liquid removed will be managed as a hazardous waste.

12.12.3 As allowed by R315-8-9.6 (c), Igloos 1632, 1633, 1634, 1635, and 1636 and the S-2 Warehouse will also be used to store containerized waste that does not contain free

liquids. As per the requirements of R315-8-9.6 (c), secondary containment is not required for these containers. These containers will be elevated (e.g., wooden pallets, railroad ties, grating, etc.) to prevent contact with accumulated liquid. The amount of accumulated liquid (e.g., run-on) encountered will be minimal since the storage area is enclosed by a building.

- 12.12.4 Reserved.
- 12.12.5 To confirm the absence of free liquids for other site-generated wastes and allow storage without secondary containment pallets, facility personnel will obtain a representative sample of the waste and analyze for free liquids. Corresponding analytical results, that indicate the absence of free liquids, will be sufficient to satisfy the requirements of R315-3-2.6(b)(1).
- 12.12.6 The S-2 Warehouse building is 100 feet long, 40 feet wide, and 24 feet high. The maximum storage capacity would be reached if four rows of pallets were placed lengthwise in the building. Each row would contain twenty-two pallets and a 2.5 foot (minimum) aisle space would be present on either side of each row of pallets. An aisle space approximately 10 feet wide would be available for operation of the forklift. This configuration enables the storage of 88 secondary containment pallets (4 rows x 22 pallets/row = 88 secondary containment pallets). Therefore, 704 55-gallon drums<sup>1</sup> could be stored in the S-2 Warehouse assuming double stacking of containers (88 secondary containment pallets x 8 containers/pallet = 704 containers). The storage capacity of the S-2 Warehouse would be 38,720 gallons (704 containers x 55 gallon/container = 38,720 gallons).
- 12.12.7 Reserved.
- 12.13 **Reserved**
- 12.14 **Reserved**
- 12.15 **Requirements for Ignitable, Reactive, or Incompatible Wastes in Containers**
- 12.15.1 Containers with incompatible waste shall not be placed on a secondary containment pallet in the S-2 warehouse at the same time. Therefore, incompatible wastes, or incompatible wastes and materials will not be placed in the same container or on the same secondary containment pallet. The site-generated waste to be stored in the S-2 warehouse may be reactive or ignitable. All containers holding reactive or ignitable wastes will be located at least 50 feet from the facility property line.

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<sup>1</sup> Although 55-gallon drums have been used to calculate the storage capacity of the S-2 Warehouse, various sizes of containers may be stored in the S-2 Warehouse.