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S427 BMPs for Storage of Liquid, Food Waste, or Dangerous Waste Containers

Description of Pollutant Sources: Steel and plastic drums with volumetric capacities of 55 gallons or less are typically used at industrial facilities for container storage of liquids and powders. The BMPs specified below apply to container(s) located outside a building. Use these BMPs when temporarily storing potential pollution generating materials or wastes. These BMPs do not apply when Ecology has permitted the business to store the wastes (see [Standards for Solid Waste Containers](#) in [I-2.15 Other Requirements](#)). Leaks and spills of pollutant materials during handling and storage are the primary sources of pollutants. Oil and grease, acid/alkali pH, BOD, COD are potential pollutant constituents.

Pollutant Control Approach: Store containers in impervious containment under a roof, or other appropriate cover, or in a building. For storage areas on-site for less than 30 days, consider using a portable temporary secondary system like that shown in [Figure IV-5.1: Secondary Containment System](#) in lieu of a permanent system as described above.

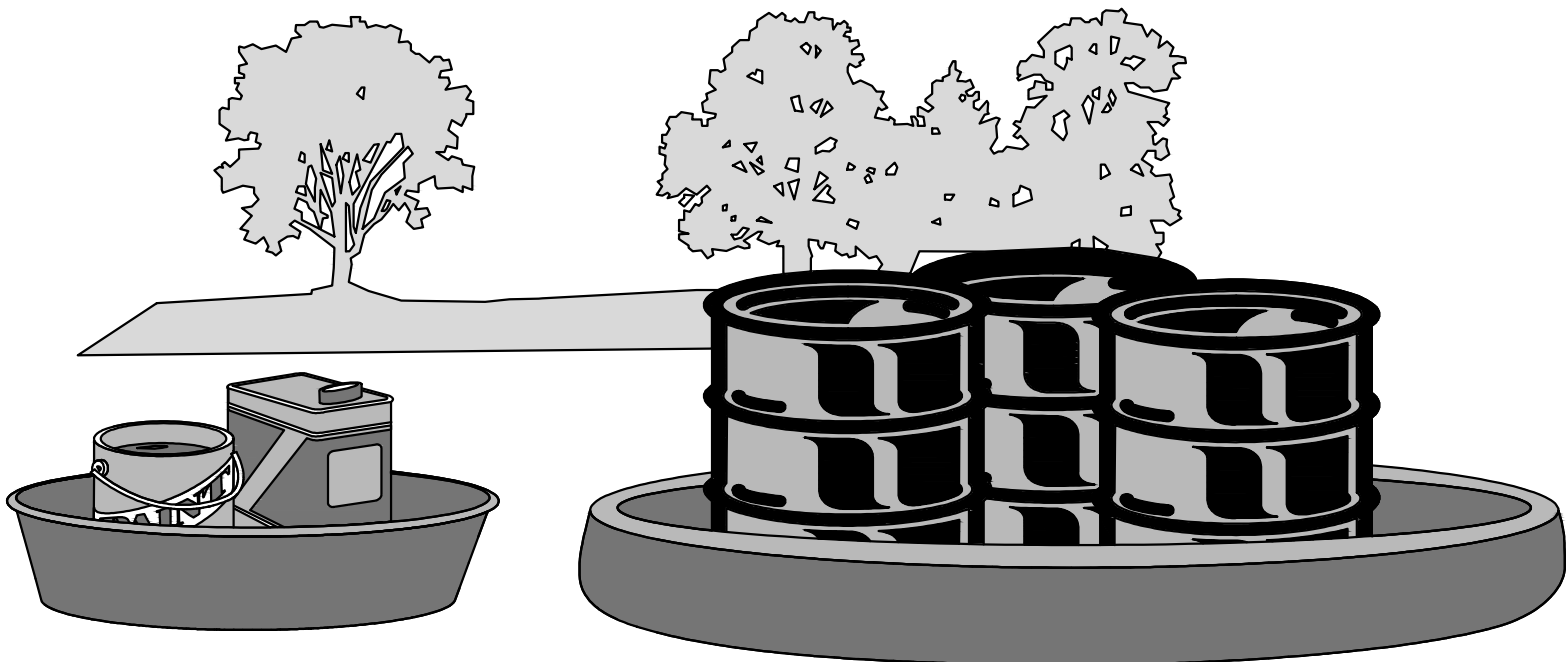
Figure IV-5.1: Secondary Containment System



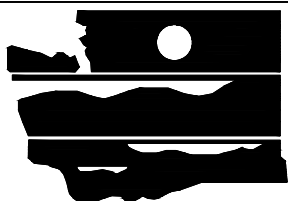
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Applicable Operational BMPs:

- Place tight-fitting lids on all containers.
- Label all containers appropriately. Store containers so that the labels are clearly visible..
- Place drip pans beneath all mounted container taps and at all potential drip and spill locations during filling and unloading of containers.
- Inspect container storage areas regularly for corrosion, structural failure, spills, leaks, overfills, and failure of piping systems. Check containers daily for leaks/spills. Replace containers, and replace and tighten bungs in drums as needed.
- Empty drums containing residues should be stored to prevent stormwater from entering drum closures. Cover or tilt drums to prevent stormwater from accumulating on the top of empty drums and around drum closures.



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Secondary Containment System

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- Store containers that do not contain free liquids in a designated sloped area with the containers elevated or otherwise protected from stormwater run-on. Comply with local fire code.
- Secure drums when stored in an area where unauthorized persons may gain access in a manner that prevents accidental spillage, pilferage, or any unauthorized use (see [Figure IV-5.2: Locking System for Drum Lid](#)).

Figure IV-5.2: Locking System for Drum Lid

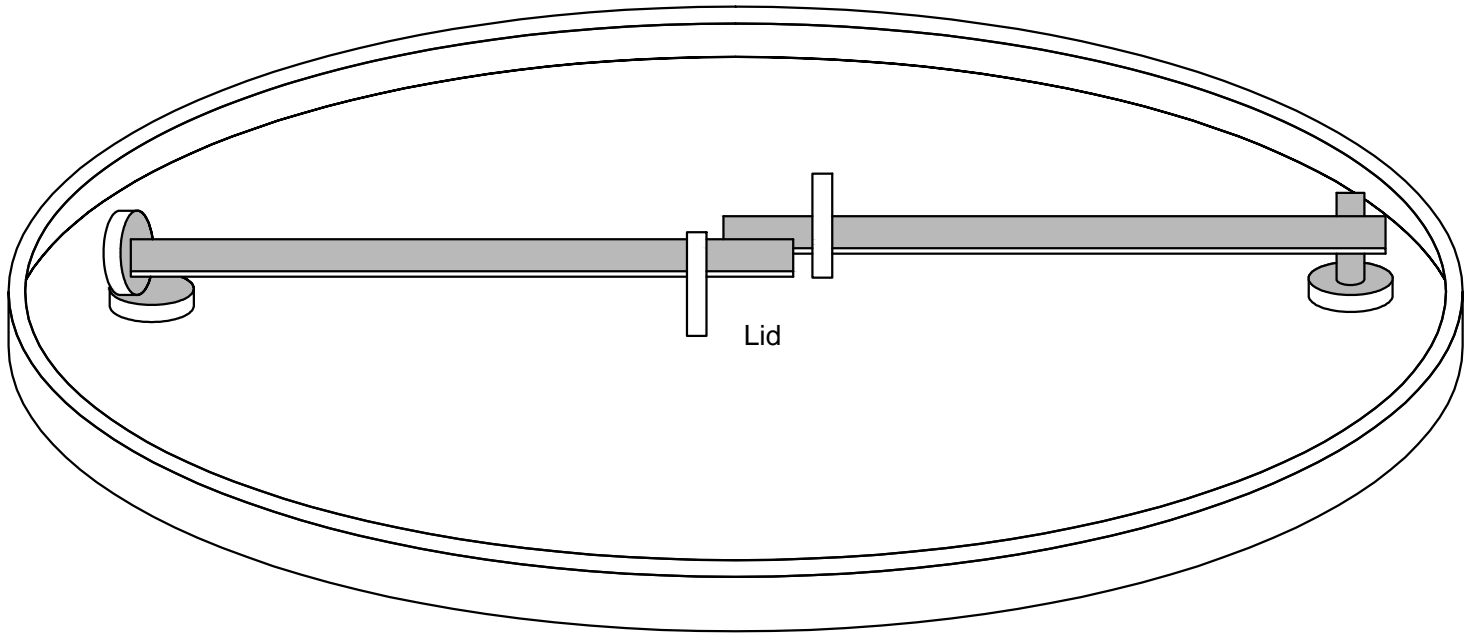


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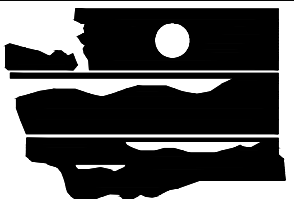
- If the material is a Dangerous Waste, the business owner must comply with any additional Ecology requirements as specified in [Ecology Requirements for Generators of Dangerous Wastes](#) within [I-2.15 Other Requirements](#).
- Storage of flammable, ignitable, and reactive chemicals and materials must comply with the stricter of local zoning codes, local fire codes, the Uniform Fire Code (UFC), UFC standards, or the National Electric Code
- Have spill kits or cleanup materials near container storage areas.
- Clean up all spills immediately.
- Cover dumpsters, or keep them under cover such as a lean-to, to prevent the entry of stormwater. Keep dumpster lids closed.
- Replace or repair leaking garbage dumpsters, or install waterproof liners.
- Drain dumpsters and/or dumpster pads to sanitary sewer where approved by the sewer authority.
- When collection trucks directly pick up roll-containers, ensure a file is on both sides of the curb to facilitate moving the dumpster.

Applicable Structural Source Control BMPs:

- Keep containers with Dangerous Waste, food waste, or other potential pollutant liquids inside a building unless this is not feasible due to site constraints or Uniform/International Fire Code requirements.
- Store containers in a designated area, which is covered, bermed or diked, paved and impervious in order to contain leaks and spills (see [Figure IV-5.3: Covered and Bermed Containment Area](#)). Slope the secondary containment to drain into a dead-end sump for the collection of leaks and small spills.
- For liquid materials, surround the containers with a dike as illustrated in [Figure IV-5.3: Covered and Bermed Containment Area](#). The dike must be of sufficient height to provide a volume of either 10 percent of the total



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Locking System for Drum Lid

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enclosed container volume or 110 percent of the volume contained in the largest container, whichever is greater.

Figure IV-5.3: Covered and Bermed Containment Area



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- Where material is temporarily stored in drums, use a containment system as illustrated, in lieu of the above system (see [Figure IV-5.1: Secondary Containment System](#)).
- Place containers mounted for direct removal of a liquid chemical for use by employees inside a containment area as described above. Use a drip pan during liquid transfer (see [Figure IV-5.4: Mounted Container - With Drip Pan](#)).

Figure IV-5.4: Mounted Container - With Drip Pan



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Applicable Treatment BMP:

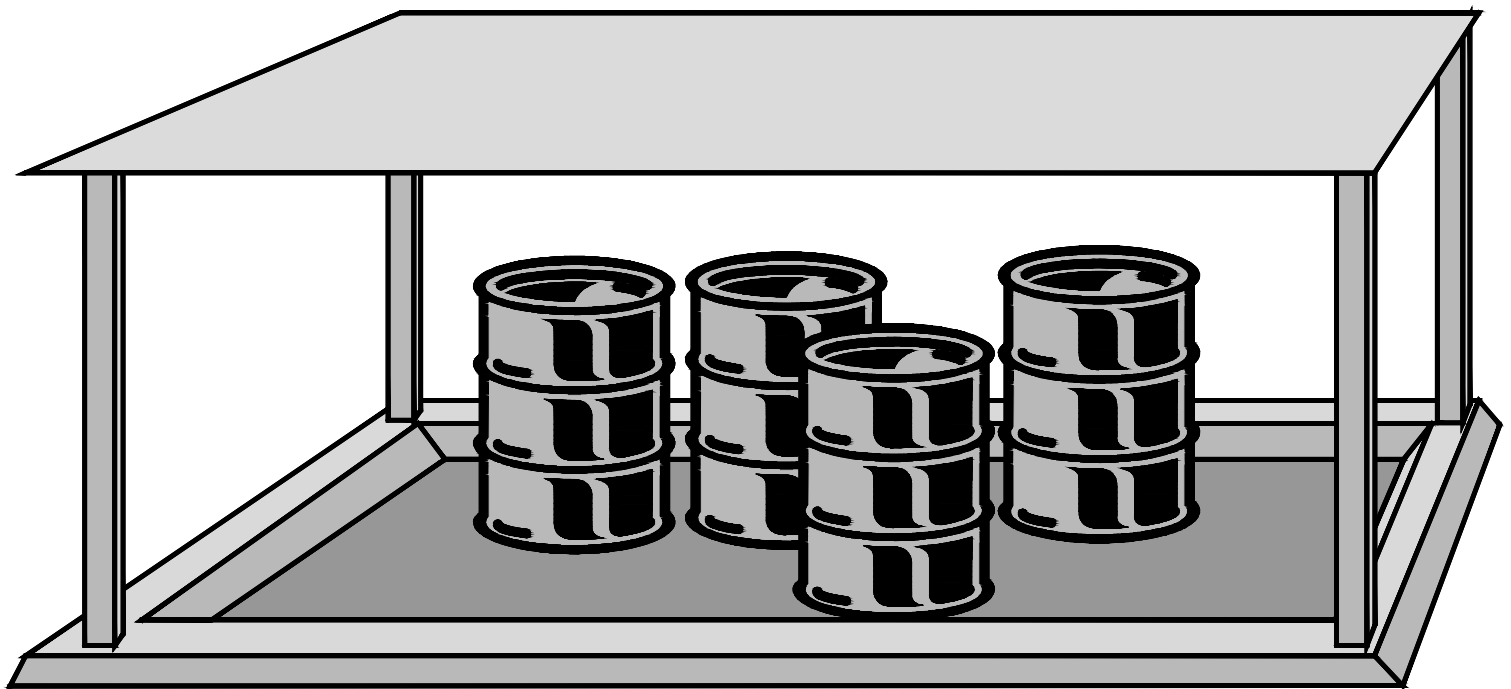
Note this treatment BMP is for contaminated stormwater from drum storage areas.

- To discharge contaminated stormwater, pump it from a dead-end sump or catchment and dispose of appropriately.

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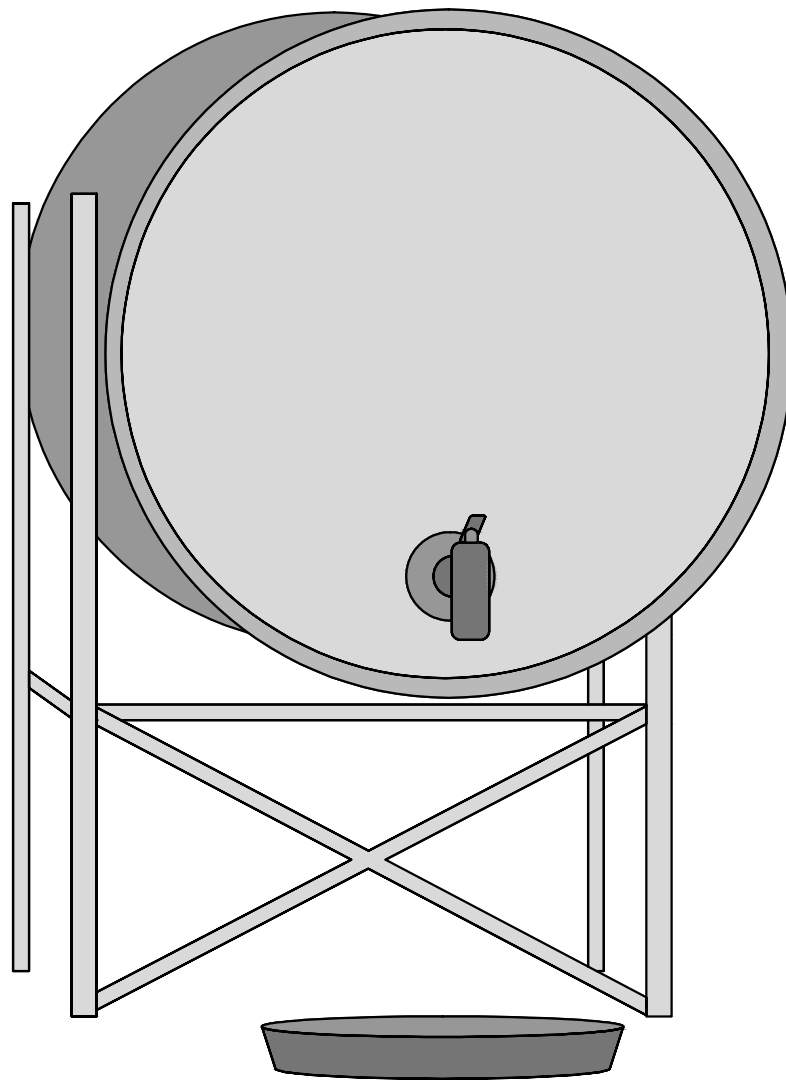


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Covered and Bermed Containment Area

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*Note that the secondary containment is not shown in this figure

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Mounted Container - with Drip Pan

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