

## Hazardous Waste Factsheet

*Secondary containment may be required for proper storage of hazardous liquids.*

# Compliance with the Nonpoint Source Pollution Ordinance

The Thurston County Nonpoint Source Pollution Ordinance (Article VI of the Sanitary Code) requires that hazardous materials and wastes be handled, stored, and disposed in a manner that is protective of the environment. Section 4.1 of Article VI states:

- (a) Moderate risk waste and petroleum products including, but not limited to, oil and grease, shall be disposed of by recycling or use of a hazardous waste management facility operating under interim status or with a permit issued by EPA or an authorized state . . . No person shall, intentionally or negligently, dump or deposit, or permit the dumping or depositing of any such waste in any other manner, including onto or under the surface of the ground or into surface or ground water.
- (b) Moderate risk waste, petroleum products, and hazardous materials shall be kept in containers and shall be stored in such a manner and location that if the container is ruptured, the contents will not discharge, flow, be washed or fall into surface water or ground water.

*In order to comply with Section 4.1 (b), secondary containment may be required for proper storage of petroleum products and other hazardous liquids.*

### What is Secondary Containment?

Secondary containment is a liquid-tight barrier that will adequately contain hazardous materials that are released from a leaking storage container. Examples include, but are not limited to the following:

- Placement drums or tanks (primary containment) inside an area surrounded by a concrete curb or metal lip (secondary containment).
- Placement of containers inside of plastic or metal tubs, bins, pans, troughs, or any other suitable secondary container.
- Double-walled storage tanks.
- Storage areas that drain into sealed vaults or sumps.

### When is Secondary Containment Required?

Secondary containment is required for any hazardous liquid that has the potential to reach the environment (i.e. soil, surface water, etc) in the event that the primary container is ruptured. Examples include, but are not limited to the following:

- Any outdoor storage area.
- Indoor storage areas located near floor drains.
- Indoor storage areas located near an outside doorway or outside wall that is not sealed to the floor.
- Indoor areas containing dirt surfaces, cracked concrete floor, or concrete expansion joints.

Thurston County Public  
Health and Social Services  
Environmental Health Division

2000 Lakeridge Dr. SW  
Olympia, WA 98502-6045

Hazardous Waste Hotline:  
360-786-5457

TDD Line: 360-754-2933

<http://www.co.thurston.wa.us/>



## The Options

The size and design of a secondary containment unit depends on the type and amount of material that it holds. The following secondary containment options will satisfy Thurston County regulatory requirements. Liquid hazardous materials, including petroleum products, can be:

1. Stored **indoors** on a liquid-tight concrete floor without secondary containment *if* the storage area is able to contain 100 percent of the largest container in the event of a spill and prevent it from flowing or leaking out of the building. In addition, spilled or leaked materials must be prevented from entering floor drains that are not part of a liquid-tight containment system designed to capture and hold hazardous materials.
2. Stored in outdoor or indoor **covered** secondary containment that can hold 110 percent of the volume of the largest storage container *or* 10 percent of the total volume stored, whichever is greatest, plus the displacement volume of any items inside the containment.
3. Stored in **outdoor uncovered** secondary containment that can hold 120 percent of the volume of the largest storage container *or* 10 percent of the total volume stored, whichever is greatest, plus the displacement volume of any items inside the containment. Uncovered containment is not generally recommended (see below).
4. Stored in UL-certified double-walled storage tanks. The volume requirements that are listed in options 1, 2, and 3 do not apply to these storage tanks, because they do not require additional containment provisions.

## Secondary Containment Criteria

### Calculations for Determining Proper Containment Volume

- First, measure cubic feet of the containment area: Multiply length x width x height
- To convert cubic feet to gallons, multiply number of cubic feet by 7.48
- 1 inch equals 0.083 feet.
- Example: Containment area measures 10 feet wide by 10 feet long by 4 inches tall.  
Multiply 10 x 10 x 0.332 (4 inches x 0.083 per inch) = 33.2 cubic feet  
Multiply 33.2 cubic feet x 7.48 = 248 gallons total containment capacity

### Chemical Compatibility and Structural Integrity

- The structural materials used in secondary containment units, including expansion joints and seals (if applicable) must be chemically compatible with the substance(s) that will be contained.
- Secondary containment must be maintained liquid-tight at all times.
- Secondary containment must be physically adequate to hold a release and remain liquid-tight.

### Stormwater Accumulation and Discharge

All stormwater that accumulates in outdoor uncovered secondary containment must be managed in accordance with the Thurston County Drainage Design and Erosion Control Manual.

- Outdoor uncovered containments must be maintained free of stormwater accumulation.
- An operator must be present during stormwater discharge from secondary containment.
- All discharge valves must be closed and locked after a supervised discharge is completed.
- Stormwater discharged from petroleum product secondary containment must be treated through an oil/water separator or handled as hazardous waste. (See the hazardous waste fact sheet “Oil/Water Separators.”)

## Additional Information

Please call the Thurston County Business Pollution Prevention Program at (360) 786-5457 or TDD (360) 754-2933 or visit our website at [www.co.thurston.wa.us/health/ehhw/index.html](http://www.co.thurston.wa.us/health/ehhw/index.html)

