

7151.6400 SECONDARY CONTAINMENT.

Subpart 1. Requirement.

A. Owners and operators must provide secondary containment for the storage of all substances in tanks. If more than one type of substance is stored within a single secondary containment area, the substances shall be compatible with each other and with the secondary containment area.

B. Secondary containment areas for existing aboveground storage tanks must have a continuous dike surrounding the tanks which will prevent releases from contaminating surface waters.

Subp. 2. **Volume.** All secondary containment systems for existing aboveground storage tanks must meet the volume requirements of part 7151.5400, subpart 2.

Subp. 3. **Materials.** All secondary containment systems for existing aboveground storage tanks must meet the materials requirements of subpart 5 or part 7151.5400, subpart 3.

Subp. 4. Design.

A. If the tank is lifted or moved within a facility, the secondary containment system must meet the design requirements of part 7151.5400, subpart 4.

B. If the tank is moved from a facility and reinstalled on a second facility, the tank must meet the standards for new aboveground storage tanks in part 7151.5100.

Subp. 5. **Soils.** A secondary containment area constructed of soils must:

A. be used as an integral part of a geosynthetic clay liner; or

B. show, through testing, a permeability rate to water equal to or less than the following:

Substance Classification	Groundwater or Bedrock < 10 Feet from Grade or Class 2 Surface Water within 100 Feet of Aboveground Storage Tank	Groundwater and Bedrock ≥ 10 Feet from Grade and Class 2 Surface Water not within 100 Feet of Aboveground Storage Tank
Type A	Minimum of three feet of soil at 1×10^{-5} cm/sec	Minimum of three feet of soil at 1×10^{-4} cm/sec
Type B	Minimum of three feet of soil at 1×10^{-4} cm/sec	Minimum of three feet of soil at 1×10^{-3} cm/sec
Type C	Minimum of three feet of soil at 1×10^{-3} cm/sec	No minimum permeability standard

Subp. 6. **Containment area evaluation.** Owners and operators shall perform postinstallation permeability testing on containment areas constructed of native soils, amended soils, or imported clay liners requiring a minimum permeability standard under subpart 5. A qualified soil technician or testing company shall evaluate the top three feet of soil, below any cover material, for vertical soil permeability. Evaluation must:

- A. comport with approved ASTM standard field or lab sampling techniques;
- B. utilize the soil sampling matrix below to quantify permeability rates of soils in smaller containment areas:

Secondary Containment Area Size (Square Feet)	Minimum Number of Soil Samples Necessary
<10,000	3
10,000 - 50,000	4
>50,000	Equal to the number of tanks contained in the secondary containment basin (minimum of 4 samples); and

C. utilize at least one sample collected from the lowest point in the containment area with the remaining samples triangulated across the entire basin.

Subp. 7. **Timing of compliance.**

A. Owners and operators shall comply with subpart 1, item B, effective November 1, 1998.

B. Owners and operators shall comply with subparts 2 to 6, effective November 1, 2003.

Statutory Authority: *MS s 115.03*

History: *23 SR 883; 25 SR 556*

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