

CHAPTER 7151
MINNESOTA POLLUTION CONTROL AGENCY
ABOVEGROUND STORAGE OF
LIQUID SUBSTANCES

7151 1100	PURPOSE	7151 6200	TANK AND PIPING STANDARDS
7151 1200	DEFINITIONS	7151 6400	SECONDARY CONTAINMENT
7151 1300	APPLICABILITY	7151 6600	CORROSION PROTECTION
7151 4100	TEMPORARY STORAGE	7151 6700	OVERFILL PROTECTION
7151 5100	REQUIREMENT	7151 7100	REQUIREMENT
7151 5200	TANK AND PIPING STANDARDS	7151 7200	MONITORING
7151 5600	CORROSION PROTECTION	7151 8200	OUT-OF-SERVICE ABOVEGROUND
7151 5700	OVERFILL PROTECTION		STORAGE TANK SYSTEMS
7151 6100	REQUIREMENT	7151 8400	CONTAMINATION DETERMINATION

7151.1100 PURPOSE.

The purpose of this chapter is to provide for the protection of the public health and the environment by establishing uniform performance standards and technical requirements for aboveground storage of liquid substances which may cause pollution of waters of the state.

Statutory Authority: *MS s 115 03*

History: *25 SR 556*

7151.1200 DEFINITIONS.

[For text of subps 1 to 4, see MR]

Subp 4a **Asphalt cement.** "Asphalt cement" means a mixture of bituminous obtained from native deposits or as a petroleum by-product used for roofing or paving that is in a solid state at 100 degrees Fahrenheit or less

[For text of subps 5 to 12, see MR]

Subp. 12a **Double-bottomed tank.** "Double-bottomed tank" means a field-erected aboveground storage tank that has been designed or modified to include a second tank bottom and where (A) the bottoms are compatible with and impermeable to the substance being stored, (B) the interstitial space between the bottoms is filled with a minimum of three inches of a neutral sand or other noncorrosive material cushion, and (C) there is a method in place for monitoring the interstitial space for leaks

Subp 13 **Double-walled tank.** "Double-walled tank" means an aboveground storage tank with an inner, primary shell and an outer, secondary shell that extends around the entire inner shell, and a method in place for monitoring the interstitial space between the shells for leaks

[For text of subp 14, see MR]

Subp 14a. **Facility.** "Facility" means an assemblage of one or more aboveground storage tanks, including any indoor tanks, together with any associated secondary containment areas, appurtenances, and substance transfer areas, that are located at a single property or multiple contiguous properties

[For text of subps 15 to 24, see M.R.]

Subp 25 **Other regulated substances.** "Other regulated substances" means any substance, including a food-based product intended for human or animal consumption, which may cause pollution of waters of the state and is not.

[For text of items A and B, see MR]

[For text of subps 26 and 27, see MR]

Subp 28 **Piping or lines.** "Piping" or "lines" means a hollow cylinder or tubular conduit that is constructed for conveying a substance from one point to another within an aboveground storage tank system

[For text of subs 29 to 32, see MR]

Subp 33 **Substance.** "Substance" means any material which is liquid at ambient pressures and temperatures which may cause pollution of waters of the state

[For text of subs 34 to 41, see M.R]

Statutory Authority: *MS s 115 03*

History: 25 SR 556

7151.1300 APPLICABILITY.

[For text of subpart 1, see MR]

Subp 2 **Exclusions.** The following aboveground storage tank systems are excluded from the requirements of this chapter

[For text of items A to J, see MR]

K an aboveground storage tank, located on a farm, in which the contents of the tank are used by the tank owner or operator for farming purposes, and the contents are not being commercially distributed,

[For text of items L to N, see MR]

O stormwater collection systems,

P septic tanks, and

Q an aboveground storage tank that is located at a site for a period of 30 days or less

Statutory Authority: *MS s 115 03*

History: 25 SR 556

7151.4100 TEMPORARY STORAGE.

Subpart 1 **Scope.** This part applies to storage of a substance in an aboveground storage tank that is located at a site for a period of more than 30 days but less than one year. Temporary storage tanks regulated under this part are exempt from all other requirements except as provided in subparts 2, 3, and 4

[For text of subs 2 to 4, see MR]

Statutory Authority: *MS s 115 03*

History: 25 SR 556

7151.5100 REQUIREMENT.

[For text of subs 1 and 2, see MR]

Subp 3 **Tanks storing other regulated substances.** Owners and operators of new tanks storing other regulated substances need not comply with parts 7151.5400, subpart 4, 7151.5500, 7151.5600, and 7151.5700

Subp 4 **Tanks storing asphalt cement.** Owners and operators of new tanks storing asphalt cement need not comply with parts 7151.5200, subpart 3, item A, subitem (2), 7151.5400, subpart 4, 7151.5500, 7151.5600; and 7151.5700

Statutory Authority: *MS s 115 03*

History: 25 SR 556

7151.5200 TANK AND PIPING STANDARDS.

[For text of subs 1 and 2, see MR]

Subp 3 **Used aboveground storage tanks.**

A. Except as provided in item C, an aboveground storage tank that has been removed from a facility must not be reinstalled at a second facility for the purpose of substance storage unless:

[For text of subitems (1) and (2), see MR]

B. Except as provided in item C, a tank that has been lifted or moved within a facility must not be reinstalled for the purpose of substance storage unless.

[For text of subitems (1) and (2), see M.R.]

[For text of item C, see M.R.]

Statutory Authority: *MS s 115 03*

History: 25 SR 556

7151.5600 CORROSION PROTECTION.

Subpart 1. **Tanks.** The floor of a steel aboveground storage tank must be protected from corrosion using one of the following methods:

[For text of A to C, see M.R.]

D. the tank is double-bottomed with.

(1) a vacuum pulled on the interstitial space; or

(2) a cathodic protection system installed in the interstitial space,

[For text of items E to G, see M.R.]

[For text of subp 2, see M.R.]

Subp. 3 **Design criteria.** Cathodic protection of new steel tanks and lines must meet the following design criteria:

[For text of items A and B, see M.R.]

Statutory Authority: *MS s 115 03*

History: 25 SR 556

7151.5700 OVERFILL PROTECTION.

[For text of subpart 1, see M.R.]

Subp 2. **Double-walled tanks.** Double-walled tanks which are not otherwise located within a secondary containment area meeting the requirements of part 7151.5400 must have one of the following systems for overfill prevention

[For text of items A and B, see M.R.]

[For text of subp 3, see M.R.]

Statutory Authority: *MS s 115.03*

History: 25 SR 556

7151.6100 REQUIREMENT.

[For text of subps 1 and 2, see M.R.]

Subp 3. **Tanks storing other regulated substances.** Owners and operators of tanks storing other regulated substances need not comply with parts 7151 6400, subpart 4, item A, 7151.6500, 7151 6600, and 7151.6700

Subp 4 **Tanks storing asphalt cement.** Owners and operators of tanks storing asphalt cement need not comply with parts 7151 6400, subpart 4, item A, 7151 6500; 7151 6600, and 7151 6700.

Statutory Authority: *MS s 115 03*

History: 25 SR 556

7151.6200 TANK AND PIPING STANDARDS.

Subpart 1 **Tank and piping standards.** Owners and operators of aboveground storage tank systems shall ensure that existing systems used to store regulated substances will not structurally fail or corrode.

[For text of subp 2, see M.R.]

Statutory Authority: *MS s 115 03*

History: 25 SR 556

7151.6400 SECONDARY CONTAINMENT.

[For text of subps 1 and 2, see MR]

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.

[For text of subp 5, see MR]

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 comply 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 basm (minimum of 4 samples); and

[For text of item C, see MR]

[For text of subp 7, see MR]

Statutory Authority: *MS s 115 03*

History: *25 SR 556*

7151.6600 CORROSION PROTECTION.

[For text of subpart 1, see MR]

Subp 2 **Tanks.** The floor of an existing steel aboveground storage tank must be protected from external corrosion using one or more of the following methods

[For text of items A to C, see MR]

D the tank is double-bottomed with

(1) a vacuum pulled on the interstitial space, or

(2) a cathodic protection system installed in the interstitial space,

[For text of items E to G, see MR]

[For text of subps 3 and 4, see MR]

Subp 5. **Exclusions.** A secondary containment area for tanks or tank systems which complies with the requirements of part 7151.5400, subparts 1, 2, 3, items B to I, and 4, is excluded from the requirements of this part

[For text of subps 6, see MR]

Statutory Authority: *MS s 115 03*

History: *25 SR 556*

7151.6700 OVERFILL PROTECTION.*[For text of subpart 1, see M.R.]*

Subp 2. **Exclusions.** A secondary containment area for tanks or tank systems which is constructed to a 1×10^{-7} centimeters per second permeability standard and meets the requirements of part 7151 5400 or 7151 6400, subparts 1 to 4, is excluded from the requirements of this part.

*[For text of subp 3, see M.R.]***Statutory Authority:** *MS s 115 03***History:** 25 SR 556**7151.7100 REQUIREMENT.***[For text of subpart 1, see M.R.]*

Subp 2. **Exclusions.** The following aboveground storage tanks are excluded from the requirements of parts 7151.7100 to 7151.7500

A tanks 1,100 gallons or less but greater than 500 gallons and located within 500 feet of Class 2 surface water,

B tanks storing other regulated substances are excluded from part 7151.7200, subparts 4, 6, item B, and 7 only, and

C tanks storing asphalt cement are excluded from part 7151 7200, subparts 4, 6, item B, and 7 only

Statutory Authority: *MS s 115 03***History:** 25 SR 556**7151.7200 MONITORING.***[For text of subps 1 to 5, see M.R.]*

Subp 6 **Tank inspection.** All field-erected steel tanks must be internally and externally inspected by a certified tank inspector pursuant to American Petroleum Institute standard 653. Initial inspections must be completed in accordance with the following schedule.

A. external inspections shall be conducted by November 2, 2003, or a maximum of five years after the initial construction date, whichever is later, and

B internal inspections shall be conducted by November 2, 2008, or a maximum of ten years after the initial construction date, whichever is later.

*[For text of subp 7, see M.R.]***Statutory Authority:** *MS s 115 03***History:** 25 SR 556**7151.8200 OUT-OF-SERVICE ABOVEGROUND STORAGE TANK SYSTEMS.**

Subpart 1. **Application.** If a substance is not introduced to or removed from an aboveground storage tank system for one year or more, or if an aboveground storage tank system is to be permanently closed, the owner or operator shall

[For text of items A, and B, see M.R.]

Subp 2 **Out of service.** The owner or operator of an aboveground storage tank system taken out of service shall:

[For text of items A to C, see M.R.]

D dispose of tank bottom sludges in accordance with applicable state or federal requirements,

*[For text of items E and F, see M.R.]***Statutory Authority:** *MS s 115 03***History:** 25 SR 556

7151.8400 CONTAMINATION DETERMINATION.

[For text of subpart 1, see MR]

Subp 2 **Exclusions.** The following aboveground storage tank systems are excluded from the requirements of this part

A a tank storing other regulated substances,

B a tank, which has been removed, that exclusively contained number 6 grade fuel oil or asphalt cement; and

[For text of item C, see MR]

Statutory Authority: *MS s 115 03*

History: *25 SR 556*