

1.1 **Pollution Control Agency**

1.2 **Adopted Permanent Rules Relating to Underground Storage Tanks**

1.3 **7150.0010 APPLICABILITY.**

1.4 [For text of subps 1 to 3, see M.R.]

1.5 Subp. 4. **Emergency power generator tanks.** Parts 7150.0300 to 7150.0340 and
1.6 7150.0450, subpart 3, item D, do not apply to an underground storage tank system installed
1.7 before December 22, 2007, that stores fuel for use by emergency power generators.

1.8 Subp. 5. **Heating oil tanks.** Parts 7150.0010; 7150.0030; 7150.0090, subparts 1,
1.9 2, 4, and 6; 7150.0100, subparts 7, 9, and 10; and 7150.0205, subparts 1 to 4, apply to
1.10 an underground storage tank system of over 1,100 gallons capacity used exclusively for
1.11 storing heating oil for consumptive use on the premises where stored.

1.12 **7150.0100 PERFORMANCE STANDARDS FOR UNDERGROUND STORAGE**
1.13 **TANK SYSTEMS.**

1.14 [For text of subps 1 to 9, see M.R.]

1.15 Subp. 10. **Repairs allowed.** Owners and operators of underground storage tank
1.16 systems must ensure that repairs will prevent releases due to structural failure or corrosion
1.17 as long as the underground storage tank system is used to store regulated substances. The
1.18 owner and operator shall ensure that the person performing the repairs has been certified
1.19 under chapter 7105. The repairs must meet the requirements in items A to F.

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

1.21 C. Within 30 days after completion of a tank repair, the tank must pass either
1.22 a tightness test in accordance with part 7150.0330, subpart 4, or a tightness test at a 0.1
1.23 gallon per hour leak rate using equipment for automatic tank gauging. Within 30 days
1.24 after completion of a piping repair, the piping must pass a tightness test in accordance
1.25 with part 7150.0340, subpart 3, item A.

2.1 D. Within six months after the repair of a cathodic protection system, the
2.2 cathodic protection system must be tested according to part 7150.0215 to ensure that
2.3 it is operating properly.

2.4 E. Impressed current cathodic protection systems must be repaired by a
2.5 corrosion expert who is qualified to repair impressed current cathodic protection systems.

2.6 F. Sacrificial anode cathodic protection systems must be repaired by a cathodic
2.7 protection tester or a corrosion expert who is qualified to repair sacrificial anode cathodic
2.8 protection systems.

2.9 [For text of subp 11, see M.R.]

2.10 Subp. 12. **Sump and basin maintenance.** Spill catchment basins, submersible
2.11 pump sumps, and dispenser sumps shall be maintained free of storm water and debris.
2.12 Regulated substances spilled to any spill catchment basin, submersible pump sump, or
2.13 dispenser sump shall be immediately removed.

2.14 Subp. 13. **Shear valves.** All shear valves shall be securely anchored.

2.15 Subp. 14. **Drop tubes.** All underground storage tanks shall have a drop tube that
2.16 extends to within six inches of the tank bottom.

2.17 **7150.0205 DESIGN AND CONSTRUCTION.**

2.18 Subpart 1. **Tanks.** Each tank must be properly designed and constructed and any part
2.19 underground that routinely contains product must be protected from corrosion using one
2.20 of the following methods, except that all hazardous materials tanks and all tanks, other
2.21 than heating oil tanks, installed or replaced after December 22, 2007, must comply with
2.22 item D. The corrosion protection methods must be in accordance with one of the codes
2.23 of practice in subpart 2 developed by a nationally recognized association or independent
2.24 testing laboratory. Tanks that do not meet the requirements of this subpart must be
2.25 permanently closed according to part 7150.0410.

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

3.2 [For text of subps 2 to 5, see M.R.]

3.3 Subp. 6. **Submersible pumps.**

3.4 A. After December 22, 2007, any new or replacement submersible pump,
3.5 including replacement pump head, shall be provided with secondary containment around
3.6 and beneath the pump head. Secondary containment shall be:

3.7 (1) designed to contain a release from the pump head and any connectors,
3.8 fittings, and valves beneath the pump head until the release can be detected and removed;

3.9 (2) designed with liquid-tight sides, bottom, cover, and points of
3.10 penetration;

3.11 [For text of subitems (3) and (4), see M.R.]

3.12 [For text of item B, see M.R.]

3.13 Subp. 7. **Dispensers.**

3.14 A. After December 22, 2007, any new dispenser, and any replacement dispenser
3.15 where work is performed beneath any shear valves or check valves or on any flexible
3.16 connectors or unburied risers, shall be provided with secondary containment beneath the
3.17 dispenser. Secondary containment shall be:

3.18 (1) designed to contain a release from the dispenser and any connectors,
3.19 fittings, and valves beneath the dispenser until the release can be detected and removed;

3.20 (2) designed with liquid-tight sides, bottom, and points of penetration;

3.21 [For text of subitems (3) and (4), see M.R.]

3.22 [For text of item B, see M.R.]

3.23 **7150.0211 CLASS A, B, AND C OPERATOR REQUIREMENTS.**

4.1 Subpart 1. **Definitions.** For purposes of this part, the following definitions apply.

4.2 A. "Class A operator" means an individual who has primary responsibility to
4.3 operate and maintain the underground storage tank system.

4.4 B. "Class B operator" means an individual who has daily responsibility to
4.5 operate and maintain the underground storage tank system.

4.6 C. "Class C operator" means an individual who has daily on-site presence and
4.7 responsibility to handle emergencies and alarms pertaining to a spill or release from the
4.8 underground storage tank system.

4.9 D. "Unattended card-lock facility" means a facility where control of dispensing
4.10 a regulated substance is through a mechanical or electronic method without the constant
4.11 on-site presence of a Class A, Class B, or Class C operator.

4.12 Subp. 2. **General.** Class A, B, and C operators must be either the owner or operator
4.13 of the underground storage tank system, or a designated employee of the owner or
4.14 operator. The owner or operator of an underground storage tank system must designate
4.15 a Class A, Class B, and Class C operator for the tank system, except that the owner or
4.16 operator is not required to designate a Class C operator for unattended card-lock facilities.
4.17 A Class A, Class B, or Class C operator must be present on site during the operation of
4.18 the tank system, except at unattended card-lock facilities, which must have a sign posted
4.19 according to subpart 3. The owner and operator of an underground storage tank system are
4.20 responsible for ensuring that the Class A, Class B, and Class C operators are fulfilling
4.21 their responsibilities under this chapter.

4.22 Subp. 3. **Unattended card-lock facility.** An unattended card-lock facility must have
4.23 a legible sign posted in a conspicuous place with the name and address of the facility and
4.24 the telephone number of the facility owner, operator, or local emergency response.

5.1 Subp. 4. **Class A operator responsibilities.** The Class A operator is responsible for
5.2 managing resources and personnel to achieve and maintain compliance with this chapter.

5.3 Subp. 5. **Class B operator responsibilities.** The Class B operator is responsible for
5.4 daily operation and maintenance of the underground storage tank system. The Class B
5.5 operator must be present on site at least one time per month to ensure proper operation
5.6 and maintenance of the tank systems, except that the Class B operator of an unattended
5.7 card-lock facility must be present on site at least one time per week. Each month, the
5.8 Class B operator must validate that:

5.9 A. required release detection monitoring is being performed according to parts
5.10 7150.0300 to 7150.0340;

5.11 B. required reporting is being performed and records are being maintained
5.12 according to part 7150.0450;

5.13 C. spill, overflow, and corrosion protection systems are in place and operational
5.14 according to part 7150.0205;

5.15 D. cathodic protection testing has been performed according to part 7150.0215;

5.16 E. unusual operating conditions or release detection system indications have
5.17 been reported and investigated according to Minnesota Statutes, section 115.061; and

5.18 F. routine operation and maintenance activities have been accomplished.

5.19 Subp. 6. **Class C operator responsibilities.** The Class C operator must be present
5.20 on site daily and is responsible for handling emergencies and alarms pertaining to a
5.21 spill or release from a tank system, including reporting spills and releases. The Class C
5.22 operator must be trained by a Class A or B operator before assuming responsibility for
5.23 the tank system.

5.24 Subp. 7. **Class A and B operator examinations.**

6.1 A. Class A and B operators must pass an agency-administered examination
6.2 verifying operator knowledge of the underground storage tank system with a score of 75
6.3 percent or higher, except as provided in item D.

6.4 B. Class A and B operators must pass the agency-administered examination
6.5 within 30 days after being designated by the owner or operator of the tank system, except
6.6 as provided in item C. The Class B operator must retake the examination within 30 days
6.7 after a change in any of the following tank system components:

- 6.8 (1) tank or piping construction material;
6.9 (2) tank or piping release detection method; or
6.10 (3) type of cathodic protection system.

6.11 C. Class A and B operators must be designated and pass the initial
6.12 agency-administered examination according to the following deadlines:

6.13 ~~(1) operators at underground storage tank facilities where the facility~~
6.14 ~~telephone area code is 651 or 952 must pass the examination no later than August 8,~~
6.15 ~~2010. After August 8, 2010, item B applies;~~

6.16 ~~(2)~~ (1) operators at underground storage tank facilities where the facility
6.17 telephone area code is 651, 952, 612, or 763 must pass the examination no later than
6.18 August 8, 2011. After August 8, 2011, item B applies; and

6.19 ~~(3)~~ (2) operators at underground storage tank facilities where the facility
6.20 telephone area code is 507, 218, or 320, or other area code must pass the examination no
6.21 later than August 8, 2012. After August 8, 2012, item B applies.

6.22 D. If a designated Class A or B operator is certified in another state as a Class
6.23 A or B operator for underground storage tanks, the owner or operator may apply to
6.24 the commissioner for a waiver of the examination requirement in item A. The owner
6.25 or operator must submit to the commissioner a copy of the designated Class A or B

7.1 operator's current certification issued by another state and information to demonstrate
7.2 that the other state's operator certification examination is equivalent in content to the
7.3 agency-administered examination under item A. If the waiver is approved by the
7.4 commissioner, the owner or operator is subject to the commissioner's conditions of
7.5 approval and to the other requirements in this part, including the examination requirements
7.6 in item B and subpart 8, item B.

7.7 **Subp. 8. Class A and B operator training requirements.**

7.8 A. If the Class A or B operator does not receive a passing score of 75 percent
7.9 or higher on the examination under subpart 7, the Class A or B operator must attend an
7.10 agency-approved training course and retake and pass an agency-administered examination
7.11 within 60 days after notification by the commissioner.

7.12 B. If the commissioner determines that the owner or operator of a tank system
7.13 has violated part 7150.0205, subpart 5; 7150.0215; 7150.0300; 7150.0330; 7150.0340;
7.14 or 7150.0400, the Class B operator of the tank system must attend an agency-approved
7.15 training course and retake and pass an agency-administered examination within 60 days
7.16 after notification by the commissioner.

7.17 **Subp. 9. Application procedures for training course approval.**

7.18 A. Persons seeking to train Class A and B operators must submit an application
7.19 to the commissioner for approval according to this subpart.

7.20 B. To apply for commissioner approval of an operator training course, a training
7.21 provider must submit an application to the commissioner on an application form provided
7.22 by the commissioner. The application must contain the following information:

7.23 (1) the course sponsor's name, address, and telephone number;

7.24 (2) a list of states that currently approve the training course;

8.1 (3) the course curriculum, including topics to be covered and length of the
8.2 training;

8.3 (4) a letter from the training course sponsor that clearly indicates how the
8.4 course meets the requirements of this chapter;

8.5 (5) a copy of all course materials, such as student manuals, instructor
8.6 notebooks, and handouts;

8.7 (6) a copy of the certificate that will be issued to students who attend the
8.8 course; and

8.9 (7) other information determined by the commissioner to be relevant
8.10 to evaluating whether the course will provide knowledge to operators to meet the
8.11 requirements of this chapter.

8.12 C. Training must provide the knowledge necessary for operators to monitor and
8.13 maintain tank systems in a manner that complies with this chapter, prevents releases to
8.14 the environment, minimizes the size of accidental releases through early detection, and
8.15 mitigates damage from releases with proper emergency response.

8.16 D. The commissioner shall suspend or revoke approval of a training course if
8.17 the commissioner finds that the course is no longer providing training that meets the
8.18 requirements of this chapter.

8.19 E. Except as provided in item D, approval of a training course remains in effect
8.20 until the commissioner notifies the approved training provider that changes in the course
8.21 are required to maintain commissioner approval. At that time, the training provider must
8.22 submit a revised training course to the commissioner for approval.

8.23 **7150.0215 OPERATION AND MAINTENANCE OF CATHODIC PROTECTION.**

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

9.1 Subp. 3. **Impressed current systems.** Impressed current cathodic protection systems
9.2 must be tested for proper operation according to the following requirements:

9.3 A. the rectifier must be read every 60 days to ensure that current is being
9.4 delivered to the system and the voltage and amperage readings shall be recorded;

9.5 B. systems must be tested by a corrosion expert or a cathodic protection tester
9.6 within six months of installation and at least annually thereafter, and within six months
9.7 after any repairs and at least annually thereafter; and

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

9.9 **7150.0300 RELEASE DETECTION.**

9.10 [For text of subps 1 to 4, see M.R.]

9.11 Subp. 5. **Tanks.** Tanks must be monitored at least every 30 days for releases using
9.12 one of the following methods or combination of methods, except that hazardous materials
9.13 tanks and tanks installed on or after December 22, 2007, must comply with item B:

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

9.15 Subp. 6. **Piping.** Underground piping that routinely contains regulated substances
9.16 must be monitored for releases using one of the following methods or combination of
9.17 methods, except that piping installed on or after December 22, 2007, must comply with
9.18 item A, subitem (3) or (4):

9.19 A. Pressure piping. Underground piping that conveys regulated substances
9.20 under pressure must use one of the following methods:

9.21 (1) line leak detection conducted according to part 7150.0340, subpart 2,
9.22 and annual line tightness testing conducted according to part 7150.0340, subpart 3, item A;

10.1 (2) line leak detection conducted according to part 7150.0340, subpart
10.2 2, and monthly line tightness testing conducted according to part 7150.0340, subpart
10.3 3, item B;

10.4 (3) line leak detection conducted according to part 7150.0340, subpart 2,
10.5 and monthly interstitial monitoring conducted according to part 7150.0340, subpart 4,
10.6 item A, subitem (2); or

10.7 (4) continuous interstitial monitoring conducted according to part
10.8 7150.0340, subpart 4, item A, subitem (1).

10.9 B. Suction piping.

10.10 (1) Except as described in subitem (2), underground piping that conveys
10.11 regulated substances under suction must:

10.12 (a) have a line tightness test conducted at least every three years if
10.13 it can detect a 0.1 gallon per hour leak rate at one and one-half times the operating
10.14 pressure; or

10.15 (b) have monthly interstitial monitoring conducted according to part
10.16 7150.0340, subpart 4.

10.17 [For text of subitem (2), see M.R.]

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

10.19 Subp. 7. **Sump and basin monitoring.** Dispenser sumps, spill catchment basins,
10.20 and submersible pump sumps shall be visually checked for releases on a monthly basis.
10.21 A submersible pump sump may be visually checked for releases on an annual basis if it
10.22 is secondarily contained in accordance with the design requirements of part 7150.0205,
10.23 subpart 6, and is equipped with a continuous automatic sensing device that signals the
10.24 operator of the presence of either the regulated substance or water in the sump. If sumps
10.25 and basins are equipped with automatic leak-sensing devices that signal the operator

11.1 of the presence of any regulated substance, sensors shall be tested annually for proper
11.2 function. Sumps and basins shall be maintained free of storm water and debris. Regulated
11.3 substances spilled to sumps and basins shall be immediately removed and the source of
11.4 the spills, drips, or leaks must be investigated and remedied.

11.5 **7150.0330 METHODS OF RELEASE DETECTION FOR TANKS.**

11.6 [For text of subp 1, see M.R.]

11.7 Subp. 2. **Inventory control.** Product inventory control must be conducted monthly
11.8 to detect a release of at least 1.0 percent flow-through plus 130 gallons on a monthly basis
11.9 in the following manner:

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

11.11 D. deliveries are made through a drop tube that extends to within six inches
11.12 of the tank bottom;

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

11.14 [For text of subps 3 to 7, see M.R.]

11.15 **7150.0340 METHODS OF RELEASE DETECTION FOR PIPING.**

11.16 [For text of subp 1, see M.R.]

11.17 Subp. 2. **Automatic line leak detectors.** Methods that continuously alert the
11.18 operator to the presence of a leak by restricting or shutting off the flow of regulated
11.19 substances through piping, or by triggering an audible or visual alarm, may be used only
11.20 if they detect leaks of three gallons per hour at ten pounds per square inch line pressure
11.21 within one hour. An annual test of the operation of any line leak detector must be
11.22 conducted. Testing shall:

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

11.24 Subp. 3. **Line tightness testing.** A periodic test of piping may be conducted:

12.1 A. annually, if it can detect a 0.1 gallon per hour leak rate at one and one-half
12.2 times the operating pressure; or

12.3 B. monthly, if it can detect a 0.2 gallon per hour leak rate at standard operating
12.4 pressure.

12.5 [For text of subps 4 and 5, see M.R.]

12.6 **7150.0400 TEMPORARY CLOSURE.**

12.7 [For text of subps 1 to 3, see M.R.]

12.8 Subp. 4. **Tanks out of service one year.** When an underground storage tank system
12.9 is out of service for one year or more, owners and operators must permanently close the
12.10 underground storage tank system according to part 7150.0410, unless the owner or operator
12.11 requests an extension of the closure period by submitting an application for an extension
12.12 on a form approved by the commissioner and the commissioner approves the extension
12.13 in writing based on compliance with this part. Conditions of extension shall include
12.14 record keeping requirements according to part 7150.0450 and the continued operation
12.15 and maintenance of cathodic protection according to part 7150.0215. The underground
12.16 storage tank system may not be returned to service without the written approval of the
12.17 commissioner, based on compliance with the applicable requirements of this chapter.

12.18 [For text of subp 5, see M.R.]

12.19 **7150.0410 PERMANENT CLOSURE AND CHANGE IN STATUS TO STORAGE**
12.20 **OF NONREGULATED SUBSTANCES.**

12.21 Subpart 1. **Requirements.** In addition to the requirements of the most current
12.22 Minnesota Fire Code, owners and operators must comply with the provisions in subparts 2
12.23 to 7 relating to permanent closure or change in status to storage of nonregulated substances.

12.24 [For text of subps 2 to 7, see M.R.]

13.1 **7150.0420 SITE ASSESSMENT.**

13.2 When permanently closing a tank or making a change in status to storage of a
13.3 nonregulated substance, owners and operators must measure through laboratory analysis
13.4 for the presence of a release where contamination is most likely to be present at the
13.5 underground storage tank site. If contaminated soils, contaminated groundwater, or free
13.6 product as a liquid or vapor is discovered by this measurement or by any other manner,
13.7 owners and operators must notify the agency immediately and begin corrective action
13.8 according to Minnesota Statutes, section 115.061. In selecting sample types, sample
13.9 locations, and measurement methods, owners and operators must consider the method of
13.10 closure, the nature of the stored substance, the type of backfill, the depth to groundwater,
13.11 and other factors appropriate for identifying the presence of a release.

13.12 **7150.0450 REPORTING AND RECORD KEEPING.**

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

13.14 Subp. 3. **Record retention.** Owners and operators must maintain the following
13.15 information in a legible manner for the specified time frame:

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

13.17 D. documentation of compliance with release detection requirements under
13.18 parts 7150.0300 to 7150.0340, as follows:

13.19 [For text of subitem (1), see M.R.]

13.20 (2) the results of any sampling, testing, or monitoring must be maintained
13.21 for at least ten years, including:

13.22 [For text of units (a) to (f), see M.R.]

13.23 (g) annual testing of any line leak detector according to part
13.24 7150.0340, subpart 2;

14.1 (h) annual line tightness testing according to part 7150.0340, subpart
14.2 3, item A;

14.3 (i) monthly line tightness testing according to part 7150.0340, subpart
14.4 3, item B;

14.5 [For text of units (j) to (m), see M.R.]

14.6 [For text of subitem (3), see M.R.]

14.7 (4) documentation of the commissioner's approval of alternate release
14.8 detection methods under part 7150.0330, subpart 7, or 7150.0340, subpart 5, must be
14.9 maintained for as long as the methods are being used to comply with the requirements
14.10 of this chapter;

14.11 E. results of the site assessment conducted at permanent closure or change in
14.12 status to a nonregulated substance under part 7150.0420 and any other records that are
14.13 capable of demonstrating compliance with closure requirements under parts 7150.0400
14.14 and 7150.0410. The results of the site assessment required in part 7150.0420 must be
14.15 maintained for at least three years after completion of permanent closure or change in
14.16 status in one of the following ways:

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

14.18 (3) by mailing these records to the commissioner if the records cannot be
14.19 maintained at the closed facility;

14.20 F. certification that the facility's Class A operator and Class B operator have
14.21 passed the operator examination requirements or documentation of current certification
14.22 in another state if the commissioner has approved a waiver of the agency-administered
14.23 examination. Certifications on current personnel must be kept until closure of the facility.
14.24 Certifications on former personnel must be kept for at least three years from the date of the
14.25 employee's termination;

15.1 G. records of monthly or weekly on-site presence of the Class B operator
15.2 according to part 7150.0211, subpart 5, must be kept for at least ten years; and

15.3 H. records that document that the Class C operator has received the training
15.4 required in part 7150.0211, subpart 6, including the date of training, who performed the
15.5 training, and the contents of the training. Training records on current personnel must be
15.6 kept until closure of the facility. Training records on former personnel must be kept for at
15.7 least three years from the date of the employee's termination.

15.8 [For text of subp 4, see M.R.]