Pollution Control Agency

Proposed Permanent Rules Relating to Underground Storage Tanks

7150.0010 APPLICABILITY.

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

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

Subp. 5. **Heating oil tanks.** Parts 7150.0010; 7150.0030; 7150.0090, subparts 1, 2, 4, and 6; 7150.0100, subparts 7, 9, and 10; and 7150.0205, subparts 1 to 4~~; and 7150.0215~~, apply to an underground storage tank system of over 1,100 gallons capacity used exclusively for storing heating oil for consumptive use on the premises where stored.

7150.0100 PERFORMANCE STANDARDS FOR UNDERGROUND STORAGE TANK SYSTEMS.

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

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

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

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

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

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

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

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

Subp. 12. **Sump and basin maintenance.** Spill catchment basins, submersible pump sumps, and dispenser sumps shall ~~have liquid-tight sides and bottom and~~ be maintained free of storm water and debris. Regulated substances spilled to any spill catchment basin, submersible pump sump, or dispenser sump shall be immediately removed.

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

Subp. 14. **Drop tubes.** All underground storage tanks shall have a drop tube that extends to within ~~12~~ six inches of the tank bottom.

7150.0205 DESIGN AND CONSTRUCTION.

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

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

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

Subp. 6. **Submersible pumps.**

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

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

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

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

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

Subp. 7. **Dispensers.**

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

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

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

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

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

7150.0211 CLASS A, B, AND C OPERATOR REQUIREMENTS.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

F. routine operation and maintenance activities have been accomplished.

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

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

A. Class A and B operators must pass an agency-administered examination verifying operator knowledge of the underground storage tank system with a score of 75 percent or higher.

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

(1) tank or piping construction material;

(2) tank or piping release detection method; or

(3) type of cathodic protection system.

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

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

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

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

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

A. If the Class A or B operator does not receive a passing score of 75 percent or higher on the examination under subpart 7, the Class A or B operator must attend an

agency-approved training course and retake and pass an agency-administered examination within 60 days after notification by the commissioner.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

7150.0215 OPERATION AND MAINTENANCE OF CATHODIC PROTECTION.

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

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

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

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

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

7150.0300 RELEASE DETECTION.

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

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

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

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

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

~~(1) be equipped with and operate a continuous automatic line-leak detector according to part 7150.0340, subpart 2; and~~

~~(2) have an annual line tightness test conducted according to part 7150.0340, subpart 3, or have monthly interstitial monitoring conducted according to part 7150.0340, subpart 4.~~

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

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

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

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

B. Suction piping.

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

(a) have a line tightness test conducted at least every three years ~~according to part 7150.0340, subpart 3~~ if it can detect a 0.1 gallon per hour leak rate at one and one-half times the operating pressure; or

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

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

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

Subp. 7. **Sump and basin monitoring.** Dispenser sumps, spill catchment basins, and submersible pump sumps shall be visually checked for releases on a monthly basis. A submersible pump sump may be visually checked for releases on an annual basis if it is secondarily contained in accordance with the design requirements of part 7150.0205, subpart 6, and is equipped with a continuous automatic sensing device that signals the operator of the presence of either the regulated substance or water in the sump. If sumps and basins are equipped with automatic leak-sensing devices that signal the operator of the presence of any regulated substance, sensors shall be tested annually for proper function. Sumps and basins shall be maintained free of storm water and debris. Regulated substances spilled to sumps and basins shall be immediately removed and the source of the spills, drips, or leaks must be investigated and remedied.

7150.0330 METHODS OF RELEASE DETECTION FOR TANKS.

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

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

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

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

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

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

7150.0340 METHODS OF RELEASE DETECTION FOR PIPING.

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

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

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

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

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

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

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

7150.0400 TEMPORARY CLOSURE.

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

Subp. 4. **Tanks out of service one year.** When an underground storage tank system is out of service for one year or more, owners and operators must permanently close the underground storage tank system according to part 7150.0410, unless the owner or operator requests an extension of the closure period ~~and completes a site assessment according to part 7150.0420,~~ by submitting an application for an extension on a form approved by the commissioner and the commissioner approves the extension in writing based on compliance with this part. Conditions of extension shall include record keeping requirements according to part 7150.0450 and the continued operation and maintenance of cathodic protection according to part 7150.0215. The underground storage tank system may not be returned to service without the written approval of the commissioner, based on compliance with the applicable requirements of this chapter.

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

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

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

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

7150.0420 SITE ASSESSMENT.

When permanently closing a tank~~,~~ or making a change in status to storage of a nonregulated substance, ~~or temporarily closing a tank for one year or more,~~ owners and operators must measure through laboratory analysis for the presence of a release where contamination is most likely to be present at the underground storage tank site. If

contaminated soils, contaminated groundwater, or free product as a liquid or vapor is discovered by this measurement or by any other manner, owners and operators must notify the agency immediately and begin corrective action according to Minnesota Statutes, section 115.061. In selecting sample types, sample locations, and measurement methods, owners and operators must consider the method of closure, the nature of the stored substance, the type of backfill, the depth to groundwater, and other factors appropriate for identifying the presence of a release.

7150.0450 REPORTING AND RECORD KEEPING.

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

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

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

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

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

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

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

~~(g) monthly electronic line leak detection according to part 7150.0340, subpart 2;~~

~~(h)~~ (g) annual testing of any ~~mechanical~~ line leak detector according to part 7150.0340, subpart 2;

~~(i)~~ (h) ~~monthly or~~ annual line tightness testing according to part 7150.0340, subpart 3, item A;

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

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

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

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

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

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

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

F. certification that the facility's Class A operator and Class B operator have passed the operator examination requirements. Certifications on current personnel must be kept until closure of the facility. Certifications on former personnel must be kept for at least three years from the date of the employee's termination;

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

H. records that document that the Class C operator has received the training required in part 7150.0211, subpart 6, including the date of training, who performed the

training, and the contents of the training. Training records on current personnel must be kept until closure of the facility. Training records on former personnel must be kept for at least three years from the date of the employee's termination.

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