

Subchapter 5: OPERATING STANDARDS FOR UNDERGROUND STORAGE TANKS**§ 8-501** APPLICABILITY

This subchapter applies to permittees of category one underground storage tank systems and the owners of category two underground storage tank systems.

§ 8-502 GENERAL REQUIREMENTS

- (a) Any suspected release of regulated substance shall be reported to the Secretary in accordance with the requirements of **§ 8-103(a)(2)**.
- (b) Any underground storage tank system or system component from which regulated substance has been released or that is leaking shall be taken out-of-service immediately, and remain out-of-service until the system or system component is repaired in accordance with **§ 8-508**, or the underground storage tank system is permanently closed.
- (c) For each underground storage tank system, the permittee or tank owner shall maintain a written facility record which documents, in chronological order, the following maintenance, repair, and monitoring activities, as applicable:
 - (1) Manual overfill prevention as required under **§ 8-503(e)(3)**;
 - (2) Cathodic protection system testing and monitoring as required under **§ 8-504(c)**;
 - (3) Release detection monitoring as required under **§ 8-505(f)**;
 - (4) Inventory monitoring as required under **§ 8-506(b)(1)(A)**; and
 - (5) Underground storage tank system repairs as required under **§ 8-508(f)**.

Note: It may be helpful to maintain a separate log book for each underground storage tank system at a facility.

- (d) At a minimum, the written record required under **subsection (c) of this section** shall also document:
 - (1) The facility name and address;
 - (2) The date (day, month, year) that the maintenance, repair, or monitoring activity occurred;
 - (3) The name of the person and company performing the work;
 - (4) The specific device or underground storage tank system being maintained, repaired, or monitored;

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- (5) A brief description of the type of work performed; and
 - (6) If applicable, the results of monitoring, including any observations indicating that a release may have occurred.
- (e) Copies of all documents, records and reports required under this subchapter shall be:
- (1) Maintained within the state for at least three years, except that records demonstrating compliance with repair and upgrading requirements must be maintained for the remaining operating life of the facility; and
 - (2) Made available to the Secretary within 24 hours of a request by the Secretary.

§ 8-503 SPILL AND OVERFILL PREVENTION

- (a) Facility diagram. At any facility with a category one or category two underground storage tank system, a diagram shall be displayed in a location that is protected from the weather and readily visible to any carrier delivering regulated substance to an underground storage tank system at the facility. The diagram shall identify:
- (1) The relative location of each underground storage tank and fill pipe;
 - (2) The regulated substance stored in each underground storage tank; and
 - (3) The capacity and diameter of each underground storage tank.
- (b) Marking or labeling of fill pipes
- (1) The fill pipe of each underground storage tank shall be marked or labeled to clearly identify the material stored in that tank. This requirement may be met by following the American Petroleum Institute Publication 1637.
 - (2) The fill pipe and pump-out pipe of any underground storage tank holding used oil shall be marked or labeled to clearly identify the contents of that tank as used oil.
- (c) Maintenance of spill containment devices
- (1) All spill containment devices required under § 8-406 shall be kept free of liquids and debris.
 - (2) Prior to accepting any delivery of regulated substance, the permittee or tank owner shall verify that the spill containment device is free of liquid and debris.
 - (3) Any liquid that collects within a spill containment device during or immediately after a delivery of regulated substance shall be removed prior to departure of the delivery vehicle.

- (4) All liquid and debris removed from a spill containment device shall be managed in accordance with the **Vermont Hazardous Waste Management Regulations** and all other applicable state and federal requirements.
- (d) Overfill prevention equipment.
- (1) All overfill prevention equipment required under § 8-406 shall be maintained in a fully operational state.
 - (2) Any vent restriction device that is installed in any of the following types of underground storage tank systems, shall be removed and replaced with another type of overfill prevention device allowed under § 8-406:
 - (A) Any underground storage tank system where there is the possibility of receiving a pumped delivery;
 - (B) Any underground storage tank system equipped with a suction dispenser and an air eliminator;
 - (C) Any underground storage tank system equipped with coaxial Stage I vapor recovery;
 - (D) Any underground storage tank system equipped with a remote fill pipe and gauge opening;
 - (E) Any underground storage tank system fueling an emergency generator or a fuel oil burner (e.g. a heating oil supply tank).
 - (3) Within 30 days of replacing a vent restriction device, the permittee shall inform the Secretary in writing that the device has been replaced.
- (e) Manual overfill prevention. Overfill prevention equipment is not required for any tank that never receives more than 25 gallons of regulated substance at one time, and never is more than 90 percent full, provided the permittee or tank owner:
- (1) Measures the level of liquid in the tank to the nearest 1/8 of an inch, and converts that measurement to volume using a tank chart that correspond with the dimensions of the tank being measured;
 - (2) Checks the volume of liquid in the tank at least once per week or more frequently as necessary to ensure that the volume never exceeds 90 percent of the tank's capacity;
 - (3) Maintains a record in accordance with §§ 8-502(d) and (e) which documents:
 - (A) The level of liquid in the tank (to the nearest 1/8 of an inch);
 - (B) The volume of liquid corresponding to the liquid level (i.e., as determined using a tank chart); and
 - (C) The percentage of tank capacity being utilized; and
 - (4) Maintains at the facility a copy of the tank chart used to convert the liquid level in the tank to volume.

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§ 8-504 CATHODIC PROTECTION SYSTEMS

(a) Systems using galvanic anodes shall:

- (1) Be tested within six months of installation and, for factory-installed anodes at least once every three years thereafter; for field-installed anodes, at least annually thereafter. Such systems shall be tested by persons trained in the principles and methods of testing cathodic protection systems, and who hold certification from NACE International as a Cathodic Protection Tester, or an equivalent certification approved by the Secretary.
- (2) Be tested using a saturated copper/copper sulfate reference electrode placed over the centerline of each tank and piping run, and in any other location deemed appropriate by the tester. Readings for tanks shall be taken in as many locations as the tester deems necessary in order to determine whether the anodes are providing adequate cathodic protection, but at a minimum the tester shall take three readings for each tank: one reading over each end of the tank, and one reading midway between each end of the tank. Readings for piping shall be taken over the centerline of the piping.
- (3) If the anodes are factory-installed, achieve readings that are equal to, or more negative than, -0.85 volts.
- (4) If the anodes are field-installed, achieve the minimum passing voltage readings specified by the system designer at locations specified by the system designer.

(b) Systems using impressed current shall:

- (1) At least once every 60 days, be monitored by a person trained to ensure that the equipment is operating properly and the voltage and current output are within the range specified by the system manufacturer and/or designer; and
- (2) At least annually, be inspected and tested to evaluate all components of the impressed current system for conformance with the specifications established by the system manufacturer and/or designer. This inspection and test shall be performed by:
 - (A) A certified or licensed professional engineer with education and experience in corrosion control of buried metal pipes and tanks; or
 - (B) A person certified by NACE International as one or more of the following: Corrosion Specialist, Cathodic Protection Specialist, Senior Corrosion Technologist, Corrosion Technologist, or Cathodic Protection Tester; or
 - (C) A person who can demonstrate successful completion of the Steel Tank Institute's Cathodic Protection Tester Training; or
 - (D) A person with an equivalent level of competence, as determined by the Secretary.

(c) The permittee or tank owner shall:

- (1) Maintain a record in accordance with §§ **8-502(d) and (e)** that documents any cathodic protection system monitoring, testing and/or inspection activity conducted pursuant to **subsections (a) and/or (b) of this section**;
 - (2) For each cathodic protection system test, obtain a report from the tester that documents the results of the test, and maintain a copy of that report within the state for at least three years following the test;
 - (3) For each passing cathodic protection system test, submit a copy of the test report to the Secretary within 30 days of the test; and
 - (4) Comply with the requirements of **subsection (d) of this section** for any cathodic protection system test that does not meet the applicable criteria established in **subsections (a) and (b) of this section**, (i.e. a failed test).
- (d) In the event of a failed cathodic protection system test the permittee or tank owner shall:
- (1) Notify the Secretary within one business day of the failed test.
 - (2) Submit a copy of the test report to the Secretary within five business days of the failed test, or immediately upon request by the Secretary.
 - (3) Within 120 days of a failed test, determine the cause of failure and, if necessary, repair or replace the cathodic protection systems in accordance with § **8-508(e)**.
 - (6) Within 30 days of repairing a cathodic protection system, submit a written report to the Secretary describing the cause of failure and the measures taken to correct the failure.
 - (7) If repairs to the cathodic protection system are not completed within 90 days of the date of the failed test, either take the underground storage tank system out-of-service in accordance with § **8-602**, or close the underground storage tank system in accordance with § **8-604**. On a case-by-case basis, the Secretary may allow an underground storage tank system to remain in service for more than 90 days after the date of the failed test.

§ 8-505 GENERAL REQUIREMENTS FOR RELEASE DETECTION

- (a) All category one and category two underground storage tank systems that are in operation, or that are taken out-of-service in accordance with § **8-605(a)** but still contain regulated substance, shall be monitored at least weekly for releases in accordance with § **8-506** (for tanks) and § **8-507** (for piping).
- (b) All release detection equipment shall be calibrated and operated in accordance with the manufacturer's specifications and maintained in a fully operational state.
- (c) All interstitial spaces of secondarily contained systems shall be maintained free of liquids, unless the space is designed to contain a liquid as an integral component of the release detection system (e.g. brine-filled interstice in a fiberglass tank). Any liquid that accumulates in an interstitial space

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intended to be dry shall be removed and handled in accordance with the Vermont Hazardous Waste Management Regulations.

- (d) In accordance with § 8-304(d)(6)(B), permittees and tank owners shall notify the Secretary in writing within ten business days of any change in the method(s) of release detection used.
- (e) All release detection equipment for each method specified in Table 1 shall be certified by an independent third party as being capable of detecting the leak rate specified in Table 1 for that method with a probability of detection of at least 95 percent and a probability of false alarm of 5 percent or less.
- (f) All release detection equipment for each method specified in Table 1 shall be operated within the limitations and restrictions specified in the third-party certification report for each release detection device.

Table 1

Method	Specified Leak Rate
Automatic Tank Gauging [§ 8-506(c)(2)]	0.2 gallons per hour
Line Tightness Testing [§ 8-507(b)(2)]	0.1 gallons per hour
Automatic Line Leak Detectors [§ 8-507(b)(5)]	3 gallons per hour

Note: The National Work Group on Leak Detection Evaluations maintains a list of release detection equipment that has been third-party certified. The list is available on-line at <http://www.nwglde.org>

(g) Tank-bottom water checks

- (1) Permittees and tank owners shall check each of their underground storage tanks for the presence of tank-bottom water at least weekly and, except for tanks containing used oil, immediately before and after any delivery of regulated substance.
- (2) Any measuring device used to check for the presence of tank-bottom water shall be capable of measuring the liquid level in an underground storage tank to one-eighth of an inch.
- (3) If water is detected in an underground storage tank, the permittee or tank owner shall compare the results of consecutive tank water checks and determine if the level of water in the tank is changing over time. Any sudden change in the level of tank-bottom water shall be considered a suspected release and reported to the Secretary in accordance with § 8-103(a)(2)(B).

(h) All permittees or tank owners shall maintain a weekly record of release detection monitoring activities in accordance with §§ 8-502(d) and (e). This record shall document:

- (1) Information about the method of release detection used and the specific tank(s) and/or piping being monitored;
- (2) All monitoring results, including any indication that a release may have occurred;
- (3) All calibrations, maintenance and repairs of release detection equipment that is permanently located at the facility; and
- (4) For tank water checks:
 - (A) Whether or not water is detected in the tank; and
 - (B) If water is detected, the volume of water present in the tank.

§ 8-506 RELEASE DETECTION REQUIREMENTS FOR TANKS

(a) Category one and category two underground storage tanks shall be monitored for releases as follows:

- (1) For tanks with secondary containment, using inventory monitoring as specified under **subsection (b) of this section**, in combination with interstitial monitoring as specified under **subsection (c)(1) of this section**. Tanks that contain used oil or that do not dispense regulated substance through a metered dispenser, are not required to use inventory monitoring.
- (2) For tanks without secondary containment that have capacities equal to or less than 550 gallons, using inventory monitoring as specified under **subsection (b) of this section**, in combination with any method specified under **subsections (c)(2) through (c)(5) of this section**. Tanks that contain used oil or that do not dispense regulated substance through a metered dispenser, are not required to use inventory monitoring.
- (3) For tanks without secondary containment that have capacities greater than 550 gallons, using inventory monitoring as specified under **subsection (b) of this section**, in combination with automatic tank gauging as specified in **subsection (c)(2) of this section**. Tanks that contain used oil or that do not dispense regulated substance through a metered dispenser, are not required to use inventory monitoring.

(b) Inventory monitoring

- (1) Except as allowed under **subsection (a) of this section**, for each category one and category two underground storage tank system, the permittee or tank owner shall:
 - (A) Maintain records in accordance with §§ **8-502(d) and (e)** which document the volume of regulated substance in the tank at the beginning and end of each operating day, and the amount of regulated substance added to and/or removed from the tank during that day.

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- (B) Verify that all receipts for deliveries of regulated substance are accurate with respect to the amount of regulated substance added to the tank by measuring the level of liquid in the tank, both before and after the delivery, to the nearest one-eighth of an inch.
- (C) Utilize a drop tube for all liquid level measurements made using a gauge stick.
- (D) Ensure that all regulated substance dispensed from the tank is metered in accordance with the standards for meter calibration established by the Vermont Agency of Agriculture Food & Markets, Division of Weights and Measures.
- (E) Utilize a tank chart that corresponds to the dimensions of the tank when converting liquid level measurements (i.e., recorded to the nearest one-eighth of an inch) to the volume of liquid in the tank.
- (F) Each month, evaluate the written records required under **subsection (A) of this section** by comparing the volume of regulated substance lost or gained during the previous month to a standard of 130 gallons plus one percent of the throughput of regulated substance from the previous month. The results of this evaluation shall be documented in writing.
- (G) Ensure that inventory monitoring is conducted by a person trained in the proper use of monitoring equipment and the requirements of this section.

Note: Practices described in the American Petroleum Institute Publication 1621: “Recommended Practice for Bulk Liquid Stock Control at Retail Outlets” meet the requirements for inventory monitoring.

- (2) A suspected release shall be reported to the Secretary in accordance with **§8-103(a)(2)(B)** when inventory monitoring for any tank indicates:
 - (A) A loss or gain of regulated substance that, for two consecutive months, is greater than 130 gallons plus one percent of the monthly throughput; or
 - (B) A sudden loss of regulated substance that, within 24 hours of the time the discrepancy is discovered cannot be attributed to circumstances other than a release.

(c) The following release detection methods may be used for category one and category two underground storage tanks as specified under **subsection (a) of this section**:

- (1) Interstitial monitoring
 - (A) Any tank with an interstitial space shall be monitored using one of the following methods:
 - (i) Electronic monitoring;
 - (ii) Manual gauging;
 - (iii) Vacuum monitoring;
 - (iv) Mechanical monitoring; or

- (v) Another method that uses either an inert gas or liquid.
- (B) Interstitial monitoring shall be capable of detecting the presence of liquid in, or a loss of negative pressure (vacuum) from an interstitial space designed to be dry, or the loss of liquid from an interstitial space designed to contain a brine solution or other inert liquid.
- (C) The interstitial monitoring method used shall be compatible with the design of the underground storage tank system.
- (D) For an interstitial space designed to be dry, monitoring shall occur in a location within the interstitial space where liquid is likely to accumulate first.
- (E) Access covers to the interstitial space shall be clearly marked, secured to prevent unauthorized access, and protected from damage if located in a traffic area.
- (F) Interstitial monitoring shall be conducted at least weekly.
- (G) A suspected release shall be reported to the Secretary in accordance with **§8-103(a)(2)(B)** when the results of interstitial monitoring indicate:
 - (i) The presence of liquid in an interstitial space designed to be dry;
 - (ii) Loss of vacuum or pressure; or
 - (iii) Any indications of regulated substance in the interstitial space, or loss of liquid from an interstitial space designed to contain a brine solution or other inert liquid.
- (2) Automatic Tank Gauging
 - (A) Automatic tank gauges shall be operated in a mode that is capable of detecting a leak rate of 0.2 gallon per hour (gph).
 - (B) Automatic tank gauging shall be conducted, and conclusive results obtained, at least weekly.
 - (C) A suspected release shall be reported to the Secretary in accordance with **§8-103(a)(2)(B)** when an automatic tank gauge indicates a leak rate, or an infiltration rate, that is equal to or greater than:
 - (i) 0.2 gallon per hour (gph); or
 - (ii) The minimum leak rate that the tank gauge is capable of detecting, whichever is less.
- (3) Deleted.
- (4) Deleted.
- (5) Manual tank gauging

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- (A) Manual tank gauging may be used for category one and category two underground storage tanks with capacities equal to or less than 550 gallons.
- (B) Manual tank gauging shall be conducted at least weekly in accordance with the following:
 - (i) The average of at least two consecutive tank liquid level measurements shall be recorded both at the beginning and end of a period of at least 36 hours, during which no liquid is added to or removed from the tank.
 - (ii) All tank liquid level measurements shall be taken to the nearest one eighth of an inch.
 - (iii) All tank liquid level measurements taken using a gauge stick shall utilize a drop tube.
 - (iv) A tank chart that corresponds to the dimensions of the tank shall be used to convert both the beginning and ending recorded measurements to the volume of liquid in the tank.
- (C) A suspected release shall be reported to the Secretary in accordance with **§ 8-103(a)(2)(B)** when manual tank gauging indicates one or more of the following:
 - (i) A sudden loss of regulated substance that, within 24 hours of the time that the discrepancy is discovered, cannot be attributed to circumstances other than a release.
 - (ii) Any variation between the volumes corresponding to the beginning and ending measurements that exceed the standards established in **Table 2**, below.

TABLE 2

WEEKLY AND MONTHLY MANUAL TANK GAUGING TEST STANDARDS Acceptable Variances		
Nominal Tank Capacity	Weekly Standard (One Test)	Monthly Standard (Average of Four Tests)
550 gallons or less	10 gallons	5 gallons
Greater than 550 gallons	Manual tank gauging is not allowed.	

§ 8-507 RELEASE DETECTION REQUIREMENTS FOR PIPING

- (a) Except for piping that operates under suction and is designed and constructed in accordance with the standards specified in **§8-405(b)(3)**, any underground piping connected to category one or category two underground storage tanks that routinely contains a regulated substance shall be monitored for a release as follows:

- (1) Piping with secondary containment, and all piping sumps, shall be monitored using interstitial monitoring as specified under **subsection (b)(1) of this section**.
 - (2) Piping without secondary containment shall be monitored using a periodic line test in accordance with **subsection (b)(2) of this section**.
 - (3) In addition to using a method specified under **subsections (a)(1) and (2) of this section**, all pressurized piping shall be monitored using an automatic line leak detector which alerts the operator to the presence of a leak by restricting or shutting off the flow of regulated substances or by triggering an audible or visual alarm. All automatic line leak detectors shall be able to detect a leak of 3 gallons per hour at 10 pounds per square inch line pressure within 1 hour. All automatic line leak detectors shall be maintained and operated as specified under **subsection (b)(5) of this section**.
 - (4) In addition to using interstitial monitoring as specified under subsection (b)(1) of this section, the owner or permittee of any existing flexible thermoplastic piping that is ten years old or older and does not meet the standards established by Underwriters Laboratories Standard 971-2005: "Standard for Nonmetallic Underground Piping for Flammable Liquids," shall conduct a visual inspection of that piping at least annually. The results of that inspection shall be reported on a form which will be provided by the Secretary, and the completed form shall be submitted to the Secretary within 30 days of completing the inspection.
- (b) Release detection methods for category one and category two underground storage tank system piping
- (1) Interstitial monitoring. All requirements applicable to the interstitial monitoring of tanks specified in **§8-506(c)(1)** also apply to the interstitial monitoring of piping. Any dispenser sump installed after July 1, 2007 shall be monitored interstitially.
 - (2) Line test
 - (A) A line test shall be capable of detecting a leak rate of 0.1 gallon per hour (gph) at 1.5 times the normal operating pressure of the piping.
 - (B) A line test shall be conducted:
 - (i) At least annually for pressurized piping; or
 - (ii) At least once every three years for piping designed to operate under suction.
 - (C) Line testing equipment shall be third party certified in accordance with **§ 8-505(d)**.

Note: Vermont's fire code prohibits the use of air pressure testing for lines that have contained flammable or combustible materials.
 - (D) The permittee or tank owner shall:
 - (i) Maintain copies of all line test reports in accordance with the requirements of **§ 8-502(e)**; and

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- (ii) Submit a copy of each passing line test report to the Secretary within 30 days of the test; and
 - (iii) In the event of a failed line test, report a suspected release to the Secretary in accordance with § 8-103(a)(2)(B), and conduct a suspected release investigation in accordance with the requirements of § 8-103(b).
- (3) Deleted.
- (4) Deleted.
- (5) Automatic Line Leak Detectors and Shear Valves
 - (A) Each automatic line leak detector and shear valve required for pressurized piping under § 8-405(e) shall be tested in accordance with the manufacturer's recommendations at the time of installation and at least annually thereafter.
 - (B) The permittee or tank owner shall maintain copies of all automatic line leak detector and shear valve test reports in accordance with the requirements of § 8-502(e).
 - (C) The permittee or tank owner shall submit a copy of each passing test report to the Secretary within 30 days of the test.
 - (D) Upon discovery of a malfunctioning line leak detector or shear valve, the permittee or tank owner shall:
 - (i) Immediately, take the corresponding piping out of service until a properly functioning line leak detector or shear valve is installed;
 - (ii) Submit a report of this incident to the Secretary within five business days of the discovery; and
 - (iii) If evidence suggests the possibility of a release from the piping, report a suspected release to the Secretary in accordance with §§ 8-103(a)(2)(B), and investigate that suspected release in accordance with §8-103(b).

§ 8-508 UNDERGROUND STORAGE TANK SYSTEM REPAIRS

- (a) Prior to excavating to the tank top or excavating beneath a dispenser in order to repair or replace any component of an underground storage tank system, the permittee or tank owner shall notify the Secretary of the anticipated replacement or repair. If necessary, the Secretary will modify the permit, as provided under § 8-304(d).
- (b) Any component of an underground storage tank system that renders another component ineffective shall not be used.
- (c) Tank repairs
 - (1) Steel tanks

- (A) Any repaired steel tank shall meet the applicable design and construction standards specified in § 8-404(a)(1), or 8-404(b)(1).
 - (B) A steel tank may be repaired by installing an interior lining once during its operating life. Installation of an interior lining within a steel tank shall be conducted in accordance with American Petroleum Institute publication 1631 “Recommended Practice for the Interior Lining of Existing Steel Underground Storage Tanks.”
 - (C) Any lined tank that lacks secondary containment shall be internally inspected:
 - (i) Within 10 years of the date that the lining was installed and every 5 years following the initial inspection; and
 - (ii) By a person either certified by the manufacturer of the lining, or with other appropriate expertise.
 - (D) The permittee or tank owner shall submit a report detailing the results of each inspection required under **subsection (c)(1)(C) of this section**, within 30 days of the inspection. If the inspection report reveals a flaw in the lining, the permittee shall, within 90 days of receipt of the inspection report, do one of the following:
 - (i) Repair the lining, in accordance with the lining manufacturer’s specifications,
 - (ii) Take the underground storage tank system out of service in accordance with the requirements of § 8-602, or
 - (iii) Close the underground storage tank system in accordance with the requirements of § 8-604.
 - (E) Within 90 days of completing a repair of any cathodically protected tank, the permittee or tank owner shall test the cathodic protection system in accordance with either § 8-504(a) or (b), as applicable.
- (2) Fiberglass-reinforced plastic tanks
- (A) Fiberglass-reinforced plastic tanks shall be repaired by an authorized representative of the tank manufacturer.
 - (B) Any repaired fiberglass reinforced plastic tank shall, at a minimum, meet the design and construction standards specified in § 8-404(a)(2), or 8-404(b)(2), whichever applies.
- (3) Following the repair of a tank, the permittee or tank owner shall:
- (A) Before using the tank, test the tank for tightness in accordance with § 8-103(c), or another method recommended by the manufacturer;
 - (B) Before using the tank, obtain from the person who repaired the tank a written warranty that:

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- (i) Warrants against structural failure for a period of at least ten years following the repair; and
 - (ii) For any steel tank, warrants against failure due to external corrosion for a period of at least ten years following the repair.
- (C) Within 30 days of testing the tank for tightness in accordance with **subsection (c)(3)(A) of this section**, submit a copy of the tank tightness report to the Secretary;
 - (D) Maintain a copy of the tank tightness report required under **subsection (c)(3)(A) of this section** in accordance with **§8-502(e)**;
 - (E) Maintain a copy of the warranty required under **subsection (c)(3)(B) of this section** within the state for the operating life of the tank; and
 - (F) Make a copy of the warranty available to the Secretary within 24 hours of a request by the Secretary.

(d) Piping Repairs

- (1) All replacement piping shall meet the design and construction standards for piping identified in **subchapter 4** of these rules.
- (2) If any piping is added to or replaced in a category one underground storage tank system, the permittee shall notify the Secretary of the change in accordance with **§ 8-304(d)**.
- (3) Before any new or repaired piping may be used, the permittee or tank owner shall conduct a line test in accordance with **§ 8-507(b)(2)**.
- (4) Within 30 days of completing the line test required under **subsection (d)(3) of this section**, the permittee or tank owner shall submit a copy of the line test report to the Secretary.
- (5) The permittee or tank owner shall maintain a copy of the line test report within the state in accordance with **§ 8-502(e)**.
- (6) Within 90 days of completing a repair of any cathodically protected piping, the permittee or tank owner shall test the cathodic protection system in accordance with **§ 8-504(a) or (b)**, as applicable.

(e) Repair or replacement of cathodic protection systems

- (1) Any repair or replacement of a cathodic protection system shall be performed in accordance with NACE International Standard RP0285-2002: “Corrosion Control of Underground Storage Tank Systems by Cathodic Protection.”
- (2) Any repair or replacement of a cathodic protection system shall be designed and supervised by a person certified by NACE International as a Cathodic Protection Specialist, or by a

licensed professional engineer who has licensing or certification that includes education and experience in corrosion control of buried or submerged metal piping systems and metal tanks.

- (3) Before using an underground storage tank system with a cathodic protection system that has been repaired or replaced, the permittee or tank owner shall test the cathodic protection system in accordance with **§ 8-504(a) or (b)**, as applicable.
- (f) All permittees or tank owners shall maintain a record of all underground storage tank system repairs in accordance with **§§ 8-502(d) and (e)**. This record shall document:
- (1) The reason why the repair was necessary;
 - (2) The work performed and materials used; and
 - (3) Whether a release of regulated substance was discovered at the time of repair.

§ 8-509 PERIODIC INSPECTIONS AND SELF-CERTIFICATIONS

- (a) Monthly Inspections. Beginning in August, 2012, certain components of the underground storage tank system shall be inspected monthly for any deficiencies or flaws.
- (1) Monthly Inspections shall be conducted by, or under the direction of, a class A or B operator, as established by **§8-307**.
 - (2) The results of each inspection shall be recorded in an inspection report which shall be maintained at the facility for a period of no less than one year.
 - (3) The monthly inspection shall cover the following system components:
 - (A) Spill containment devices shall be inspected to determine the integrity of the device, and if necessary, shall be repaired or replaced in accordance with **§8-406(a) and §8-508(a)**. Any regulated substance, water, or debris which may be present in the device shall be removed and disposed of in accordance with all applicable federal, state, and local requirements.
 - (B) The tank pad shall be visually examined for stains or other indications of a spill or leak in a sump or other tank-top appurtenance. Any indication of a leak or spill shall be investigated and cleaned up in accordance with **§8-103**.
 - (C) Dispensers, dispensing islands, and fueling pads shall be visually examined for stains or other indications of a spill or leak in a dispenser. Any indication of a leak or spill shall be investigated and cleaned up in accordance with **§8-103**.
 - (D) If applicable, the automatic tank gauging system shall be checked to ensure it is functioning properly, the printer has paper (if applicable), and all functions are normal.

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- (b) Self Certifications. On a schedule which shall be determined by the Secretary, but in no case more frequently than once per year, the permittee shall inspect each category one underground storage tank system for compliance with these rules. A list of the components to be inspected will be provided by the Secretary.
- (c) Any component that does not meet the requirements of these rules shall be repaired or replaced in accordance with **§8-508**.
- (d) Permittees shall report the results of inspections conducted pursuant to **subsection (a) of this section** by:
 - (1) Completing the Compliance Certification Forms provided by the Secretary, signing the form in accordance with the requirements of **§ 8-104**, and submitting the form to the Secretary by an established date; or
 - (2) Completing the on-line self-certification available through the Secretary's Internet site.
- (e) If an inspection reveals that one or more underground storage tank systems are not in compliance with these rules, the permittee shall also complete a "Return to Compliance" form. At a minimum, the form shall require a description of the steps proposed to correct any deficiencies that were not corrected immediately, and a proposed schedule for completing those steps. The "Return to Compliance" form shall be submitted to the Secretary with the "Inspection Report" form.
- (f) Upon review of a "Return to Compliance" form, the Secretary will either accept or reject the proposed corrective steps and schedule. If the proposed steps or schedule are rejected, the Secretary will contact the permittee and explain the reasons why the steps or schedule were rejected. The permittee shall submit a revised "Return to Compliance" form within a time frame specified by the Secretary.
- (g) Within five business days of correcting any deficiencies, the permittee shall notify the secretary in writing that compliance has been achieved.

END OF SUBCHAPTER FIVE