567—135.4(455B) General operating requirements.

135.4(1) *Spill and overfill control.*

a. Owners and operators must ensure that releases due to spilling or overfilling do not occur. The owner and operator must ensure that the volume available in the tank is greater than the volume of product to be transferred to the tank before the transfer is made and that the transfer operation is monitored constantly to prevent overfilling and spilling.

NOTE: The transfer procedures described in National Fire Protection Association Standard 385, "Standard for Tank Vehicles for Flammable and Combustible Liquids," or American Petroleum Institute Recommended Practice 1007, "Loading and Unloading of MC 306/DOT 406 Cargo Tank Motor Vehicles," may be used to comply with paragraph 135.4(1)*"a."* Further guidance on spill and overfill prevention appears in American Petroleum Institute, "Recommended Practice 1621 for Bulk Liquid Stock Control at Retail Outlets."

b. The owner and operator must report, investigate, and clean up any spills and overfills in accordance with 135.6(4).

135.4(2) *Operation and maintenance of corrosion protection.* All owners and operators of metal UST systems with corrosion protection must comply with the following requirements to ensure that releases due to corrosion are prevented until the UST system is permanently closed or undergoes a change in service in accordance with subrule 135.15(2):

a. All corrosion protection systems must be operated and maintained to continuously provide corrosion protection to the metal components of that portion of the tank and piping that routinely contain regulated substances and are in contact with the ground.

b. All UST systems equipped with cathodic protection systems must be inspected for proper operation by a qualified cathodic protection tester in accordance with the following requirements:

(1) *Frequency.*All cathodic protection systems must be tested within six months of installation and at least every three years thereafter or according to another reasonable time frame established by the department; and

(2) *Inspection criteria.* The criteria that are used to determine that cathodic protection is adequate as required by this subrule must be in accordance with a code of practice developed by a nationally recognized association.

NOTE: The following codes of practice may be used to comply with subparagraph 135.4(2)*"b"*(2).

- NACE International Test Method TM 0101, "Measurement Techniques Related to Criteria for Cathodic Protection of Underground Storage Tank Systems";
- NACE International Test Method TM0497, "Measurement Techniques Related to Criteria for Cathodic Protection on Underground or Submerged Metallic Piping Systems";
- Steel Tank Institute Recommended Practice R051, "Cathodic Protection Testing Procedures for STI-P3® USTs";
- NACE International Standard Practice SP 0285, "External Control of Underground Storage Tank Systems by Cathodic Protection"; or
- NACE International Standard Practice SP 0169, "Control of External Corrosion on Underground or Submerged Metallic Piping Systems."

c. UST systems with impressed current cathodic protection systems must also be inspected every 60 days to ensure the equipment is running properly.

d. For UST systems using cathodic protection, records of the operation of the cathodic protection must be maintained (in accordance with 135.4(5)) to demonstrate compliance with the performance standards in this subrule. These records must provide the following:

(1) The results of the last three inspections required in paragraph *"c"*; and

(2) The results of testing from the last two inspections required in paragraph *"b."*

e. When an impressed current cathodic protection system is failing cathodic protection for the time periods given below, owners and operators must take the following actions:

(1) For impressed current cathodic protection systems that have been inoperative for 0 to 90 days after failing a corrosion protection test or after discovering the system is not operating, all of the following must be completed:

1. Power must be restored to an inoperative corrosion protection system. A damaged or failed corrosion protection system must be repaired by a cathodic protection tester. A corrosion expert must approve any modifications to the system that are outside of the original design.

2. The corrosion protection system must be retested within six months of repair.

3. A copy of the test and any repairs must be kept as part of the cathodic protection records.

4. A copy of the new design standards must be kept as part of the cathodic protection records.

(2) For impressed current corrosion protection systems that have been inoperative for 90 to 365 days or repaired 90 to 365 days after failing a corrosion protection test, all of the following must be completed:

1. Notify the department.

2. Power must be restored to an inoperative corrosion protection system.

3. The corrosion protection system must be repaired, tested and returned to service under the supervision of a corrosion expert.

4. A precision tightness test must be conducted on the entire UST system.

5. The corrosion protection system must be retested within six months of the repair or power being restored.

6. A copy of the test and any repairs must be kept as part of the cathodic protection records.

7. A copy of the new design standards must be kept as part of the cathodic protection records.

8. If determined the tank is not suitable for corrosion protection, the tank must be permanently closed in accordance with subrule 135.15(2).

(3) If the impressed current corrosion protection system has been inoperative for more than 365 days or was not repaired for more than 365 days after failing a corrosion protection test, all of the following must be completed:

1. Notify the department.

2. Immediately empty and stop using the tank system.

3. An internal inspection of the steel tank must be conducted according to a national standard (e.g., API 1631). If the UST fails the internal inspection, the UST owner must permanently close the tank in accordance with subrule 135.15(2).

4. All metal piping and buried metal components (e.g., flex connectors, couplings) that routinely contain product must be inspected by a UST professional or cathodic protection tester. If the metallic components have no visible corrosion and have passed a line tightness test (unless the piping is exempt from leak detection, e.g., Safe or European Suction) then the cathodic protection system may be repaired or replaced under the supervision of a corrosion expert. Metallic components that show visible corrosion must be replaced.

5. A precision test must be conducted on the entire UST system following repair or replacement of the cathodic protection system.

6. The corrosion protection system must be retested within six months of repair.

7. A copy of the tests and any repairs must be kept as part of the cathodic protection records.

8. A copy of the new design standards must be kept as part of the cathodic protection records.

(4) If the impressed current cathodic protection system has been inoperable for more than 365 days and cannot or will not be brought back into immediate use, the tank system must be permanently closed in accordance with rule 567—135.15(2).

135.4(3) *Compatibility.* Owners and operators must use a UST system made of or lined with materials that are compatible with the substance stored in the UST system.

a. Owners and operators must notify the department at least 30 days prior to switching to a regulated substance containing greater than 10 percent ethanol, greater than 20 percent biodiesel, or any other regulated substance identified by the department.

b. Owners and operators must have a UST installer licensed under 567—Chapter 134, Part C, submit the department's checklist for equipment compatibility for the UST system to the department at least 30 days prior to switching to a regulated substance containing greater than 10 percent ethanol or greater than 20 percent biodiesel, or any other regulated substance identified by the department.

c. A retail dealer, as defined in Iowa Code section 214A.1, must show compliance with the requirements of Iowa Code sections 455G.32 and 455G.33, if applicable, by submitting and maintaining the applicable reporting and record-keeping documentation listed in subparagraphs 135.4(5)*"a"*(10), 135.4(5)*"a"*(11), 135.4(5)*"b"*(12), and 135.4(5)*"b"*(13).

NOTE: Owners and operators storing alcohol blends may use the following codes to comply with the requirements of subrule 135.4(3): American Petroleum Institute Recommended Practice 1626, "Storing and Handling Ethanol and Gasoline-Ethanol Blends at Distribution Terminals and Service Stations Filling Stations."

135.4(4) *Repairs and replacement.* Owners and operators of UST systems must ensure that repairs will prevent releases due to structural failure or corrosion as long as the UST system is used to store regulated substances. The repairs must meet the following requirements:

a. Repairs to UST systems must be properly conducted in accordance with a code of practice developed by a nationally recognized association or an independent testing laboratory.

NOTE: The following codes and standards may be used to comply with paragraph 135.4(4)*"a"*:

- National Fire Protection Association Standard 30, "Flammable and Combustible Liquids Code";
- International Fire Code;
- American Petroleum Institute Recommended Practice 2200, "Repairing Crude Oil, Liquefied Petroleum Gas, and Product Pipelines";
- American Petroleum Institute Recommended Practice 1631, "Interior Lining and Periodic Inspection of Underground Storage Tanks";
- National Fire Protection Association Standard 326, "Standard for the Safeguarding of Tanks and Containers for Entry, Cleaning, or Repair";
- National Leak Prevention Association Standard 631, Chapter A, "Entry, Cleaning, Interior Inspection, Repair, and Lining of Underground Storage Tanks";
- Steel Tank Institute Recommended Practice R972, "Recommended Practice for the Addition of Supplemental Anodes to STI-P3® Tanks";
- NACE International Standard Practice SP 0285, "External Control of Underground Storage Tank Systems by Cathodic Protection"; or
- Fiberglass Tank and Pipe Institute Recommended Practice T-95-02, "Remanufacturing of Fiberglass Reinforced Plastic (FRP) Underground Storage Tanks."

b. Repairs to fiberglass-reinforced plastic tanks may be made by the manufacturer's authorized representatives or in accordance with a code of practice developed by a nationally recognized association or an independent testing laboratory.

c. Piping and fittings.

(1) Metal pipe sections and fittings that have released product as a result of corrosion or other damage must be replaced. Noncorrodible pipes and fittings may be repaired in accordance with the manufacturer's specifications.

(2) Any replacement of ten feet or more of piping shall have secondary containment.

(3) If 50 percent or more of any piping run is removed, the entire piping run must be removed and replaced with secondarily contained piping and interstitial monitoring.

(4) All piping replacements requiring secondary containment shall be constructed with transition or intermediate containment sumps.

d. Repairs to secondary containment areas of tanks and piping used for interstitial monitoring and to containment sumps used for interstitial monitoring of piping must have the secondary containment tested for tightness according to the manufacturer's instructions, a code of practice developed by a nationally recognized association or independent testing laboratory, or according to requirements established by the department within 30 days following the date of completion of the repair. All other repairs to tanks and piping must be tightness tested in accordance with paragraphs 135.5(4)*"c"* and 135.5(5)*"b"* within 30 days following the date of the completion of the repair except as provided in subparagraphs (1) to (3) below:

(1) The repaired tank is internally inspected in accordance with a code of practice developed by a nationally recognized association or an independent testing laboratory; or

(2) The repaired portion of the UST system is monitored monthly for releases in accordance with a method specified in paragraphs 135.5(4)*"d"* through *"i"*; or

(3) Another test method is used that is determined by the department to be no less protective of human health and the environment than those listed above.

NOTE regarding paragraph 135.4(4)*"d"*: The following codes of practice may be used to comply with paragraph 135.4(4)*"d"*:

- Steel Tank Institute Recommended Practice R012, "Recommended Practice for Interstitial Tightness Testing of Existing Underground Double Wall Steel Tanks"; or
- Fiberglass Tank and Pipe Institute Protocol, "Field Test Protocol for Testing the Annular Space of Installed Underground Fiberglass Double and Triple-Wall Tanks with Dry Annular Space."
- Petroleum Equipment Institute Publication RP1200, "Recommended Practices for the Testing and Verification of Spill, Overfill, Leak Detection and Secondary Containment Equipment at UST Facilities."

e. Within six months following the repair of any cathodically protected UST system, the cathodic protection system must be tested in accordance with paragraphs 135.4(2)*"b"* and *"c"* to ensure that it is operating properly.

f. Within 30 days following any repair to spill or overfill prevention equipment, the repaired spill or overfill prevention equipment must be tested or inspected, as appropriate, in accordance with subrule 135.4(1) to ensure it is operating properly.

g. Installation of any new or replacement turbine pumps involving the direct connection to the tank shall have secondary containment.

h. UST system owners and operators must maintain records of each repair until the UST system is permanently closed or undergoes a change-in-service pursuant to subrule 135.15(2).

i. Repairs or replacements to a UST system must be conducted by an Iowa-licensed UST professional whose license is issued for that specific work.

135.4(5) *Reporting and record keeping.* Owners and operators of UST systems must cooperate fully with inspections, monitoring and testing conducted by the department, as well as requests for document submission, testing, and monitoring by the owner or operator pursuant to Section 9005 of Subtitle I of the Solid Waste Disposal Act, as amended.

a. Reporting. Owners and operators must submit the following information to the department:

(1) Notification for all UST systems (135.3(3)), which includes certification of installation for new UST systems (135.3(1)*"e"*);

(2) Notification of equipment replacement or addition of new equipment;

(3) Reports of all releases including suspected releases (135.6(1)), spills and overfills (135.6(4)), and confirmed releases (135.7(2));

(4) Corrective actions planned or taken including initial abatement measures (135.7(3)), initial site characterization (567—135.9(455B)), free product removal (135.7(5)), investigation of soil and groundwater cleanup and corrective action plan (567—135.8(455B) to 567—135.12(455B));

(5) A notification before permanent closure or change-in-service (135.15(2));

(6) Notification of any change in ownership;

(7) Notification of any change in Class A or Class B operators;

(8) Notification of any loss of financial responsibility (i.e., insurance);

(9) Notification prior to UST systems switching to certain regulated substances;

(10) Documentation establishing compatibility and capability as required in Iowa Code section 455G.32, if applicable;

(11) Documentation establishing compatibility and capability as required in Iowa Code section 455G.33, if applicable.

b. Record keeping. Owners and operators must maintain the following information:

(1) A corrosion expert's analysis of site corrosion potential if corrosion protection equipment is not used (135.3(1)*"a"*(4); 135.3(1)*"b"*(3)).

(2) Documentation of operation of corrosion protection equipment (135.4(2));
(3) Documentation of UST system repairs (135.4(4)*"h"*);
(4) Documentation of compliance with release detection requirements (135.5(6));
(5) Results of the site investigation conducted at permanent closure (135.15(3));
(6) Cathodic protection system testing results (135.4(2));
(7) Class A, B and C operator training certificates (135.4(6));
(8) Secondary containment test results (135.3(9));
(9) Documentation of periodic walkthrough inspections (135.4(13));
(10) Documentation of compatibility for UST systems (135.4(3));
(11) Documentation of compliance for spill and overfill prevention equipment and containment sumps used for interstitial monitoring of piping (135.4(12));
(12) Documentation establishing compatibility and capability as required in Iowa Code section 455G.32, if applicable;
(13) Documentation establishing compatibility and capability as required in Iowa Code section 455G.33, if applicable.

c. Availability and maintenance of records. Owners and operators must keep the records required either:
(1) At the UST site and immediately available for inspection by the department; or
(2) At a readily available alternative site and be provided for inspection to the department within two business days of department request.

NOTE: In the case of permanent closure records required under subrule 135.15(5), owners and operators are also provided with the additional alternative of mailing closure records to the department if they cannot be kept at the site or an alternative site as indicated above.

135.4(6) *Training required for UST operators.*

a. An owner or operator shall designate Class A, Class B, and Class C operators for each underground storage tank system or facility that has underground storage tanks regulated by the department, except for unstaffed facilities, which may designate only Class A and Class B operators.

b. A facility may not operate unless operators have been designated and trained as required in this rule, or unless otherwise agreed upon by the department based on a finding of good cause for failure to meet this requirement and a plan for designation and training at the earliest practicable date.

c. Trained operators must be readily available to respond to suspected or confirmed releases, equipment shut-offs or failures, and other unusual operating conditions.

d. A Class A or Class B operator should be immediately available for telephone consultation with the Class C operator when a facility is in operation. Class A or Class B operators should be able to be on site at the storage tank facility within four hours.

e. For staffed facilities, a Class C operator must be on site whenever the UST facility is in operation.

f. For unstaffed facilities, a Class B operator must be geographically located such that the person can be on site within two hours of being contacted by the public, the owner or operator of the facility, or the department. Emergency contact information and emergency procedures must be prominently displayed at the site. An unstaffed facility shall have an emergency shutoff device as provided in 135.5(1) and a sign posted in a conspicuous place that includes the name and telephone number of the facility owner, an emergency response telephone number to contact the Class B operator, and information on local emergency responders.

g. Designated operators must successfully complete required training under subrule 135.4(9).

h. A person may be designated for more than one class of operator.

i. When a facility is found to be out of compliance, the department may require that the designated UST system Class A, B, or C operator be retrained under a plan approved by the department. The retraining must occur within 30 days from departmental notice for Class A and Class B operators and within 15 days for Class C operators.

135.4(7) *UST operator responsibilities.*

a. Class A operator.

(1) Class A operators have the primary responsibility to operate, maintain, and have knowledge of the regulatory requirements for the underground storage tank system and facility. The Class A operator's responsibilities include managing resources and personnel to achieve and maintain compliance with regulatory requirements under this chapter in the following ways:

1. Class A operators assist the owner by ensuring that underground storage tank systems are properly installed and expeditiously repaired and inspected; financial responsibility is maintained; and records of system installation, modification, inspection and repair are retained and made available to the department and certified compliance inspectors. The Class A operator shall properly respond to and report emergencies caused by releases or spills from UST systems, ensure that the annual tank management fees are paid, and ensure that Class B and Class C operators are properly trained.

2. Class A operators shall be familiar with training requirements for each class of operator and may provide required training for Class C operators.

3. Class A operators shall provide site drawings that indicate equipment locations for Class B and Class C operators.

(2) Department-licensed installers, installation inspectors, and department-certified compliance inspectors may perform Class A operator duties when employed or contracted by the tank owner to perform these functions so long as they are properly trained and designated as Class A operators pursuant to subrules 135.4(9) through 135.4(11). Class A operators who are also certified compliance inspectors under 567—Chapter 134, Part B, may perform in-house facility inspections of the UST system, but shall not perform department-mandated compliance inspections pursuant to rule 567—135.20(455B). Compliance inspections of a UST facility required by rule 567—135.20(455B) must be completed by a third-party compliance inspector certified under 567—Chapter 134, Part B.

(3) When there is a change in ownership or operator status, the new owner or operator is responsible for designating a Class A operator prior to bringing the UST system into operation. The Class A operator is responsible for ensuring that all necessary documentation for change of ownership is completed and submitted to the department and that all compliance requirements of this chapter are satisfied prior to bringing the UST system into operation. The compliance requirements may be provided to the owner or operator using the department's checklist.

If the UST system was temporarily closed, the designated Class A operator must ensure the department's checklist for returning a UST into service is followed, all compliance requirements of this chapter have been met, and the necessary documentation is submitted to the department.

(4) When there is a change in UST ownership, property ownership or operator status, the designated Class A operator for the current owner and operator is responsible for notifying the department when the change is final and, if possible, prior to the new owner or operator taking possession of the site.

b. Class B operator.

(1) A Class B operator is knowledgeable of the applicable underground storage tank regulatory requirements and standards and implements them in the field or at the tank facility. A Class B operator oversees and implements the day-to-day aspects of operation, maintenance, and record keeping for the underground storage tanks at facilities within four hours of travel time from the Class B operator's principal place of business. A Class B operator's responsibilities include, but are not limited to:

1. Performing mandated system tests at required intervals and making sure spill prevention, overfill control equipment, and corrosion protection equipment are properly functioning.

2. Assisting the owner by ensuring that release detection equipment is operational, release detection monitoring and tests are performed at the proper intervals, and release detection records are retained and made available to the department and compliance inspectors.

3. Making sure record-keeping and reporting requirements are met and that relevant equipment manufacturers' or third-party performance standards are available and followed.

4. Properly responding to, investigating, and reporting emergencies caused by releases or spills from USTs.

5. Performing UST release detection in accordance with rule 567—135.5(455B).

6. Monitoring the status of UST release detection.

7. Meeting spill prevention, overfill prevention, and corrosion protection requirements.

8. Reporting suspected and confirmed releases and taking release prevention and response actions according to the requirements of rule 567—135.6(455B).

9. Training and documenting Class C operators to make sure at least one Class C operator is on site during operating hours. Class B operators shall be familiar with Class C operator responsibilities and may provide training for Class C operators.

(2) Department-licensed installers, installation inspectors, and department-certified compliance inspectors may perform Class B operator duties when employed or contracted by the tank owner to perform these functions so long as they are properly trained and designated as Class B operators under subrules 135.4(9) through 135.4(11). Class B operators who are also certified compliance inspectors under 567—Chapter 134, Part B, may perform in-house facility inspections of the UST system, but cannot perform department-mandated compliance inspections pursuant to rule 567—135.20(455B). Compliance inspections of a UST facility pursuant to rule 567—135.20(455B) must be completed by a third-party compliance inspector certified under 567—Chapter 134, Part B.

(3) The owner or operator of a site undergoing a change in ownership shall designate a Class B operator prior to bringing the UST system into operation. The Class B operator must conduct an inspection using the department's inspection checklist and submit the completed checklist along with the change of ownership form prior to operation. If a UST system was temporarily closed, the Class B operator shall ensure that the department's checklist for returning a UST to service is followed and that the necessary documentation is submitted to the department prior to operation of the UST system.

c. Class C operator. A Class C operator is an on-site employee who typically controls or monitors the dispensing or sale of regulated substances and is the first to respond to events indicating emergency conditions. A Class C operator must be present at the facility at all times during normal operating hours. A Class C operator monitors product transfer operations to ensure that spills and overfills do not occur. The Class C operator must know how to properly respond to spills, overfills and alarms when they do occur. In the event of a spill, overfill or alarm, a Class C operator shall notify the Class A and Class B operators, as well as the department and appropriate local emergency authorities as required by rule.

(1) Written basic operating instructions, emergency contact names and telephone numbers, and basic procedures specific to the facility shall be provided to all Class C operators and readily available on site.

(2) There may be more than one Class C operator at a storage tank facility, but not all employees of a facility need be Class C operators.

135.4(8) *UST operator training course requirements.* Individuals must attend a department-approved training course covering material designated for each operator class. Individuals must attend every session of the training, take the examination, and attend examination review.

a. Class A operators. To be certified as a Class A operator, the applicant must successfully complete a department-approved training course that covers underground storage tank system requirements as outlined in 567—Chapters 134 to 136. The course must also provide a general overview of the department's UST program, purpose, groundwater protection goals, public safety and administrative requirements. The training must include, but is not limited to, the following:

(1) Components and materials of underground storage tank systems.

(2) A general discussion of the content of PEI/RP900-08, Recommended Practices for the Inspection and Maintenance of UST Systems, and PEI/RP500, Recommended Practices for Inspection and Maintenance of Motor Fuel Dispensing Equipment.

(3) Spill and overfill prevention, to include the American Petroleum Institute (API) Publication RP1621, "Recommended Practice for Bulk Liquid Stock Control at Retail Outlets," and National Fire Protection Association Standard 30, "Flammable and Combustible Liquids Code."

(4) Ensuring product delivery to the correct tank by using color-symbol codes in the API Standard RP1637, "Using the API Color-Symbol System to Mark Equipment and Vehicles for Product Identification at Service Stations and Distribution Terminals."

(5) Proper fuel ordering and delivery, including procedures in API RP1007, "Loading and Unloading of MC/DOT 406 Cargo Tank Motor Vehicles."

(6) Release detection methods and related reporting requirements.

(7) Corrosion protection and inspection requirements, including the requirement to have a department-licensed cathodic protection tester.

(8) Discussion of the benefits of monthly or frequent inspections and content and use of inspection checklists. Training materials for operators shall include the department's "Iowa UST Operator Inspection Checklist" or a checklist template similar to the department's document.

(9) Requirement and content of third-party compliance inspections.

(10) How to properly respond to an emergency, including hazardous conditions.

(11) Product and equipment compatibility, including the department's ethanol compatibility guidance and certification.

(12) Financial responsibility, including detailed explanation of liability, notice and claim procedures, and the six-month window to check for and report a release prior to insurance termination to maintain coverage for corrective action.

(13) Notification of installation and storage tank registration requirements.

(14) Requirement to use department-licensed companies and individuals for UST installation, testing, lining, and removal.

(15) Temporary and permanent closure procedures and requirements.

(16) NESHAP vapor recovery requirements.

(17) Conditions under which the department may stop fuel delivery and take enforcement action.

(18) Ensuring that annual tank management fees are paid.

(19) Ensuring that suspected and confirmed releases are investigated and reported according to subrule 135.6(1).

b. Class B operators. To be certified as a Class B operator, the individual must successfully complete a department-approved training course that provides in-depth understanding of UST system regulations applicable to this class. Training must also provide a general overview of the department's UST program, purpose, groundwater protection goals, public safety and administrative requirements. Training shall cover the operation and maintenance requirements set forth in this chapter, including, but not limited to, the following:

(1) A general discussion of the content of PEI/RP900-08, Recommended Practices for the Inspection and Maintenance of UST Systems, and PEI/RP500, Recommended Practices for Inspection and Maintenance of Motor Fuel Dispensing Equipment.

(2) Components and materials of underground storage tank systems.

(3) Spill and overfill prevention.

(4) Ensuring product delivery to the correct tank by using color-symbol codes in the API Standard RP1637.

(5) Proper fuel ordering and delivery, including procedures from API RP1007.

(6) Methods of release detection and related reporting requirements.

(7) Corrosion protection and related testing.

(8) Requirements of 30-day and annual walkthrough inspections. Training materials for operators shall include the department's "Iowa UST Operator Inspection Checklist" or a checklist template similar to the department's document.

(9) Requirement and content of third-party compliance inspections.

(10) Emergency response, reporting and investigating releases.

(11) Product and equipment compatibility, including the department's ethanol compatibility guidance and certification.

(12) Financial responsibility, including detailed explanation of liability, notice and claim procedures, and the six-month window to check for and report a release prior to insurance termination to maintain coverage for corrective action.

(13) Notification of installation and storage tank registration requirements.

(14) Requirement to use department-licensed companies and individuals for UST installation, testing, lining, and removal.

(15) Reporting and record-keeping requirements.

(16) Overview of Class C operator training requirements.

(17) NESHAP vapor recovery requirements.

(18) Conditions under which the department may stop fuel delivery and take enforcement action.

(19) Requirements for facilities that operate unstaffed at any time.

c. Class C operators. To be certified as a Class C operator, an individual must complete a department-approved training course. A Class A or Class B operator who has completed a department-approved training course may provide the Class C training. Class C operator training must include at a minimum:

(1) A general overview of the department's UST program and purpose;

(2) Groundwater protection goals;

(3) Public safety;

(4) UST system overview;

(5) Administrative requirements; and

(6) Action to be taken in response to an emergency condition due to a spill or release from a UST system.

Training must include written procedures for the Class C operator, including notification instructions necessary in the event of emergency conditions. The written instructions and procedures must be readily available on site. A Class A or Class B operator may provide additional on-site Class C training specific to the operator's UST system.

135.4(9) *Examination and review requirement.* Class A and Class B operators must complete the department-approved training course and take an examination to verify their understanding and knowledge. The examination may include both written and practical (hands-on) testing activities. The trainer must follow up the examination with a review of missed test questions with the class or individual to ensure understanding of problem areas. Upon successful completion of the training course, the applicant will receive a certificate verifying the applicant's status as a Class A, Class B, or Class C operator.

a. Reciprocity. The department may waive the training course for operators upon a showing of successful completion of a training course and examination approved by another state or regulatory agency that the department determines are substantially equivalent to the UST requirements contained in this chapter.

b. Transferability to another UST site. Class A and Class B operators may transfer to other UST facilities in Iowa provided the operator is properly designated by the facility owner as a Class A or Class B operator according to 567—subrule 135.4(11). Class A and Class B operators transferring from other states shall seek prior approval of training qualifications, unless the department has preapproved the out-of-state program as substantially equivalent to the requirements of this chapter.

135.4(10) *Timing of UST operator training.*

a. An owner shall ensure that Class A, Class B, and Class C operators are trained by approved training providers before an operator assumes duties of that class of operator.

b. When a Class A or Class B operator is replaced, a new operator must be trained prior to assuming duties for that class of operator. A copy of the certificate of training must be submitted to the department within 30 days of assuming duties.

c. Class C operators must be trained before assuming the duties of a Class C operator. Written basic operating instructions, emergency contact names and telephone numbers, and basic procedures specific to the facility shall be provided to all Class C operators and readily available on site. A Class C operator may be briefed on these procedures concurrent with annual safety training required under Occupational Safety and Health Administration regulations, 29 CFR, Part 1910.

135.4(11) *Documentation of operator training.*

a. The owner of an underground storage tank facility shall maintain a list of designated operators. The list shall be made available to the department in accordance with subrule 135.4(5). The list shall represent the current Class A, Class B and Class C operators for the UST facility and must include:

(1) The name of each operator and the operator's class(es); contact information for Class A and Class B operators; the date each operator successfully completed initial training and refresher training, if any; the name of the company providing the training; and the name of the trainer.

(2) For all classes of operators, the site(s) for which an operator is responsible if more than one site.

b. A copy of the certificates of training for Class A and Class B operators shall be on file and readily available for inspection in accordance with subrule 135.4(5). Records verifying completion of training or retraining of Class A, Class B, and Class C operators must identify name of trainee, date trained, operator training class completed, and list the name of the trainer or examiner and the training company name, address, and telephone number. Owners and operators must maintain these records for as long as Class A, Class B, and Class C operators are designated.

c. A copy of the certificates of training for Class B and Class C operators shall be available at each facility for which the operator is responsible.

d. Class A and Class B operator contact information, including names and telephone numbers and any emergency information, shall be conspicuously posted at unstaffed facilities near the dispensers and the station building.

135.4(12) *Periodic testing of spill prevention equipment and containment sumps used for interstitial monitoring of piping and periodic inspection of overfill prevention equipment.*

a. Owners and operators of UST systems with spill and overfill prevention equipment and containment sumps used for interstitial monitoring of piping must meet these requirements to ensure the equipment is operating properly and will prevent releases to the environment:

(1) Spill prevention equipment (such as a catchment basin, spill bucket, or other spill containment device) and containment sumps used for interstitial monitoring of piping must prevent releases to the environment by meeting one of the following:

1. The equipment is double walled and the integrity of both walls is periodically monitored at a frequency of not less than the frequency of the walkthrough inspections described in subrule 135.4(13). If owners and operators discontinue periodic monitoring of this equipment, they must begin meeting paragraph 135.4(12)*"a"*(1)"2" and conduct a test within 30 days of discontinuing periodic monitoring of this equipment; or

2. The spill prevention equipment and containment sumps used for interstitial monitoring of piping are tested at least once every three years to ensure the equipment is liquid tight by using vacuum, pressure, or liquid testing in accordance with one of the following criteria:

- Requirements developed by the manufacturer (Note: Owners and operators may use this option only if the manufacturer has developed requirements); or
- A code of practice developed by a nationally recognized association or independent testing laboratory; or
- Requirements determined by the department to be no less protective of human health and the environment than the requirements listed in this subrule.

(2) Overfill prevention equipment must be inspected at least once every three years. At a minimum, the inspection must ensure that overfill prevention equipment is set to activate at the correct level specified in paragraph 135.3(1)*"c"* and will activate when regulated substance reaches that level. Inspections must be conducted in accordance with one of the following criteria:

1. Requirements developed by the manufacturer (Note: Owners and operators may use this option only if the manufacturer has developed requirements); or

2. A code of practice developed by a nationally recognized association or independent testing laboratory; or

3. Requirements determined by the department to be no less protective of human health and the environment than the requirements listed in this subrule.

b. Owners and operators must begin meeting these requirements as follows:

(1) For UST systems in use on or before June 23, 2021, the initial spill prevention equipment test and overfill prevention equipment inspection must be conducted not later than October 13, 2021.

(2) For UST systems brought into use after June 23, 2021, these requirements apply at installation.

c. Owners and operators must maintain records as follows for spill prevention equipment and overfill prevention equipment:

(1) All records of testing or inspection must be maintained for three years; and

(2) For spill prevention equipment and containment sumps used for interstitial monitoring of piping not tested every three years, documentation showing that the prevention equipment is double-walled and the integrity of both walls is periodically monitored must be maintained for as long as the equipment is periodically monitored.

NOTE: The following code of practice may be used to comply with this section: Petroleum Equipment Institute Publication RP1200, "Recommended Practices for the Testing and Verification of Spill, Overfill, Leak Detection and Secondary Containment Equipment at UST Facilities."

135.4(13) *Periodic operation and maintenance walkthrough inspections.* Conduct inspections to properly operate and maintain UST systems.

a. Conduct a walkthrough inspection every 30 days that, at a minimum, checks the following equipment as specified below (Exception: spill prevention equipment at UST systems receiving deliveries at intervals greater than every 30 days may be checked prior to each delivery):

(1) Spill prevention equipment: visually check for damage; remove liquid or debris; check for and remove obstructions in the fill pipe; check the fill cap to make sure it attaches securely on the fill pipe and gasket is in good condition; and, for double-walled spill prevention equipment with interstitial monitoring, check for a leak in the interstitial area, and

(2) Release detection equipment: check to make sure the release detection equipment is operating with no alarms or other unusual operating conditions present, and ensure records of release detection testing are reviewed and current.

b. Conduct a walkthrough inspection annually, at a minimum, checking the following equipment as specified below:

(1) Containment sumps: visually check for damage, leaks to the containment area, or releases to the environment; remove liquid (in contained sumps) or debris; and, for double-walled sumps with interstitial monitoring, check for a leak in the interstitial area, and

(2) Handheld release detection equipment: check devices such as tank gauge sticks or groundwater bailers for operability and serviceability;

c. Conduct operation and maintenance walkthrough inspections according to a standard code of practice developed by a nationally recognized association or independent testing laboratory that checks equipment comparable to paragraphs 135.4(13)*"a"* and *"b"*; or

NOTE regarding paragraph 135.4(13)*"c"*: the following code of practice may be used to comply with paragraph 135.4(13)*"c"*: Petroleum Equipment Institute Recommended Practice RP 900, "Recommended Practices for the Inspection and Maintenance of UST Systems."

d. Conduct operation and maintenance walkthrough inspections developed by the department that checks equipment comparable to paragraphs 135.4(13)*"a"* and *"b."*

e. Owners and operators must maintain records (in accordance with subrule 135.4(5)) of operation and maintenance walkthrough inspections for 12 consecutive months. Records must include a list of each area checked, whether each area checked was acceptable or needed action taken, a description of actions taken to correct an issue, and delivery records if spill prevention equipment is checked less frequently than every 30 days due to infrequent deliveries.

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