

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 Publication 385 may be used to comply with 135.4(1) “*a.*” Further guidance on spill and overfill prevention appears in American Petroleum Institute Publication 1621, “Recommended Practice for Bulk Liquid Stock Control at Retail Outlets,” and National Fire Protection Association Standard 30, “Flammable and Combustible Liquids Code.”

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 steel UST systems with corrosion protection must comply with the following requirements to ensure that releases due to corrosion are prevented for as long as the UST system is used to store regulated substances:

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: National Association of Corrosion Engineers Standard RP-02-85, “Control of External Corrosion on Metallic Buried, Partially Buried, or Submerged Liquid Storage Systems,” may be used to comply with 135.4(2) “*b*”(2).

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.*”

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.

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 Publication 1626, “Storing and Handling Ethanol and Gasoline-Ethanol Blends at Distribution Terminals and Service Stations”; and American Petroleum Institute Publication 1627, “Storage and Handling of Gasoline-Methanol/Cosolvent Blends at Distribution Terminals and Service Stations.”

135.4(4) Repairs allowed. 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 135.4(4) “a”: National Fire Protection Association Standard 30, “Flammable and Combustible Liquids Code”; American Petroleum Institute Publication 2200, “Repairing Crude Oil, Liquefied Petroleum Gas, and Product Pipelines”; American Petroleum Institute Publication 1631, “Recommended Practice for the Interior Lining of Existing Steel Underground Storage Tanks”; and National Leak Prevention Association Standard 631, “Spill Prevention, Minimum 10 Year Life Extension of Existing Steel Underground Tanks by Lining Without the Addition of Cathodic Protection.”

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

d. Repaired tanks and piping must be tightness tested in accordance with 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 135.5(4) “d” through “h”; 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.

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

f. UST system owners and operators must maintain records of each repair for the remaining operating life of the UST system that demonstrate compliance with the requirements of this subrule.

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

(3) 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)); and

(4) A notification before permanent closure or change-in-service (135.15(2)).

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) “f”);
- (4) Recent compliance with release detection requirements (135.5(6)); and
- (5) Results of the site investigation conducted at permanent closure (135.15(5)).

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 upon request.

NOTE: In the case of permanent closure records required under 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 after December 31, 2011, 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) no later than December 31, 2011.

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 the owner and operator to retrain the designated UST system Class A, B, or C operator under a plan approved by the department. The retraining must occur within 60 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 and maintain 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 licensed 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 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 licensed compliance inspectors under 567—Chapter 134, Part C, 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 licensed 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 implements applicable underground storage tank regulatory requirements and standards 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 required training for Class C operators.

(2) Department-licensed installers, installation inspectors, and 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 licensed compliance inspectors under 567—Chapter 134, Part C, 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 licensed 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) Within six months after October 14, 2009, 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) 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) 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.

c. Class C operators. To be certified as a Class C operator, an individual must complete a department-approved training course that covers, at a minimum, a general overview of the department's UST program and purpose; groundwater protection goals; public safety and administrative requirements; and 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 Class C training.

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 134.4(13). 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 as soon as practicable after October 14, 2009, contingent upon availability of approved training providers, but not later than December 31, 2011, except as provided in paragraph 135.4(6) "b."

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.

c. Class C operators must be trained before assuming the duties of a Class C operator. Within six months after October 14, 2009, 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).

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.

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