### 567—135.3 (455B) UST systems—design, construction, installation and notification.

**135.3(1)** *Performance standards for new UST systems.* In order to prevent releases due to structural failure, corrosion, or spills and overfills for as long as the UST system is used to store regulated substances, all owners and operators of new UST systems must meet the following requirements.

- a. Tanks. Each tank must be properly designed and constructed, and any portion underground that routinely contains product must be protected from corrosion, in accordance with a code of practice developed by a nationally recognized association or independent testing laboratory as specified below:
  - (1) The tank is constructed of fiberglass-reinforced plastic; or

NOTE: The following industry codes may be used to comply with 135.3(1) "a" (1): Underwriters Laboratories Standard 1316, "Standard for Glass-Fiber-Reinforced Plastic Underground Storage Tanks for Petroleum Products"; Underwriters Laboratories of Canada CAN4-S615-M83, "Standard for Reinforced Plastic Underground Tanks for Petroleum Products"; or American Society of Testing and Materials Standard D4021-86, "Standard Specification for Glass-Fiber-Reinforced Polyester Underground Petroleum Storage Tanks."

- (2) The tank is constructed of steel and cathodically protected in the following manner:
- 1. The tank is coated with a suitable dielectric material;
- 2. Field-installed cathodic protection systems are designed by a corrosion expert;
- 3. Impressed current systems are designed to allow determination of current operating status as required in 135.4(2) "c"; and
- 4. Cathodic protection systems are operated and maintained in accordance with 135.4(2) or according to guidelines established by the department; or

NOTE: The following codes and standards may be used to comply with 135.3(1) "a"(2): Steel Tank Institute "Specification for STI-P3 System of External Corrosion Protection of Underground Steel Storage Tanks"; Underwriters Laboratories Standard 1746, "Corrosion Protection Systems for Underground Storage Tanks"; Underwriters Laboratories of Canada CAN4-S603-M85, "Standard for Steel Underground Tanks for Flammable and Combustible Liquids," and CAN4-GO3.1-M85, "Standard for Galvanic Corrosion Protection Systems for Underground Tanks for Flammable and Combustible Liquids," and CAN4-S631-M84, "Isolating Bushings for Steel Underground Tanks Protected with Coatings and Galvanic Systems"; or National Association of Corrosion Engineers Standard RP-02-85, "Control of External Corrosion on Metallic Buried, Partially Buried, or Submerged Liquid Storage Systems," and Underwriters Laboratories Standard 58, "Standard for Steel Underground Tanks for Flammable and Combustible Liquids."

(3) The tank is constructed of a steel-fiberglass-reinforced plastic composite; or

NOTE: The following industry codes may be used to comply with 135.3(1) "a"(3): Underwriters Laboratories Standard 1746, "Corrosion Protection Systems for Underground Storage Tanks," or the Association for Composite Tanks ACT-100, "Specification for the Fabrication of FRP Clad Underground Storage Tanks."

- (4) The tank is constructed of metal without additional corrosion protection measures provided that:
- 1. The tank is installed at a site that is determined by a corrosion expert not to be corrosive enough to cause it to have a release due to corrosion during its operating life; and
- 2. Owners and operators maintain records that demonstrate compliance with the requirements of 135.3(1) "a"(4)"1" for the remaining life of the tank; or
- (5) The tank construction and corrosion protection are determined by the department to be designed to prevent the release or threatened release of any stored regulated substance in a manner that is no less protective of human health and the environment than 135.3(1) "a" (1) to (4).

b. Piping. The piping that routinely contains regulated substances and is in contact with the ground must be properly designed, constructed, and protected from corrosion in accordance with a code of practice developed by a nationally recognized association or independent testing laboratory as specified below:

(1) The piping is constructed of fiberglass-reinforced plastic; or

NOTE: The following codes and standards may be used to comply with 135.3(1)"b"(1): Underwriters Laboratories Subject 971, "UL Listed Non-Metal Pipe"; Underwriters Laboratories Standard 567, "Pipe Connectors for Flammable and Combustible and LP Gas"; Underwriters Laboratories of Canada Guide ULC-107, "Glass Fiber Reinforced Plastic Pipe and Fittings for Flammable Liquids"; and Underwriters Laboratories of Canada Standard CAN 4-S633-M81, "Flexible Underground Hose Connectors."

- (2) The piping is constructed of steel and cathodically protected in the following manner:
- 1. The piping is coated with a suitable dielectric material;
- 2. Field-installed cathodic protection systems are designed by a corrosion expert;
- 3. Impressed current systems are designed to allow determination of current operating status as required in 135.4(2) "c"; and
- 4. Cathodic protection systems are operated and maintained in accordance with 135.4(2) or guidelines established by the department; or

NOTE: The following codes and standards may be used to comply with 135.3(1)"b"(2): National Fire Protection Association Standard 30, "Flammable and Combustible Liquids Code"; American Petroleum Institute Publication 1615, "Installation of Underground Petroleum Storage Systems"; American Petroleum Institute Publication 1632, "Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems"; and National Association of Corrosion Engineers Standard RP-01-69, "Control of External Corrosion on Submerged Metallic Piping Systems."

- (3) The piping is constructed of metal without additional corrosion protection measures provided that:
- 1. The piping is installed at a site that is determined by a corrosion expert to not be corrosive enough to cause it to have a release due to corrosion during its operating life; and
- 2. Owners and operators maintain records that demonstrate compliance with the requirements of 135.3(1) "b" (3)"1" for the remaining life of the piping; or

NOTE: National Fire Protection Association Standard 30, "Flammable and Combustible Liquids Code"; and National Association of Corrosion Engineers Standard RP-01-69, "Control of External Corrosion on Submerged Metallic Piping Systems," may be used to comply with 135.3(1) "b" (3).

- (4) The piping construction and corrosion protection are determined by the department to be designed to prevent the release or threatened release of any stored regulated substance in a manner that is no less protective of human health and the environment than the requirements in 135.3(1) "b" (1) to (3).
  - c. Spill and overfill prevention equipment.
- (1) Except as provided in subparagraph (2), to prevent spilling and overfilling associated with product transfer to the UST system, owners and operators must use the following spill and overfill prevention equipment:
- 1. Spill prevention equipment that will prevent release of product to the environment when the transfer hose is detached from the fill pipe (for example, a spill catchment basin); and
  - 2. Overfill prevention equipment that will:

Automatically shut off flow into the tank when the tank is no more than 95 percent full; or

Alert the transfer operator when the tank is no more than 90 percent full by restricting the flow into the tank or triggering a high-level alarm; or

Restrict flow 30 minutes prior to overfilling, alert the operator with a high-level alarm one minute before overfilling, or automatically shut off the flow into the tank so that none of the fittings located on top of the tank are exposed to product due to overfilling.

- (2) Owners and operators are not required to use the spill and overfill prevention equipment specified in subparagraph (1) if:
- 1. Alternative equipment is used that is determined by the department to be no less protective of human health and the environment than the equipment specified in subparagraph (1)"1" or "2" of this paragraph; or
  - 2. The UST system is filled by transfers of no more than 25 gallons at one time.
- d. Installation. All tanks and piping must be properly installed in accordance with a code of practice developed by a nationally recognized association or independent testing laboratory and in accordance with the manufacturer's instructions.

NOTE: Tank and piping system installation practices and procedures described in the following codes may be used to comply with the requirements of 135.3(1)"d": American Petroleum Institute Publication 1615, "Installation of Underground Petroleum Storage System"; Petroleum Equipment Institute Publication RP100, "Recommended Practices for Installation of Underground Liquid Storage Systems"; or American National Standards Institute Standard 831.3, "Petroleum Refinery Piping," and American National Standards Institute Standard 831.4, "Liquid Petroleum Transportation Piping System."

- e. Certification of installation. All owners and operators must ensure that one or more of the following methods of certification, testing, or inspection is used to demonstrate compliance with paragraph "d" of this subrule by providing a certification of compliance on the UST notification form in accordance with 135.3(3).
  - (1) The installer has been certified by the tank and piping manufacturers; or
- (2) The installer has been certified or licensed by the department as provided in 567—Chapter 134, Part C; or
- (3) The installation has been inspected and certified by a registered professional engineer with education and experience in UST system installation; or
- (4) The installation has been inspected and approved by an inspector certified or licensed by the Iowa comprehensive petroleum underground storage tank fund board; or
  - (5) All work listed in the manufacturer's installation checklists has been completed; or
- (6) The owner and operator have complied with another method for ensuring compliance with paragraph "d" that is determined by the department to be no less protective of human health and the environment.

### **135.3(2)** *Upgrading of existing UST systems.*

- a. Alternatives allowed. Not later than December 22, 1998, all existing UST systems must comply with one of the following requirements:
  - (1) New UST system performance standards under 135.3(1);
  - (2) The upgrading requirements in paragraphs "b" through "d" below; or
- (3) Closure requirements under rule 135.15(455B), including applicable requirements for corrective action under rules 135.7(455B) to 135.12(455B).

Replacement or upgrade of a tank system on a petroleum contaminated site classified as a high or low risk in accordance with subrule 135.12(455B) shall be a double wall tank or a tank equipped with a secondary containment system with monitoring of the space between the primary and secondary containment structures in accordance with 135.5(4) "g" or other approved tank system or methodology approved by the Iowa comprehensive petroleum underground storage tank fund board.

b. Tank upgrading requirements. Steel tanks must be upgraded to meet one of the following requirements in accordance with a code of practice developed by a nationally recognized association or independent testing laboratory:

- (1) Interior lining. A tank may be upgraded by internal lining if:
- 1. The lining is installed in accordance with the requirements of 135.4(4), and
- 2. Within ten years after lining, and every five years thereafter, the lined tank is internally inspected and found to be structurally sound with the lining still performing in accordance with original design specifications.
- (2) Cathodic protection. A tank may be upgraded by cathodic protection if the cathodic protection system meets the requirements of 135.3(1) "a"(2)"2," "3," and "4" and the integrity of the tank is ensured using one of the following methods:
- 1. The tank is internally inspected and assessed to ensure that the tank is structurally sound and free of corrosion holes prior to installing the cathodic protection system; or
- 2. The tank has been installed for less than ten years and is monitored monthly for releases in accordance with 135.5(4) "d" through "h"; or
- 3. The tank has been installed for less than ten years and is assessed for corrosion holes by conducting two tightness tests that meet the requirements of 135.5(4) "c." The first tightness test must be conducted prior to installing the cathodic protection system. The second tightness test must be conducted between three and six months following the first operation of the cathodic protection system; or
- 4. The tank is assessed for corrosion holes by a method that is determined by the department to prevent releases in a manner that is no less protective of human health and the environment than 135.3(2)"b"(2)"1" to "3."
- (3) *Internal lining combined with cathodic protection*. A tank may be upgraded by both internal lining and cathodic protection if:
  - 1. The lining is installed in accordance with the requirements of 135.4(4); and
  - 2. The cathodic protection system meets the requirements of 135.3(1) "a"(2)"2," "3," and "4."

Note: The following codes and standards may be used to comply with subrule 135.3(2): American Petroleum Institute Publication 1631, "Recommended Practice for the Interior Lining of Existing Steel Underground Storage Tanks"; 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"; National Association of Corrosion Engineers Standard RP-02-85, "Control of External Corrosion on Metallic Buried, Partially Buried, or Submerged Liquid Storage Systems"; and American Petroleum Institute Publication 1632, "Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems."

c. Piping upgrading requirements. Metal piping that routinely contains regulated substances and is in contact with the ground must be cathodically protected in accordance with a code of practice developed by a nationally recognized association or independent testing laboratory and must meet the requirements of 135.3(1)"b"(2)"2," "3," and "4."

NOTE: The codes and standards listed in the note following 135.3(1) "b" (2) may be used to comply with this requirement.

d. Spill and overfill prevention equipment. To prevent spilling and overfilling associated with product transfer to the UST system, all existing UST systems must comply with new UST system spill and overfill prevention equipment requirements specified in 135.3(1)"c."

### **135.3(3)** *Notification requirements.*

a. Except as provided in 135.3(3) "b," the owner of an underground storage tank existing on or before July 1, 1985, shall complete and submit to the department a copy of the notification form provided by the department by May 1, 1986.

- b. The owner of an underground storage tank taken out of operation between January 1, 1974, and July 1, 1985, shall complete and submit to the department a copy of the notification form provided by the department by May 8, 1986, unless the owner knows the tank has been removed from the ground. For purposes of this subrule, "owner" means the person who owned the tank immediately before the discontinuation of the tank's use.
- c. An owner or operator who brings into use an underground storage tank after July 1, 1985, shall complete and submit to the department a copy of the notification form provided by the department within 30 days of installing the tank in the ground. The owner or operator shall not allow the deposit of any regulated substance into the tank without prior approval of the department or until the tank has been issued a tank registration tag and is covered by an approved financial responsibility mechanism in accordance with 567—Chapter 136.
- d. All owners and operators of new UST systems must certify in the notification form compliance with the following requirements:
  - (1) Installation of tanks and piping under 135.3(1)"e";
  - (2) Cathodic protection of steel tanks and piping under 135.3(1) "a" and "b";
  - (3) Financial responsibility under 567—Chapter 136, Iowa Administrative Code;
  - (4) Release detection under 135.5(2) and 135.5(3).
- e. All owners and operators of new UST systems must ensure that the installer certifies in the notification form that the methods used to install the tanks and piping comply with the requirements in 135.3(1)"d."
- f. Exemption from reporting requirement. Paragraphs "a" to "c" do not apply to an underground storage tank for which notice was given pursuant to Section 103, Subsection c, of the Comprehensive Environmental Response, Compensation and Liabilities Act of 1980. (42 U.S.C. Subsection 9603(c))
- g. Reporting fee. The notice by the owner to the department under paragraphs "a" to "c" shall be accompanied by a fee of \$10 for each tank included in the notice.
- h. Notification requirement for installing a tank. A person installing an underground storage tank and the owner or operator of the underground storage tank must notify the department of their intent to install the tank 30 days prior to installation. Notification shall be on a form provided by the department.
- i. Notification requirements for a person who sells, installs, modifies or repairs a tank. A person who sells, installs, modifies, or repairs a tank used or intended to be used in Iowa shall notify, in writing, the purchaser and the owner or operator of the tank of the obligations specified in paragraphs 135.3(3) "c" and "j" and the financial assurance requirements in 567—Chapter 136. The notification must include the prohibition on depositing a regulated substance into tanks which have not been registered and issued tags by the department. A standard notification form supplied by the department may be used to satisfy this requirement.
- *j*. It is unlawful for a person to deposit or accept a regulated substance in an underground storage tank that has not been registered and issued permanent or annual tank management tags in accordance with rule 567—135.3(455B). It is unlawful for a person to deposit or accept a regulated substance into an underground storage tank if the person has received notice from the department that the underground storage tank is subject to a delivery prohibition or if there is a "red tag" attached to the UST fill pipe or fill pipe cap as provided in subrule 135.3(8).
- (1) The department may provide written authorization to receive a regulated substance when there is a delay in receiving tank tags or at new tank installations to allow for testing the tank system.
- (2) The department may provide known depositors of regulated substances lists of underground storage tank sites that have been issued tank tags, those that have not been issued tank tags, and those subject to a delivery prohibition pursuant to subrule 135.3(8). These lists do not remove the requirement for depositors to verify that current tank tags are affixed to the fill pipe prior to delivering product.

Regulated substances cannot be delivered to underground storage tanks without current tank tags or those displaying a delivery prohibition "red tag" as provided in subrule 135.3(8).

- (3) A person shall not deposit a regulated substance in an underground storage tank after receiving written or oral notice from the department that the tank is not covered by an approved form of financial responsibility in accordance with 567—Chapter 136.
- k. If an owner or operator fails to register an underground storage tank within 30 days after installation or obtain annual renewal tags by April 1, the owner or operator shall pay an additional \$250 upon registration of the tank or application for tank tag renewal. The imposition of this fee does not preclude the department from assessing an additional administrative penalty in accordance with Iowa Code section 455B.476.

#### 135.3(4) Farm and residential tanks.

- a. The owner or operator of a farm or residential tank of 1100 gallons or less capacity used for storing motor fuel for noncommercial purposes is subject to the requirements of this subrule.
- b. Farm and residential tanks, installed before July 1, 1987, shall be reported on a notification form by July 1, 1989, but owners or operators are not required to pay a registration fee.
- c. Farm and residential tanks that were installed on or after July 1, 1987, shall be in compliance with all the underground storage tank regulations.

## 135.3(5) Registration tags and annual management fee.

- a. Tanks of 1100 gallons or less capacity that have registered with the department will be issued a permanent registration tag.
- b. The owner or operator of tanks over 1100-gallon capacity must submit a tank management fee of \$65 per tank by January 15 of each year. The owner or operator must also submit written proof that the tanks are covered by an approved form of financial responsibility in accordance with 567—Chapter 136. Upon proper payment of the fee and acceptable proof of financial responsibility, a one-year registration tag will then be issued for the period from April 1 to March 31. The department shall refund a tank management fee if the tank is permanently closed prior to the effective date of April 1 for that year.
- c. The owner or operator shall affix the tag to the fill pipe of the underground storage tank where it will be readily visible.
- d. A person who conveys or deposits a regulated substance shall inspect the underground storage tank to determine the existence or absence of a current registration tag, a current annual tank management fee tag, or a delivery prohibition "red tag" as provided in subrule 135.3(8). If the tag is not affixed to the fill pipe cap or if a delivery prohibition "red tag" is displayed, the person shall not deposit the substance in the tank.
- e. The owner or operator must return the tank tags upon request of the department for failure to meet the requirements of rules 135.3(455B) to 135.5(455B) or the financial responsibility rules in 567—Chapter 136 after permanent tank closure or when tanks are temporarily closed for over 12 months, or when the tank system is suspected to be leaking and the responsible party fails to respond as required in subrule 135.8(1). The department will not return the tags until the tank system is in full compliance with the technical requirements of this chapter and financial responsibility requirements of 567—Chapter 136.

## **135.3(6)** Petroleum underground storage tank registration amnesty program.

- a. A petroleum underground storage tank required to be registered under 135.3(3) and 135.3(4), which has not been registered prior to July 1, 1988, may be registered under the following conditions:
  - (1) The tank registration fee under 135.3(3) "g" shall accompany the registration.
- (2) The storage tank management fee under 135.3(5) shall be paid for past years in which the tank should have been registered.
- b. If a tank is registered under this subrule on or prior to October 1, 1989, penalties under Iowa Code section 455B.477 shall be waived.

135.3(7) Exemption certificates from the environmental charge on petroleum diminution.

- a. An owner or operator of a petroleum underground storage tank that is exempt, deferred, or excluded from regulation under Iowa Code sections 455G.1 to 455G.17, can apply for an exemption certificate from the department to exempt a tank from the environmental charge on petroleum diminution. Exempted tanks include those listed in 135.1(3) "b" and "c" and those excluded in the definition of "underground storage tank" in 135.2(455B). Application for the exemption certificate shall be made on the form provided by the department.
- b. An exemption certificate is not required for those classes of tanks that the Iowa comprehensive petroleum underground storage tank fund board has waived from the exemption certificate requirement.
- c. The department shall revoke and require the return of the exemption certificate if the petroleum underground storage tank becomes subject to Iowa Code sections 455G.1 to 455G.17.

# 135.3(8) Delivery prohibition process.

- a. Identifying sites subject to delivery response prohibition action.
- (1) Annual registration tag and tank management fee process. Owners and operators shall certify to the following on a form prepared by the department when applying for annual tank tags pursuant to subrule 135.3(5):
- 1. Installation and performance of an approved UST and piping release detection method as provided in rule 135.5(455B), including an annual line tightness test and a line leak detector test if applicable.
- 2. Installation of an approved overfill and spill protection system as provided in paragraph 135.3(1) "c."
- 3. Installation of an approved corrosion protection system as provided in paragraphs 135.3(1) "a" and "b."
- 4. If the UST system has been out of operation for more than three months, that the UST system has been temporarily closed in accordance with rule 135.15(455B) and a certification of temporary closure has been submitted to the department.
- 5. If the UST system has been removed or filled in place within the last 12 months, the date of removal or filling in place and whether a closure report has been submitted as provided in rule 135.15(455B).
- (2) Sites with provisional status. If the UST system has been classified as operating under provisional status as provided in paragraph 135.3(8) "c," owners and operators when applying for annual tank tags pursuant to subrule 135.3(5) must certify on a form prepared by the department that the owners and operators are in compliance with an approved provisional status remedial plan as provided in paragraph 135.3(8) "c."
- (3) Compliance inspections. The department may initiate a delivery prohibition response action based on: (1) a finding resulting from a third-party compliance inspection conducted pursuant to rule 135.20(455B); (2) a department investigation and inspection conducted pursuant to Iowa Code section 455B.475; or (3) review of a UST system check or other documentation submitted in response to a suspected release under rule 135.6(455B) or in response to a confirmed release under rule 135.7(455B).
- b. Delivery prohibition eligibility criteria. A delivery prohibition response action may be initiated upon a finding that the UST system is out of compliance with department rules and meets the eligibility criteria as specified below. Reinstatement criteria define the standards and process for owners and operators to document that they have taken corrective action sufficient to authorize resumption of fuel to the USTs. Prior to initiation of the delivery prohibition, owners and operators are afforded a minimum level of procedural due process such as prior notice and the opportunity to present facts to dispute the finding. Where notice and the opportunity to take corrective action prior to initiation of a delivery prohibition response action are required, notice by the department or by a certified compliance inspector as provided in rule 135.20(455B) shall be sufficient.

If the department finds that any one of the following criteria has been satisfied, the department may initiate a delivery prohibition response action following the notice procedures outlined in paragraph "e"

of this subrule. After initiation of the delivery prohibition response action, the department will offer the owner or operator an opportunity to establish reinstatement criteria by written documentation and, if requested, an in-person meeting.

(1) An approved release detection method for USTs or UST piping is not installed, such as automatic tank gauging, groundwater monitoring wells and line leak detectors, and there is no record that an approved method such as inventory control, statistical inventory reconciliation, or interstitial space monitoring has been employed during the previous three months. If the owner or operator claims to have documentation that an approved release detection method has been conducted, the owner or operator will be given two business days to produce the documentation.

REINSTATEMENT CRITERIA: The owner or operator must submit results of a passing UST system precision tightness test at the 0.1 gallon-per-hour leak rate in paragraphs 135.5(4) "c" and 135.5(5) "b." The owner or operator must also document installation and operation of an approved release detection system. This may include proof that a contract has been signed with a qualified statistical inventory reconciliation provider or that a qualified inventory control method has been implemented and training has been provided to onsite supervisory personnel.

(2) No documentation of a required annual line tightness test or line leak detector test has been provided, and the owner or operator has failed to conduct the required testing within 14 days of written notice by the department or a certified compliance inspector as provided in rule 135.20(455B).

REINSTATEMENT CRITERIA: The owner or operator must provide documentation of a passing line precision tightness test at the 0.1 gallon-per-hour leak rate in paragraph 135.5(5)"b" and a line leak detector test as provided in paragraph 135.5(5)"a."

(3) Overfill and spill protection is not installed.

REINSTATEMENT CRITERION: The owner or operator must provide documentation that overfill and spill protection equipment has been installed.

(4) A corrosion protection system is not installed or there is no record that an impressed current corrosion protection system has been in operation for the prior six months.

REINSTATEMENT CRITERIA: A manned entry tank integrity inspection must be completed prior to installation of a corrosion protection system, and the owner or operator must submit results of a passing UST system precision tightness test at the 0.1 gallon-per-hour leak rate in paragraphs 135.5(4) "c" and 135.5(5) "b." A corrosion protection analysis must be completed and approved by the department.

(5) The owner or operator has failed to provide proof of financial responsibility in accordance with 567—Chapter 136.

REINSTATEMENT CRITERION: The owner or operator must submit acceptable proof of financial responsibility in accordance with 567—Chapter 136.

(6) A qualified UST system release detection method is installed and is being used but the documentation or the absence of documentation is sufficient to question the reliability of the release detection over the past 12-month period. The owner or operator shall be notified of the deficiencies, shall be given at least two business days to produce documentation of compliance and, if necessary, shall be required to conduct a leak detection system analysis and a system tightness test within 14 days. If the owner or operator fails to produce documentation of compliance or to conduct the system analysis and the UST system precision tightness test at the 0.1 gallon-per-hour leak rate in paragraphs 135.5(4) "c" and 135.5(5) "b," the department may initiate a delivery prohibition response action. Notice by the department or a compliance inspector as provided in rule 135.20(455B) shall be sufficient to initiate a delivery prohibition response action.

REINSTATEMENT CRITERIA: The owner or operator must submit documentation that the leak detection method analysis sufficiently documents compliance and explains the reasons for the accuracy and reliability concerns. If necessary, the owner or operator must submit passing results of a UST

system precision tightness test at the 0.1 gallon-per-hour leak rate in paragraphs 135.5(4) "c" and 135.5(5) "b."

(7) The owner or operator has failed to document completion of a three-year corrosion protection test or to repair defective corrosion protection equipment within 30 days after notice of the violation by the department or a certified compliance inspector as provided in rule 135.20(455B).

REINSTATEMENT CRITERION: The owner or operator must submit documentation of a three-year corrosion protection test as provided in rule 135.3(455B).

(8) The owner or operator has failed to complete a compliance inspection required by rule 135.20(455B) within 60 days after written notice of the violation by the department.

REINSTATEMENT CRITERION: The owner or operator must submit a compliance inspection report as provided in rule 135.20(455B).

(9) The owner or operator has failed to take necessary abatement action in response to a confirmed release as provided in subrules 135.7(2) and 135.7(3).

REINSTATEMENT CRITERION: The owner or operator must document compliance with the abatement provisions in subrules 135.7(2) and 135.7(3).

(10) The owner or operator has failed to undertake and document release investigation and confirmation steps within seven days in response to a suspected release as provided in paragraph 135.6(3) "a."

REINSTATEMENT CRITERION: The owner or operator must document release confirmation and system check as provided in paragraph 135.6(3) "a."

c. Provisional status. The department may classify a UST system as operating under a provisional status when the department documents a pattern of UST operation and maintenance violations under rules 135.3(455B) through 135.5(455B) and suspected release and confirmed release response actions under rules 135.6(455B) and 135.7(455B). The department shall provide the owner or operator with a notice specifying the basis for the proposed classification and a proposed remedial action plan. The objective of the remedial action plan is to provide the owner and operator an opportunity to undertake certain remedial actions sufficient to establish a reasonable likelihood that future regulatory compliance will be achieved.

The remedial action plan may include but is not limited to provisions for owner/operator training, development of a facility-specific compliance manual, more frequent third-party compliance inspections than otherwise required under rule 135.20(455B), monthly reporting, and retention of a third-party compliance manager/consultant. If the owner or operator and the department cannot reach agreement on a remedial action plan, the department may initiate enforcement action by issuance of an administrative order pursuant to 567—Chapter 10. This provision does not grant the owner or operator an entitlement to this procedure, and the department reserves all discretion to undertake an enforcement action and assess penalties as provided in Iowa Code sections 455B.476 and 455B.477.

- d. Administrative orders. The department may impose a delivery prohibition as a remedy for violations of the operation and maintenance provisions in rules 135.3(455B) through 135.5(455B) and the suspected and confirmed release response actions in rules 135.6(455B) and 135.7(455B). This remedy may be in addition to the assessment of penalties as provided in Iowa Code section 455B.476 and other appropriate injunctive relief necessary to correct violations.
  - e. Due process prior to initiation of a delivery prohibition response action.
- (1) Prior to imposing a delivery prohibition response action under paragraph 135.3(8) "b" above, the department will provide notice to the owner or operator or, if notice to the owner or operator cannot be confirmed, to a person in charge at the UST facility of the basis for the finding and the intent to initiate

a delivery prohibition response action. Notice may be by verbal contact, by facsimile, or by regular or certified mail to the UST facility address or the owner's or operator's last-known address. The owner and operator will be given a minimum of one business day to provide documentation that the finding is inaccurate or that reinstatement criteria in subparagraphs 135.3(8) "b" (1) through (5) have been satisfied. Additional days and the opportunity for a telephone or in-person conference may be provided the owner and operator to contest the factual basis for a finding under subparagraphs 135.3(8) "b" (6) through (10). Additional procedural due process may be afforded the owner and operator on a case-by-case basis sufficient to satisfy Constitutional due process standards.

If insufficient information is submitted to change the finding, the department will notify the owner or operator and a person in charge at the UST facility of the final decision to impose the delivery prohibition response action.

- (2) Provisional status. Upon a finding that an owner or operator under provisional status has failed to comply with the terms of a remedial action plan as provided above, the department may initiate a delivery prohibition response action by giving actual notice to the owner or operator of the basis for the finding of noncompliance and the department's intent to initiate a delivery prohibition response action. The delivery prohibition response action shall not be imposed without providing the owner or operator the opportunity for an evidentiary hearing consistent with the provisions for suspension and revocation of licenses under 567—Chapter 7.
- f. Delivery prohibition procedure. Upon oral or written notice that the delivery prohibition response action has been imposed, the owner or operator and any person in charge of the UST facility shall be notified that they are not authorized to receive any further delivery of regulated substances until conditions for reinstatement of eligibility are satisfied. Owners and operators are required to immediately remove and return to the department the current annual tank management fee tags or the tank registration tags if there are no tank management fee tags. Owners and operators are required to provide the department with names and contact information for all persons who convey or deposit regulated substances to the USTs. The department will attempt to notify known persons who convey or deposit regulated substances to the USTs that they are not authorized to deliver to the USTs until further notice by the department as provided in paragraph 135.3(3)";" and subrule 135.3(5).

If the tank tags are not returned within three business days, the department shall visit the site, remove the tags, and affix a "red tag" to the fill pipes or fill pipe caps of all affected USTs. It is unlawful for any person to deposit or accept a regulated substance into a UST that has a "red tag" affixed to the fill pipe or fill pipe cap. The department may allow the owner and operator to dispense and sell the remainder of existing fuel unless the department determines there is an immediate risk of a release or other risk to human health, safety or the environment. The department shall confirm in writing the basis for the delivery prohibition response action, contacts made prior to the action, and steps the owner or operator must take to reinstate fuel delivery.

- 135.3(9) Secondary containment requirements for new and replacement UST system installations. All new and replacement underground storage tank systems and appurtenances used for the storage and dispensing of petroleum products installed after November 28, 2007, shall have secondary containment in accordance with this subrule. The secondary containment provision includes the installation of turbine sumps, transition or intermediate sumps and under-dispenser containment (UDC).
- a. The secondary containment may be manufactured as an integral part of the primary containment or constructed as a separate containment system.
- b. Installation of any new or replacement turbine pumps involving the direct connection to the tank shall have secondary containment.
  - c. Any replacement of ten feet or more of piping shall have secondary containment.
- d. All piping replacements requiring secondary containment shall be constructed with transition or intermediate containment sumps.

e. The design and construction of all primary and secondary containment shall meet the performance standards in subrule 135.3(1) and paragraphs 135.5(3)"b" and 135.5(4)"g." At a minimum, the secondary containment must:

- (1) Contain regulated substances released from the tank system until detected and removed;
- (2) Prevent the release of regulated substances into the environment at any time during the operational life of the underground storage tank system; and
- (3) Be checked for evidence of a release at least every 30 days as provided in paragraph 135.5(2)"a."
- f. Secondary containment with interstitial monitoring in accordance with paragraphs 135.5(3) "b," 135.5(4) "g" and 135.5(5) "d" shall become the primary method of leak detection for all new and replacement tanks and piping installed after November 28, 2007.
- g. Testing and inspection. Secondary containment systems shall be liquid-tight and must be inspected and tested every two years. The sensing devices must be tested every two years.
- (1) Inspections for secondary containment sumps (spill catchment basins, turbine sumps, transition or intermediate sumps, and under-dispenser containment) shall:
- 1. Consist of a visual inspection by an Iowa-licensed installer or Iowa-certified inspector every two years. Sumps must be intact (no cracks or perforations) and liquid-tight, including sides and bottom.
  - 2. Sumps must be maintained and kept free of debris, liquid and ice at all times.
- 3. Regulated substances spilled into any spill catchment basin, turbine sump, transition/intermediate sump or under-dispenser containment shall be immediately removed.
- (2) Sensing devices used to monitor the interstitial space shall be tested at least every two years for proper function.
- *h*. Under-dispenser containment. When installing a new motor fuel dispenser or replacing a motor fuel dispenser, a UDC shall be installed whenever:
- (1) A motor fuel dispenser is installed at a location where there previously was no dispenser (new UST system or new dispenser location at an existing UST system); or
- (2) An existing motor fuel dispenser is removed and replaced with another dispenser and the equipment used to connect the dispenser to the underground storage tank system is replaced. This equipment includes flexible connectors or risers or other transitional components that are beneath the dispenser and connect the dispenser to the piping. A UDC is not required when only the emergency shutoff or shear valves or check valves are replaced.
- (3) A UDC shall also be installed beneath the motor fuel dispenser whenever ten feet or more of piping is repaired or replaced within ten feet of a motor fuel dispenser.
- *i.* Exceptions from secondary containment standards. A tank owner or operator may request an exception from the secondary containment standard if the location of the UST system is greater than 1,000 feet from a community water system or potable drinking water well. A community water system includes the distribution piping.
- (1) "Community water system (CWS)" means a public water system which has at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents. "Public water supply system" means a system for the provision to the public of water for human consumption through pipes or other constructed conveyances, if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year. Such term includes: any collection, treatment, storage, and distribution facilities under control of the operator of such system and used primarily in connection with such system; and any collection or pretreatment storage facilities not under such control which are used primarily in connection with such system. Such term does not include any "special irrigation district." A "public water supply system" is either a "community water system" or a "noncommunity water system."

(2) "Potable drinking water well" means any hole (dug, driven, drilled, or bored) that extends into the earth until it meets groundwater and that supplies water for a noncommunity public water system or supplies water for household use (consisting of drinking, bathing, and cooking or other similar uses). Such wells may provide water to entities such as a single-family residence, a group of residences, businesses, schools, parks, campgrounds, and other permanent or seasonal communities. A "noncommunity water system" is defined in rule 567—40.2(455B) as a public water system that is not a community water system. A "noncommunity water system" is either a "transient noncommunity water system (NTNC)."

- (3) To determine if a new or replacement underground storage tank, piping, or motor fuel dispenser system is within 1,000 feet of an existing community water system or an existing potable drinking water well, at a minimum the distance must be measured from the closest part of the new or replacement underground storage tank or piping or the motor fuel dispenser system to:
  - 1. The closest part of the nearest existing community water system, including:
- The location of the wellhead(s) for groundwater and the location of the intake point(s) for surface water;
  - Water lines, processing tanks, and water storage tanks; and
  - Water distribution/service lines under the control of the community water system operator.
  - 2. The wellhead of the nearest existing potable drinking water well.
- (4) If a new or replacement underground storage tank, piping, or motor fuel dispenser that is not within 1,000 feet of an existing community water system will be installed, and a community water system that will be within 1,000 feet of the UST system is planned or a permit application has been submitted to the department under 567—Chapter 40, secondary containment and under-dispenser containment are required unless the permit is denied.
- (5) If a new or replacement underground storage tank, piping, or motor fuel dispenser that is not within 1,000 feet of an existing potable drinking water well will be installed and the owner will be installing a potable drinking water well at the new facility, or a private water well permit has been submitted pursuant to 567—Chapter 38 and pursuant to applicable county and municipal ordinances for a potable drinking water well that will be within 1,000 feet of the UST system, secondary containment and under-dispenser containment are required unless the permit is denied.
- *j.* Documentation for exception from secondary containment. The following documentation must be provided by the tank owner or operator when requesting an exception from the UST system secondary containment requirement.
- (1) A statement from the manager of the local community water system that the community water system is not located or planned within 1,000 feet of the UST system location. This would include rural water systems.
  - (2) A map showing homes and businesses within 1,000 feet of the UST system location.
  - (3) Identification of the source of water for the business at the UST system location.
- (4) The results of an on-foot search around businesses and homes within a 1,000-foot radius for possible potable drinking water wells. Documentation that there are no pending nonpublic water well permit applications within 1,000 feet of the UST system from any applicable municipal permitting authority, county department of health with department-delegated authority, or the department if there is not delegated permitting authority.
- (5) Search results from the Geographic Information System (GIS) well mapping for well locations available from the Iowa Geological Survey.
- (6) Documentation that the department's water supply section has no pending applications for a public water supply construction permit within 1,000 feet of a proposed UST system installation or replacement or motor fuel dispenser installation or replacement.