# 401 KAR 42:020. UST system requirements, notification, registration, and annual fees.

RELATES TO: KRS 224.1, 224.10, 224.60, 10 C.F.R. Part 50, 40 C.F.R. Part 280, Subparts A, B, C, D, G, H, I, J, K, Part 281, Subpart D, 42 U.S.C. 2011 - 2021, 2022 - 2286i, 2296a - 2297h-13, 6991 - 6991m

STATUTORY AUTHORITY: KRS 224.10-100, 224.60-105, 224.60-150, 42 U.S.C. 6991 - 6991m

NECESSITY, FUNCTION, AND CONFORMITY: KRS 224.10-100 requires the cabinet to develop and conduct programs that provide for the prevention, abatement, and control of contaminants that may threaten the environment. KRS 224.60-105 requires the cabinet to regulate underground storage tanks (USTs) by requiring registration, minimum construction and performance standards, leak detection, recordkeeping, release reporting, corrective action, closure, financial responsibility, and other requirements to protect public health and the environment. KRS 224.60-105(3) requires the cabinet to establish a regulatory program that implements federal requirements for UST systems. KRS 224.60-150 requires the cabinet to levy and collect an annual fee of thirty (30) dollars per tank from owners or operators of USTs for the purpose of funding the administration of the UST Program. KRS 224.10-100(28) authorizes the cabinet to promulgate administrative regulations not inconsistent with the provisions of law administered by the cabinet. This administrative regulation establishes the scope of the UST program, including provisions for exclusions, requirements concerning registration, annual fees, performance standards, operation and maintenance of UST systems, delivery prohibition, operator training, and requirements for demonstrating financial responsibility for corrective action, compensation of third parties for bodily injury and property damage, and lender liability.

Section 1. Applicability and Exclusions. (1) Except as established in subsection (3) of this section, applicability and exclusions shall be as established in 40 C.F.R. 280.10, 280.11, and this administrative regulation.

- (2) Requirements for previously federally deferred field-constructed tanks and airport hydrant fuel distribution systems shall be as established in 40 C.F.R. 280.250 through 280.252, and this administrative regulation.
- (3) In addition to the exclusions established in subsection (1) of this section, the following shall be excluded from the requirements of 401 KAR Chapter 42:
- (a) A UST system containing wastes established as hazardous in 401 KAR Chapter 39 and UST systems containing mixtures of hazardous waste and other regulated substances;
  - (b) Exclusions listed in KRS 224.60-100(1)(a) through (i); and
- (c) A UST system used in the operation of heating equipment, boilers, and furnaces, but with a secondary usage as part of an emergency generator system, if:
  - 1. UST system contents are consumed on the premises where stored; and
  - 2. The UST system stores fuel oil number 1, 2, 4, 5, 6, or residual fuel oil.

Section 2. Notification, Registration, and Annual Fees. (1) Notification requirements for UST systems shall be as established in KRS 224.60-105, 40 C.F.R. 280.22, and this section.

- (a) Owners shall submit the UST Notice of Intent to Install Underground Storage Tank or Piping, DWM 4231, to the appropriate Division of Waste Management Regional Office, at a minimum, fourteen (14) days prior to installation of a UST or an entire piping run, in accordance with Section 6(4) of this administrative regulation, to afford a division representative the opportunity to be present during installation.
- (b) If a division representative fails to be present on the date scheduled for installation, the installation may proceed.

- (2) Registration of UST systems shall comply with the requirements in subsection (1) of this section and this subsection.
- (a) The owner shall submit, to the cabinet, a UST Facility Registration, DWM 4225, for a UST facility within thirty (30) days of bringing a UST system into use at the UST facility.
  - (b) The form shall be signed by the owner and operator of the UST system.
- (3) A corporation or limited liability company, registering as an owner or operator of a UST system, shall be authorized to conduct business in the Commonwealth of Kentucky, hold an active status, and be in good standing, with the Kentucky Secretary of State.
- (4)(a) Except as established in subsection (5) of this section, an owner shall submit to the cabinet an amended UST Facility Registration, DWM 4225 within thirty (30) days of any change to information contained within the most recently submitted UST Facility Registration.
  - (b) The form shall be signed by the owner and operator of the UST system.
- (5) An unregistered UST system discovered during permanent closure activities conducted in accordance with 401 KAR 42:060, shall be listed on the UST Closure Assessment Report Checklist, DWM 4262, incorporated by reference in 401 KAR 42:060, in lieu of an amended UST Facility Registration, DWM 4225.
- (6) An owner shall notify the cabinet within thirty (30) days of an address change by submittal of:
  - (a) An amended UST Facility Registration, DWM 4225; or
  - (b) A UST Facility Owner Address Correction, DWM 4224.
  - (7) If ownership of a UST system changes, the new owner shall comply with this subsection.
- (a) The new owner shall complete and submit an amended and signed UST Facility Registration, DWM 4225, to indicate the new ownership. The form shall include the previously-assigned agency interest number and shall be submitted to the cabinet within thirty (30) days after the transaction.
- (b) The new owner shall maintain a copy of the properly executed deed or other properly executed legal document proving the transfer of the UST system and submit to the cabinet if requested.
- (c) Upon the sale of a UST system, the previous owner shall advise the new owner of the obligation to submit an amended and signed UST Facility Registration, DWM 4225, to the cabinet that indicates the change in ownership.
- (8) Upon a determination by the UST Branch that the UST Facility Registration, DWM 4225, is complete and accurate, and the requirements of subsection (9) of this section are met, a written approval letter shall be issued by the UST Branch.
- (9)(a) Annual fees for each tank that is in the ground, and not permanently closed in accordance with 401 KAR 42:060, on July 1 of a year (July 1 through June 30), shall be as established in KRS 224.60-150; and
- (b)1. Owners or operators of USTs shall pay a thirty (30) dollar annual fee for each tank in the ground on July 1 of that year (July 1 through June 30);
- 2. Payment shall be made according to instructions on the invoice from the cabinet stating the required payment;
- 3. Payment shall be made within thirty (30) days from the date on the invoice from the cabinet specifying the required payment;
- 4. Payment submitted by check shall be made payable to the Kentucky State Treasurer with a note stating that the payment applies to UST tank fees;
  - 5. Annual fees shall not be due for years prior to the one beginning July 1, 1990; and
- 6. Annual fees shall not be required for an unregistered tank newly discovered during permanent closure activities conducted in accordance with 401 KAR 42:060.

- Section 3. Temporary Closure. (1) An amended UST Facility Registration, DWM 4225, shall be submitted in accordance with Section 2(4) of this administrative regulation.
- (2) If a UST system is in temporary closure, the owner and operator shall continue operation and maintenance of corrosion protection and UST system release detection, in accordance with this section.
- (a) If a UST system is empty, the following operation and maintenance requirements shall not be required:
- 1. UST system release detection in accordance with Section 15 of this administrative regulation; and
  - 2. Walkthrough inspections in accordance with Section 17 of this administrative regulation.
- (b) Spill and overfill operation and maintenance testing and inspections shall not be required in accordance with Sections 8 and 9 of this administrative regulation.
- (3) In addition to the requirements of subsection (2) of this section, if a UST system is in temporary closure for more than three (3) months, the owner and operator shall:
  - (a) Leave vent lines open and functioning; and
  - (b) Cap and secure all other lines, pumps, man ways, and ancillary equipment.
- (4) If a UST system is in temporary closure for more than twelve (12) months, and does not comply with the requirements of subsections (2) and (3) of this section, the owner and operator of the UST system shall:
  - (a) Perform permanent closure in accordance with 401 KAR 42:060; or
- (b) Request an extension of temporary closure in accordance with Section 22 of this administrative regulation and perform an assessment in accordance with Section 4.0 of the UST Corrective Action Manual, incorporated by reference in 401 KAR 42:060.
- (5) If a UST system is in temporary closure for more than twelve (12) months, and complies with the performance standards for corrosion protection, spill containment and overfill prevention, and release detection in accordance with this administrative regulation, the owner and operator shall conduct tank and piping tightness tests, and any outstanding periodic test, prior to returning the UST system into use.
- Section 4. Performance Standards for New UST Systems. (1) Performance standards for new UST systems shall be as established in 40 C.F.R. 280.20, Section 4.0 of the UST System Compliance Manual, and this section.
- (2) Noncorrodible piping requirements shall be as established in Section 14 of this administrative regulation.
- (3) Owners and operators shall submit a UST System Compatibility Verification, DWM 4234, in accordance with Section 12 of this administrative regulation.
- Section 5. Upgrading of Existing UST Systems. Upgrading requirements for existing UST systems shall be as established in 40 C.F.R. 280.21 and this section, except that:
  - (1) Interior lining shall not be an acceptable method of corrosion protection; and
- (2) All interior lined steel tanks that had not, as of December 22, 2013, been upgraded with impressed current corrosion protection shall be permanently closed immediately in accordance with 401 KAR 42:060.
- Section 6. Double Walled Tanks and Piping Requirements. (1) Requirements for double walled tanks and piping shall be as established in 40 C.F.R. 280.20 and the performance standards of this section.
- (2) All tanks and piping installed, or UST systems changing from storage of a non-regulated substance to storage of a regulated substance, on or after April 1, 2012, shall comply with the

requirements in Section 4 of this administrative regulation, and the UST System Compliance Manual, except that the use of flow restrictors shall be in accordance with Section 9(3) of this administrative regulation.

- (3) All existing single walled piping shall be permanently closed in accordance with 401 KAR 42:060 if an associated tank is permanently closed.
- (4) Owners and operators shall replace an entire piping run with double walled piping, in accordance with the UST System Compliance Manual, if fifty (50) percent or more of the piping run, extending from the tank to the farthest dispenser or other end-use equipment, excluding connectors, is replaced.
- (5) Newly installed piping that is associated with a newly installed UST system dispenser, located in an area where a UST system dispenser did not previously exist, shall be designed and manufactured with double walled construction and shall comply with the requirements in Section 4.0 of the UST System Compliance Manual.
- (6) An existing tank that is removed shall comply with the requirements of Section 4.0 of the UST System Compliance Manual if reinstalled.

Section 7. Emergency Shutoff Valves (Shear Valves). (1) Shear valve requirements shall be as established in 40 C.F.R. 280.20(d) and this section.

- (2) All pressurized piping systems that connect tanks to dispensers shall be installed with shear valves for each supply line at the base of each dispenser.
- (3) The shear valves shall be rigidly anchored to the dispenser island or another appropriate anchoring point in a manner that allows the shear valve to close automatically in the event of significant impact to a dispenser.
- (4) A shear valve found to be defective, inoperable, leaking, not functioning as designed by the manufacturer, or not rigidly anchored shall be immediately replaced or repaired in accordance with Sections 4 and 13 of this administrative regulation.

Section 8. Spill Containment Devices (Spill Buckets and Catch Basins). (1) Requirements for spill buckets and catch basins shall be as established in 40 C.F.R. 280.20(c), 280.30, 280.35, and this section.

- (2) Owners and operators shall not allow regulated substances, liquids, or debris to accumulate in a spill containment device. Owners and operators shall immediately, upon discovery, remove all liquid accumulations and debris from a spill containment device.
- (3) All spill containment devices installed on or after April 1, 2012 shall be double walled, liquid-tight, compatible with the substance being stored in the UST system, and installed in accordance with the manufacturer's instructions.
- (4) All double walled spill containment devices installed on or after April 1, 2012 shall be tested at installation, and, at a minimum, every thirty-six (36) months thereafter, for liquid-tightness using a test method approved by the double walled spill containment device's manufacturer, a code of practice developed by a nationally recognized association or independent testing laboratory, or a method approved by the cabinet based upon site-specific conditions.
- (5) All single walled spill containment devices, and all double walled spill containment devices, installed prior to April 1, 2012 shall be immediately tested and, at a minimum, every thirty-six (36) months thereafter, for liquid-tightness using a test method approved by the spill containment device's manufacturer, a code of practice developed by a nationally recognized association or independent testing laboratory, or a method approved by the cabinet based upon site-specific conditions.
- (6) The thirty-six (36) month testing requirements for double walled spill containment devices established in subsections (4) and (5) of this section shall not be required if the spill con-

tainment device interstice is monitored, at a minimum, every thirty (30) days and is documented as follows:

- (a) For electronic devices capable of printing sensor readings, owners and operators shall obtain a record, at a minimum, every thirty (30) days; or
- (b) For devices not capable of printing sensor readings, a monthly log shall be maintained and documented on the UST Visual Interstitial Log, DWM 4236.
- (7) The thirty-six (36) month testing established in subsections (4) and (5) of this section shall be conducted within thirty (30) days of the requirements of subsection (6) of this section no longer being met.
- (8) The test for liquid-tightness shall be documented on the UST Containment Device Test, DWM 4222 and shall be submitted to the UST Branch within:
  - (a) Seven (7) days of the test date for failing test results; or
  - (b) Thirty (30) days of the test date for passing test results.
- (9) Owners and operators shall ensure immediate replacement or repair of a damaged, defective, or leaking spill containment device in accordance with Sections 4 and 13 of this administrative regulation.

Section 9. Overfill Prevention Requirements.

- (1) Except as established in this section, overfill prevention device requirements shall be as established in 40 C.F.R. 280.20(c), 280.30, and 280.35.
- (2) All overfill prevention devices installed on or after April 1, 2012 shall be installed in an extractable fitting to allow for inspection, maintenance, and testing of the device.
- (3) Flow restrictors, also known as ball floats, shall not be an approved method for overfill prevention for newly installed UST systems.
- (4) All overfill prevention devices shall be accessible for testing, shall be tested to ensure that overfill prevention equipment is set to activate at the levels established in 40 C.F.R. 280.20(c), and will activate if a regulated substance reaches that level. Overfill prevention devices shall be tested using a method approved by the device's manufacturer, a code of practice developed by a nationally recognized association or independent testing laboratory, or a method approved by the cabinet based upon site-specific conditions.
- (5) All existing overfill prevention devices not subject to the requirements in subsection (7) of this section, shall be immediately tested and at a minimum, every thirty-six (36) months thereafter.
- (6)(a) All flow restrictors, also known as ball floats, shall immediately be removed and physically inspected to verify the ball and cage are intact and functioning properly. If this equipment is not functioning properly, the ball float shall be replaced with another form of overfill prevention in accordance with subsection (4) of this section.
- (b) If the flow restrictor, also known as a ball float, cannot be evaluated in accordance with paragraph (a) of this subsection, an automatic shutoff device or a high level alarm, set to activate at ninety (90) percent capacity, shall be installed as a replacement of the existing ball float.
- (7) All newly installed overfill prevention devices shall be tested at installation and, at a minimum, every thirty-six (36) months thereafter.
- (8) The overfill prevention device test shall be documented on the UST Overfill Prevention Device Test, DWM 4232 and shall be submitted to the UST Branch within:
  - (a) Seven (7) days of the test date for failing test results; or
  - (b) Thirty (30) days of the test date for passing test results.

Section 10. Under-dispenser Containment (UDC) and Sump Requirements.

- (1) Requirements for UDC and sumps shall be as established in 40 C.F.R. 280.20, 280.35, and this section.
- (2) A UST system dispenser installed on or after April 1, 2012, located in an area where a UST system dispenser did not previously exist, shall have liquid-tight UDC installed in accordance with this section and Section 7.0 of the UST System Compliance Manual.
- (3) If equipment below the shear valve, used to connect an existing UST system dispenser to the piping, is replaced in conjunction with a dispenser replacement, liquid-tight UDC shall be installed or existing equipment shall comply with the requirements of this section and Section 7.0 of the UST System Compliance Manual.
- (4) A UDC or sump containing product piping, installed or replaced on or after April 1, 2012, shall comply with the liquid-tight containment requirements in Section 7.0 of the UST System Compliance Manual.
- (5) Owners and operators shall maintain written records of all installations of UDC and sumps, installed on or after April 1, 2012, for the operating life of the UDC or sump. These records shall be made available to the cabinet upon request.
- (6) If a UDC or sump sensor monitoring device detects the presence of a liquid, the owner and operator shall ensure that the UDC or sump shall be immediately inspected.
- (7) If one-eighth of an inch or greater of free product is discovered within a UDC or sump, the requirements of 401 KAR 42:060, Section 1, shall apply.
  - (8) Free product shall be recovered and disposed of in accordance with KRS Chapter 224.
- (9) If liquid, other than free product, is discovered within a UDC or sump, the UDC or sump shall be further inspected to determine the source of liquid infiltration, the liquid shall be removed, and the UDC or sump shall be repaired, as necessary.
- (10) Except as established in subsection (11) of this section, UDC and sumps installed on or after April 1, 2012 shall be tested for liquid-tightness at installation and, at a minimum, every thirty-six (36) months thereafter. To verify liquid-tightness, UDC and sumps shall be tested using a method approved by the device's manufacturer, a code of practice developed by a nationally recognized association or independent testing laboratory or a method approved by the cabinet based upon site-specific conditions.
- (11)(a) Testing of double walled UDC and sumps, required every thirty-six (36) months in accordance with subsection (10) of this section, shall not be required if the UDC or sump interstice is monitored, at a minimum, every thirty (30) days; and
- (b)1. For electronic devices capable of printing sensor readings, a record shall be obtained, at a minimum, every thirty (30) days; or
- 2. For a device not capable of printing sensor readings, a monthly log shall be maintained and documented on the UST Visual Interstitial Log, DWM 4236.
- (12) The thirty-six (36) month testing required in subsection (10) of this section shall be conducted within thirty (30) days of the requirements of subsection (11) of this section no longer being met.
- (13) The liquid-tightness test shall be documented on the UST Containment Device Test, DWM 4222 and shall be submitted to the UST Branch within:
  - (a) Seven (7) days of the test date for failing test results; or
  - (b) Thirty (30) days of the test date for passing test results.

#### Section 11. Corrosion Protection Operation and Maintenance.

- (1) Requirements for operation and maintenance of corrosion protection shall be as established in 40 C.F.R. 280.31 and this section.
- (2) UST system components that routinely contain product and are regularly, or intermittently, in contact with soil, water, or backfill, shall be protected from corrosion.

- (3) Owners and operators with steel tanks or piping that have never had corrosion protection installed in accordance with subsection (2) of this section shall immediately remove all regulated substances and initiate permanent closure in accordance with 401 KAR 42:060.
- (4) A tank or piping that has been left unprotected from corrosion, or that has been inadequately protected from corrosion, for over 365 days shall undergo an integrity assessment on the unprotected tank or piping, conducted by a contractor certified by the State Fire Marshal's Office in accordance with 815 KAR 30:060, utilizing a method certified by an independent thirdparty evaluator.
- (a) Documentation of the integrity assessment and results, including the average tank metal thickness, shall be submitted to the cabinet on the UST Integrity Assessment, DWM 4228, within thirty (30) days of the assessment date.
- (b) If the integrity assessment determines that the average thickness of the steel tank is less than seventy-five (75) percent of the tank's original metal thickness, the steel tank shall be permanently closed in accordance with 401 KAR 42:060.
- (5) Owners and operators shall ensure that cathodic protection systems and evaluations shall be as established in this subsection.
- (a) A cathodic protection system evaluation shall be required within 180 days from the date of installation, repair, or modification of a cathodic protection system and, at a minimum, every thirty-six (36) months thereafter.
- (b) If a cathodic protection system fails an evaluation, but the cathodic protection system evaluator determines that the failure may be attributable to adverse physical conditions related to the evaluation, and further determines that the system is otherwise in good working condition, then a re-evaluation shall be performed.
- 1. If a re-evaluation is performed, it shall be performed within thirty (30) days of the failing evaluation.
  - 2. A re-evaluation shall only be performed once for a failed system evaluation.
- 3. If the cathodic protection system fails the re-evaluation, then repairs or modifications shall be completed as soon as practicable, but not more than ninety (90) days after the performance of the evaluation.
- (c) If a cathodic protection system fails the evaluation, and it does not qualify for the thirty (30) day re-evaluation period established in paragraph (b) of this subsection, then repairs or modifications shall be completed as soon as practicable, but not more than ninety (90) days after the performance of the evaluation.
- (d) If a cathodic protection system evaluation result is inconclusive, as a result of inconsistent remote and local potential readings, a corrosion expert shall evaluate the cathodic protection system and make a determination regarding cathodic protection system adequacy for the UST facility as soon as practicable, but not more than ninety (90) days after the performance of the evaluation.
- (6) Impressed current cathodic protection system requirements shall also comply with the requirements established in this subsection.
- (a) Impressed current cathodic protection system design, or modifications to an impressed current corrosion protection system, shall only be conducted by a person qualified as a corrosion expert.
- (b) Owners and operators shall complete the UST Rectifier Operational Record for Impressed Current Cathodic Protection Systems (60-day Log), DWM 4233, every sixty (60) days.
- (c) The form shall be retained by the owner and operator for a minimum of three (3) years and made available to the cabinet upon request.
- (7) Owners and operators shall maintain written records for the last two (2) cathodic protection evaluations.

- (8) The owners and operators shall ensure that a cathodic protection tester completes, signs, and submits to the cabinet the cathodic protection system evaluation within thirty (30) days of the system evaluation. Results of the cathodic protection evaluation shall be documented on:
- (a) A UST Galvanic Cathodic Protection Evaluation, DWM 4226, for a galvanic cathodic protection system; or
- (b) A UST Impressed Current Cathodic Protection Evaluation, DWM 4227, for an impressed current cathodic protection system.
- (9) A cathodic protection tester shall have completed a third-party corrosion protection tester training, which shall include, at a minimum:
  - (a) Basics of corrosion, underground corrosion, and corrosion prevention;
  - (b) Assessing physical conditions for corrosion potential;
- (c) Hands on field experience in the testing of both impressed current and sacrificial anode systems, including using reference cells, taking remote readings for appropriate systems, how to read and understand a rectifier, taking measurements using -850 criterion, and typical and non-typical problems;
  - (d) Review of EPA's regulatory requirements for corrosion protection; and
- (e) Review of standards and recommended practices from corrosion protection publications, as referenced in the note to 40 C.F.R. 280.31(b).
- (10) Owners and operators shall ensure that individuals, qualified to perform cathodic protection system evaluations in accordance with subsection (9) of this section, submit to the cabinet upon request, documentation verifying that the training requirements have been met.
- (11) All interior lined steel tanks that had not, as of December 22, 2013, been upgraded with external corrosion protection shall be permanently closed immediately in accordance with 401 KAR 42:060.

### Section 12. Compatibility.

- (1) Requirements for compatibility shall be as established in 40 C.F.R. 280.32, Section 4.0 of the UST System Compliance Manual, and this section.
- (2) The owners and operators of UST systems installed on or after April 1, 2012 shall submit the UST System Compatibility Verification, DWM 4234, within thirty (30) days of bringing the UST system into use, in order to verify that the UST systems are compatible with the regulated substances stored.
- (3) A UST System Compatibility Verification, DWM 4234, shall be submitted within thirty (30) days of the replacement of a UST system component, associated with a UST system installed on or after April 1, 2012, if the UST system component is no longer covered by a previously submitted UST System Compatibility Verification, DWM 4234.
- (4) A UST System Compatibility Verification, DWM 4234, shall be submitted to the cabinet if the regulated substance stored is no longer covered by a previously submitted UST System Compatibility Verification, DWM 4234.

## Section 13. Repairs.

- (1) UST system repairs shall be as established in 40 C.F.R. 280.33 and this section.
- (2) UST system repairs shall be performed by a contractor certified by the State Fire Marshal's Office, in accordance with 815 KAR 30:060.
- (3) Owners and operators of UST systems shall ensure that repairs shall prevent releases due to structural failure or corrosion.
- (4) Within thirty (30) days following the date of the completion of a repair to a tank, piping, or UST system component, owners and operators shall:

- (a) Submit a UST System Compatibility Verification, DWM 4234, in accordance with Section 12 of this administrative regulation; and
- (b) Conduct a test, adequate to detect a release from the repaired component of the UST system, in accordance with this administrative regulation.

## Section 14. Noncorrodible Piping.

- (1) All new or replaced underground noncorrodible piping installed on or after April 1, 2012, shall comply with or exceed the Standard for Safety established by Underwriters Laboratories Inc. in Standard for Nonmetallic Underground Piping for Flammable Liquids UL 971, as referenced in the note to 40 C.F.R. 280.20(b)(1).
- (2) Owners and operators shall ensure repairs to noncorrodible piping shall be performed in accordance with Section 13 of this administrative regulation, or shall permanently close noncorrodible piping in accordance with Section 6.0 of 401 KAR 42:060, if the piping exhibits any of the conditions identified in UST Systems: Inspecting and Maintaining Sumps and Spill Buckets, EPA 510-R-05-001.

#### Section 15. Release Detection.

- (1) General release detection requirements for petroleum UST systems shall be as established in 40 C.F.R. 280.40, 280.41, 280.42, 280.45, and this section.
- (2) System integrity tests shall be performed in accordance with a method approved by the device's manufacturer, a code of practice developed by a nationally recognized association or independent testing laboratory, or an equally protective method approved by the cabinet based on site-specific conditions. Results shall be submitted for:
  - (a) A line tightness test on a UST Line Tightness Test, DWM 4229;
- (b) An automatic line leak detector test on a UST Automatic Line Leak Detector Operational Test, DWM 4221;
- (c) An electronic release detection equipment test on a UST Electronic Release Detection Equipment Test, DWM 4223; and
  - (d) A tank tightness test on a UST Tank Tightness Test, DWM 4235.
- (3) Owners and operators shall immediately report failing results of a test performed in accordance with subsection (2) of this section to the cabinet as a suspected release in accordance with 401 KAR 42:060, Section 1.
  - (4) All test results shall be documented in accordance with subsection (2) of this section.
- (a) Failing test results shall be submitted to the UST Branch within seven (7) days of the test date.
- (b) Passing test results shall be submitted to the UST Branch within thirty (30) days of the test date.
- (5) Owners and operators shall ensure that tests of tanks and piping for tightness, and operational tests of automatic line leak detectors, shall be conducted by a UST system equipment tester.
  - (6) A UST system equipment tester shall:
- (a) Use testing equipment and methods that are certified, as of the time of testing, by an independent third-party evaluator;
- (b) Have completed a training course conducted or endorsed by the manufacturer of the testing equipment;
- (c) Maintain training credentials as established by the manufacturer of the testing equipment; and
  - (d) Provide a copy of their training credentials to the cabinet upon request.
  - (7) Failure to provide training credentials as established in subsection (6) of this section, up-

on written request from the cabinet, shall render the test results invalid.

- (8) Methods of release detection for tanks and piping installed prior to April 1, 2012 shall be as established in 40 C.F.R. 280.43(b), (c), (d), (g), and (h); 280.44; and this section.
- (a) A release detection method shall be certified, at the time of testing, by an independent third-party evaluator.
- (b)1. Electronic interstitial monitoring shall be the primary method of release detection for all UST systems installed on or after April 1, 2012, in accordance with Section 9.0 of the UST System Compliance Manual.
- 2. Owners and operators shall only install electronic devices capable of printing sensor readings. Owners and operators shall obtain a record, at a minimum, every thirty (30) days, to verify that release detection is being performed and that releases have not occurred.
- (c) Owners and operators of tanks and piping installed prior to April 1, 2012, for which interstitial monitoring is the primary method of release detection, shall:
- 1. If using electronic devices capable of printing sensor readings, obtain, at a minimum, every thirty (30) days a sensor reading to verify that release detection is being performed and that releases have not occurred; or
- 2. If using devices not capable of printing sensor readings, maintain a monthly log documented on the UST Visual Interstitial Log, DWM 4236, to verify that release detection is being performed and that releases have not occurred.
- (d) Owners and operators of piping installed prior to April 1, 2012, for which interstitial monitoring is the primary method of release detection, shall comply with the requirements in paragraph (c) of this subsection and comply with the requirements for UDCs and sumps in Section 10 of this administrative regulation.
- (e) All release detection records shall be retained for the most recent twelve (12) months, except:
  - 1. Annual operational test results, which shall be retained for three (3) years; and
- 2. Tank tightness testing and line tightness testing results, which shall be retained until the next test is conducted.
- (f) All electronic release detection monitoring equipment for UST systems shall be operationally tested at installation, and at a minimum, every twelve (12) months thereafter, using a test method approved by the manufacturer or a code of practice developed by a nationally recognized association or independent testing laboratory.
- (g) Owners and operators shall not remove, alter, or disable release detection monitoring equipment, required to be maintained in accordance with this administrative regulation, in a manner that would render the equipment inaccurate or inoperable.
- (9) Except as established in subsection (12) of this section, automatic line leak detectors (ALLD) for all pressurized piping systems shall be:
- (a) Performance tested at installation, and at a minimum, every twelve (12) months thereafter, by a qualified individual that complies with the requirements of subsection (6) of this section:
- (b) Performance tested through simulation of a release at the dispenser located furthest away from the ALLD or at the highest elevation above the ALLD; and
  - (c) Installed within a UST system during the test as it would be during normal use.
- (10) Electronic line leak detectors, in addition to the requirements established in subsection (9) of this section, shall be:
- (a) Tested to verify that the ALLD functions and shuts down the submersible turbine pump (STP);
- (b) Capable of detecting a leak rate equivalent to three (3) gallons-per-hour at ten (10) pounds per square inch of line pressure; and

- (c) Tested to verify that the STP relay switch is not malfunctioning in the permanent on position, which would prevent the electronic line leak detector from operating properly.
- (11) Mechanical line leak detectors, in addition to the requirements established in subsection (9) of this section, shall be:
- (a) Tested to verify that the ALLD is capable of detecting a leak rate equivalent to three (3) gallons-per-hour at ten (10) pounds per square inch of line pressure while reducing the flow; and
- (b) Tested to verify that the STP relay switch is not malfunctioning in the permanent on position, which would prevent the mechanical line leak detector from operating properly.
- (12) ALLD requirements for all pressurized piping systems installed for emergency generators shall be as established in 40 C.F.R. 280.44(a).

## Section 16. Operator Training Requirements.

- (1) Operator training requirements for UST systems shall be as established in 40 C.F.R. 280 Subpart J and this section.
- (2) A combined Class A and Class B operator shall comply with the requirements of both the Class A operator and the Class B operator as established in 40 C.F.R. 280.242.
- (3) An owner of a UST system registered, but not permanently closed, and not subject to the requirements in subsection (4) of this section, shall immediately designate at least one (1) individual to be trained (if not previously designated and trained) within thirty (30) days of designation, as a combined Class A and Class B operator.
- (4) An owner of a newly installed, or newly acquired but not permanently closed, UST system shall, within thirty (30) days of registration, designate at least one (1) individual to be trained, within thirty (30) days of designation, as a combined Class A and Class B operator.
- (5) If an owner of a UST system no longer has a trained combined Class A and Class B operator, the owner shall immediately designate another individual as a combined Class A and Class B operator, and that designated individual shall complete operator training within thirty (30) days.
  - (6) The owner of a UST system shall ensure that:
- (a) A trained combined Class A and Class B operator successfully retrains annually, within twelve (12) months of the most recent training date:
- (b) An operator training certificate, in accordance with this section, is submitted to the cabinet within thirty (30) days of completion; and
- (c) An operator trained in accordance with this section, shall submit to the cabinet upon request, documentation verifying that the training requirements have been met.

#### Section 17. Walkthrough Inspections.

- (1) Except as established in this section, requirements for periodic operation and maintenance walkthrough inspections shall be as established in 40 C.F.R. 280.36.
- (2) Owners and operators of UST systems shall comply with the requirements and procedures for walkthrough inspections in Section 11.0 of the UST System Compliance Manual.
- (3) Owners and operators shall ensure that the walkthrough inspections are completed by the owner, operator, or a combined Class A and Class B operator as established in Section 16 of this administrative regulation.
- (4) Monthly walkthrough inspections shall be completed and documented on the UST Monthly Walkthrough Inspection, DWM 4230, or another form containing, at a minimum, the same information, for:
- (a) Existing UST facilities, not subject to the requirements of paragraphs (b) and (c) of this subsection, immediately, and every thirty (30) days thereafter;

- (b) Newly installed UST facilities, initially within thirty (30) days of registration, and every thirty (30) days thereafter; and
- (c) UST facilities that have a change in ownership, within thirty (30) days of registration, and every thirty (30) days thereafter.
- (5) Annual walkthrough inspections shall be completed and documented on the UST Annual Walkthrough Inspection, DWM 4220, or another form containing, at a minimum, the same information, for:
- (a) Existing UST facilities, not subject to the requirements of paragraphs (b) and (c) of this subsection, immediately, and every twelve (12) months thereafter;
- (b) Newly installed UST facilities, initially within thirty (30) days of registration, and every twelve (12) months thereafter; and
- (c) UST facilities that have a change in ownership, within thirty (30) days of registration, or within twelve (12) months of the last annual walkthrough inspection, and every twelve (12) months thereafter.
- (6) The annual walkthrough shall include replacing hand held release detection equipment, including tank gauge sticks, if the equipment is damaged or unable to function as originally designed.
- (7) Walkthrough inspection forms required by subsections (4) and (5) of this section shall be retained for twelve (12) months after the last annual walkthrough inspection completion date.

Section 18. Delivery Prohibition.

- (1) The cabinet shall issue a Notice of Violation to the UST system's owner or operator upon confirmation of:
  - (a) Spill prevention equipment not installed, operational, or maintained;
  - (b) Overfill prevention equipment not installed, operational, or maintained;
  - (c) Corrosion protection equipment not installed, operational, or maintained;
  - (d) Release detection not performed;
  - (e) Release detection equipment not installed, operational, or maintained;
  - (f) Registration not submitted or not amended as necessary;
  - (g) Annual fee past due by more than one (1) year; or
- (h) A defective UST system component, confirmed by UST system testing, or visual observation by the cabinet, and for which the owner and operator have not documented a repair or replacement, has:
  - 1. Caused a release of a regulated substance into the environment; or
- 2. Allowed a regulated substance to infiltrate into the interstitial space or secondary containment of the UST system.
- (2) The Notice of Violation shall serve as notice to owners and operators of the cabinet's intent to invoke delivery prohibition for the UST system if the violation is not corrected within the time frame established in writing by the cabinet.
- (3) A second Notice of Violation shall be issued upon failure by an owner or operator to correct a condition cited in the initial Notice of Violation issued in accordance with subsection (1) of this section, or to request an extension in accordance with Section 22 of this administrative regulation.
- (4) Upon issuance by the cabinet of the second Notice of Violation, delivery prohibition shall be invoked and an authorized representative of the cabinet shall attach a delivery prohibition tag to the non-compliant UST system.
- (5) Owners and operators shall ensure that a delivery prohibition tag shall not be removed, defaced, altered, or destroyed.
  - (6) Owners and operators shall not allow the delivery, deposit, or acceptance of regulated

substances into a UST system if the cabinet has invoked delivery prohibition, unless directed in writing by the cabinet for the purpose of UST system testing.

- (7) Owners and operators shall notify the appropriate product deliverer if delivery prohibition has been invoked.
- (8) Except as established in subsection (11) of this section, delivery prohibition shall remain in effect until the non-compliant UST system is returned to compliance for the violation that caused delivery prohibition to be invoked.
- (9) The cabinet shall determine if a UST system is authorized to accept deliveries within two (2) business days (Monday through Friday) of receipt of written notice from the owner or operator that the remedial measures established in the Notice of Violation have been completed.
- (10) If the violation has been corrected, the cabinet shall terminate delivery prohibition and remove an affixed delivery prohibition tag within two (2) business days (Monday through Friday).
- (11) If the division director or designee determines, in writing, that delivery prohibition at a UST facility would jeopardize the availability of, or access to, motor fuel in a rural and remote area, the cabinet shall defer the application of delivery prohibition for a UST system for a period not to exceed forty-five (45) days, unless an extension is approved in accordance with Section 22 of this administrative regulation by the division director or designee.
- (12) This section shall not apply to a regulated UST used to fuel an emergency backup generator.

Section 19. Recordkeeping. Requirements for recordkeeping shall be as established in 40 C.F.R. 280.34, 280.45, Section 13.0 of the UST System Compliance Manual, and this administrative regulation.

Section 20. Financial Responsibility.

- (1) Requirements for financial responsibility shall be as established in 40 C.F.R. 280 Subpart H and this section.
- (2) The Petroleum Storage Tank Environmental Assurance Fund (PSTEAF) may be utilized as a mechanism to demonstrate financial responsibility in accordance with subsection (1) of this section, and the requirements as established in 401 KAR 42:250.
- (3) Owners and operators shall certify, through signature on the UST Facility Registration, DWM 4225, that financial responsibility has been established and shall be maintained in accordance with this administrative regulation.

Section 21. Lender Liability. Requirements for lender liability shall be as established in 40 C.F.R. 280 Subpart I.

Section 22. Extensions.

- (1) The owner or operator of a UST system may request an extension to a deadline established by this administrative regulation or established by the cabinet in a written directive.
- (2) The extension request shall be submitted in writing and received by the Division of Waste Management prior to the deadline.
- (3) The cabinet may grant an extension, if an extension would not have a detrimental impact on human health or the environment.

Section 23. Incorporation by Reference.

- (1) The following material is incorporated by reference:
- (a) "UST Annual Walkthrough Inspection", DWM 4220, September 2019;

- (b) "UST Automatic Line Leak Detector Operational Test", DWM 4221, September 2019;
- (c) "UST Containment Device Test", DWM 4222, September 2019;
- (d) "UST Electronic Release Detection Equipment Test", DWM 4223, September 2019;
- (e) "UST Facility Owner Address Correction", DWM 4224, September 2019;
- (f) "UST Facility Registration", DWM 4225, September 2019;
- (g) "UST Galvanic Cathodic Protection Evaluation", DWM 4226, September 2019;
- (h) "UST Impressed Current Cathodic Protection Evaluation", DWM 4227, September 2019;
- (i) "UST Integrity Assessment", DWM 4228, September 2019;
- (j) "UST Line Tightness Test", DWM 4229, January 2019;
- (k) "UST Monthly Walkthrough Inspection", DWM 4230, September 2019;
- (I) "UST Notice of Intent to Install Underground Storage Tank or Piping", DWM 4231, September 2019;
  - (m) "UST Overfill Prevention Device Test", DWM 4232, September 2019;
- (n) "UST Rectifier Operational Record for Impressed Current Cathodic Protection Systems (60-day Log)", DWM 4233, September 2019;
  - (o) "UST System Compatibility Verification", DWM 4234, September 2019;
  - (p) "UST Tank Tightness Test", DWM 4235, September 2019;
  - (q) "UST Visual Interstitial Log", DWM 4236, September 2019;
  - (r) "UST System Compliance Manual", January 2019; and
- (s) "UST Systems: Inspecting and Maintaining Sumps and Spill Buckets", EPA 510-R-05-001, May 2005.
- (2) This material may be inspected, copied, or obtained, subject to applicable copyright law, at the Division of Waste Management, 300 Sower Boulevard, Second Floor, Frankfort, Kentucky 40601, Monday through Friday, 8 a.m. to 4:30 p.m.
- (3) This material may also be obtained at the Division of Waste Management's Web site at eec.ky.gov/environmental-protection/waste or from www.epa.gov. (17 Ky.R. 1637; 1994; eff. 12-19-1990; 22 Ky.R. 318; 920; eff. 11-14-1995; 32 Ky.R. 2113; 33 Ky.R. 461; 736; eff. 9-13-2006; 37 Ky.R. 2693; 514; eff. 10-6-2011; TAm eff. 7-8-2016; TAm eff. 12-21-2016; Crt eff. 10-9-2018; 45 Ky.R. 1370, 2365, 2634; eff. 4-5-2019; TAm eff. 5-7-2019; TAm eff. 9-25-2019.)