

401 KAR 42:030. UST system general operating requirements.

RELATES TO: KRS 224.10, 224.60, 40 C.F.R. Part 280 Subpart C, 42 U.S.C. 6991c, 6991e, 6991k

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

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 by requiring registration, minimum construction and performance standards, leak detection, recordkeeping, release reporting, corrective actions, 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 underground storage tanks This administrative regulation establishes requirements for spill and overfill control, operation and maintenance of corrosion protection, compatibility, repairs, and reporting and recordkeeping.

Section 1. Spill and Overfill Control. Spill and overfill control requirements shall be as established in 40 C.F.R. 280.30.

Section 2. Spill Containment Devices (Spill Buckets). (1) All spill containment devices installed after April 1, 2012, shall be double-walled, liquid-tight, compatible with the substance being stored in the tank, and installed in accordance with the manufacturers' instructions.

(2)(a) All double-walled spill containment devices installed after April 1, 2012 shall be tested at installation, and every thirty-six (36) months thereafter, for liquid-tightness using a hydrostatic test, or a test method approved by the double-walled spill containment device's manufacturer.

(b) The test shall be documented on Spill Containment Device Test, DEP 4065 or on a standardized form provided by the testing equipment manufacturers if the form contains, at a minimum, the same information.

1. Failing test results shall be submitted to the Underground Storage Tank Branch within seven (7) days of the test date.

2. Passing test results shall be submitted to the Underground Storage Tank Branch within thirty (30) days of the test date.

(c) Owners and operators shall maintain written records to document the current test results until the next test is performed.

(3) Owners and operators shall immediately repair or replace a damaged, defective, or leaking spill containment device.

(4) Owners and operators shall not allow regulated substances, liquids, or debris to accumulate in a spill containment device. Owners and operators shall remove all liquid accumulations and debris from a spill containment device immediately.

Section 3. Under-Dispenser Containment and Sumps. (1) UDC and sumps installed in accordance with 401 KAR 42:020, Section 12 shall be tested for liquid-tightness at least every three (3) years. Testers shall conduct a hydrostatic, vacuum, or other manufacturer-approved integrity test to verify liquid-tightness.

(2) Owners and operators shall maintain written documentation of the test results for at least three (3) years.

(3)(a) Failing test results shall be submitted to the Underground Storage Tank Branch within seven (7) days of the test date

(b) Passing test results shall be submitted to the Underground Storage Tank Branch within thir-

ty (30) days of the test date

Section 4. Overfill Prevention Devices. All overfill prevention devices installed after April 1, 2012 shall be installed in an extractable fitting to allow for inspection, maintenance, and testing of the device.

Section 5. Corrosion Protection. (1) UST system components that routinely contain product and are regularly or intermittently in contact with soil, water, or backfill shall be protected from corrosion.

(2) Owners or operators with steel tanks or piping that do not have corrosion protection installed in accordance with subsection (1) of this section shall remove all regulated substances and initiate permanent closure, in accordance with 401 KAR 42:070, by January 1, 2012.

Section 6. Operation and Maintenance of Corrosion Protection. Requirements for operation and maintenance of corrosion protection shall be as established in 40 C.F.R. 280.31.

Section 7. Cathodic Protection System Evaluation. (1) 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 least every three (3) years thereafter.

(2) If the cathodic protection system fails an evaluation, but the cathodic protection system evaluator determines the failure may be attributable to adverse physical conditions related to the evaluation and determines that the system is otherwise in good working condition, then a reevaluation may be performed.

(a) If a reevaluation is performed, it shall be within ninety (90) days of the failing evaluation.

(b) A reevaluation shall only be performed once for a failed system evaluation.

(c) If the cathodic protection system fails the reevaluation, then repairs or modifications shall be completed as soon as practicable, but not more than ninety (90) days after the performance of the evaluation.

(3) If the cathodic protection system fails the evaluation, and it does not qualify for the ninety (90) day reevaluation period in subsection (2) of this section, then repairs or modifications shall be completed as soon as practicable, but not more than ninety (90) days after the performance of the evaluation.

(4) If the cathodic protection system evaluation results are 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.

(5)(a) The owner or operator shall complete the 60-Day Record of Rectifier Operation for Impressed Current Cathodic Protection System, DEP 8054, every sixty (60) days; and

(b) The form shall be retained by the owner or operator for at least three (3) years and made available to the cabinet upon request.

(6) The owner or operator shall ensure that a cathodic protection system evaluator completes, signs, and submits to the cabinet, the applicable forms incorporated by reference in Section 15, paragraphs (1)(a) and (b) of this administrative regulation for the purpose of cathodic protection system evaluation within thirty (30) days of system evaluation.

Section 8. Impressed Current Cathodic Protection System Design or Modification. The design of, or modifications to, an impressed current corrosion protection system shall only be conducted by a person qualified as a corrosion expert.

Section 9. Cathodic Protection System Evaluators. (1) To test cathodic protection systems, a person shall have completed a third-party corrosion protection tester training, which includes, at a minimum, the following:

- (a) Basics of corrosion;
- (b) Underground corrosion;
- (c) Corrosion prevention;
- (d) Assessing physical conditions for corrosion potential;
- (e) Hands on field experience in the testing of both impressed current and sacrificial anode systems, which includes:
 - 1. Using reference cells;
 - 2. Taking remote readings for appropriate systems;
 - 3. How to read and understand a rectifier;
 - 4. Taking measurements/ -850 criterion; and
 - 5. Typical and nontypical problems;
- (f) Review of EPA's regulatory requirements for corrosion protection; and
- (g) Review of standards and recommended practices from corrosion protection publications including, NACE, API, NFPA, STI, and ASTM.

(2) Owners or operators shall ensure that individuals, qualified to perform cathodic protection system evaluations in accordance with subsection (1) of this section, submit to the cabinet upon request, documentation verifying that the training requirements have been met.

Section 10. Compatibility. (1) Requirements for compatibility shall be as established in 40 C.F.R. 280.32; and

(2) The owner or operator of a UST system installed after April 1, 2012 shall submit the Installation Verification and Compatibility Form, DEP 7115 within thirty (30) days of bringing the UST system into operation in order to verify that the UST system is compatible with the regulated substance stored.

(3)(a) A UST System Compatibility Form, DEP 6089 shall be submitted to the cabinet if the regulated substance stored is no longer covered by a previously submitted Installation Verification and Compatibility Form, DEP 7115 or UST System Compatibility Form, DEP 6089.

(b) A UST System Compatibility Form, DEP 6089 shall be submitted within thirty (30) days of the replacement of a UST system component associated with a UST system installed after April 1, 2012, when the UST system component is no longer covered by a previously submitted Installation Verification and Compatibility Form, DEP 7115 or a UST Compatibility Form, DEP 6089.

Section 11. UST System Repairs. (1) UST system repairs allowed shall be as established in 40 C.F.R. 280.33.

(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)(a) Prior to returning the repaired tank or piping to service, owners and operators shall conduct a tank or line tightness test, adequate to detect a release from the repaired portion of the tank or piping, using a testing method certified by an independent third-party evaluator that is capable of detecting a one-tenth (0.1) gallon per hour leak rate.

(b) Owners and operators shall submit the results of all tank or line tightness tests in accordance with 401 KAR 42:040, Section 4.

Section 12. Upgrading Interior-lined Steel Tanks with External Corrosion Protection. (1) Not lat-

er than December 22, 2013, all existing steel tanks equipped with interior lining as the sole method of corrosion protection shall be upgraded by the addition of an impressed current cathodic protection system or shall be permanently closed in accordance with 401 KAR 42:070.

(2) A manned-entry integrity assessment of a steel tank, conducted by a contractor certified by the State Fire Marshal's Office pursuant to 815 KAR 30:060 utilizing a method certified by an independent third-party evaluator, shall be performed prior to upgrading an interior-lined steel tank with an impressed current cathodic protection system.

(a) The manned-entry integrity assessment shall be performed not more than twelve (12) months prior to the addition of an impressed current cathodic protection system.

(b) Documentation of the manned-entry integrity assessment and results, including the average tank metal thickness, shall be submitted to the cabinet on the Manned Entry Integrity Assessment, DEP 8050 within thirty (30) days of the assessment being conducted.

(3) If the integrity assessment determines that the average metal thickness of the steel tank is less than seventy-five (75) percent of the tank's original metal thickness, the steel tank shall not be upgraded and shall be permanently closed in accordance with 401 KAR 42:070.

Section 13. Recordkeeping. Requirements for recordkeeping shall be as established in 40 C.F.R. 280.34(b) and (c).

Section 14. 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 writing pursuant to this administrative regulation.

(2) The extension request shall be submitted in writing and received by the Division of Waste Management prior to the deadline.

(3) The cabinet shall grant an extension if an extension would not have a detrimental impact on human health or the environment.

Section 15. Incorporation by Reference. (1) The following material is incorporated by reference:

(a) "Galvanic (Sacrificial Anode) Cathodic Protection System Evaluation", DEP 8052, November 2016;

(b) "Impressed Current Cathodic Protection System Evaluation", DEP 8053, November 2016;

(c) "60-Day Record of Rectifier Operation for Impressed Current Cathodic Protection System", DEP 8054, November 2016.

(d) "UST System Compatibility Form", DEP 6089, November 2016;

(e) "Spill Containment Device Test", DEP 4065, November 2016; and

(f) "Manned Entry Integrity Assessment", DEP 8050, November 2016.

(2) This material may be inspected, copied, or obtained, subject to applicable copyright law, at the Division of Waste Management, 300 Sower Boulevard, Frankfort, Kentucky 40601, Monday through Friday, 8 a.m. to 4:30 p.m. This material is also available on the Division of Waste Management's Web site at <http://waste.ky.gov/ust> (17 Ky.R. 1638; eff. 12-19-1990; 32 Ky.R. 2117; 33 Ky.R. 737; eff. 9-13-2006; 37 Ky.R. 2696; 38 Ky.R. 263; 518; 744; eff. 10-6-2011; TAm eff. 7-8-2016; TAm eff. 12-21-2016; Crt eff. 10-9-2018.)