

PROPOSED NEW EPA RULES FOR USTs

On November 18, 2011, the U.S. EPA published proposed new UST regulations in the Federal Register. *EPA is accepting written comments until February 16, 2012.* The proposal covers 89 pages in the Federal Register. Two summaries prepared by other parties are enclosed.

Some of the proposed changes to the federal rules are very similar to those recently made in Missouri's UST rules – i.e., updating obsolete references, removing old deadlines, etc.

However, several others would have a significant impact on Missouri UST owners/operators, notably:

- All new UST systems would have to be double-walled, (this effectively negates Missouri's choice to implement a FR requirement for equipment companies instead of a requirement for double-walled UST systems);
- Ball float valves would be outlawed on new UST systems;
- When a ball float valve wears out or malfunctions, a different type of overfill prevention device would have to be installed;
- Spill buckets would have to be tested annually, or double-walled spill buckets with continuous monitoring would have to be installed, and records of the testing or monitoring would be required;
- All secondary containment, including sumps, would have to be either continuously monitored or tested every three years;
- Monthly "walk-through inspections" of the UST system would be required and would have to be documented;
- Vapor monitoring and groundwater monitoring would be eliminated as acceptable leak detection methods;
- All leak detection equipment, including gauges, battery backups, probes, sensors, vacuum pumps, pressure gauges, etc., would have to be tested annually; and
- Overfill prevention equipment would have to be tested every three years.

EPA estimates that the new rules, (if finalized in their current form), would cost the average UST facility owner \$890 per year. EPA notes it does not believe that many firms will be able to pass fuel price increases on to consumers to pay for the additional regulatory costs, but assumes compliance costs will "be passed on through cross-marketed goods whose demand is less sensitive to changes in prices,...." It estimates that the cost of the new rules will cause approximately 560 firms to "exit the market."

The primary benefit of the new rules would be, according to EPA's analysis, a reduction in the number of UST leaks that occur each year and in the cost of cleanup. EPA acknowledges it does not have leak frequency data, so it used questionnaires sent to five national experts as a basis for estimating the "avoided remediation costs" from reduced frequency and severity of leaks. *EPA has specifically requested public input on the accuracy of its assumed cost savings.*

Committee Action: The PSTIF intends to prepare written comments for approval and submission by the PSTIF Board of Trustees. Committee members' views are invited, and volunteers who wish to help prepare the comments are sought.

The following paragraphs briefly describe EPA's proposal, starting with requirements for periodic operation and maintenance of UST systems.

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Adding periodic operation and maintenance requirements for UST systems. The 1988 UST regulation required owners and operators to install improved UST system equipment to detect and prevent releases; however, it did not require operation and maintenance for all of that equipment. EPA proposes to add requirements for periodic spill, overfill, secondary containment and release detection testing, along with periodic walkthrough inspections, to prevent and quickly detect releases.

EPA's proposal would add a new §280.37 requiring owners and operators to perform **walkthrough inspections** of their UST systems at least once every 30 days. According to the proposal, owners and operators could inspect equipment:

- By following specific EPA guidelines described in the rule;
- According to a standard code of practice developed by a nationally recognized association or independent testing laboratory; or
- By following guidelines developed by the implementing agency that are comparable to EPA's guidelines.

EPA used PEI's *Recommended Practices for the Inspection and Maintenance of UST Systems* (PEI/RP900) as a guide as it developed the proposed walkthrough requirements. RP900 could be used to satisfy the proposed walkthrough requirements since it qualifies as a standard code of practice developed by a nationally recognized trade association. EPA also proposes to allow owners and operators to hire a third party to conduct walkthrough inspections instead of performing the inspections themselves.

EPA proposes that **spill prevention equipment** testing be performed at installation and at least once every 12 months. Spill prevention equipment testing would not be required in those situations where spill prevention equipment has two walls and the space between the walls is monitored continuously.

EPA's proposal would add a requirement that owners and operators test proper operation of **overfill prevention equipment** (automatic shutoff devices, flow restrictors and high level alarms) and **secondary containment areas** at installation and every three years. EPA proposes staggering implementation over a three-year period based on the installation date of the oldest UST at the facility.

In §280.40, EPA proposes that UST owners and operators perform annual operation and maintenance tests on electronic and mechanical components of their **release detection equipment** to ensure the equipment is operating properly. EPA proposes that owners and operators begin meeting this requirement no later than one year after the effective date of the final UST regulation.

EPA proposes that owners and operators meet the testing requirements for spill prevention equipment, overfill prevention equipment, interstitial integrity and operability for release detection methods according to one of the following: manufacturer's instructions; a code of practice developed by a nationally recognized

association or independent testing laboratory; or requirements developed by the implementing agency. EPA notes in its proposal that it knows of one code of practice currently being developed—*PEI's Recommended Practices for the Testing and Verification of Spill, Overfill, Release Detection and Secondary Containment Equipment*—that may address testing of this equipment. EPA says it will review the code of practice after it is issued in final form and decide whether to include it in the final UST regulation.

Adding secondary containment requirements for new and replaced tanks and piping. EPA proposes that all owners and operators install secondary containment (including interstitial monitoring) for new or replaced tanks and piping installed after the effective date of the final UST regulation. That would include Indian country and the two states (Missouri and Kansas) that currently use the financial responsibility for manufacturers and installers option provided in the Energy Policy Act. EPA does not propose secondary containment for safe suction piping systems and piping associated with field-constructed tanks and airport hydrant fuel distribution systems. EPA also proposes to remove the option in §280.42 for owners and operators to use a release detection method other than interstitial monitoring for hazardous substance USTs installed after the effective date of the final UST regulation.

EPA also proposes that owners and operators install under-dispenser containment beneath new dispenser systems at UST systems. EPA considers a dispenser system new when both the dispenser and equipment needed to connect the dispenser to an UST system are installed at an UST facility. EPA proposes that check valves, shear valves, unburied risers or flexible connectors, and other transitional components be included as equipment that connects a dispenser to an UST system. If an owner or operator replaces a dispenser but uses existing equipment to connect a dispenser to an UST system, then under-dispenser containment is not required. EPA is also proposing owners and operators install under-dispenser containment beneath new dispenser systems at UST systems, irrespective of whether they dispense motor fuel. This would require kerosene dispensers to have under-dispenser containment.

Adding operator training requirements for UST system owners and operators. The operator training provision of the Energy Policy Act of 2005 requires that state implementing agencies, as a condition of receiving federal Subtitle I money, develop state-specific training requirements for three classes of UST system operators. EPA issued grant guidelines that provide minimum requirements state operator training programs must include in order for states to continue receiving federal Subtitle I money. The operator training grant guidelines apply to most UST systems in the United States; however, all are not covered. UST systems not covered include those in Indian country where EPA is the primary implementing agency, and in states and territories that do not meet the requirements of EPA's operator training grant guidelines. In EPA's proposal, the Agency closes the gap in coverage and ensures all operators are trained according to their level of responsibility, designated as Class A, B or C.

Removing certain deferrals. Certain categories of UST systems were deferred from the requirements of 40 CFR 280 in the 1988 UST regulation. In EPA's proposal, it will continue to defer the aboveground components associated with airport hydrant systems and USTs with field-constructed tanks. EPA proposes to regulate the underground components associated with airport hydrant systems and USTs with field-constructed tanks. In addition, EPA proposes to regulate wastewater treatment tank systems and UST systems that store fuel solely for use by emergency power generators.

Providing for other changes to improve release prevention and detection and program implementation. EPA proposes language to various sections of 40 CFR 280 that would accomplish the following:

- Require testing after repairs to spill and overfill prevention equipment, and interstices;
- Eliminate flow restrictors in vent lines as an overfill prevention option for all new tanks and when overfill devices are replaced;
- Require closure of lined tanks that cannot be repaired according to a code of practice;
- Clarify the responsibilities of UST owners and operators regarding interstitial alarm monitoring results, including alarms, under 40 CFR 280, subpart E;
- Provide notification of UST ownership change to the implementing agency within 30 days;
- Eliminate groundwater and vapor monitoring as release detection methods; and
- Establish requirements for determining compatibility for owners and operators who choose to store regulated substances containing greater than 10 percent ethanol and/or 20 percent biodiesel.

Making general updates to the regulation. EPA proposes to include technologies developed since the 1988 UST regulations were issued and clarify the use of those technologies by:

- Revising a tank definition to allow UST owners and operators to be able to use jacketed tanks to meet EPA's proposed requirement for secondary containment and interstitial monitoring;
- Revising a piping definition to allow UST owners and operators to install other piping, such as flexible piping, that does not corrode;
- Adding statistical inventory reconciliation (SIR) and continuous in-tank leak detection (CITLD) as release detection methods; and
- Adding three methods of interstitial monitoring—vacuum, pressure and liquid-filled methods—as distinct interstitial monitoring methods.

EPA is thoroughly reviewing the proposal and will be accepting comments for EPA. Look

United States: Impending Changes To Underground Storage Tank Regulations

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Article by Susan P. Phillips  and Jennifer Sulla 

For the first time in over 20 years, the US Environmental Protection Agency (EPA) has proposed significant revisions to the 1988 underground storage tank (UST) regulations. The proposed revisions will affect every gas station and can also affect hospitals, universities, and other facilities relying on backup power sources. The changes are intended to prevent and ensure quick detection of releases to the environment, emphasizing proper operation and maintenance of UST systems and including requirements for operator training and secondary containment.

Although some of these requirements already apply by statute to states receiving funding under the federal UST program, the proposed regulatory revisions are more extensive and will apply to all states. In states operating their own EPA-approved UST programs, state regulations will need to change to conform to EPA's final regulation.

Comments on the proposed revisions to 40 CFR parts 280 (UST regulations) and 281 (state program approval regulations) must be received by EPA on or before **February 16, 2012**. The proposed revisions are highlighted below.¹

Operation & Maintenance

- Monthly walkthrough inspections, beginning immediately²
- Annual testing of spill prevention and release detection equipment, within one year
- Testing every three years of overfill prevention equipment and secondary containment areas to ensure the integrity of the interstitial area (unless specified continuous monitoring methods are used), phased in over three years depending on the age of the UST

Operator Training

- Designate individuals for each of three classes of operators at each UST system and maintain list of designated individuals
- Mandated training or comparable examination
- Phased in over three years depending on the age of the UST

Containment

- Secondary containment and interstitial monitoring at all new and replaced USTs and piping
- Under-dispenser containment for new dispenser systems
- Containment requirements will apply immediately to all USTs and dispenser systems, except those for which installation began on or before the effective date of the final regulation

Emergency Power Generator USTs

- Release detection at USTs storing fuel for use by emergency power generators, such as those used by hospitals, universities, and other facilities relying on backup power sources, within one year

Notifications

- Notification to implementing agency within 30 days of change of ownership of UST system
- One-time notification to agency of previously-deferred USTs, e.g., USTs storing fuel for use by emergency power generators, within 30 days of effective date of final regulation

Vapor and Groundwater Monitoring

- Phase-out of vapor and groundwater monitoring as release detection options, within five years

Other Changes

- Elimination of flow restrictors in vent lines as an option to meet overfill prevention requirements, beginning immediately
- Permanent closure of USTs using internal lining as the sole means of corrosion protection if the internal lining has failed testing and cannot be repaired, beginning immediately
- Demonstration of compatibility of UST systems with storage of more than 10% ethanol or more than 20% biodiesel, beginning immediately
- Testing within 30 days after a repair to spill or overfill equipment and secondary containment areas
- Investigate and address interstitial monitoring results, including alarms, signifying water or product in the interstitial area, and report within 24 hours results that indicate a release may have occurred, beginning immediately

State Program Approval

- Update state program approval requirements to address proposed revisions to UST regulations
- States with program approval have three years to submit a revised application to EPA conforming the state program to the final UST regulation
- List of states with approved programs as of September 2011:
http://www.epa.gov/oust/fedlaws/spa_frs.htm

Footnotes

1 The proposed revisions are at 76 Fed. Reg. 71708 (November 18, 2011), <http://www.gpo.gov/fdsys/pkg/FR-2011-11-18/pdf/2011-29293.pdf>.

2 All time periods begin after the effective date of the final UST regulation.