
EPA Proposes Revisions to 1988 UST Regulations

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For the first time in more than 20 years, the U.S. Environmental Protection Agency (EPA) is proposing revisions to the 1988 federal underground storage tank (UST) regulations found at 40 CFR Parts 280–81. 76 Fed. Reg. 71,708 (Nov. 18, 2011). The proposed rule emphasizes release prevention and proper operation and maintenance of release prevention and detection equipment. Significant proposed changes include: adding requirements for secondary containment, operator training, and periodic operation and maintenance; removing existing exemptions from the UST regulations for certain types of underground tanks; adding new release prevention and detection technologies; updating codes of practice to reflect current codes and standards; and updating state program approval requirements to incorporate the proposed changes. If finalized, the proposed revisions are expected to reduce the number of releases, which are one of the leading causes of groundwater contamination, and detect them quickly, if they do occur.

Congress authorized the UST program in 1984 when it added Subtitle I to the Solid Waste Disposal Act, directing EPA to develop a comprehensive regulatory program for USTs storing petroleum and certain hazardous substances to ensure that the environment and human health are protected from UST releases. In 1988, EPA promulgated UST regulations. The regulations require new USTs to be designed, constructed, and installed to prevent releases and required existing USTs to be upgraded, replaced, or closed to prevent releases. The 1988 regulations also require owners and operators to perform release detection, demonstrate financial responsibility, and clean up releases. In 2005, Congress passed the Energy Policy Act of 2005 and again amended Subtitle I of the Solid Waste Disposal Act. The Energy Policy Act requires operator training and secondary containment for USTs in states receiving federal Subtitle I money under the Solid Waste Disposal Act. EPA developed grant guidelines for states for implementing the provisions of the Energy Policy Act. *See, e.g.*, http://www.epa.gov/swrust1/fed-laws/otgg_final080807.pdf. The proposed rule would ensure that all USTs in the United States, including those in Indian country, meet the same minimum standards.

For operator training, EPA is proposing three classes of UST operators – Class A, Class B, and Class C. A Class A operator would be an individual with primary responsibility for operating and maintaining an UST system according to applicable regulatory requirements, and a Class B operator would be an individual with day-to-day responsibility for the operation and maintenance of an UST system in the field. A Class C operator would be an on-site employee responsible for initially addressing emergencies resulting from a spill or release from an UST system. Owners/operators of UST systems would be required to designate individuals for each of the three operator classes and to ensure that designated individuals meet minimum training requirements. Contractors would be allowed to serve as Class A and B operators. The proposal would also allow one person to serve in multiple operator classes, provided he is trained.

Knowledge of the minimum training areas for each operator class would be evaluated through a test, practical demonstration,

or another approach acceptable to the implementing agency (i.e., EPA or state having an EPA-approved program). Alternatively, the proposal would allow the operator classes to pass comparable examinations that assess their knowledge of the minimum training areas. An independent organization or the implementing agency would develop and administer the evaluation component of the training program or comparable examinations.

Operator training would be phased in over three years after the effective date of the final rule based upon the installation date of the tank. After the initial three-year period, owners/operators would be required to train Class A and B operators within 30 days of assuming their duties, while Class C operators would be required to be trained before assuming their duties. Retraining of Class A and B operators of UST systems determined to be out of compliance would be required unless the Class A and B operators take annual refresher training that was in place at the time the UST system was determined to be non-compliant or the implementing agency grants a waiver after considering the severity and areas of noncompliance. However, if the reason for the noncompliance is an equipment change, EPA is proposing that the implementing agency require that UST owners/operators retrain Class A and B operators.

In addition to new operator training requirements, EPA is proposing to add secondary containment and interstitial monitoring requirements for new and replaced USTs. The current regulations require secondary containment and monitoring of the space between the walls for hazardous substance but not petroleum tanks, and the Energy Policy Act requires secondary containment and interstitial monitoring for tanks and piping installed within 1,000 feet of an existing community water system or potable drinking water well, unless a state requires manufacturer and installer financial responsibility. Pub. L. No. 109-58, § 1530, 119 Stat. 1092, 1104 (2005) (codified at 42 U.S.C. § 6991b); 40 CFR § 280.42. The proposed rule would go beyond these requirements and apply to all new and replaced tanks and piping installed after the effective date of the final UST regulations, except safe suction piping and piping associated with field-constructed tanks and airport hydrant fuel distribution systems used to fuel aircraft. The proposal would require owners/operators to replace the entire piping run when 50 percent or more of the piping, excluding connectors, is removed and other piping is installed. EPA is proposing that secondarily contained tanks and piping be monitored for a leak at least once every 30 days using interstitial monitoring. An automatic line leak detector would be required for pressurized piping. In addition, owners/operators would be required to install under-dispenser containment for new motor fuel dispenser systems. A dispenser system would be considered new when both the dispenser system and equipment needed to connect the dispenser system to the UST system are installed. EPA is proposing that under-dispenser containment be liquid tight and allow for visual inspection and access to the components in the containment system or be continuously monitored for leaks.

The proposed rule also focuses on proper operation and maintenance of equipment. EPA is proposing to add periodic testing requirements for spill, overflow, secondary containment, and release detection equipment along with monthly walk-through inspections to prevent and detect releases quickly. The 1988 regulations required owners and operators to install improved UST system equipment to detect and prevent releases but do not require operation and maintenance of all of that equipment. Walkthrough inspections would check spill

prevention equipment, sumps and dispenser cabinets, monitoring/observation wells, cathodic protection equipment, and release detection equipment.

Frequencies for testing prevention and leak detection equipment would range from annually to every three years. EPA is proposing annual spill prevention equipment tests for liquid tightness using vacuum, pressure, or liquid methods unless the spill prevention equipment is double-walled with continuous interstitial monitoring. EPA is proposing that owners/operators test overfill prevention equipment and secondary containment areas that use interstitial monitoring once every three years subject to certain exceptions. The exceptions that EPA is proposing would include tanks using continuous interstitial monitoring, underground piping using vacuum monitoring, pressure monitoring, or liquid-filled interstitial space monitoring, and containment sumps having two walls and using continuous interstitial monitoring. EPA is also proposing annual operation and maintenance tests on electronic and mechanical components of release detection equipment, including automatic tank gauging and other controllers, probes and sensors, line leak detector, and vacuum pumps and pressure gauges.

EPA deferred requirements for UST systems storing fuel for use by emergency power generators, wastewater treatment tanks, and the underground components of field-constructed tanks and airport hydrant systems in the 1988 UST regulations. As a result of advances in technology that allow for the prevention and quick detection of releases, EPA is proposing to regulate these UST systems. These UST systems would no longer be subject to Spill Prevention Control and Countermeasure (SPCC) requirements because EPA's SPCC regulations exempt completely buried storage tanks and associated underground piping, equipment, and containment systems that are subject to EPA's UST regulations. Owners/operators of existing USTs for which EPA is proposing to remove deferrals would need to meet applicable UST requirements within one year of the effective date of the final UST regulation. Owners/operators of emergency power generator UST systems would be required to perform release detection. Owners/operators of airport hydrant system tanks would be required to meet release detection and prevention requirements, including corrosion protection, spill, and overfill requirements. Adding internal lining as a means of corrosion protection would not be allowed for tanks in airport hydrant systems that are not already upgraded. Existing airport hydrant systems that are not upgraded within three years would be permanently closed. For new or replaced airport hydrant systems, EPA is proposing secondary containment with interstitial monitoring for tanks but not piping.

Additional proposed changes pertain to notification, compatibility, and repairs. EPA is proposing a new notification when ownership of an UST system changes and a one-time notification of the existence of UST systems that had been exempt. The ownership change notification would be due within 30 days of the change, and the one-time notification for

previously exempt UST systems would be due 30 days after the effective date of the final rule. In addition, EPA is proposing that owners/operators of new USTs notify the implementing agency, rather than state or local agencies designated by EPA, as is the practice under the 1988 regulations. The proposal would also clarify how to demonstrate compatibility with ethanol, biodiesel, and other new fuels that may be more degrading to certain UST system materials than petroleum alone. Testing within 30 days after a repair to spill or overfill equipment and secondary containment would be required even if not associated with a release.

Implementation deadlines range from the effective date of the final UST rule to within five years of that date. Immediate implementation would be required for secondary containment, walkthrough inspections, notification, compatibility, repairs, and interstitial monitoring results. Bans on vent line flow restrictors (i.e., ball float valves), as an option to prevent overfilling and additional internal linings as the sole method of corrosion protection for new tanks and when upgrading existing tanks, would also apply on the effective date of the final rule. A one-year implementation deadline would apply for spill prevention equipment and release detection equipment tests. For operator training and tests for overfill prevention equipment and secondary containment, EPA is proposing to phase in implementation over three years based upon tank installation date. Vapor and groundwater monitoring used to detect leaked product in the soil or floating on the groundwater would be phased out within five years in favor of secondary containment with interstitial monitoring, which provides more immediate release detection.

If finalized, the proposed revisions would likely affect motor fuel retailers, commercial institutions (i.e., hospitals and universities), manufacturers, transportation, wired telecommunications carriers, electric power generation, transmission and distribution, and farmers as well as UST system service providers, states, and tribes. Once the rule becomes final, states with approved UST programs will have three years to submit a revised program for EPA approval. EPA is proposing to revise the state program approval requirements in 40 CFR Part 281 to make them consistent with but not identical to the federal UST requirements in Part 280. EPA is proposing to continue the approach followed in the 1988 regulations of developing no less stringent criteria in the form of objectives. Therefore, owners/operators of UST systems in states having approved UST programs should monitor their state program for changes once the rule is finalized. Owners/operators located in states without an EPA-approved UST program will need to comply with the final federal regulations.

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