



UST Program Facts

Preventing Leaks: Technical Regulations

U.S. Environmental Protection Agency (EPA) regulations

EPA designed the technical regulations for underground storage tanks (USTs) to reduce the chance of releases from USTs, increase the likelihood of finding releases quickly when they do occur, and secure prompt cleanup. Owners and operators are responsible for detecting, stopping, and cleaning up leaks and spills.

Leak prevention for new USTs (installed after 1988)

USTs installed after December 1988 must be fiberglass-reinforced plastic, corrosion-protected steel, or a composite, and must be designed, constructed, and installed in accordance with a national code of practice. All of these types of systems are protected against corrosion, which lessens the chance of leaks. Piping also must be protected.

Upgrading existing USTs (installed before 1988)

Before EPA regulations were issued, most tanks were not equipped with release prevention or detection features. Now, EPA regulations require that, by 1998, all tanks must be protected against corrosion (for steel tanks and piping) and equipped with devices that prevent spills and overfills. Older tanks must be replaced or upgraded by fitting them with corrosion protection and spill and overfill prevention devices to bring them up to new-tank standards.

Under the compliance schedule (see chart), all existing UST systems must meet the standards for new tanks, be closed in accordance with regulations, or be upgraded with the following features by 1998:

- Corrosion protection. Three methods are used. One technique is to line the inside of the tank with a corrosion-resistant fiberglass-reinforced plastic. Another technique is to use cathodic protection, that is, a technique that involves reversing the electric current that causes corrosion by using either sacrificial anodes or impressed electrical current. A third technique is to combine a fiberglass-reinforced plastic lining with cathodic protection. Piping must also be protected.
- Spill and overfill prevention. Technologies include a spill containment device combined with either an automatic flow shut-off device to stop product flow during delivery, or an overfill alarm.

Closure of existing USTs

To close a tank permanently, an owner or operator must:

- Notify the regulatory authority 30 days before closing,
- Determine if the tank has leaked and damaged the environment and, if so, take appropriate notification and corrective actions,
- Empty and clean the UST according to standard safety practices, and
- Remove the UST from the ground or leave the UST in the ground but fill it with an inert solid material.

Leak Prevention Requirements for USTs			
Type of Tank or Piping	Corrosion Protection Requirements	Spill/Overfill Prevention Requirements	Deadlines
New tanks (installed after December 1988)	Coated and cathodically protected steel or fiberglass or steel tank clad with fiberglass	Catchment basins and either automatic shutoff devices or overfill alarms	At installation
Existing tanks	Same options as for new tanks plus cathodic protection system or interior lining or both		December 1998
New piping (installed after December 1988)	Coated and cathodically protected steel or fiberglass*		At installation
Existing piping	Same options as for new piping or cathodically protected steel		Corrosion protection deadline for all piping is December 1998

**Or others determined by the implementing agency to be no less protective.*

Reporting and record-keeping requirements for all tanks

UST owners must notify state or local authorities of the existence of an UST and its leak prevention and leak detection measures, or of the permanent closure of an UST. Technical regulations also set guidelines for notifying authorities of leaks of any size or spills of more than 25 gallons.

Owners and operators must also keep records on:

- Inspection results for the cathodic protection system, if one is used,
- Repairs or upgrades, and
- Site assessment results after permanent closure, which must be kept for at least three years.

State financial assistance funds

The cost of complying with prevention and other requirements will be a burden to some owners and operators, especially those with older tanks. Seventeen states have established financial assistance programs that serve to mitigate the overall economic impact of the UST regulatory program. These assistance programs provide funds or low-interest loans to help owners upgrade or replace their tanks.

Preventing Leaks: Technical Regulations is one in a series of fact sheets about underground storage tanks (USTs) and leaking USTs. The series is designed to help EPA, other federal officials, and state authorities answer the most frequently asked questions about USTs with consistent, accurate information in language the layperson can understand. Keep the fact sheets handy as a resource. This fact sheet addresses federal regulations. You may need to refer to applicable state or local regulations, as well. For more information on UST publications, call the RCRA/Superfund Hotline at 800 424-9346.