

LOSS CONTROL DATA GUIDE

U.S. EPA Underground Storage Tank Regulations

The United States Environmental Protection Agency (EPA) published final technical rules for new and existing Underground Storage Tank (UST) systems on 9/23/88 and financial responsibility rules on 10/26/88. The technical standards became effective on 12/22/88, and financial responsibility rules became effective on 1/24/89. If an UST owner or operator cannot comply with the regulations, the UST may have to be closed.

Owners and operators should develop management plans to minimize potential financial impacts from UST leaks and spills. Owners and operators are now responsible for (1) UST system removal and cleanup of any contamination, (2) new UST system installation, and (3) existing UST system upgrading.

New and existing UST's and piping must meet the following standards:

Performance

- New UST systems
 - Proper installation and certification
 - Corrosion protection - Constructed of (1) fiberglass-reinforced plastic, (2) coated steel with cathodic protection, or (3) steel-fiberglass-reinforced plastic composite. EPA allows both sacrificial anode and impressed-current cathodic protection systems.
 - Spill and overfill protection - Catch basins, automatic flow shutoff system or alarm to prevent overfilling.
- Existing UST Systems
 - Corrosion protection - May include (1) interior tank shell liner and cathodically-protected piping, (2) a cathodically-protected tank shell and piping, or (3) a combination of (1) and (2).

- Spill and overfill protection - Same as for new UST's.

Release detection

All UST systems must have one or more of the following release detection systems:

- Automatic tank gauging
- Vapor monitoring - Using vapor monitoring wells and detection equipment can be used only if the tank's product is sufficiently volatile and the backfill is clean and porous.
- Groundwater monitoring - Using monitoring wells only if groundwater table is never deeper than 20 feet below grade and tank products are immiscible in water.
- Interstitial monitoring - Using a chemically-compatible, secondary containment barrier which will allow any leaked product to flow toward a monitoring point for early detection.

Release detection must be installed by the following phase-in schedule:

Year System was Installed	Required by December 22				
	1989	1990	1991	1992	1993
Before 1965 or unknown age	RD	P			
1965 to 69		RD+P			
1970 TO 74		P	RD		
1975 to 79		P		RD	
1980 to 88		P			RD
New Tanks	IMMEDIATELY UPON INSTALLATION				

RD = Monthly release detection for tanks and suction piping
P = Monthly release detection for pressurized piping

Owners and operators of new and existing UST's may (1) use monthly inventory control methods and tank-tightness testing or (2) install a permanent release detection system.

For new and upgraded UST systems, tank-tightness testing must be conducted every 5 years until 12/22/98, or ten years after system is installed. After 12/22/98, or the ten-year period, permanent release detection must be installed. EPA requires secondary containment (tanks and piping with double walls or external liners) and interstitial monitoring system for new hazardous substance UST systems.

For non-upgraded UST systems (without corrosion, spill, overflow protection), tank-tightness testing must be conducted annually until 12/22/98, when these tanks must be upgraded to meet performance standards or permanently closed. UST systems must be closed if a release detection system is not being used by the phase-in schedule date. EPA requires secondary containment and interstitial monitoring systems for existing hazardous substance UST systems by 12/22/98.

EPA requires the following release detection methods for piping:

- Suction piping - Tightness-tested every three years or monitored monthly using a vapor, groundwater or interstitial monitoring system. Release detection is not required if piping is designed so that liquid can drain back into the UST.
- Pressurized piping - By 12/22/90, must be equipped with an automatic line leak detector and line-tightness tested annually, or monitored with a vapor, groundwater, or interstitial monitoring system. Hazardous substance piping must be equipped with secondary containment, an interstitial monitoring system, and an automatic line leak detector.

Tank closure

Owners and operators must:

- Notify the implementing agency (federal, state, or local EPA) within 30 days
- Clean the tank's interior
- Remove the tank or fill tank with inert material
- Conduct sampling to determine if tank or piping has leaked
- Maintain closure records

Many state and local codes do not allow in-ground tank closure unless the tank's removal threatens the structural integrity of a building.

Release reporting

If an UST system leaks, or is suspected of leaking:

- Notify the regulating agency (federal, state, local EPA) within 24 hours
- Secure the site
- Remove and dispose any visible contamination
- Conduct full investigation of leak and damage
- Submit corrective action plan for approval by regulatory agency
- Execute corrective action plan

Financial requirements

Owners and operators must demonstrate financial responsibility by 1/24/89 through 10/26/90, depending on (1) the number of tanks owned, (2) the owner's tangible net worth, and (3) whether the facility is a petroleum marketing facility (petroleum is produced/refined or sold/transferred to the public). EPA will require financial responsibility for hazardous substance UST systems in the future. The petroleum tank financial requirements are:

- Per occurrence - For marketing facilities or other facilities that handle more than 10,000 gallons per month, \$1 million for each release occurrence. For all others, \$0.5 million is required.
- Annual aggregate - For owners/operators of 1 to 100 UST's, \$1 million annual aggregate. For all others, \$2 million is required.

The loss prevention information and advice presented in this brochure are intended only to advise our insureds and their managers of a variety of methods and strategies based on generally accepted safe practices, for controlling potentially loss producing situations commonly occurring in business premises and/or operations. They are not intended to warrant that all potential hazards or conditions have been evaluated or can be controlled. They are not intended as an offer to write insurance coverage for such conditions or exposures, or to imply that Great American Insurance Company will write such coverage. The liability of Great American Insurance Company is limited to the specific terms, limits and conditions of the insurance policies issued.