

Are You Upgrading An Underground Storage Tank System?

Are you responsible for meeting federal requirements that apply to underground storage tank (UST) systems storing petroleum and installed before December 22, 1988? You must take action on one of the following if your UST system does not have spill, overfill, and corrosion protection:

- Replace the old UST with a new one that has spill, overfill, and corrosion protection; *or*
- Properly close the old UST; *or*
- Upgrade the old UST with spill, overfill, and corrosion protection.

The federal **deadline** for taking action on these choices is **December 22, 1998**. However, you should act as soon as possible to avoid contractor backlogs or rising costs as the deadline approaches. If you fail to comply by the deadline you can be cited for violations and fined.

Continue reading for helpful information on upgrading your UST.

Adding Spill And Overfill Protection

You must add spill protection by installing a “spill bucket.” A spill bucket is a catchment basin sealed around the fill pipe and designed to catch spills from a fuel delivery.

Overfill equipment is designed to restrict or stop the flow of fuel during delivery *before* the tank reaches full capacity. Your UST needs to have one of the following overfill protection devices: automatic shutoff device, overfill alarm, or ball float valve.

Adding Corrosion Protection To Tanks

What do you need to consider when you add corrosion protection to upgrade the tank?

First, are you sure your tank does not already have corrosion protection? Your tank has corrosion protection if the tank is:

- Completely made of noncorrodible material, such as fiberglass; *or*
- Made of steel having a corrosion-resistant coating **and** having cathodic protection; *or*
- Made of steel clad or jacketed with noncorrodible material.

If your tank doesn’t fit one of these descriptions, you will need to add corrosion protection by either lining the interior of the tank with a noncorrodible material or adding cathodic protection. Cathodic protection (CP) systems are of two types: impressed current or sacrificial anode. Impressed current systems are most often used when adding CP to older USTs. You can also combine lining with CP.

Can Your Tank Have Corrosion Protection Added?

Before you can internally line a tank or add CP, you must first have an integrity assessment of the tank conducted. This assessment will determine whether the tank’s structure is sound and free of holes.

One way to assess a tank is to have a human-entry internal inspection of the tank, during which a trained professional enters the tank to determine if it can be upgraded. Additional integrity assessment methods may be available as alternatives to using human-entry inspection. You should check with your implementing agency—usually the state regulatory authority—to find out which

methods are valid in your area. Alternative integrity assessment methods fall into two categories:

- **Integrity assessment methods that comply with a standard code of practice** developed by a nationally recognized association (such as the American Society for Testing and Materials) or independent testing lab. These methods are usually technologies—such as corrosion rate modeling or tank wall thickness measurement—that are in accordance with a standard code of practice. Codes of practice are often updated over time, so the code used must be the one applicable at the time the assessment is conducted.
- **Vendor-supplied procedures that have been evaluated and certified by a third party** as meeting criteria for establishing the integrity of the tank. The “third party” must be independent and have no financial or organizational conflict of interest with the vendor. A vendor-supplied procedure is an application of a technology, usually marketed as a patented brand name and procedure.

Once the tank has passed any of the above integrity assessment methods, you can have the tank lined, have CP added, or do both.

See the “Need More Information” section in this leaflet for sources of answers to such questions as “Is my tank an ‘UST’?”

Exercise Care In Choosing An Integrity Assessment Method

You should ask prospective vendors for documentation showing that their assessment procedures meet an industry code of practice or have been successfully evaluated by a third party. If you have any doubt, check with others who have used this integrity assessment vendor and compare warranties offered by vendors—in short, use common business sense. Also, contact your implementing agency for a list of approved vendor-supplied procedures or additional guidance.

Corrosion Protection For Piping

Piping also needs corrosion protection. You can add corrosion protection for piping by installing new piping that is corrosion protected or adding cathodic protection to existing steel piping.

Completing The UST Upgrade

Regulations and industry codes require a qualified corrosion expert to design, supervise installation, and inspect CP systems installed at the UST site. The system must be operating at all times to provide protection. The system must be tested by a qualified CP tester within 6 months of installation and at least every 3 years thereafter. You will need to keep the results of the last two tests to prove that the CP is working. In addition, you must inspect an impressed current system every 60 days to verify that the system is operating properly. Keep results of your last three inspections to prove that the impressed current system is operating properly.

You also need to have leak detection monitoring for the life of the tank. Once your tank, piping, spill, and overfill upgrades are complete, you can start using inventory

control and tank tightness testing every 5 years. After the later of two dates—either 10 years after the tank has corrosion protection or December 22, 1998—you must start using a monthly leak detection method, such as automatic tank gauging, groundwater or vapor monitoring, interstitial monitoring, or statistical inventory reconciliation. (However, the period during which inventory control combined with tightness testing can be used *will be less than 10 years* in those cases in which the tank had corrosion protection added *before* the entire UST system met upgrade requirements.) *Check with your implementing agency for more specific guidance on leak detection compliance.*

Need More Information?

EPA can provide free, plain-English booklets on general UST requirements, the 1998 deadline, UST system closure, leak detection methods, inventory control, manual tank gauging, and statistical inventory reconciliation.

To order free booklets, determine if your tanks need to meet federal UST requirements, get more information about UST requirements, or identify state regulatory authorities call **EPA's toll-free Hotline at 800-424-9346**. Remember, requirements and deadlines may be different in some states, so check with your state UST program office.

You can also find UST publications, links to state regulatory authorities, and other information on USTs at EPA's Office of Underground Storage Tanks Web site at <http://www.epa.gov/oust/>.

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