

Underground Storage Tanks: Are you doing the Big Six?

The Minnesota Pollution Control Agency (MPCA) requires all regulated underground storage tank (UST) systems to comply with specific requirements. This fact sheet is designed to highlight the six main requirements for managing USTs. This is a guidance document for owners and operators, to be used as a compliance tool.

The Big Six requirements cover:

1. Tank leak detection
2. Line (pipe) leak detection
3. Corrosion testing
4. Tank maintenance/testing
5. Class A,B,C operator training
6. Record keeping

Tank leak detection

There are three main tank leak detection methods:

- Automatic tank gauging requires a passing leak test at least once a month.
- Monthly Statistical Inventory Reconciliation (SIR) with passing monthly results.
- Interstitial monitoring may be used if the tank is double-walled. (This method must be used on tanks installed after December 22, 2007.) A passing monthly test is required.

Line leak detection

Continuous –All pressure piping must have an automatic (mechanical or electronic) line leak detector. An annual function test is required by an agency-approved tester.

Pressure piping must also have **one** of the periodic methods described below:

- Periodic – Line tightness testing annually at 0.1 gph by an agency approved tester
- Periodic – Line tightness testing monthly at 0.2 gph (electronic line leak detector or SIR)
- Periodic – Interstitial Monitoring used with some double-walled piping applications (must be used on piping installed after December 22, 2007)
 - Sump sensor with monthly passing test results and an annual sensor test by an agency approved tester, or;
 - Monthly visual inspection of sump by owner/operator

Non-safe suction pipe- line tightness testing every three years at 0.1 gph by an agency approved-tester; or interstitial monitoring as described above.

Corrosion testing

Metal tanks or piping must have a cathodic protection test performed by a qualified cathodic protection tester. Impressed current must be tested annually. Rectifier readings must be recorded every 60 days. Sacrificial anode systems must be tested every three years.

Tank maintenance / testing

Once a month:

- All product dispensers, submersible sumps, spill buckets and risers must be visually inspected for leaks and maintenance issues.
- ensure there are no obstructions in the fill risers
- ensure tank bottoms are monitored for water
- ensure release detection equipment is operating correctly and proper records are being kept

Annually (by an agency-approved tester)

- ATG certification –test controllers, alarms and system configuration
- Test probes, sensors, and leak detectors for functionality and communication with controller
- Visually inspect spill buckets and containment sumps used for interstitial monitoring for deficiencies.

Every three years (by an agency-approved tester)

- Integrity test all spill buckets for liquid tightness tank system
- Integrity test containment sumps (STP, dispenser, transition) used for interstitial monitoring for liquid tightness. (Interstitial monitoring is required for all pressure piping and non-safe suction piping installed after December 22, 2007)
- Overfill protection devices must be inspected to ensure the device is set at the correct level and tested to assure the device is functioning properly

Class A, B, C operator training

All facilities must have class A, B and C operator. Class A and B operators are required to pass an MPCA test relating to the operation of their tank system.

Class B operators must be on site at least once a month to assure tank compliance requirements are being met. Class C operators (commonly known as the attendant/clerk) must be trained by the A or B operator on how to respond to spills, releases, and alarms.

For unattended card-lock facilities, the B operator must be on site weekly and a C operator is not required. Unattended card-lock facilities must post an emergency contact sign in lieu of the class C operator.

Record keeping

You must keep records on file to prove that you are in compliance with all testing, employee training, and inspection requirements. You must also retain records of all repairs made to the tank system.

Additional information

More detailed information is available on the MPCA tanks website at www.pca.state.mn.us/cleanup/ust.html.

You can also call the MPCA at 651-296-6300 or 1-800-657-3864 and ask for the UST Program