

What tank owners need to know about the new underground storage tank rules

In 2019, the Minnesota Pollution Control Agency (MPCA) amended Minn. R, ch. 7150, Underground Storage Tanks. The main purpose of the amendments is to conform with the 2015 revisions to CFR 40, pt. 280 which is administered by the U.S Environmental Protection Agency. The rules were also amended to include new technologies, codes of practice, industry standards, and address concerns that have emerged during the past 29 years of Underground Storage Tank (UST) program regulation. The following list is not a complete list, rather a summary of significant amendments that are new to Minnesota UST owners/operators.

Previously deferred underground storage tank systems

Emergency generator tank systems are now fully regulated and are no longer exempt from release detection requirements. Emergency generator tanks must have an approved method of monthly leak detection by October 13, 2020. Pressurized and non-safe suction piping associated with emergency generator tanks must also have a leak detection method in place by October 13, 2020.

Notification changes

Notification will now be required at least 30 days prior to storing a regulated substance greater than 10% ethanol or 20% biodiesel by submitting a “UST change in status form” found on the agency website. Tank owners and operators must also demonstrate compatibility of tank system components storing regulated substances greater than 10% ethanol or 20% biodiesel prior to storing the substance using the “UST alternative fuel compatibility form” found on the agency website.

Ballfloats used for overflow protection

Ballfloats also known as vent restricting devices, can still be used as overflow protection on existing tanks if they are still functioning properly provided that:

- The ball float is not used in conjunction with automatic shut off devices
- The ball float is not used on suction systems with air eliminators
- The ball float is not used with co-axial stage one vapor recovery
- The ball float is not used on pressure or remote fills
- All tank openings and risers are liquid tight

If any of the above conditions exist or if the ball float is not functioning properly, an overflow alarm or an automatic shut of device must be installed. If an automatic shut off device is installed, the ball float device must be entirely removed.

Emergency disconnect switch

Emergency disconnect switches are required at facilities that offer dispensing to the public and must comply with the Minnesota State Fire Code. The emergency disconnect switch must; be readily available to persons in control of dispensing equipment, be properly labeled, disconnect all electrical power to pumps and dispensers in case of an emergency, and be located within 100-feet but not closer than 20-feet from a dispenser.

Shear valves

Newly installed or repaired shear valves must be of double poppet design that will prevent the release of fuel from both sides of the shear valve, should the shear valve break.

When are containment sumps required to be installed?

The new rules clarify when containment sumps are required to be installed at the dispensers and/or submersible turbine pumps (STP) regardless if the pipe is single wall or double wall. On new or replacement piping systems, containment sumps are required at the STP and all dispensers associated with the pipe system.

On existing piping systems, containment sumps are required at:

- The STP, when the STP is disconnected from the riser during installation or replacement of a STP
- The dispenser, when new or replacement piping is connected to a dispenser, a dispenser is replaced and work is performed below the shear valve or check valve, or base material (concrete) under the dispenser is replaced

Monthly tank system operation and maintenance inspections

Monthly inspections of spill buckets, submersible pump sumps, and dispenser sumps are currently required to identify leaks and maintenance issues. Additional items to be inspected and documented are:

- Confirm release detection equipment is operating with no alarms or unusual operating conditions and records of release detection are reviewed and current
- Ensure all riser caps are tight and no obstructions are in the fill risers
- Ensure tanks are monitored for water monthly

Annual tank system operating, maintenance, and testing

Annual testing/inspection of release detection equipment must be conducted to assure the systems are functioning properly. Annual testing must be done by an agency-approved tester by October 13, 2020 and annually thereafter. Examples of testing/inspection include:

- Automatic tank gauge system configuration, testing of alarms, probes, sensors, and leak detectors.
- Visual inspections of spill buckets, containment sumps used for interstitial monitoring, and hand held leak detection devices (gauging sticks) to assure proper operation and that they are in good condition.

Three-year tank system operational testing

The following equipment must have operational testing conducted by an agency-approved tester. The testing must be completed by October 13, 2020, and every three years thereafter.

- Spill buckets, and containment sumps used for interstitial monitoring must be tested to assure liquid tightness (Note: double wall spill bucket and containment sumps are exempt from this requirement provided the interstice is monitored monthly and documented)
- Overfill protection devices must be inspected to assure they are set at the correct level and functioning properly

Need more information?

Visit the UST Program at <https://www.pca.state.mn.us/waste/underground-storage-tank-systems>. The site has forms, fact sheets, and other information about USTs and UST requirements.

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