



# Underground Storage Tank Flood Guide

## BUREAU OF WEIGHTS AND MEASURES

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## RESOURCES

EPA UST Flood Guide  
<https://www.epa.gov/sites/production/files/2014-03/documents/ustfloodguide.pdf>

Storage Tanks Website  
[https://datcp.wi.gov/Pages/Programs\\_Services/PetroleumHazStorageTanks.aspx](https://datcp.wi.gov/Pages/Programs_Services/PetroleumHazStorageTanks.aspx)

### Installation Practices To Help Reduce Flooding Impact

- Owners and operators may consider extending the vent pipe above flood levels to help prevent floodwaters from entering the vent line and tank.
- Add a restraining force by increasing the burial depth or the amount of pavement on top of the tank, or both. The burial depth should not exceed the manufacturer's recommendation.

### Before a Flood, What Should Owners and Operators Do?

In order to prevent underground storage tank (UST) system displacement and prevent water from entering the system, owners and operators should take these precautions if there is a threat of flooding:

- Turn off all electricity to the UST system including power to dispensers, pumps, turbines, automatic tank gauging (ATG) consoles, lighting, and any other system components.
- Fill the tank to weigh it down so that it will not float out of the ground.
- Place a dumpster, sand bags, or large containers full of sand or rock over the tank to reduce the chance of a tank floating out of the ground.
- Take product inventory and water level reading of all USTs to help account for possible product loss.
- Secure all openings on top of the tank (including vapor recovery, automatic tank gauge probe, interstitial port, and vent extractor fitting) and make sure fill caps and gaskets are in good condition and fastened securely in place and locked. If fill caps are not tightened, tanks will fill with water and release product. Empty or near-empty tanks may float up, destroying overlying concrete/asphalt and distribution lines, which can also release product.
- Make sure the seal on spill bucket plungers are operational so water cannot enter the tank.
- Close the shear valve on pressurized piping to prevent releases from product dispenser lines.
- Temporarily cap off the vent pipes to prevent water from entering the tank and displacing product.
- Protect fuel pump and controls to prevent damage from flooding.
  - o Secure dispensers with plastic, tarps or plywood.
  - o If time allows, consider removing dispensers, and storing them safely.
  - o Protect aboveground components from floating debris or floodwater

Contact a Wisconsin-certified contractor if you need assistance with flood preparedness. To find a contractor in your area, check our website listing: [https://mydatcp.wi.gov/documents/dtcp/List\\_of\\_Tank\\_Specialty\\_Firm\\_Registrations.pdf](https://mydatcp.wi.gov/documents/dtcp/List_of_Tank_Specialty_Firm_Registrations.pdf)

### After a Flood, What Should Owners and Operators Do?

If the UST has been in a flood, the department recommends contacting a certified company to evaluate the system. Depending on the site-specific situation, owners and operators should take the following actions after the water has receded and local officials allow for re-entry:

- Make sure the power is off to any UST-related equipment (such as power to the dispensers, pumps, release detection equipment, and other devices).
- Determine if product leaked from the UST.
- Determine if water or debris entered the UST.
- After inspecting the electrical system, return power to the UST system.
- Check release detection system for proper operation. Perform release detection again as soon as possible after the flood.
- Check all equipment including pumps, shear valves, fill pipes, and vent lines for proper operation.
- Clean and empty spill buckets and sumps, including those under the dispensers and above the tanks. Inspect the piping and fittings for damage and possible leaks.
- Perform an UST system tightness test to ensure integrity prior to adding product.\*
- Test spill buckets and sumps to ensure they are tight.
- Test cathodic protection to ensure it is operating properly.\*

\* Tank tightness testing and cathodic protection testing and recommissioning must be performed by Wisconsin-certified contractors. To find a contractor in your area, check our website listing: [https://mydatcp.wi.gov/documents/dtcp/List\\_of\\_Tank\\_Specialty\\_Firm\\_Registrations.pdf](https://mydatcp.wi.gov/documents/dtcp/List_of_Tank_Specialty_Firm_Registrations.pdf)

*Adapted from the Environmental Protection Agency's "Underground Storage Tank Flood Guide," available online: <https://www.epa.gov/sites/production/files/2014-03/documents/ustfloodguide.pdf>*