

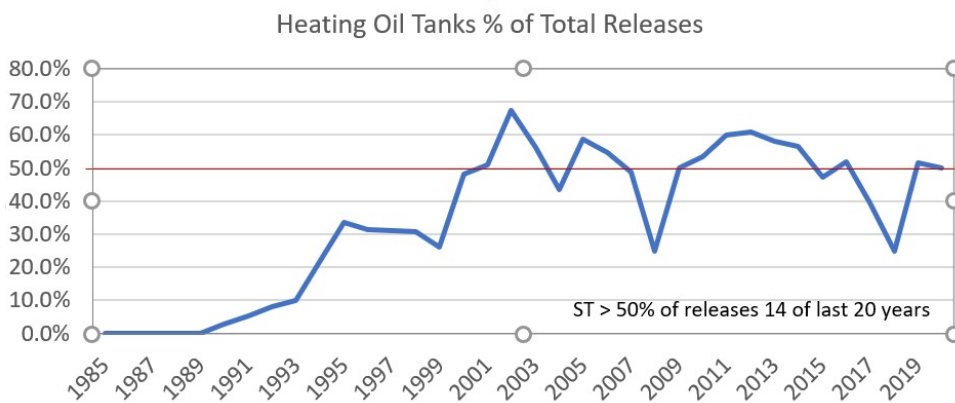


Tightness Testing of Heating Oil Underground Storage Tanks (USTs)

State of Rhode Island UST Management Program

As release prevention and maintenance practices at underground storage tank (UST) systems containing gasoline and other federally regulated fuels have improved over the past 10 years, releases from heating oil UST systems have become a growing problem.

- More than half of releases come from heating oil tanks, even though heating oil tanks make up only 1/3 of the USTs in Rhode Island;
- Heating oil tanks do not have the same maintenance, construction, and testing requirements as federally regulated systems containing gasoline and other motor fuels and are more likely to leak;
- Federally regulated USTs are tested annually and replaced on average every 30 years, whereas the average heating oil tank is 60 years old, with several that are over 100 years old and have never been tested;
- When the UST regulations were updated and re-codified in November 2018, a new rule was included which required routine testing of all UST systems containing heating fuels of all grades at non-residential facilities;
- These requirements apply to any heating oil UST used for onsite use at commercial and industrial facilities, schools, and other public or government properties.



What Kind of Tanks do I have?

It can be difficult to determine if your tank is single-walled or double walled, and the best way to find this out is to have a licensed tester take a look at your tank. However, if your tank was installed prior to 2000, it is most likely single-walled!

When are the tightness testing deadlines?

Single Walled USTs: The majority of heating oil tanks are single walled and are required to be tested for tightness by an approved method by a DEM-licensed tester according to the table below. After the initial test, tightness testing is required every 5 years.

UST Install Date	Test Deadline
Prior to 12/31/1970	12/31/2021
1/1/1971—12/31/1980	12/31/2022
1/1/1981—12/31/1990	12/31/2023
1/1/1991—12/31/2000	12/31/2025
1/1/2001—12/31/2010	12/31/2027

Double Walled USTs: USTs storing heating oil with a “dry” interstitial space are required to have the interstitial space tightness tested 30 years from the date of installation date and every 5 years thereafter. Double walled USTs with a “brine” or “wet” interstitial space do not need testing as long as the interstitial space is continuously monitored.



This testing requirement does not apply to most tanks used at single-family homes!

As long as your tank is < 1,100 gallons and serves less than 3 residential units, you are not *required* to have your UST tested. However, DEM strongly recommends that all residential USTs be routinely tested to ensure they are liquid-tight and in good condition!

Who can test a UST?

All tightness testing must be performed by a qualified 3rd party who is licensed by DEM. A list of companies who are licensed and eligible to perform this testing can be found here:

<http://www.dem.ri.gov/programs/benviron/waste/pdf/lictesters.pdf>. There are several different methods that these companies may use to determine if the tank is liquid tight, most involve placing the tank under vacuum with audio equipment inside, and the technician analyzes the response from the sensors to determine if there are any leaks. In many heating oil tanks these methods will also determine if the piping connected to the tank is liquid tight as well. The tank does not need to be empty during testing. Your technician will be able to provide more details about the specifics of the method they are using.

What happens if the UST fails the tightness test?

- Single-walled USTs that fail tightness testing must be taken out of service immediately and emptied within 24 hours
- Double-walled USTs that fails interstitial tightness test must have its primary wall tested for tightness within 48 hours

If the primary wall tightness test passes, the UST can remain in use for up to 30 days, however, may not accept deliveries.

If the primary wall tightness test fails, the UST should be taken out of service immediately and have its contents removed and an release investigation started



Additional testing or inspection can be performed to determine the cause of the failure and determine if it is repairable, however, due to the lack of corrosion protection, most heating oil USTs cannot be repaired



If the UST fails a tightness test, it may be leaking and must be immediately emptied to prevent potential contamination. Don't wait until the winter months when you need heat to get the USTs tested!



Environmental Investigation and Cleanup

- A single walled UST failing a tightness test often indicates that a release of product into the environment may have occurred, and that further investigation is necessary
- Investigation of releases will typically require the property/UST owner to hire an environmental consultant to perform a Site Investigation;
- Typically, soil borings and groundwater wells will be installed in the area surrounding the UST and samples would be taken for analysis
- If the UST is being removed, site investigation and soil removal can often be combined into a single event which may save money on remediating the property. The complexity and cost of cleanup increases with the length of time the UST has leaked, so routine testing and early intervention is the best way to keep our environment clean and save money!

We urge you to plan ahead and get your UST tested in advance of this deadline in order to prevent delays, scheduling problems, and interruptions in service that may occur closer to the testing deadline!

If you don't know the installation date of your UST system, you can use the DEM online Environmental Site Search at <http://eplover.dem.ri.gov/ploverpublic/search.aspx> to look up your site! Alternatively, you may perform an in-person file review by contacting the DEM Office of Customer and Technical Assistance at DEM.filereview@dem.ri.gov

If you have questions on these requirements, please contact our office at
DEM.USTquestions@dem.ri.gov