

Underground Heating Oil Tank

A Homeowner's Guide

If your home heating oil storage tank is buried underground, you probably know already that a leak could be very unfortunate - not only for the environment, but for your pocketbook. When an underground storage tank or connected piping leaks, the cleanup can be costly. And if your homeowners insurance policy contains a "pollution exclusion" clause, which many do, you could get stuck with the bill.

The best way to avoid significant expenses later is to have your tank taken out of the ground now and have a new tank installed in your basement, garage or storage shed. You probably have questions about what this would involve. This guide has been prepared by The Massachusetts Department of Environmental Protection (MassDEP) and the Department of Fire Services (DFS) to give you answers and advice.

DFS regulates the installation, maintenance and removal of underground tanks. The agency relies primarily upon the local fire departments to ensure that this work is done in accordance with the law. For tank removals, local fire officials issue the necessary permits, determine when conditions are safe for excavation, and respond to emergencies or public safety hazards. They also ensure that measurements are made for contamination when the tanks are removed.

When tanks are found to be leaking, additional work is usually needed to determine the extent of the problem and whether cleanup will be required. Contamination should be reported to the local fire department and, in some instances, to MassDEP.

State law does not require the removal of a residential underground tank if it isn't leaking, but there may be local requirements in your community. Check with your fire department or health board.

Why should I consider removing my underground storage tank?

Many underground home heating oil tanks are the same type of 275 gallon bare steel tanks you have probably seen in basements or garages. These tanks were not designed to be buried and, if left in place, will eventually rust and leak. Even larger tanks that were specifically designed for underground use can leak if they do not have adequate corrosion protection and will not last forever, and will leak eventually.

If you notice an unexplainable sharp increase in your home heating oil consumption, your tank may be leaking. But that information alone is not always an accurate indicator. In some cases, leaks are found even after homeowners see their oil consumption drop.

While your underground tank probably is not leaking yet, the odds of a leak happening increase as the tank gets older. Even small, slow leaks can pose serious threats to your family, your neighbors and the environment if they go undiscovered for a long time. And, if your tank does leak, you may face a costly cleanup. Having your underground storage tank removed now can save you both money and anguish in the long run.

How much does an underground tank removal cost?

Removal contractors generally charge between \$1,000 and \$2,500+ depending on the size of the tank, its condition, and how easily it can be reached. The checklist on pages 3 and 4 of this guide includes a summary of services that your contractor should provide for this price. Usually not included in this price are the cost of a replacement tank, sampling and testing, cleanup work if a leak is found, and landscaping after the removal is complete.

For the best price, shop around and get cost estimates from your oil company, if they perform removals, as well as from several contractors. They can provide you with an accurate cost estimate only by visiting your home to determine both where your tank is located and whether there are any obstacles to getting the job done. Compare services the companies can provide and be sure to check references. As with any substantial home improvement job, get a written cost estimate and a contract that outlines the services to be performed before work begins.

Can I test my tank for leaks instead of digging it up?

Yes, but it may cost you less to simply remove your tank from the ground. It is important to consider that no test can predict what will happen next year, next month, or even the next day. Your money may be better spent on tank removal since you will have to dig the tank up anyway if the test reveals it is leaking. Information on testing methods can be obtained from your local fire department, DFS (978) 567-3300 or companies that perform tank tests.

Can I just empty the oil from my tank and leave it underground?

Yes - but only in limited conditions and only if your local fire department approves. Typically, leaving a tank in place will be allowed only if its removal will jeopardize the structural integrity of your home. Even if the fire department permits you to leave your tank in place, you will need to have it cleaned and the area around and underneath must be checked for contamination. Once the area is determined clean, the fire department will permit filling with sand or concrete.

Getting this done will cost somewhat more than having your tank removed from the ground. In addition, should you decide to sell your home, a bank or the buyer may ask for more environmental testing or the removal of the tank, which could make leaving your tank in place costlier than taking it out of the ground at the start.

How will I know if my tank has leaked?

Contamination may be indicated by signs of a damaged tank or piping, soil that is stained or gives off strong oil odors, a sheen on the groundwater, or environmental test results. Under state law, a measurement for contamination is required within 24 hours of a tank removal. So before work even begins, make sure the contractor has the necessary expertise to make such a measurement.

The accompanying checklist includes an outline of the steps that need to be taken to “measure for contamination”. The basic inspection is slightly more than a sight, smell and physical check of the tank and the surrounding soil. Screening of soil and groundwater is done as the tank is removed. Sampling and analysis is recommended if the tank is located near any wells, drinking water supplies, wetlands, ponds or streams, or if there are any indications that contamination is present including corroded holes in the tank or visible soil staining.

What if contamination is found?

First, don't panic. The problem could be minor and relatively simple to correct. Simply remember the importance of notifying the proper officials and taking the appropriate cleanup actions right away. Addressing the problem now will limit release migration and is the first step in controlling costs associated with cleanup.

If you find contamination or even suspect there has been a leak, contact the nearest MassDEP regional office (the telephone numbers can be found on page 4 of this guide). Also notify your local fire department, which will help you and your contractor determine what needs to be done next. While not all leaks must be reported to MassDEP, it is recommended that you contact the agency for help in determining whether the level of contamination found makes reporting necessary in your individual case and what next steps are necessary.

For additional information, contact your local fire department or the nearest MassDEP regional office.

Tank Removal Checklist

STEP 1 - DO YOUR HOMEWORK

Ask your local fire prevention officer about...

- ✓ Any local rules that may be more stringent than what state law requires; and
- ✓ Requirements for measuring for the presence of contamination.

STEP 2 - HIRE A CONTRACTOR

Shop around...

- ✓ Seek tank removal company referrals from your...
 - Oil company;
 - Local public works department;
 - Neighbors;
 - Yellow Pages directory (look under Oil Tanks or Tank Services);
 - Local fire department; or
 - The Massachusetts Oilheat Council at (617) 237-0730.
- ✓ Compare costs (prices are higher for removals of tanks that are large or difficult to reach);
- ✓ Compare services (the basic services a contractor should provide are listed in STEP 3 below);
- ✓ Check references; and
- ✓ Ask your oil company if it will credit you for any usable fuel that is removed from your tank.

Make sure the contractor you select...

- ✓ Understands the state regulations (527 CMR 9.00, 502 CMR 3.00) and any local rules governing underground tank removals;
- ✓ Is able to inspect the tank and identify possible signs of contamination;
- ✓ Provides a written contract with a specific cost estimate based on property conditions; and
- ✓ Is insured to perform such work.

STEP 3 - THE TANK REMOVAL

Your removal contractor should...

- ✓ Obtain all required permits;
- ✓ Empty oil from the tank and clean out all residues or arrange for someone else to perform this work;
- ✓ Excavate the tank and piping;
- ✓ Dispose of the tank, piping, residues, soil and any remaining oil at locations that are authorized to accept them;
- ✓ Check for signs of a leak and report findings to you (see STEP 4);
- ✓ Separate clean soil from any that appears to be contaminated;
- ✓ Backfill the hole to grade; and
- ✓ Provide written documentation of the removal, including disposal or recycling records for the tank, fuel, residues, and contaminated soil (if any).

Your local fire department should...

- ✓ Observe the removal;
- ✓ Ensure that the tank and surrounding area are free of safety hazards;
- ✓ Ensure that a measurement for contamination is made; and
- ✓ Note on the removal permit both the condition of the tank and whether any contamination was observed.

You should...

- ✓ Observe the tank removal from a safe distance;
- ✓ Record any problems that are encountered by the contractor; and
- ✓ Take notes and photos to document the work, even if everything seems to be going well.

STEP 4 - THE CONTAMINATION MEASUREMENT

State law requires that a measurement for contamination be taken within 24 hours of the time a tank is removed from the ground or prior to abandonment in place. The measurement can be performed by the tank contractor or an environmental professional. You should observe the

inspection and obtain written observations from people at the scene, including the contractor and fire officials, even if the tank and piping appear sound and there are no signs of contamination.

The basic measurement includes...

- ✓ Recording the condition of the tank, piping, and soil;
- ✓ Checking the tank and piping for holes;
- ✓ Examining the delivery line and surrounding soil.
- ✓ Checking the excavated area for visible oil stains or strong odors;
- ✓ Noting problem areas on a drawing or map of the excavation;
- ✓ Photographing the area to support written documentation;
- ✓ Taking a composite soil sample to be analyzed for petroleum constituents if:
 - (a) The condition of the tank, piping, or soil indicates a leak may have occurred;
 - (b) Your tank is located near a well, water supply, wetland, pond, or stream; or
 - (c) You want a record of analytical results to confirm that no contamination was found.

The local fire department will specify the procedures for taking the contamination measurement when a tank is to be cleaned, filled and left in the ground.

STEP 5 (if necessary) - REPORT LEAKS OR SPILLS

State law requires that you report certain petroleum releases or threats of release to MassDEP and the local fire department (depending on the nature and volume of the release, as well as contamination levels). MassDEP can help you in determining whether a particular situation requires reporting. Should any contamination be observed during the removal of your tank, contact the fire department (as well as the board of health if required by local ordinance) and notify the MassDEP regional office nearest you:

Western	(413) 784-1100
Central	(508) 792-7650
Northeast	(978) 694-3200
Southeast	(508) 946-2700

- ✓ Consult with local and MassDEP officials before proceeding with any further cleanup work. In most cases, the tank removal will not have to be halted.

- ✓ Do not, under any circumstances, allow your contractor to excavate to a point where the structure of your home is compromised.
- ✓ Any soil suspected of being contaminated should be separated from soil that appears to be clean (so you will not be paying for the disposal of clean soil).
- ✓ If needed, hire an environmental consultant to ensure proper assessment and cleanup. MassDEP can advise you on whether this is necessary.
- ✓ Check with your insurance agent to see if you are covered in the event of an oil spill or leak at your home.

STEP 6 - KEEP GOOD RECORDS

It is important to maintain complete records of the tank removal, inspection process, and any necessary cleanup work. Keep them in a safe place with your other important records. You may be asked to produce them later if you sell your property, obtain financing, or file an insurance claim. Your documentation should include:

- ✓ Shipping records documenting recycling or disposal of the tank, piping, residues, soil, and fuel;
- ✓ An accurate drawing showing where the tank was located;
- ✓ Contamination measurement results, including any analytical results, if samples are taken;
- ✓ Documentation of any cleanup work, if performed;
- ✓ Your own notes and photos taken during the removal, inspection and cleanup (if necessary); and
- ✓ Written observations from people at the scene, including the contractor and fire officials.

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