

Stay Warm!

Save Money!

Protect Maryland's Environment!

Tips to Avoid a Heating Oil Leak or Spill

Homeowners can take responsible steps year-round to avoid the accidental release of heating oil. The typical cleanup cost for spills from home heating oil tanks ranges from \$10,000 to \$50,000 and is seldom covered by homeowner's insurance.

To head off potentially costly problems caused by fuel leaks and spills, the Maryland Department of the Environment (MDE) recommends homeowners take these precautionary steps:

Inspect your tank and its attached components frequently. Consider installing some of the relatively inexpensive upgrades mentioned in this pamphlet.

Replace old tanks (above ground or underground) if you know that your tank is more than 15 years old. If you don't know how old your tank is, MDE strongly recommends replacing it before it leaks.

Carefully consider any recommendation made by your heating contractor. If your oil company offers to perform a "tightness test," or apply temporary patches instead of replacing the tank, ask if this could cause a future problem.

Generally, these tightness tests should not be performed on older residential heating oil systems. The test only indicates the tanks integrity at the time the test is performed. It does not assure future liquid-tight performance. If you have a tank, fuel delivery line, valves, piping or fittings that may be in questionable condition, then it is probably better to replace the equipment that is causing the concern.

Applying the cost of the test toward the cost of replacing the system usually proves to be the most prudent use of your heating maintenance dollars.

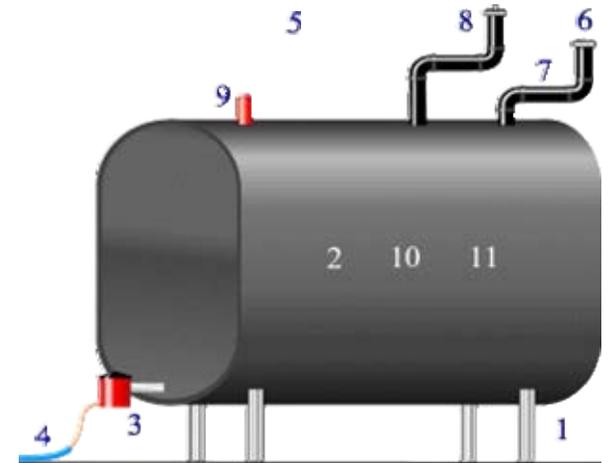
Oil Tank Inspection Checklist

Numbers correspond to location on cover diagram

- Stability:** 1 Are the tank legs bent, broken, rusted through or missing? Are the tank leg support brackets undamaged and still firmly welded to the tank?
Z Pass Z Fail
- Foundation:** 1 Are the legs sitting on a hard surface like concrete or steel and supported by firm, compacted ground?
Z Pass Z Fail
- Integrity:** 2 Are there any signs of rust, weeping, wet spots or dents on the tank?
Z Pass Z Fail
- 10 Is the tank blackened at the low end, around the drain? (This may be an indication of water in the tank, and resultant corrosion inside the tank.)
Z Pass Z Fail
- 3&4 Are there any stains, drips or signs of leakage around the supply/return lines, filter, valves or connections?
Z Pass Z Fail
- 7&8 Are there signs of leakage or spills around the fill pipe or vent pipe?
Z Pass Z Fail
- 6 Vent whistle must sound during delivery. Is the vent whistle silent when the tank is being filled? (Ask the fuel delivery person.)
Z Pass Z Fail
- 9 Is the fuel-level gauge working properly? Is it cracked, stuck or frozen? Are there signs of oil around it? (A missing gauge cover will allow water to enter tank.)
Z Pass Z Fail
- Protection:** 5 Is there a danger of snow or ice falling on the tank? Are there low hanging branches or yard items nearby, which may fall and strike the tank?
Z Pass Z Fail
- 3&4 Are lines and filter protected from strikes by yard equipment like mowers and weed eaters?
Z Pass Z Fail
- 6 Can the vent clog or become restricted because of debris, snow, ice or insect nests? (Screened vents can help prevent insect nest problems, but screens must be regularly inspected for excess corrosion buildup that will diminish ability to vent.)
Z Pass Z Fail
- 5 If mounted outdoors, is the tank rated for outdoor use? Is the tank located so as to protect it from strong winds?
Z Pass Z Fail
- 11 **What is the age of the tank?** (Not usually indicated until after 1998.) _____ Z Fail
(Indoor - older than 20-25 years? Outdoor - older than 15 years?)



Recommended Practices for Owners of Home Heating Oil Storage Tank Systems



Heating Oil Storage System Tips

Every fall you should:

Inspect for leaks. Look at the tank, fuel delivery and vent lines, valves, supply and return lines and all fittings.

Have your oil company routinely clean and adjust the furnace, and repair or replace worn and damaged parts. A well-maintained furnace burns cleaner and uses less fuel, which means lower fuel bills and lower emissions.

Inspect the vent pipe often to ensure that it is free of obstructions and that an audible signal (whistle) is on the vent. Oil company personnel listen for the whistle to help avoid overfills. Check with your delivery person immediately after a delivery and make sure your whistle is functioning properly.

Weak underground electrical currents, a soil condition known as “Electrolysis,” can rapidly corrode metals. **Consider replacing any oil lines** (supply, return, fill or vent) **that are buried underground, or located under concrete, such as basement floors, before they leak.** A potentially serious release could go undetected for a long period of time eventually resulting in an expensive clean up. Your heating service contractor can route new lines that are all visible and do not contact the earth. If lines must be buried, they can be encased in a flexible plastic sleeve that will protect them, extend their life, contain any possible releases and let you know immediately if problems exist.

Year-round you should:

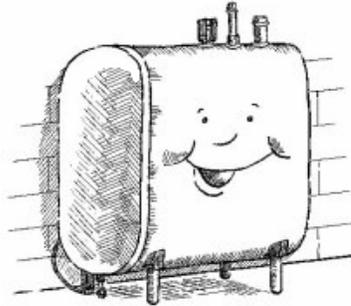
Retain all oil delivery receipts. Keep receipts handy so you can track your oil demand. Unexpected increases in oil consumption may indicate a leak.

Ensure that your street number is clearly visible from the road or alley to prevent oil company personnel from delivering fuel to the wrong address.

Clearly mark the location of the tank's fill pipe to ensure that oil company personnel deliver your fuel to the right place.

Inform the delivery company of any unique circumstances or special requirements involving your delivery each time you order oil. Don't rely on them to remember from the last delivery.

Always remember that all oil storage tanks are constantly “breathing” and allowing condensation to form on the inside of the tank. The resulting accumulation of water at the bottom of the tank can cause corrosion that occurs from the inside out. You may not notice a problem until it is too late. **Consider having your heating contractor clean the inside of the oil tank at least every five years** so that over time, water and sludge don't build up and cause corrosion resulting in leaks.



If you remove a tank from service, be sure to remove fill and vent pipes immediately to prevent a fuel delivery to a location without an attached tank.

Indoor Aboveground Tanks

Inspect indoor aboveground storage tanks for signs of pitting and corrosion, particularly at the bottom of the tank. Remember, tanks primarily rust from the inside, out, so if signs of aging are present, replace the tank. Indoor tanks generally do not last more than about 20 to 25 years, and often their lifespan is much shorter.

Outdoor Aboveground Tanks

Ask an oil technician to **inspect the stability of the aboveground tank.** A full 275-gallon tank weighs more than 2,000 pounds.

The tank has metal legs and should stand on concrete supports or pads, supported by **stable, compacted earth.** If the legs become loose, the concrete cracks or the supporting earth becomes soft or “squishy” in bad weather, the tank can fall over and release product. The tank should also be located in an area that provides some **protection from strong winds.**

Replace an outdoor aboveground storage tank that has been uncovered for 15 years or longer. These tanks rust from the inside out much sooner than indoor tanks and cleaning or painting the outside of the tank does not usually prolong their life.

Underground Tanks

Determine if the underground storage tank is made of steel (common) or fiberglass (rare). In Maryland soil, most steel underground storage tanks will last approximately 15 years. If the tank is more than 15 years old, or the age is unknown, replace it with an aboveground storage tank. Locate your new tank under a shelter, or inside a basement or garage to prevent rust, corrosion, or damage. **Underground tanks removed from service must be emptied of all liquid and properly abandoned.** (Removed from the ground or cleaned and filled with a solid, inert material.)

Replacing Tanks

For your new or replacement tank, consider **purchasing a secondary containment enclosure** (a tank with double walls or a tank with a thick urethane coating). Approved home heating oil tanks are no longer just made of steel. Steel protected plastic tanks are also available. These provide an extra layer of protection regardless of tank location.

If you suspect an oil leak or spill, immediately contact your oil company and/or your local fire department for assistance.

Leaks or spills must also be reported to the Maryland Department of the Environment within two hours.

Report Oil or Chemical Spills 1-866-633-4686

Toll Free (within Maryland) 1-800-633-6101

Oil Control Compliance Division 410-537-3442

Emergency Response Division 410-537-3975

www.mde.state.md.us