

# Home Heating Oil Tanks



*This document provides guidance to homeowners on how to maintain a home heating oil tank, causes and signs of a leaking tank, steps to take in the event of a leak or release from the tank, and how to properly close a tank when it is no longer used. A heating oil tank is defined as an aboveground storage tank (AST) or underground storage tank (UST) that stores heating oil that fuels a boiler or furnace to supply heat to a*

*home. A tank that is located in the basement of a residence is categorized as an AST. A business or industry that utilizes heating oil tanks may have different or additional regulatory requirements and should contact the Department of Licensing and Regulatory Affairs (LARA), Storage Tank Division (BFS-STD) at 517-241-8847 for more information.*

## TANK MAINTENANCE AND LEAK PREVENTION

- Quarterly inspect and maintain both AST and UST heating oil tanks: scrutinize the fill lines, pipes, filters, sight glass, valves, gauges, and AST tank supports for any visible signs of rust and decay, or dark staining under the AST. An owner of a heating oil system, that has not been properly maintained, will likely be considered liable for a release should the tank or tank system leak.
- Most insurance companies will not cover the cost of cleaning up a release from a heating oil tank, vandalism, or even an act of God. Some insurance companies can write a rider policy to insure the heating oil tank. Contact your insurance company for more information on rider policies and to determine what the current policy covers.
- Maintain the pad or drip pan upon which the AST is placed. If the AST was not installed on a pad or in a drip pan, it is a good investment to update the AST with a pad or drip pan.
- Keep the furnace and related piping in good working order.
- In the winter, keep the roof and eaves nearest the AST, free from ice. To prevent ice from forming, the owner could have heat tape installed at the edge of the roof. If the AST is 660 gallons or less, the owner could have a shed or a roof constructed over the AST. The vent and fill pipes would have to terminate beyond the roof perimeter. If the tank is larger than 660 gallons, the owner is advised to call the BFS-STD at 517-241-8847.
- If the tank is no longer used; properly close the tank (see the 'Closing a Tank' section), remove the fill pipe or lock it closed with a bolt to prevent a mistaken delivery.

## COMMON CAUSES OF LEAKS OR RELEASES

- Underground storage tanks leak due to rust, decay, or frost shift;
- Overfilling of either UST's or AST's;
- Failing tank supports, sight gauges, valves, and other equipment problems;
- Leaking fittings;
- Accidentally broken lines, tank tipping over, or lines severed due to falling ice, snow removal, or landscaping; or
- Negligent delivery of heating oil into the wrong piping system, such as disconnected lines, abandoned groundwater well piping, or other pipes that look like fill pipes;
- Not inspecting and maintaining the tank on a routine basis.

## SIGNS OF A LEAKING TANK

A leaking heating oil tank can cause indoor air pollution and can potentially contaminate soil; surface, ground and drinking water. Often, a UST release will not be detected unless the tank is removed from the ground. At the tank removal, the owner should carefully observe the removal for signs that the tank leaked. The following scenarios may indicate a leaking tank:

- Fuel consumption greatly increases, even though the weather is not unusually cold;
- Dead or dying vegetation in the area of the tank;
- Heating oil odors in the house or emanating from the ground;
- Dark stained soils compared to the surrounding native soils;
- Oily rainbow sheen on water beneath the tank, in basement sump or footing drain discharge;
- Staining around the fill pipe;
- Water in fuel lines.

## STEPS TO TAKE UPON DISCOVERING A LEAK

- Try to identify the source of the release.
- Take immediate steps to stop the leak and contain the escaped heating oil with absorbent material such as kitty litter, shredded paper, or sawdust. You can also place a drip pan under a leak from an aboveground tank. Use absorbent pads to control discharges from basement sumps.
- Turn off all the oil furnace shut off switches and close the oil line valve. Verify that the furnace blower is turned off to prevent spreading the odors throughout the house. For indoor spills, open windows to ventilate the odors.
- Minimize skin contact with the spilled oil. You should wear rubber gloves, if you are cleaning up the spill, to prevent the oil from getting on your hands.
- Contact your heating oil supplier for assistance and to drain the heating oil from the tank, if necessary.
- With releases from AST's or UST's, the actual quantity of heating oil released is frequently hard to determine. In order to assure compliance with all applicable regulations, it is highly recommended that any release be reported to the nearest Department of Environmental Quality (DEQ) Remediation and Redevelopment Division (RRD) District Office within 24 hours of the discovery. The Environmental Assistance Center, 800-662-9278, can help you find the phone number of the RRD district office nearest to you. If the release has created an emergency situation, call the Pollution Emergency Alerting System at 800-292-4706.
- Begin the cleanup process. Releases affecting only small amounts of soil may be handled by removal of the contaminated soil and disposal at an appropriate disposal location. For releases that have affected large quantities of soil or groundwater, the DEQ strongly recommends that you contact an environmental consultant to prepare a cleanup plan and take care of the release. Environmental consultants may be found under the "Environmental & Ecological Services" section in the yellow pages of most phone books.
- Contact the insurance company to inform them of the situation and to determine what the policy covers.
- Contact your landlord if the property is rented.
- In the event you have knowledge of contamination migrating onto your neighbor's property, you must provide notice to the DEQ RRD and affected property owners.
- Contact your local landfill to properly dispose of contaminated soils generated from the cleanup. The environmental consultant can address disposal of contaminated soils and/or groundwater, or you may contact the local DEQ office for further guidance.
- Keep all the records of the cleanup together: the cleanup plan, receipts for services, dates, location, amount of contaminated soils and/or groundwater disposed of and photographs taken to document the activities. Also, you should keep a logbook in which you record the time and date that the release was found, the dates on which work was done and by whom.



## POTENTIAL HEALTH EFFECTS

- Short-term exposure to heating oil odors can cause headaches, nausea, dizziness, increased blood pressure, and difficulty concentrating.
- Long-term exposure to some heating oils has been associated with an increased risk of developing cancer.
- If you have a drinking water well and notice any strange taste, color or odors, have the well tested periodically for heating oil contamination.

**Closing a Tank:** In the event your heating oil tank is no longer used, the tank must be taken out of service and properly closed. Proper closure for both an AST and UST is defined as emptying the tank and related piping of heating oil. After the oil is drained, the tank must be properly cleaned to remove all vapors and residual oil. Once the AST has been emptied and cleaned and there is no evidence that the tank leaked, the tank is considered closed and can be removed.

**Removing a UST:** State regulations require a UST, that is not being used, must be removed from the ground within one year from the last date it was used. After the tank is properly cleaned, the UST must be removed from the ground unless removing the tank could jeopardize the structural integrity of an adjacent structure. For example, if the tank is under the garage, the tank can remain in the ground. However, if the UST is to remain in place, it must be filled to 100% capacity with an inert material. An example of inert materials would be pea gravel or cement slurry. The material must have the consistency to eliminate the air space within the tank and not dam up under the fill port. The inert materials will prevent your UST from collapsing and creating a sinkhole.

The LARA recommends that you hire a tank professional; such as a heating system vendor, oil supplier, or an environmental consultant; to properly drain the heating oil and clean out the tank.

Tank professionals usually list their services in the yellow pages of major city phone books. The listings can be found under, “Environmental & Ecological Services” or under “Tank”. Heating oil suppliers may also know of tank professionals that are available in your area to clean and remove tanks.

**Tank Disposal:** Once the tank is closed and removed, the next step is to properly dispose of the tank. The DEQ recommends taking the tank to a metal recycler. Tanks can also be landfilled if the landfill operators will accept it. The yellow pages of your telephone book can be an excellent resource to locate both metal recyclers and landfills. Scrap metal recyclers can be found under the heading “Scrap Metals” and landfills under the heading “Landfills”. Metal recyclers are also listed in the Michigan Recycled Materials Market Directory at [www.michigan.gov/deqrecycling](http://www.michigan.gov/deqrecycling). A tank professional can handle the arrangements for the proper disposal of your tank. For record keeping purposes, you should retain copies of the receipts for all costs associated with the draining, cleaning, removal, and recycling of the tank. The receipts should give the name, address, and phone numbers for the companies that are providing the services.

**Seller’s Disclosure Act:** The seller of a residential property is required to disclose any known environmental problems with the home and property under Michigan Public Act 92 of 1993 (Act 92). However, the prospective purchaser should carefully inspect the property for signs of a heating oil tank. The potential buyer should look carefully for unidentified piping jutting out from the ground, hidden under bushes near the house, or cut-off pipes sticking out of the basement wall. The aforementioned red flags could indicate the presence of a heating oil tank. If a tank has been disclosed, the potential buyer should inspect the tank for signs of a release (refer back to the “Signs of a Leaking Tank” section). The prospective purchaser would be best advised to have a home safety inspection, conducted by an experienced inspector, prior to the purchase of the house with an added emphasis on inspecting the heating oil equipment and tank. Part 201 (324.20116) also has a transfer of interest in real property notice.

## INFORMATION RESOURCES

- For information on the rules and regulations regarding the installation, maintenance, or removal of heating oil tanks, release reporting, or cleanup of contamination, call the Office of Environmental Assistance at 800-662-9278.
- For the potential health effects of exposure to heating oil call the Michigan Department of Community Health, Toxics Hotline at 800-648-6942.