



Department of Environmental Protection

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Prevention - Worth Many Pounds of Cure!

Nowhere is the old adage about prevention more relevant. If you have not yet experienced a problem, or even if you have, you might want to consider the following advice about common situations, to avoid (or avoid repeating) future problems.

Fuel Oil Storage Tanks

Here's what you should do for the number one contamination problem among homeowners and small businesses:

Replace or Upgrade Buried Tanks - The average period of time an unprotected steel tank can be buried in the ground before springing a leak is only about 15 years. This is only a rough rule of thumb; depending on site conditions and tank design and construction, any given tank may experience failure much sooner or much later than this average value. Eventually, however, all tanks can leak, and the costs to clean up the mess could easily run into 5 figures. So, as soon as you can, plan on replacing an old buried tank, either with a modern corrosion-resistant/protected tank, or better yet, by installation of a free-standing/above-ground tank. For more details, please refer to *Removing Your Underground Heating Oil Tank - A Homeowners Guide* (1996), the MassDEP draft publication *Assessing Contamination at Residential Underground Heating Oil Tank Closures*, and other homeowner and small property owner material on the MassDEP website.

Replace Old/Rusted Free-Standing Tanks - If you have an old, rusted free-standing oil tank in your basement, ask your oil dealer about whether it should be replaced. The Bureau of Waste Site Cleanup (BWSC) responds to a number of spills where the use of new high-flow fuel oil delivery systems "blows out" the ends of weaker tanks.

Replace Your Oil Supply Delivery line - By code, the oil tank in your basement has to be a certain distance from your furnace. Oil is transferred from the tank to the furnace by means of a delivery line. These lines are typically small-diameter copper tubing, and are usually buried below the concrete basement floor. Unfortunately, the corrosive nature of concrete tends to create holes in these lines, which could lead to the (substantial) leakage of oil into the soil below the basement floor. Often, this can occur for years without being noticed. Eventually, the oil may surface in a basement sump, storm drain, or neighboring drinking water well. Talk to your oil dealer about replacing these lines with more modern, corrosion-resistant, double-walled piping systems. This can usually be done for a modest price, and is one of the best insurance policies you can buy for pollution prevention!

This information is available in alternate format. Contact Michelle Waters-Ekanem, Director of Diversity/Civil Rights at 617-292-5751.

TTY# MassRelay Service 1-800-439-2370

MassDEP Website: www.mass.gov/dep

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Remove Old /Unused Fill and Vent Pipes - On occasion, an oil tank in a basement is removed, but the fill pipe (through the exterior wall) is left in place. Periodically, BWSC responds to spills where an oil delivery was mistakenly made to one of these disconnected fill and vent pipes - and where oil was pumped directly into a basement! If the tank is removed, immediately remove the fill and vent pipes. If the tank is unused, take steps to lock or secure the fill and vent pipes, to prevent accidental deliveries.

Septic Systems

Septic systems, and especially cesspools and drywells, are direct routes to the environment. NEVER discharge gasoline, oils or chemicals into these systems. Not only is this illegal, but it has the potential to contaminate soil and groundwater, and create a "hazardous waste" site that will be very costly to clean up. Of particular concern are chlorinated solvents, like trichloroethylene (TCE), trichloroethane (TCE) or perchloroethylene ("perc") - some of which were in the past marketed as drain cleaners. These chemicals are heavier than water, and will "sink" if discharged to the groundwater. They are also resistant to biological breakdown, and can travel great distances (up to a mile or more) in the groundwater. BWSC is aware of a number of neighborhood communities where private drinking water wells have been impacted (or shut down) because of contamination that likely came from septic system/dry well discharges.

Asbestos

In many older homes, asbestos-containing materials were used for insulation of furnace/stove piping and associated ductwork. In some homes, asbestos-containing cementitious siding materials and shingles were used. In either case, the inappropriate removal and disposal of these materials could expose you or your neighbors to cancer-causing asbestos fibers. For that reason, there are strict regulations on how these materials must be handled, and where they can go. Contact the appropriate MassDEP Service Center for more information and details if you are planning renovations that will involve disturbance or removal of these materials. Note that the unpermitted removal and disposal of asbestos materials is not only illegal, but may also result in the creation of a "hazardous waste" site that would fall under the jurisdiction of MGL c. 21E and the Massachusetts Contingency Plan - and necessitate an expensive cleanup.

Lead In Soils

Lead poisoning is one of the top environmental health threats to children. Over time, exposure to even low levels of lead can affect a child's growth, behavior, and learning ability. Children under six years of age are particularly vulnerable to lead poisoning. For more information see "Lead Contamination in Your Yard" on the MassDEP website.