

RESIDENTIAL UNDERGROUND HEATING OIL TANKS IN VIRGINIA

FACT SHEET (Revised 3/2022)

Following WWII heating oil began replacing coal as a popular source of fuel for domestic heat. Many thousands of oil storage tanks (both aboveground and underground) were installed across Virginia during the 1940s, 50s, 60s and 70s. The underground tanks installed during that period were constructed of steel, and most have developed leaks due to natural corrosion of the metal. Possible resulting soil and/or groundwater contamination and its effect on human health, property, and the environment, as well as responsibility for corrective action, are legitimate concerns.

Regulations

Heating oil Underground Storage Tanks (USTs) may be subject to State Water Control Law (SWCL) and/or State Building/Fire Codes. One that is in use and not leaking is in compliance with both.

State Water Control Law (SWCL)

Article 11 of SWCL requires that petroleum discharges to the environment be reported immediately to the Virginia Department of Environmental Quality (VDEQ), and it authorizes the VDEQ to require tank owners to take corrective action (e.g., abatement/cleanup) measures as necessary to protect human health and the environment. The Virginia Petroleum Storage Tank Fund (VPSTF) is available to Virginia tank owners to assist with the potentially high cost of VDEQ-required corrective action.

State Building and Fire Codes

Regarding USTs, both the Uniform Statewide Building Code (§108.2) and the Virginia Statewide Fire Prevention Code (§103.1) refer to the 2018 International Fire Code section 5704.2.13, which states that underground petroleum storage tanks that are leaking or out of service shall be emptied of flammable/combustible liquids and either removed from the ground or filled with an *approved* inert solid [This Code applies to the entire state but is implemented by local governments].

When should one suspect the presence of a UST? Is leakage typically apparent?

- 1. The age of a house is an excellent indicator as to the likely presence of an oil tank. Homes built prior to ca. 1980 often utilized oil heat at one time. The oil may have been stored in an aboveground or underground tank, or a sequence of both.
- 2. Leakage from aboveground tanks is usually apparent, but leakage from underground tanks is normally not. Sometimes excess water in a UST or unusual fuel consumption will signal leakage. Leakage may also be apparent if something gets impacted, such as a well, basement, or creek.
- 3. The best way to determine if a UST is leaking is the use of soil borings below the depth of the tank and recovery of soil for testing. The importance of having professionals, such as Pollard Environmental, perform such inspections cannot be overemphasized.

Likelihood of Leakage

Pollard Environmental has performed leakage inspections of more than 6,000 heating oil USTs in Virginia, and over 70% were found to be leaking. This statistic includes in-use and out-of-use tanks. The majority of the inspected tanks were over 50 years old, and the leaks were a result of holes near the bottom of the tank caused by natural corrosion of the metal (rusting).

Reporting Requirements / Corrective Action

As stated above, SWCL requires the reporting of petroleum releases to the VDEQ, which in turn determines the corrective action, if any, required to remedy the problem. The first priority is to stop the leakage by removing the remaining petroleum from the tank. In some instances, natural processes may satisfactorily remediate the contamination over time. More serious leaks posing risks to groundwater, water wells, basements, creeks, and/or other receptors often require more aggressive action such as excavation and proper treatment/disposal of contaminated soils.

Responsibility for Corrective Action

The owner of the UST when a leak/release is reported to the VDEQ is normally designated by the VDEQ as the responsible party (RP). The RP is responsible for corrective action (i.e., abatement/cleanup) when required by the VDEQ. Currently an RP has access to the Virginia Petroleum Storage Tank Fund (VPSTF) for financial assistance towards VDEQ-required corrective action.

Virginia Petroleum Storage Tank Fund (VPSTF)

In the event of a petroleum release from a storage tank, the VPSTF normally provides financial assistance for costs incurred for VDEQ-required environmental corrective action once a deductible ("financial responsibility") is met. For releases from heating oil tanks, the deductible is \$500. The VPSTF assistance is available for VDEQ-required corrective action only; it does not cover Building/Fire Code compliance costs that are exclusive of VDEQ requirements, and it does not cover new/replacement tanks. VPSTF assistance requires pre-approval of activities and accurate claim submittal, so it is important to have an experienced consultant, such as Pollard Environmental, handle this process.

Buyer's Due Diligence

When purchasing residential real estate containing a known or suspected heating oil UST, we recommend that the following items be included in the contract:

- 1. A <u>proper</u> leak/release inspection of all underground petroleum storage tanks shall be performed by Pollard Environmental, LLC (the buyer should select or approve of the inspection company). ^{1,2}
- 2. If there is a leak/release from the petroleum storage tank(s), it shall be immediately reported to the Virginia Department of Environmental Quality (VDEQ) and addressed per VDEQ specifications.
- 3. All out-of-use (regardless of how long out of use) and/or leaking underground petroleum storage tanks shall be properly removed or abandoned-by-filling per the Building/Fire Code specifications. [Note: because the Code allows for removal or filling, if a buyer wishes for a particular method of Code compliance, the desired method should be explicitly stated].
- 4. The site is to be reasonably restored to its original condition (if it is necessary that an active tank be taken out of service due to leakage, then an equivalent replacement tank or alternative source of heat shall be provided).
 - There is no certification or licensing for inspectors, so it is important that qualified personnel be selected to perform the inspection. We also recommend that the inspection company have professional liability insurance. Pollard Environmental, LLC meets these criteria.
 - ² If you are uncertain whether a UST exists, we can perform a due diligence inspection for evidence or a record of one.