



2013 FACT SHEET RESIDENTIAL UNDERGROUND HEATING OIL TANKS IN VIRGINIA

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 1950s, 60s and 70s. The majority of 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 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 2009 International Fire Code section 3404.2.13.1, which states that underground petroleum storage tanks that are leaking or out of use for more than 1 year 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 local interpretation may vary].

Recent Change in Building / Fire Codes

Effective March 01, 2011 the State Building & Fire Codes (see above) adopted the 2009 International Fire Code (IFC) requirements with regard to leaking or abandoned petroleum USTs (Underground Storage Tanks). The material difference between the new code and the previous one (2006 IFC) has to do with the in-place abandonment of the UST. Whereas the previous code allowed residential heating oil USTs less than 1,100 gallons capacity to be abandoned by removing the fuel and permanently sealing the fill pipe below grade (i.e., no tank fill was required), the newly adopted code requires USTs that are abandoned in-place to be filled with an approved inert solid. Typical approved inert solids are cement, foam, sand, or gravel, but approval may vary among localities. USTs that were previously abandoned without filling remain compliant (despite the change in Code) provided there is documentation that it was approved by a Code inspector. Also, some localities may allow a grace period before the change is enforced.

When should one suspect a UST? Is leakage normally apparent?

1. The age of a house is an excellent clue as to the likely presence of an oil tank. Homes built prior to 1980 typically utilized oil heat at one time. The oil may have been stored in an aboveground or underground tank.
2. Leakage from aboveground tanks is usually apparent, but leakage from underground tanks is commonly 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 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 4,000 heating oil USTs in Virginia, and over 70% were leaking or had leaked. This statistic includes in-use and out-of-use tanks. The majority of the inspected tanks were over 30 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 residential and farm 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 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 proper 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/they 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 addressed per state and local Codes/regulations. [**Note:** because the Code allows for removal, filling, or sometimes abandonment, 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 a replacement tank or alternative source of heat should be provided).

¹ 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.