Residential Heating Oil Tanks

The Problem

Many Thurston County residents have underground heating oil tanks no longer in use. These unused tanks can pose a problem for both homeowners and environment. A typical home heating oil tank lasts thirty years before corrosion causes leaking, but lifespan varies widely depending on the properties of the surrounding soil. A leaking tank will contaminate your soil, and possibly your neighbors' soil. These oil leaks can also migrate into groundwater, potentially polluting a source of drinking water. It is also possible that old or unused heating oil tanks will cave in, causing sink holes.

Homeowners can be held liable for contamination caused by a leaking tank on their property. Because of this threat of liability, many lending institutions and homebuyers require closure of unused heating oil tanks before they will finalize a sale. In addition, delaying the cleanup of any contamination may allow contaminants to spread and potentially increase cleanup costs. If you have an active heating oil tank, you may be eligible for coverage under the Heating Oil Pollution Liability Program (PLIA). For more information, call PLIA at 360-586-5997 or 1-800-822-3905.

It is typically in the best interest of a homeowner to remove an unused heating oil tank.

This fact sheet:
1. Outlines regulations applying to unused residential tanks.
2. Lists necessary steps to remove a tank or decommission it in place.
3. Provides some guidelines on hiring a contractor and analytical lab.

The Regulatory Requirements

Federal and state laws for operating underground storage tanks do not apply to residential heating oil tanks. However, under the WA Model Toxics Control Act (the state law governing investigation and cleanup of contaminated sites), you may be held liable for any damage caused by petroleum products leaking from your tank.

The Uniform Fire Code requires removal of underground storage tanks that have been out of use for more than one year. If removal of a tank will cause structural damage, the Fire Marshall may allow the tank to be decommissioned in place. The fire code also requires that tanks out of service for more than ninety days be safeguarded by having all flammable or combustible materials removed.
Your local building and/or fire department oversee enforcement of fire code requirements for residential tanks. Many jurisdictions require that you apply for a permit to remove or decommission a tank. The permitting process provides review of your site plan, inspection and written documentation. Permit applications often require a site plan or drawing showing the location of the tank in relation to other structures. Some jurisdictions also require written documentation regarding where you will dispose of your tank.

The building department or fire department will review your application and grant you a permit to have the tank removed or decommissioned in place. The following is a chart of the different municipal requirements in Thurston County.

<table>
<thead>
<tr>
<th>Location</th>
<th>Building Dept. Phone Number</th>
<th>Do I Have to Contact the Fire Dept.?</th>
<th>Are Permits &amp; Site Plans Required??</th>
<th>Is an Inspection Required?</th>
<th>Is a Soil Test Required??</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unincorporated Thurston County</td>
<td>786-5490</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes, if inspector detects contamination or if tank is decommissioned in place</td>
</tr>
<tr>
<td>Bucoda</td>
<td>278-3525</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Same as County</td>
</tr>
<tr>
<td>Lacey</td>
<td>491-5642</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Only if tank is leaking</td>
</tr>
<tr>
<td>Olympia</td>
<td>753-8314</td>
<td>Yes @ 753-8348</td>
<td>Yes</td>
<td>Yes</td>
<td>Same as County</td>
</tr>
<tr>
<td>Rainier</td>
<td>446-2265</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Same as County</td>
</tr>
<tr>
<td>Tenino</td>
<td>264-2368</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes, if inspector detects contamination</td>
</tr>
<tr>
<td>Tumwater</td>
<td>754-4180</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes, if inspector detects contamination</td>
</tr>
<tr>
<td>Yelm</td>
<td>458-8407</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes, if inspector detects contamination</td>
</tr>
</tbody>
</table>

* Obtaining the proper permit is the responsibility of the homeowner, not the contractor. However, many contractors include this process in their service. If your contractor obtains the permit, ask to receive a copy.
** Soil tests are always strongly recommended because they are the only way to legally document that your site is not contaminated.

**Tackling Your Tank**

You can meet the requirements of the Uniform Fire Code, as well as avoid possible future liability and real estate sales difficulties, by completing the steps outlined below. Your lending institution may have further requirements. Make certain to check with them before beginning any tank work.

1. **Decide if you will do the work yourself or hire a contractor.**
   You can accomplish many of the following tasks on your own. However, persons inexperienced with these procedures may harm themselves, or the environment. Therefore, unless you have suitable knowledge, training, and experience, you should hire a qualified firm to do this work. **The following steps will give you a general idea about the procedures that a contractor can perform.**
2. **Determine what is in your tank.**
   Insert a long stick to the bottom of the tank to determine the depth of the oil inside. It is possible that water will also be inside, which might indicate a leak in your tank. To detect water in your tank, coat the stick with a paste that changes color when it contacts water. This water-finding paste is inexpensive and can be purchased from most heating oil companies and hardware stores.

3. **Pump any remaining oil from the tank and dispose of it properly.**
   Completing this step as soon as possible may prevent contamination of soil and ground water. However, this is not a long-term solution. Abandoning an empty tank on your property can leave you open to the liability of cave-ins, or past leakage migrating into ground water.

4a. **Remove and dispose of the tank.**
   This solution is a better choice for homeowner than the next option (step 4b), for several reasons:
   - The Uniform Fire Code requires removal of unused tanks unless doing so will cause structural damage.
   - Soils contaminated by a leaking tank can be located and cleaned up.
   - It is easier to take soil samples when a tank has been removed.
   - Many lending institutions and buyers require unused tanks be removed as a condition of sale.

   It is a good idea to take photographs of the removal process for your files. Also find out where your tank is going; it should not be stored at your home. **Obtain documentation that the tank was disposed of properly.** To be recycled as scrap metal, your tank must be properly cleaned out.

4b. **Decommission the tank in place.**
   If the removal of a tank could cause structural damage, it may be decommissioned in place. Materials such as cement slurry are used to "fill" a tank in place. However, consider the following:
   - You may be required to have the soil beneath the tank tested. Because getting soil samples from underneath the tank is difficult, this may cost more than removing the tank itself.
   - The tank must be pumped out and cleaned before it is decommissioned in place. Remember, all oil, rinsate (rinse water), and sludge must be disposed of properly.

5. **Test soils.**
   Check the chart in the previous section to see if this step is required in your jurisdiction. Under the Model Toxics Control Act, these tests **are** required if contamination is present. Even if a leak is not detected, soil tests are beneficial to homeowners because they are the only way to legally document that the property is not contaminated. At least two samples should be taken - one from beneath each end of the tank. These samples should be analyzed for total petroleum hydrocarbons (TPH) as diesel, using laboratory method NWTPH-D. Per the Model Toxics Control Act, cleanup is not required if the results from the soil test show less than 2000 parts per million (ppm) TPH. Soils with TPH levels less than 2000 ppm can be left on your property or taken to a licensed landfill. If the soil has concentrations of TPH greater than 2000 ppm, call Ecology’s Toxics Cleanup Program at (360) 407-7170 for more information about contamination cleanup. **If you are taking soil samples yourself, make certain to call a laboratory before taking the soil sample to receive specific instructions about the sampling procedure.**

6. **Remove and dispose of any contaminated soil.**
   Be sure to obtain records of proper disposal of contaminated soils. Under Thurston County's Solid Waste Ordinance, soils containing more than 2000 ppm of TPH must be taken to a treatment facility for petroleum-contaminated soils. Currently, no such facilities exist in Thurston County, but they can be found in neighboring counties. In some cases, the county may approve on-site remediation. For more information, contact the Thurston County Health Department’s Solid Waste Program at (360) 786-5461.
7. **Documentation.**
Keep a file of all removal and disposal records to protect yourself in case future contamination is found, which may be associated with the tank. This file should include copies of permits, lab results, disposal records for tank, soils and wastes, photographs, and a report from the contractor about cleanup activities.

### Working with Contractors and Laboratories

Several companies in Thurston County and dozens of companies around Puget Sound provide services to safely close or remove old home heating oil tanks. Other companies may provide these services as well. Look under "Tank-Removal," "Oil Waste," or "Tanks" in the telephone book. Prices can vary widely; we recommend that you do thorough research and obtain several bids before selecting a contractor.

**If you hire a contractor, you are still liable for any environmental contamination. Therefore, it is vital that you carefully research your options. Some important questions to ask contractors are:**

1. Are they experienced? Can they provide references?
2. Do they have environmental or pollution liability insurance? What activities or services are covered?
3. Do they collect soil samples? Which laboratories do they use to analyze the samples?
4. Where will the tank, oil, and rinsate (contaminated water from rinsing out the tank) be taken?
5. What documentation, labeling and other paper work are provided? (See number seven above.)

Several labs in the area perform the appropriate soil test mentioned in this fact sheet. Look under "Laboratories - Analytical" or "Soil Testing" in the phone book. We recommend that you obtain several quotes or bids before selecting a lab.

Some important questions to ask a lab are:

1. Are they familiar with method NWTPH-D? Do they perform it regularly? Can they provide references?
2. What are their sampling and shipping procedures? Do they provide the sample container?
3. How much do they charge per sample? What kind of quality control do they offer?
4. How long will it take to get the results and what type of documentation do they provide?

### Additional Information
For specific requirements that apply in your jurisdiction, beyond the guidelines described in this fact sheet, please contact the building department noted on page two.

In 2000, Thurston County prepared a new set of fact sheets on small heating oil tanks. The “Tank Talk” folder includes:

- Guidelines for Decommissioning Residential Heating Oil Tanks
- Questions and Answers
- Minimizing Leaks and Spills
- Contractor List
- State of Washington Heating Oil Pollution Liability Insurance Program (PLIA)

To receive the Tank Talk folder, please call the Business Pollution Prevention Program at (360) 867-2664, TDD line (360) 867-2603, Monday through Friday during regular business hours. The program also has a number of other fact sheets that can be requested by calling the office or viewed on our website: [http://www.co.thurston.wa.us/health/ehhw/index.html](http://www.co.thurston.wa.us/health/ehhw/index.html).

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