

CITY OF VANCOUVER

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RESIDENTIAL UNDERGROUND STORAGE TANK REMOVAL

Many homes in Vancouver were heated by furnace oil particularly prior to natural gas becoming available which started in 1957. The furnace oil was stored in underground tanks initially because above ground tanks were not allowed in Vancouver. Most tanks were located in the back yards of residences with the tank sizes ranging from 300 gals to 1000 gals. As conversions to natural gas took place the oil tanks were commonly left in the ground sometimes having been pumped out of any remaining oil, but not always.

Eventually all tanks will corrode or rust out; any oil which may be remaining in the tank will leach into the ground. It is very common for the oil to find its way into the perimeter drainage system of the house whereby it will flow into the storm sump. When this happens a strong fuel oil odour will permeate the inside of the house. In worst case situations the oil will run into a neighbours drainage system causing the same odourous problem in the neighbours house.

Bylaw Requirements

The City of Vancouver Fire By-Law No.8191(sec. 4.10.3) and the City of Vancouver Sewer and Watercourse By-Law No.8093 (sec.5.3) both require that tanks which will not be reused or have been out of service for 2 years shall be removed. If the Fire Chief determines that it is impractical to remove the tank then it shall be filled with an inert material.

The Removal Process

It is strongly recommended that contractors who are experienced in tank removals be contracted to carry out the work. A number of these contractors can be found in the yellow pages under " tank-installation/cleaning/removal." or "environmental services."or you can contact the Environmental Protection Branch at 873-7567.

A tank removal permit issued by the Fire Prevention Department must be obtained prior to any work being done. The Fire Prevention office is located at 456 W Broadway, tel.873-7595. A copy of the permit would be kept in the City's Permits and License's data resource centre. All conditions noted on the Tank removal Permit must be followed.

The tank should be dipped to determine if there is any oil remaining in it; any oil that is still in the tank must be pumped out and taken to an approved disposal/recycling facility before the tank is removed. Following the tank removal a determination should be made on whether there is any soil or groundwater contamination. The preliminary assessment can be accomplished using sight and smell. Obvious signs of contamination would be oil pooling in the excavation or oil which is floating on water which may have accumulated in the tank basin. Soil from the bottom sides and ends of the tank basin should be smelled to determine the presence of oil. Soil and groundwater that has been contaminated must be remediated. This could mean removal of all soil that has been impacted. It may be necessary to have soil samples taken to a laboratory to confirm that there is no contaminated soil or groundwater left on the site.

Oil that has entered the drainage system should be flushed by placing a hose down the nearest outside drain (usually where the drain from the gutters enters the ground) and allowing it to run fully open for an hour. The oil which is flushed into the storm sump should be skimmed off and collected for disposal. The storm sump lid should be covered with plastic which is taped to the floor to stop the oil odour from entering the house. This flushing/skimming process will have to be repeated until there is no oil entering the sump.

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Environmental Protection Branch