Living with an oil tank

An oil tank needs regular care, like a car.

Oil leaks are our most-common source of contamination in Nova Scotia, although the numbers of spills are going down.

Did you know that a slow drip from an oil tank beside your house can flow deep into the ground? Leaving it there can harm anyone who goes near the spill or lives in the house. It can also go onto a neighbour's property or into the groundwater. The law says that you must clean it up. Without the right insurance, cleaning up a domestic fuel oil spill may cost you anywhere from a few thousand to many thousands of dollars.

This checklist walks you through steps you can take to protect yourself and prevent spills.

General wisdom

- Do not install a used tank. Re-using tanks is against the law.
- Do NOT use oil pumped out of an old tank. The sludge in the oil is full of microorganisms, acids, and water. These can destroy a new metal tank quickly, sometimes in less than a year.
- Do NOT patch a tank. It is probably leaking because it has corroded from the inside.
 Catch any oil that leaks and get a new tank.
- If something looks like it is leaking or smells like it is, place a container under the tank to find out if you have a leak.
- If you know you have a leak, contain it as quickly as possible with rags, a container, or a tarp piled with soil. Have the oil pumped out and get a new tank. Notify Nova Scotia Environment.
- Check from time to time for a line that looks like someone drew it along the bottom of the tank. Also check for what looks like little icicles hanging down from the tank. These mean your tank is worn out, and you are close to having an emergency. Do NOT touch anything. Put something under the tank to catch or contain any fluid in case it spills. Have the tank pumped. Get a new tank.

Buy the tank that meets your needs

- Look for metal tags or labels that say
 National Standards of Canada and
 Underwriters' Laboratories of Canada.
- Measure the benefits against the cost for things like these: double walls, lined, 2.5mm or 12-gauge steel, stainless steel, fibreglass, composite plastic versus metal. Spending more now may save you a lot of money later.
- Look at what new technologies make the tank safer and make it last longer. Weigh what they give you against what they cost. These include alarms that let you know there is a leak, and a device to stop spills.
- Ask your oil company about a maintenance package.

Install the tank in the best place

- Hire someone who is trained to install an oil tank. Work with them to find the best place to put it.
- Put your tank inside if possible. Indoor tanks last longer, work better, and are less likely to leak.

The inside tank

- Add a fuel safety valve that shuts the oil line off if there is a fire.
- Put a drip tray under the tank, to catch a leak before it contaminates the basement.
- Leave a clear pathway for people to move around the tank without touching it.
- Make sure you can see all sides of the tank to check it for leaks.

- Protect the vent and oil-level gauge from getting bumped.
- Run the vent pipe and fill pipe to the outside.
- Keep all parts of the tank, the oil supply line, the oil filter on the fuel line, pipes, and gauges away from spots where water may collect or leak into the basement.
- Put the oil supply line above the basement floor. It is illegal to bury a line as concrete can corrode copper. A buried line can leak for a long time before you discover the problem.
- Use oil lines that have a protective coating, such as covered copper tubing.
- If the oil supply line is in a walkway, cover it with something you can walk on to protect the line from being bumped or squashed. Do NOT let the line touch the floor.

If inside is in the garage

Put in a post or something solid to protect the tank from being bumped.

The outside tank

- Put in an antisiphon device to stop oil from spilling if the supply line breaks or is cut.
- Set your tank on concrete that is reinforced, where there is good drainage under it to keep the ground from getting frost heaves or from packing down.
- Put your tank on ground that slopes away from the house, where ice and water will NOT drop onto it. Do not block any windows.
- Put your tank downhill from your well, if possible, to stop a leak from going into your water.

Maintain your tank

The inside tank

- Check for the smell of oil.
 - Oil that goes down the floor drain can contaminate sewers and drinking water.
 - The vapour from oil, what you smell, may cause harm to people.
- Check the oil filter on the supply line for rust or an oil stain under it.
- Seal any floor drains and other openings, and make sure the tank is not near a sump or sump pump assembly.

The outside tank

- Install it so that air can move around your tank. Keep it clear of tall grass, leaves, ice, snow, and insect nests that break down the outside of the tank and hold water against the tank.
- Check the pipes on the top that are used for venting and filling the tank whenever the tank is filled. Look for cracked pipes that need to be fixed or replaced. Look for caps that are threaded wrong and put them on right.
- Look at welded joints, at the ends of the tank and where pipes come out of it. These may be the first to leak.
- Watch for liquid on dents, cracks, and weld seams. If you find any, you need to replace your tank soon.
- Keep your tank painted but watch for rust outside the tank. Some rust is not usually a problem. Watch for rust bubbles like those

- you get on a car, because oil tanks usually corrode from the inside, in the bottom quarter of the tank.
- Do not touch rust bubbles or damp spots.

 They may start to leak if you do. If you see these, your tank is likely ready to be replaced. Put down something to catch any possible leak and get a new tank.
- Make sure your tank does not start to lean. The ground under it can shift.

 Tanks are tall and narrow so they can fit through doorways. That means they are not very stable. A full tank weighs about 1000 kilograms or one tonne. Get the tank levelled right away to keep it from tipping.

Work with the **fuel company**

- Have them check your oil filter once a year.
- Have them check the oil filter box. The box can rust and let oil leak out.
- Have them inspect your tank and furnace once a year.

Get rid of the old tank

- Ask the company bringing a new tank if they will take away the old one.
- Ask your oil company to pump out any oil left in the tank and offer the tank to an authorized recycler.

Get insurance that meets your needs

Get insurance for cleaning up contamination. The extra cost for the right insurance is fairly low. The cost to clean up is high.

- Make sure your policy protects you and deals with all of the contamination. Weigh what the policy gives you against what it costs.
- Find out exactly what your policy covers.

 Some policies cover only cleaning up your neighbouring properties if they become affected. Some cover your property and not your home. Some cover cleaning up all property that is affected.
- Ask what the payment limits are. Ask if there are other limits that apply.
- Look for a better rate for some types of oil tanks. Get all the details.

For more information on oil tanks please refer to "Installation and Environmental Management Guide for Aboveground Domestic Oil Tanks in Nova Scotia."

novascotia.ca/nse/petroleum/docs/ OilTankinstall.pdf