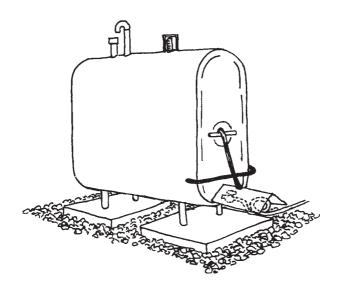
# Home Heat Tank Safety

What you should know about your home heat tank

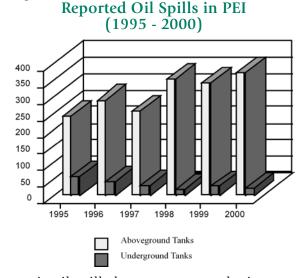




Fisheries, Aquaculture and Environment

## Did You Know?

There were over 375 recorded oil spills in Prince Edward Island in 2000. More than 240 of these spills were from home heat tanks either inside or outside aboveground.



Domestic oil spill cleanup costs can be in excess of \$150,000. Common spill cleanups can easily cost \$5,000.

Insurance coverage for home heat tank oil spills will vary depending on the insurance company. Coverage will range anywhere from "no coverage" to "full coverage." It is recommended that you contact your insurance company and discuss your policy, before a spill occurs.

Just one litre of leaked oil can contaminate one million litres of drinking water! This fact is an extremely troubling one in Prince Edward Island as groundwater is the only source of drinking water for most Island homes.

A survey conducted in 2000 revealed that 63% of home heat tanks in Prince Edward Island do not meet the Department of Fisheries, Aquaculture and Environment's installation standards. This is a 17% increase over the initial survey conducted in 1998.

# Reasons for Leaks and Spills

There are two main factors which contribute to leaks and spills from aboveground home heat storage systems: internal corrosion and improper installation.

#### **Internal Corrosion**

Nearly all fuel oil tanks corrode from the inside out. Inevitably, through condensation and other means, there will be an accumulation of water and sludge at the bottom of every tank. These compounds are the cause of internal corrosion.

Tanks with a bottom outlet product line connection can help reduce the buildup of corrosive water and sludge.

Outdoor installations are much more susceptible to condensation as a result of day-night temperature changes.

Tanks may look "as good as new" but rust may be eating away at the shell of the tank. Regulations require that tanks be replaced every 15-25 years, depending on the design and steel thickness.



When having your home heat tank replaced, take care not to pump the water and sludge from the bottom of your old tank into a new one. Cross contamination can cause a home heat tank to corrode in less than two years.

Regulations require that ALL tanks be tested and certified by a Standards Council of Canada approved testing agency, such as Underwriters Laboratories of Canada.

# Petroleum Storage Tanks Regulations

Effective June 16, 2001, home heat tank installation and replacement is regulated on Prince Edward Island under amendments to the Petroleum Storage Tanks Regulations.

Homeowners will have a period of five years from the implementation date to comply with these amendments.

### **Regulation Requirements**

In part, the Petroleum Storage Tanks Regulations require that:

Effective September 2002—no person shall install, alter or remove a home heat tank—unless the person is the holder of a valid Home Heat Tank Installer's licence.

By September 2006—ALL home heat tanks in Prince Edward Island must be inspected by the holder of a Home Heat Tank Installer's licence or a Home Heat Tank Inspector's licence, and have a valid identification label permanently affixed to the vent pipe.

By September 2007—fuel oil cannot be delivered to a home heat tank which has not been inspected and does not bear a valid identification label issued by the Department of Fisheries, Aquaculture and Environment. The home heat tank replacement date will be indicated on the identification label.

Home heat tanks must be replaced every 15-25 years, depending on the tank design and steel thickness as follows:

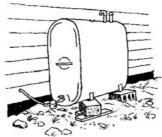
14 gauge (2 mm) with end outlet	15 years
12 gauge (2.3 mm) with end outlet	20 years
14 gauge (2 mm) with bottom outlet	20 years
12 gauge (2.3 mm) with bottom outlet	25 years

Approved, non-corroding home heat tanks are exempt from these regulations.

# **Proper Installation**

Seasonal weather conditions can take a toll causing ground shifts and frost heaves. When installing a home heat oil tank, stability and weather conditions must be considered.

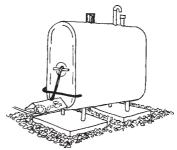




#### Your home heat tank must:

- Be installed on a stable base such as reinforced patio stones or a concrete pad, with clean gravel or tamped soil beneath.
- Have a horizontal vibration loop in the oil product line.
- Wherever possible, be installed inside to provide better protection from adverse weather conditions and vandalism.
- Include weather protection devices on outside tanks to help prevent damage caused by snow and ice buildup.





Note: Your home heat tank must be of a type which has been certified by a Standards Council of Canada approved testing agency, such as Underwriters Laboratories of Canada.

To Report a Fuel Oil Leak or Spill Contact:

902 368 5057 during office hours or 1 800 565 1633 after hours Review the following questions on the installation of your home heat tank; and if you circle "No" for any item, you should have your home heat contractor address the issue.

Do the fill and vent pipes exit your Yes No

## **Indoor Installations**

home?

HOHIE:		
Does your oil line run on top of the basement floor?	Yes	No
Is there at least five feet of clearance between your tank and furnace?	Yes	No
Are unused fill and vent pipes capped or removed?	Yes	No
Is your tank approved by an approved testing agency?	Yes	No
Is your tank or component parts (i.e., product filter) freestanding and not embedded in the concrete floor?	Yes	No
Does your tank have a properly operating vent whistle?	Yes	No
Outdoor Installations		
Is your tank on a stable surface such as reinforced patio stones or concrete pad?	Yes	No
Is there a horizontal vibration loop in the oil product line?	Yes	No
Is your filter inside your house (if possible)?	Yes	No
Are your fill and vent pipes at least two feet from any window or door?	Yes	No
Do you have weather protection for your filter and product line?	Yes	No

# Taking Care of Your Tank

Whenever possible, tanks with an end outlet product line connection should have any sludge and water removed annually by a reputable tank

Homeowners should inspect the vent and fill pipes and the tank bottom for leaks and spills, before

Be cautious when rubbing your hand along the bottom of the tank to check for damp or wet spots.

and after each fill.

The slightest pressure may cause a pin hole leak in a corroded tank. Remove debris such as leaves, ice, snow and insect nests from on or under your tank.

to move, have the tank leveled immediately. Consider having the tank installed on washed gravel and reinforced patio stones.

If frost heaving or ground settling causes your tank

On indoor installations, route or protect your oil product line from physical damage by installing the line around the perimeter of the basement wall.

Effective April 2000, fuel lines cannot be installed underneath a foundation wall or basement floor.

This includes fuel lines enclosed in a protective, non-corrosive tubing.

Never install a used or rebuilt tank.

When replacing your tank, ensure that no water or sludge is transferred from the old tank into the new one. For best results, let your old tank run dry.

Keep your tank filled during the summer so less water from condensation accumulates inside.

Have your tank and accessories checked as part of your annual furnace maintenance.

## Other Issues

#### **Vent Whistles**

Vent whistles are a mandatory part of any home heat tank installation. This device allows the oil delivery person to know when your tank is full. An inoperative whistle may lead to an inside tank being unknowingly overfilled, or result in an outside tank spill due to product expansion caused by daily temperature changes.

#### **Weather Protection Devices**

Weather protection devices which help protect the filter and product line are mandatory on outside home heat tank installations. These devices help protect vulnerable parts from being broken or damaged by the natural elements, such as an accumulation of snow and ice. They also help prevent damage from falling debris from roof tops or trees.

## **Reporting Leaks**

The Environmental Protection Act requires that all individuals report known oil spills or leaks. Every leak or spill should be reported to accurately assess potential property or environmental damage.

#### For More Information

For additional copies of this brochure or additional information on home heat tank safety, contact the Prince Edward Island Department of Fisheries, Aquaculture and Environment at:

### 902 368 5042 www.gov.pe.ca/fae/pp-info

To obtain a copy of the department's Construction Standards for Installation of Aboveground Home Heat Storage Systems, or the Petroleum Storage Tanks Regulations, contact Island Information Service at:

902 368 4000 or 1 800 236 5196