

# Brownfields Newsletter

KNIK TRIBE

March 2025



## Protecting Your Home, the Environment, and Your Wallet: Home Heating Oil Tank Safety

Reliable home heating is a big priority here in Alaska given our long and (*normally*) cold winters. For many families, heating oil is the primary source of warmth during the harsh, long months of winter. However, maintaining a heating oil tank is often overlooked—until a problem arises. To avoid costly repairs, running out of fuel, or even a fuel spill, it's essential to understand the importance of proper heating oil tank care and maintenance.

This edition of the newsletter contains information that every Alaskan homeowner with a heating oil tank should know about keeping their tank in safe, efficient condition throughout the year. Regular Inspections, timely replacement, and preparations in case of an issue can go a long way in helping you avoid serious issues for which you could be held financially responsible and leave you in the cold.

For additional information, visit the ADEC's webpage on Home Heating Oil Tanks at:  
<https://dec.alaska.gov/spar/ppr/prevention-preparedness/hho-tanks/>

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# Look for Signs of Trouble: Tank Inspections

One of the best ways that you can prevent issues from occurring with your heating oil tank is to perform regular inspections. Being proactive and looking for signs of problems before they occur can prevent most tank failures, saving you money, keeping you warm, and protecting the environment.

Some of the obvious signs of issues include:

- **Rust and Corrosion:** water can lead to rust on metal tanks, especially when they are exposed to the elements. Check your tank for sign of corrosion and/or flaking. Corrosion can weaken your tank's structure and lead to leaks, which can be costly and dangerous. Be sure to empty oil/water separator regularly to remove water from the system. Tanks can rust from the inside at the bottom of the tank where water collects.
- **Leaks and Drips:** Small leaks are often the first sign of a problem. Look for any oil stains or puddles around your tank's base, valves, or connections. If you spot a leak, act immediately by contacting a professional for repairs. Even small leaks can lead to serious environmental harm and can negatively impact human health.
- **Cracks in the Tank:** Cracks in the tank's exterior can develop over time due to freezing and thawing or impact. These cracks can worsen quickly and cause major fuel loss. If you notice any, contact a professional to assess the tank's condition.

- **Fuel Level:** Ensure that your tank is not running too low on fuel. Running out of oil can leave your home without heat during the coldest months. If your fuel is running out earlier than expected based on use, it could indicate that there is a leak in your fuel system. Never fill the tank all the way, because the fuel expands in heat and can overflow.
- **Tank support and Location:** Ensure your tank's support system is structurally sound and that the tank is not located under the drip edge of your roof where falling snow and ice could endanger the tank.
- **Tank Plumbing:** Ensure the lines from the tank to your house have some excess to allow for movement and are protected by conduit or otherwise attached to the structure to avoid accidental severing of fuel lines. Fuel outlet plumbing should be at the very bottom of the tank to direct water to the oil/water separator and should be equipped with a shutoff valve.

These are a few of the signs of trouble that you should keep an eye out for. The Alaska Department of Environmental Conservation created the graphic below to help homeowners perform a more comprehensive inspection of their home heating oil tank.

## Once Around Your Tank Can Save You Money!

- 1) The vent pipe is clear of debris and insects.
- 2) The tank is free of dents and rust and is painted to protect it.
- 3) The fill pipe has a cover to keep water out.
- 4) The fuel lines are protected from damage. Lines in the ground or concrete are inside liquid-tight conduit.
- 5) The tank, especially the ends, are free of stains or wet spots.
- 6) The fuel system is protected from over head damage such as falling ice, snow or trees.
- 7) The fuel filter is protected from damage and is not leaking.
- 8) The tank legs or stand are in good condition and are on a stable foundation.
- 9) If the tank is more then 15 years old, consider replacing it.

# What if There is an Issue With My Tank??

## If you notice a spill or leak...

While prevention is the best approach, it is wise to be prepared in case there is an emergency. If you observe a leak in your tank or the associated infrastructure, it is important that you know how to respond.

- Try to **Identify the source** of the spill or leak
- **Turn off the oil supply** if appropriate, to prevent further spillage
- **Stop or contain the spill** to the best of your abilities. This could include calling your fuel provider to have the tank emptied safely, and/or using absorbent materials to contain the spill and minimize impacts
  - It is helpful to have a spill kit at your home to address potential issues quickly
- **Report the spill to ADEC.** Information on spill reporting is found on the next page.

Addressing a spill or leak is important to minimize impacts to your health, the environment, and your finances. Even small leaks add up quickly:

OIL SPILL COST BY DROPS			
RATE OF LEAK	GALLONS PER YEAR LOST	DOLLAR PER YEAR LOST*	TONS OF CONTAMINATED SOIL **
Drop Every 10 Seconds	40	\$180	150
Drop Every 5 Seconds	80	\$360	300
Drop Every Second	410	\$1,845	1,500
Three Drops Every Second	1,200	\$5,400	4,500
Stream that Breaks into Drops	8,600	\$38,700	32,000

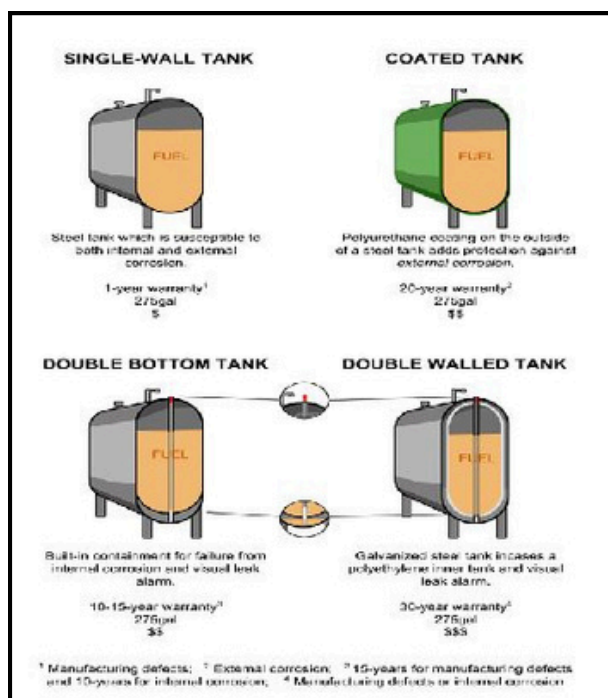
(Drops are approximately 11/64 inch in diameter.)  
 \*At \$4.50 per gallon of heating oil  
 \*\* Average: 1000 ppm total petroleum hydrocarbons

## Does my tank need replaced?

Many heating oil tanks are designed to last for decades, but they do have a lifespan, and issues can arise at any time. It is important to replace your tank *before* it fails and causes a spill or leak. So, how do you know if it needs replacement?

- **Age of the Tank:** if your tank is older than 15-20 years, it may be time for a replacement. Contact a professional to help you determine if a new tank is needed.
- **Leaks or Other Issues:** If you've noticed any leaks, rust/corrosion, or other issues, you should contact a professional for an assessment of your tank.
- **Tank Materials:** Newer tanks are made of more durable, corrosion-resistant materials, which can provide a longer service life compared to older tanks.

ADEC made the graphic below regarding the common types of tanks available:



## How to Report a Spill:

If you have observed a release of a **hazardous substance**, it needs to be reported **immediately**.

If you have observed a release of oil/petroleum:

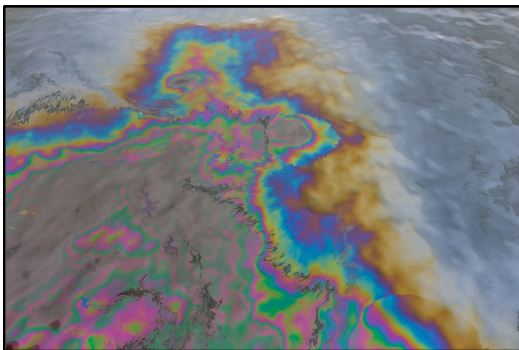
- To Water-
  - **any** release must be reported **as soon as you have knowledge** of the discharge
- To Land-
  - **More than 55 gallons**- must be reported **as soon as you have knowledge** of the release
  - **10-55 gallons**- must be reported within **48 hours** of becoming aware of the release
  - **1-10 gallons**- written record of these releases needs to be maintained and provided to ADEC by the person in charge of a facility or operation

Spills need to be reported to the Alaska Department of Environmental Conservation (ADEC):

- ADEC Response Team: 1-800-478-9300 or 907-269-0667
- Report Online: [ReportSpills.alaska.gov](http://ReportSpills.alaska.gov)

In addition, you must report a suspected underground release in any amount from an Underground Storage Tank (UST) within 24 hours to:

- UST Unit: 907-269-3055 or 907-269-7679



## Where to Report a Suspected Brownfield

If there is a site that you suspect may be a brownfield, please contact the Knik Tribe Brownfields Program. Once we have some basic information about the site from you, we can further investigate the site and determine a course of action.

You can report sites to the Brownfields Program by filling out a reporting form on our website (listed at bottom of page), emailing [krobillard@kniktribe.org](mailto:krobillard@kniktribe.org), or you can report in person at the Natural Resources Department located at 1800 Laurel Drive, Palmer, AK.

Important information to provide us regarding your site of concern:

- **Location**- be as specific as possible. Addresses, coordinates, or intersections are helpful
- **Concern**- what makes you think this is a brownfield? Did you observe contamination? Why do you suspect contamination might be present?
- **Contact Information**- If you provide your contact information, we can reach out and gather additional information if needed and keep you up to date as we investigate your reported site.



KNIK TRIBE BROWNFIELDS PROGRAM

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<https://bentehsteamacademy.wixsite.com/knik-tribe/alaska-knik-tribe-brownfields-program>

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