

How to Report

Spills must be reported to the **NU Spill Report Line** without delay in one of the following ways:



Calling the NU Spill Line
at (867) 920-8130



Emailing a completed Spill
Report to spills@gov.nt.ca



Faxing a completed Spill
Report to 867-873-6924

This Guideline has been prepared by the Department of Environment's Environmental Protection Division and approved by the Minister of Environment under the authority of Section 2.2 of the Environmental Protection Act.

This Guideline is not an official statement of the law and is provided for guidance only. Its intent is to increase the awareness and understanding of the risks, hazards, and best management practices associated with Heating Fuel Tanks. This Guideline does not replace the need for the owner or person in charge, management, or control of Contaminants to comply with all applicable legislation and to consult with Nunavut's Department of Environment, other regulatory authorities, and qualified persons with expertise in the management of these tanks.

Copies of this Guideline are available upon request from:

Department of Environment Government of Nunavut
P.O. Box 1000, Station 1360, Iqaluit, NU, X0A 0H0
867-975-7700

An electronic version of this Guideline is available at www.gov.nu.ca/environment/

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List of Acronyms and Units

Acronym	Definition
CSA	Canadian Standards Association
ENV	Department of Environment, Government of Nunavut
ECCC	Environment and Climate Change Canada
EPA	Environmental Protection Act (1988)
NWT	Northwest Territories
OBM	Oil Burner Mechanic
OHST	Oil Heat System Technician
ULC	Underwriters Laboratories of Canada
UL	Underwriters Laboratories [USA]

Units	Description
Kg	Kilogram (1,000 grams)
L	Litre
Lbs	Pounds

2 Introduction

This Guideline is intended to prevent heating fuel spills by educating property owners about their tanks and accessories. It also covers maintenance practices and requirements for new tank installations.

As a Guideline, this document does not carry the force of law. It is intended to help comply with laws, specifically the *Environmental Protection Act (EPA)* (1988) and its associated regulations, as well as other environmental laws enforced in Nunavut.

The *EPA* prohibits the discharge of **Contaminants**, such as heating fuel, into the environment. The *EPA* also says that the person in charge, management, or control of the **Contaminant** at the time of a spill is responsible for the cleanup.

This means that if you are a homeowner and your heating fuel tank leaks, you are responsible for the cleanup of that fuel spill. A spill cleanup, called a **Remediation**, can be very costly, and often constitutes an enormous financial burden. For this reason, the Department of Environment (ENV) encourages every property owner in Nunavut to buy insurance that covers fuel spills. Even if all precautions are taken, there is always the risk that a costly spill could occur.

This Guideline is provided as a courtesy only. It is not a complete manual on the proper installation and maintenance of heating oil tanks and accessories. Using it does not guarantee that the tank installation being inspected is safe.

Tank owners should also regularly have a qualified **Oil Heat Systems Technician (OHST)/Oil Burner Mechanic (OBM)** look over their tank to make sure it is in a good state.

The definitions of most words in **Bold** can be found in the [Definitions](#) section at the end of this guideline.

Refer to [Appendix A](#) for a diagram of a 275-gallon fuel tank and its parts.



Important

The Department of Environment (ENV) encourages every property owner in Nunavut to buy insurance that covers fuel spills. Even if all precautions are taken, there is always the risk that a costly spill could occur.



Roles and Responsibilities



3.1 Tank Owners

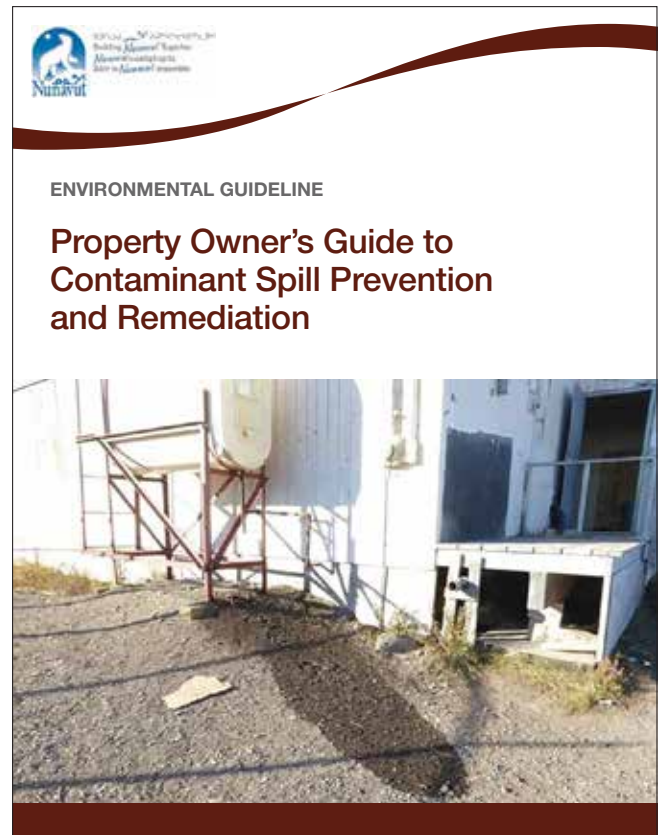
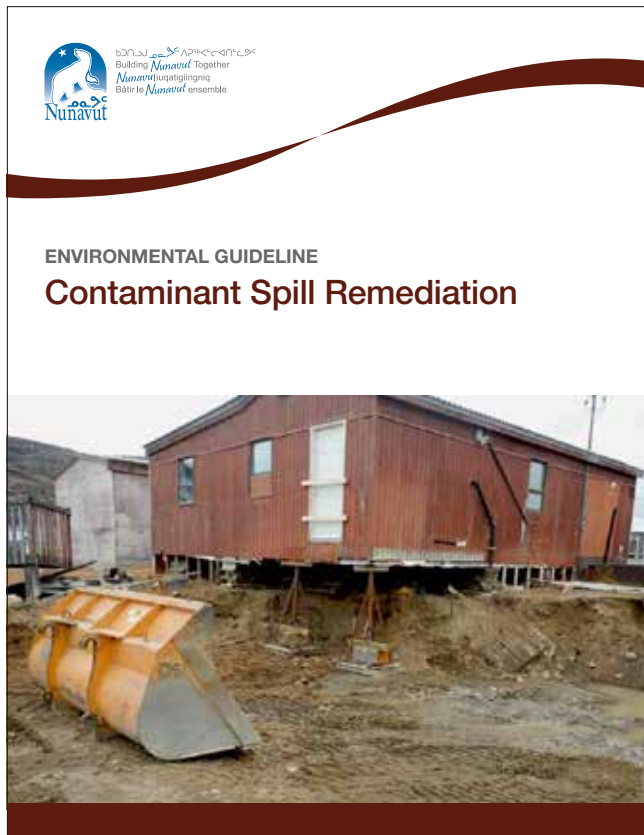
Tank owners are responsible for making sure that their tanks and accessories are kept in good working order and comply with current regulations and codes of practice.

A tank owner who becomes aware of a spill, or has reason to believe that a spill has occurred, must immediately take measures to manage the contamination.

The spill must be stopped as soon as possible. Once the safety of people in the area is assured, the owner should without delay report the spill to the **NU Spill Report Line** at **867-920-8130**. An email can also be sent to spills@gov.nt.ca.

Spills above or likely to be above the **Reportable Quantities** ([Appendix G](#)), must be reported in accordance with the *Spill Contingency Planning and Reporting Regulations* (1993).¹ A Spill Report Form that can be used to report a spill is included as [Appendix H](#).

Refer to the Environmental Guideline for *Contaminant Spill Remediation* and the *Property Owner's Guide to Contaminant Spill Prevention and Remediation* for more information.



¹ Spill Contingency Planning and Reporting Regulations 1993 NWT Reg (Nu) 068-93 s 9

3.2 Fuel Suppliers



Fuel suppliers have the responsibility to ensure that fuel is delivered safely. If a tank cannot safely receive fuel, the delivery must be stopped and the owner notified. Here are some common reasons why fuel delivery is unsafe:



The **Tank Stand** is not secure



The tank is leaning dangerously



The **Tank Whistle** is not working

3.3 Government of Nunavut



Department of Environment

The Department of Environment's authority is derived from the *Environmental Protection Act* (1988), which prohibits the discharge of **Contaminants** to the environment.² The *EPA* enables the Minister of Environment to take actions to ensure that appropriate management measures are in place for potential **Contaminants**.

The ENV conducts inspections of fuel storage tanks with a capacity of **2500L or less**. Fuel storage tanks with a capacity of **over 2500L** fall under the jurisdiction of **Environment and Climate Change Canada (ECCC)**. The ENV also conducts inspections of facilities that store and manage contaminants.

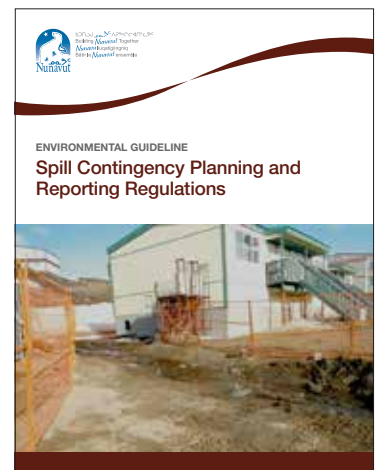
If a ENV inspector (Officer) finds a significant problem with a heating fuel tank, an **Inspection Notice** will be delivered to inform the owner about the problem. The Officer will write on the **Inspection Notice** how much time the owner has to fix the problem. If the problem does not get fixed, the Officer will follow-up with enforcement measures such as a **Protection Order** under the *EPA*. Non-compliance with a **Protection Order** will lead to prosecution and penalties, such as fines.

The purpose of these measures is to prevent fuel spills that are both extremely expensive for tank owners and damaging to the health of the community and the environment. A homeowner who has questions about their tank can contact the Department of Environment for an inspection and advice at no cost.

The ENV also reviews **Spill Contingency Plans** filed in accordance with the *Spill Contingency Planning and Reporting Regulations* (1993).³ These apply to facilities that store large quantities of fuel. Refer to the Environmental Guideline for *Spill Contingency Planning and Reporting Regulations*, also from the ENV, for more information.

Department of Community and Government Services

The **Department of Community and Government Services (CGS)** enforces several laws that may apply to heating fuel tanks.



² Environmental Protection Act 1988 RSNWT (Nu) c-E-7 s 5

³ Spill Contingency Planning and Reporting Regulations 1993 NWT Reg (Nu) 068-93, as amended, s 6

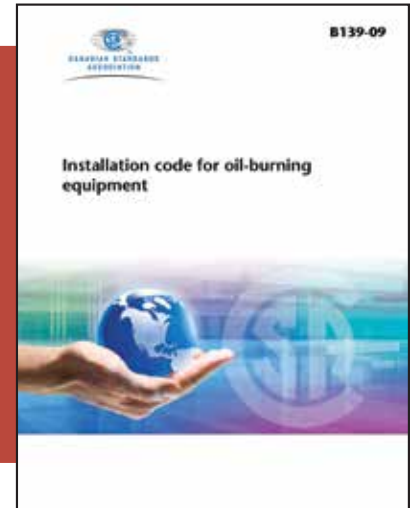
The Office of the Chief Building Official enforces the *Nunavut Building Code Act* (2012) and associated regulations. Under this legislation, new tank installations require a **Building Permit** and must conform to the *National Building Code of Canada* (2015) including *CSA B-139 Installation Code for Oil-Burning Equipment*.

The Nunavut Fire Marshal's Office enforces several laws including the *Fire Safety Act* (1988) and associated regulations. This legislation requires tank owners to follow the *National Fire Code of Canada* (2015).



Important

The *Nunavut Building Code Regulations* (2018) now require any person installing a heating fuel tank to obtain a **Building Permit**. To comply with the requirements of the Regulations, the installation also has to conform to *CSA B-139 Installation Code for Oil-Burning Equipment*.



3.4 Government of Canada



Environment and Climate Change Canada

Environment and Climate Change Canada (ECCC) enforces the *Storage Tank Systems for Petroleum Products and Allied Petroleum Products Regulations* (2008) under the *Canadian Environmental Protection Act* (1999). These regulations apply to fuel tanks on federal and aboriginal lands including Commissioners Lands in Nunavut. Tanks that have a capacity of 2500 L or less and are connected to a heating appliance or emergency generator are not covered.⁴

Further information on these regulations is included as [Appendix D](#).

⁴ Storage Tank Systems for Petroleum Products and Allied Petroleum Products Regulations 2008 SOR/2008-197 s 2



3.5 Oil Heat Systems Technicians/Oil Burner Mechanics

The Department of Environment recommends that heating fuel tanks be installed and serviced by accredited **Oil Burner Mechanics (OBM)/Oil Heat Systems Technicians (OHST)**. Most insurance companies require that the installation and servicing of a heating fuel tank be performed by an accredited **OBM/OHST**. There is currently no accreditation required by the Government of Nunavut to install heating fuel tanks in the Territory.

Tanks subject to the federal *Storage Tank Systems for Petroleum Products and Allied Petroleum Products Regulations* (2008) need to have installation supervised by a professional engineer.⁵ This installation requirement does not apply to the standard 275-gallon tanks used by most homeowners but may apply to businesses or commercial operators who store petroleum products.

Oil Burner Mechanics are an important resource for all tank owners. Not only do they install and maintain fuel tanks, but they are also an important source of information regarding what can and should be done to prevent fuel spills. A tank owner who has questions about their tank can contact the Department of Environment for an inspection and advice at no cost. However, officers of the ENV are not **OBMs**. For technical advice, tank owners should contact a local contractor (or housing authority) that has a trained and experienced **OBM** on staff.



⁵ Storage Tank Systems for Petroleum Products and Allied Petroleum Products Regulations 2008 SOR/2008-197, Section 33

What Causes Spills?

4.1 Old Tanks

The biggest cause of fuel spills in Nunavut is rust from old steel tanks. When water gets into a fuel tank, it goes to the bottom of the tank and forms a layer there. This water then causes the bottom of the tank to rust. Rust eventually forms small holes that fuel can drain out of, causing a spill.

Because tanks usually rust from the inside out, it is very hard to see the damage before it is too late. For this reason, the ENV recommends owners replace single-walled steel tanks after they have been in service for 10 years.



Double-walled and **Double-bottom** steel tanks are made to prevent this problem. These tanks can last much longer than single-walled tanks, up to 30 years. They are discussed further in [Section 5.11](#).

Products are available to prevent or slow down rusting on the inside of steel tanks:



Water testers

These are pastes that are applied to a dipstick and inserted into a tank. The paste changes colour if it touches water. If a small amount of water is found in your fuel tank, a dispersant (see below) can be used. Larger amounts should be pumped out (contact your local **OBM**).



Dispersants

Water and fuel naturally separate, but dispersants can dissolve small amounts of water into heating fuel, keeping it from separating and collecting at the bottom of the tank. Methyl hydrate is a dispersant, and is commonly found in gas-line antifreeze.



Biocide

Certain bacteria can live in the water inside a fuel tank, where they slowly break down and digest the hydrocarbons in the fuel. As bacteria eat the fuel, they make chemical byproducts that cause rusting to happen faster. Biocides kill these bacteria.



Useful Tip

Because fiberglass tanks do not rust, they can last over 30 years.



4.2 Broken Supply Lines

The **Supply Line** is the piping that brings fuel from the tank to the burner inside the building. There are three main causes for breaks in the **Supply Line**:

Water in the Drip Leg

A **Drip Leg** is a pipe installed vertically to provide a low point that catches water before it gets to the burner. This low point must be drained once a year to ensure that the water inside does not freeze and break the pipe. More information on **Drip Legs** is given in [Section 5.6](#).



Flex-Connector out of alignment

Heating fuel tanks are not usually attached to the buildings they serve. As the building and the tank shift over time, the **Supply Line** will get misaligned. Most **Supply Lines** have a **Flex-Connector** to prevent a leak when this happens, but if the tank moves too much, the connector will break and a spill will happen. When you notice the **Flex-Connector** get more than a little crooked, it's time to move the tank or adjust the **Supply Line**. More information on **Flex-Connectors** is given in [Section 5.6](#).

Kids playing on the tank

Kids often see a fuel tank and its supply line as a jungle gym. A child swinging on a **Supply Line** can easily cause it to break.

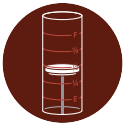
4.3 Tank Overfills

Fuel suppliers rely on simple devices in order to know when a tank is full and stop pumping fuel into it. If these parts of a tank are broken or do not work properly, an overfill is more likely. It is up to the tank owner to ensure that these devices are working. It is up to the supplier to not fill tanks that are missing these devices.



The Tank Whistle

This small piece of pipe inside the **Vent Pipe** makes a whistling noise as air leaves the tank. Once the **Tank Whistle** stops, the tank is full to 90% of its capacity (room is left for fuel expansion if temperature changes).



The Tank Gauge

This gauge shows how much fuel is in the tank. It only gives a rough approximation, but helps the supplier know how much fuel is likely needed to fill the tank, and when the tank is getting full. **Tank Gauges** are fragile and often break when snow and ice fall on them.

4.4 Accidents

Fuel tanks that are located in high traffic areas are more likely to get hit by a car or truck, causing a spill. If a tank cannot be moved to a safer location, it should be protected with bollards, large rocks, or some other barrier.

Tanks that have shifted over time may lean to one side. This can lead to the tank falling over. A fuel tank's position may need to be adjusted over time to prevent such an accident.

Tank protected by large rocks



5 Inspecting your Fuel Tank

The best advice for any fuel tank owner is to keep an eye on their tank. This means making a habit of walking around your tank every few weeks to verify that everything is working properly and there are no slow drips. A small leak can become a big problem if it is not noticed early.

When doing this, it is a good idea to look over each part of the tank to make sure everything is as it should be.

The following sections go over the parts of a typical 275-gallon tank and give information about what to look out for.

Tank owners can use a checklist to thoroughly inspect their tanks. An example checklist is provided as [Appendix B](#).

5.1 Major Damage or Rusting

Fuel tanks should not have any major dents or signs of physical damage. These could create weak points. Major rusting could also be a problem over time. If your tank has these issues, you should contact an **Oil Burner Mechanic**, who will inspect the tank to see how bad the damage is and recommend repairs or even a tank replacement.



5.2 Drips and Ground Staining

Heating fuel often stains the ground. Fuel stains can be caused by a slow leak or a spill. Small spills often occur from overfills or from accidents when **Drip Legs** are being drained.



If staining is found the following steps should be taken:

1. Inspect the **Supply Line** and tank to find possible leaks.
2. If a leak is found, place a bucket underneath to catch leaking fuel and have the tank or **Supply Line** repaired as soon as possible.
3. If no leak is found, check to see if your tank was filled or serviced (**Drip Leg** drained) recently. These may be the causes of the spill.
4. The stained soil has fuel in it and must be removed and disposed of properly. See the *Property Owner's Guide to Contaminant Spill Prevention and Remediation* for more information.



Prospective home buyers are strongly advised to conduct a thorough **Inspection** of the area surrounding the heating oil tank for signs of past fuel spills.

5.3 Tank Slope

Tanks that have an outlet at the bottom should be sloped toward the **Supply Line** to minimize the amount of water that can sit in the bottom of the tank. It is possible that a tank shifts over time and needs to be adjusted to have the right slope.



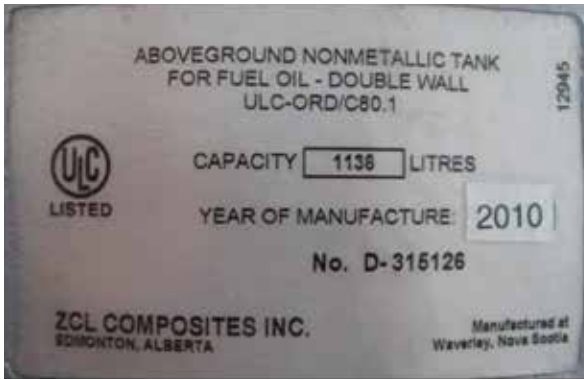
If a tank has a **Bottom Outlet**, the *CSA B-139 Installation Code for Oil-Burning Equipment* says that it must have a minimum slope of 1 in 50.⁶ This means that the end with the outlet must be 1¼" lower than the opposite end of the tank.

For a discussion on **Bottom Outlet** vs. **End-Wall Outlet** see [Section 6.2](#).



⁶ Canadian Standards Association (2019) CSA B-139. *Installation Code for Oil-Burning Equipment*, S.7.3.10

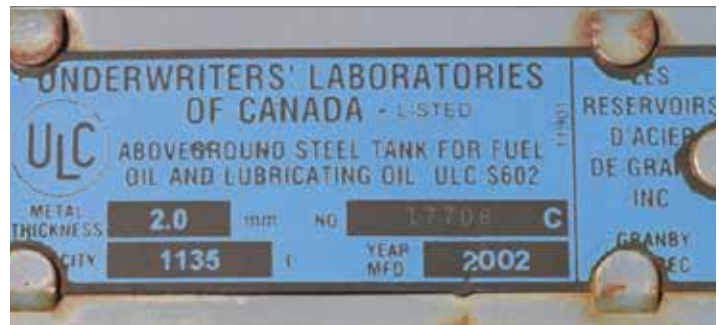
5.4 Certification Plates



Fuel tanks should have a metal plate or sticker that gives information about the tank. The plate or sticker will name the manufacturer, the type of tank, steel thickness, tank capacity, and most importantly, the manufacture date.

For steel tanks, this date tells us how much life the tank has left. It can be assumed that the installation date is one or two years after the manufacture date (because of sealift to Nunavut).

The Certification Plate also indicates that the tank meets national construction standards (CAN/ULC S602 for steel tanks; ORD/C80-1 for non-metallic tanks). This is usually in the form of a ULC (Underwriters Laboratories of Canada), UL (Underwriters Laboratories [USA]), or CSA (Canadian Standards Association) certification. Most insurance companies require proof of this before they will provide coverage to the homeowner.



5.5 Tank Stands



In Nunavut, buildings must be built well above ground level to prevent melting of the permafrost underneath. Because most fuel tanks rely on gravity to bring fuel to the burner, tanks are placed on a steel tank stand.



Important

Wooden tank stands should not be considered: they are not strong enough and are banned under the *National Fire Code of Canada (2015)*.*

* Canadian Commission on Building and Fire Codes (2015) NRCC 56192. *National Fire Code of Canada 2015*, S.4.3.3.1



A full 1,135-Litre (275-gallon) tank weighs approximately 1000 kg (2,205 lbs.), or one tonne. Standard metal tank stands are unstable because they are top-heavy, have a narrow base, and therefore are subject to tipping over unless properly anchored. Tank stands should be bolted to a solid footing and/or fitted with a very broad base. An ideal foundation is a large concrete pad onto which the metal tank stand is firmly bolted. Alternatively, the stand can be bolted to a frame of treated wood timbers (a minimum of 6 inches x 6 inches), which should be installed such that the top of the timber is at ground level.

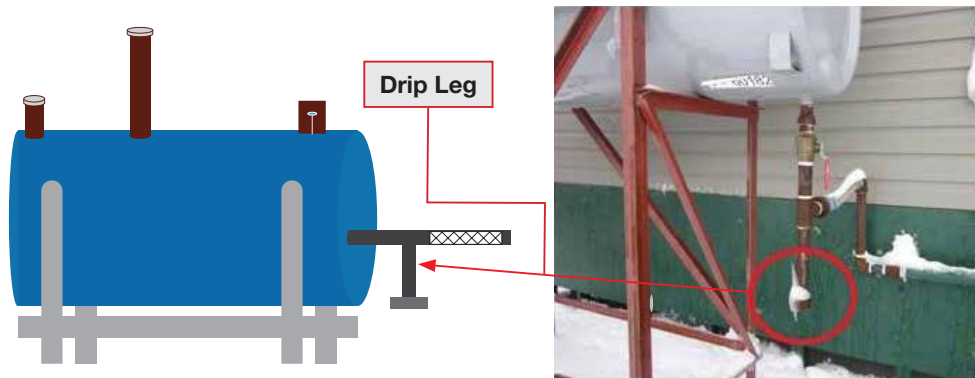
Many installers and homeowners make the mistake of anchoring the heating fuel tank and stand to the building's siding, which is itself fastened to the building with thin wooden strapping. This provides almost no holding strength and certainly not enough to hold a 1000 kg tank. Many spills occur as a result of the heating fuel tank and stand tipping over due to wind, the weight of accumulated snow and ice, and children climbing on them.



Fuel tanks often tip over during the spring runoff, when flowing melt water can take away the soil under the tank stand. For this reason, tanks should be installed on a dry location far from any paths of flowing water.

5.6 Drip Legs

A **Drip Leg** is a vertical section of pipe added to the **Supply Line** to provide a low point in the system to collect water, making it easier to remove.



Water left in the **Drip Leg** during the winter months will freeze and can cause the pipe to break, causing a spill. For this reason, **Drip Legs** should be drained at least once a year. The ENV recommends tank owners ask their furnace contractor (or qualified **OBM/OHST**) to drain the **Drip Leg** during their annual maintenance. Be sure to ask for this and verify with them that it was done; there is no way to tell if there is water inside the leg without opening up the pipe. It is also recommended that **Drip Legs** be constructed in a way that will minimize the chance of breaking.



Here are the recommended specifications:



Made of a 2-inch diameter pipe



No valves on the **Drip Leg** itself



Made at least 12 inches in length



End cap should be rated to 300 lbs

5.7 Flex Connector



Flex Connectors are flexible sections of pipe used to protect **Supply Lines** from strain caused by the tank shifting over time. They come in different diameters and lengths.

Each **Flex Connector** will only be able to flex and bend so much before breaking. It is important to install it straight so that it will take longer to get out of alignment. This also means that once it gets seriously out of alignment, the **Supply Line** needs to be adjusted. An **Oil Burner Mechanic** can be hired to adjust the **Supply Line**.

How much a specific model of **Flex Connector** can be bent before breaking depends on its length and diameter. Tank owners should consult the instructions given by manufacturers for the tolerances and installation instructions of their **Flex Connector**.



Proper installation



Needs adjustment

5.8 Supply Line



The **Supply Line** is the piping that brings the fuel to the furnace.

The Supply Line should be:



Made of steel, 2 inch is preferable



As short as possible



Firmly supported along its entire length



In an area where it will not get buried in a snow drift (if possible)



Proper installation



Needs adjustment

5.9 Vent and Fill Pipes



Fuel tanks are equipped with a pipe to pump fuel into them. This is called the **Fill Pipe**. They also have a **Vent Pipe** which allows air to leave the tank as fuel comes in.

Specific requirements for **Fill** and **Vent Pipes** can be found in the *CSA B-139 Installation Code for Oil-Burning Equipment*. Here are some general requirements:

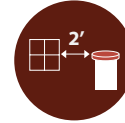
Fill Pipes



Must have a weather-tight cover (rain cap)



Must be 6 inches lower than the vent pipe



Fill pipe opening should be more than 2 feet from an opening window or door

Vent Pipes



Must have a **Tank Whistle** if the level of the fuel in the tank cannot be seen at the fill pipe opening during fueling



Vent pipe must have a minimum diameter of 1¼ inches (for 275-gallon tanks)



Vent pipe must have an opening at least 6 inches above the top of the fill pipe



Vent pipe must have a rain cap or fitting to keep rain and snow out, while still venting



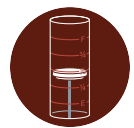
Vent pipe opening should be more than 2 feet from an opening window or door





5.10 Fuel Gauge

All fuel tanks should be fitted with a convenient way to determine the fuel level inside. Most 275-gallon tanks have a simple float mechanism connected to a gauge. As these are fragile, broken and/or malfunctioning gauges should be repaired or replaced without delay. Gauges can be equipped with a gauge protector to prevent damage from falling ice, fill hoses, and vandalism.



5.11 Secondary Containment and Double Bottoms

Secondary Containment is a device that temporarily holds fuel that has leaked or spilled from a tank to keep it from contaminating the environment.



If a tank has **Secondary Containment**, it must be looked over during your **Inspection**.

There are two types of **Secondary Containment**: integrated and external.

External Secondary Containment

This is a containment berm or other structure that the tank is placed into in order to catch any potential spills or leaks from the tank. Containment berms should be kept clear of water, garbage, and other debris. Most containment berms have a drain valve for letting rainwater out. This drain must be kept closed so that a spill will not simply flow out of the berm. This means that water will accumulate inside and need to be drained. Before draining water, you must check to make sure it is clean and doesn't have any fuel in it.



Secondary Containment berms must have a capacity of 110% of the volume of the tank inside the berm. In other words, if your tank has a capacity of 3,000 litres, the **Secondary Containment** berm must have a capacity of 3,300 litres.

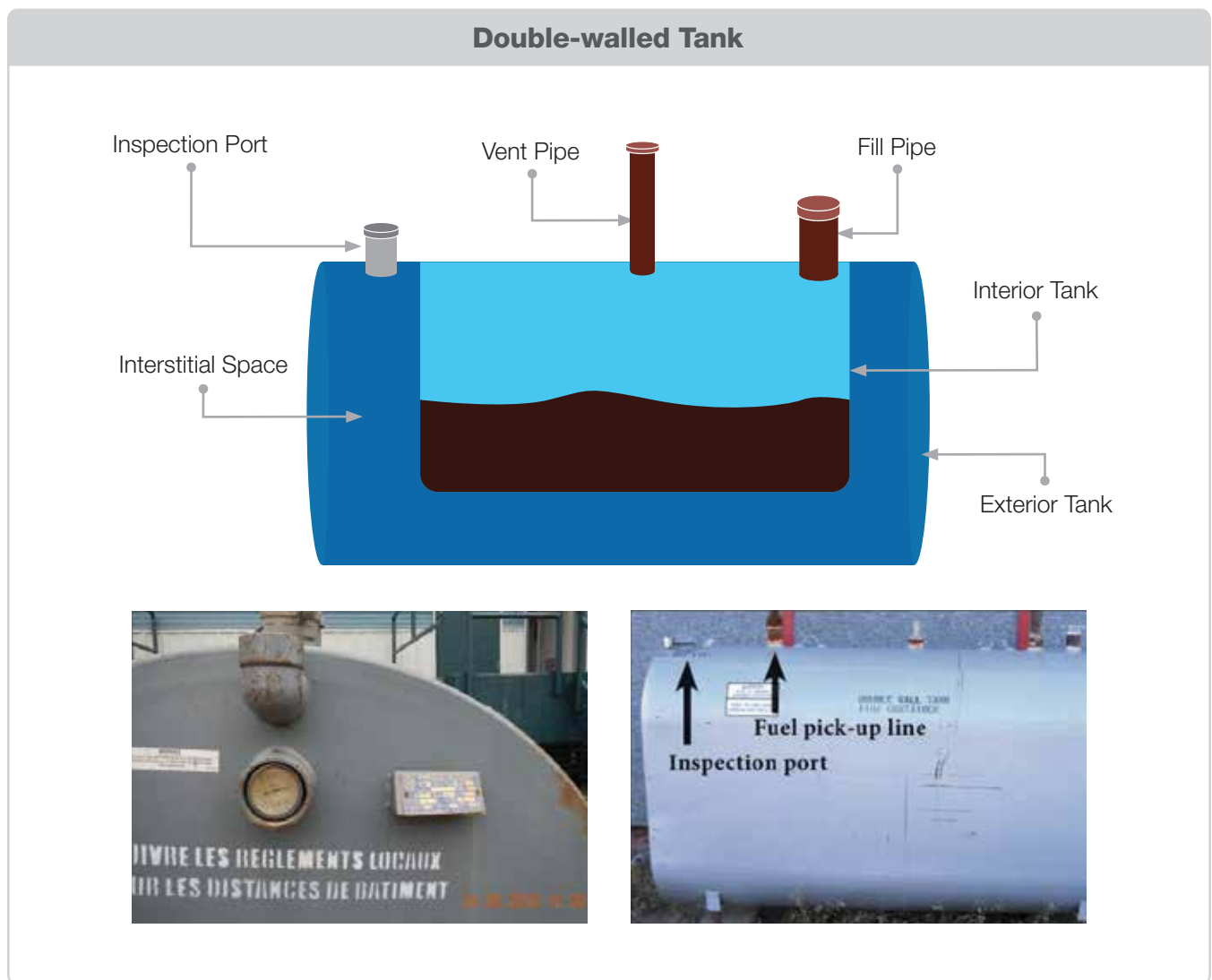
Integrated Secondary Containment

This refers to a tank that is built with a **Double-wall** or **Double-bottom**.

A **Double-walled** tank is really a tank within a tank. If the inner tank leaks, the outer tank will contain the fuel.

Owners of this type of tank need to keep an eye on the space between the two tanks, called the **Interstitial Space**. An **Inspection Port** is often present to look inside this space. If fuel is ever seen there, there is a problem; either the tank has leaked, or the wrong opening was used to fill the tank.

Some **Double-walled** tanks have an added safety feature—the **Interstitial Space** is put under vacuum. In this case an air pressure gauge is used to see if the vacuum is present. If the gauge shows a reading of “0” then the vacuum has been lost. This could mean the inner tank has leaked. It is important to note that the vacuum will slowly be lost over time, so it needs to be renewed regularly.



Double-bottom Tanks

Double-bottom tanks have an extra layer of steel welded to their underside. This provides extra protection from leaks that often happen from rust holes in the bottom of the tank. Similar to **Double-walled** tanks, there is a space between the two layers of steel called the **Interstitial Space**. This space can be monitored through a **Viewing Port**.

If the bottom of the main tank leaks, this space will fill with fuel. This fuel will activate a float that pushes up a red marker that can be seen in the **Viewing Port**.⁷ If a red marker or ball is visible, there may be a fuel leak and the tank should be checked by an **OBM**.



It is important for owners of these tanks to check on the **Viewing Port** regularly to verify that there has not been a leak.



Important

Older Granby **Double-bottom** tanks had a design flaw that allowed water to enter the viewing port. Water could then fill the **Interstitial Space** and activate the float, making it seem like there was a fuel leak.

Granby Storage Tanks has released a technical bulletin with instructions on how to fix this problem. This is included as Appendix E. Granby will send a replacement viewing port free of charge to owners of affected tanks. Contact your installer or Granby Storage Tanks directly for more information.

⁷ Granby Canada (2018). *Installation and Maintenance Guidelines for Aboveground Steel Tanks for Fuel and Lubricating Oil*.

Considerations When Replacing Your Fuel Tank

The *Nunavut Building Code Regulations* (2018) now require any person installing a heating fuel tank to obtain a **Building Permit**. To comply with the requirements of the Regulations, the installation must conform to *CSA B-139 Installation Code for Oil-Burning Equipment*.

According to the *CSA B-139 Installation Code for Oil-Burning Equipment*, **Secondary Containment** or a **Double-bottom** is required for outdoor installations of steel tanks.⁸

Other legislation, such as the *National Fire Code of Canada*, have requirements as well, like **Secondary Containment** for certain tanks.

6.1 Fiberglass Fuel Tanks

Fiberglass fuel tanks are not subject to rust and corrosion and therefore last for a very long time. Many are guaranteed by their manufacturers for 30 years. They are more expensive than steel tanks, but the added cost upfront is offset by their longer lifespan, as they last up to a decade longer.



The Department of Environment highly recommends the installation of fiberglass tanks because of the added safety of these tanks and their long life.

These tanks are designed to rest directly on a flat surface—usually a prepared ground pad—on their pedestals.

In Nunavut, most tanks must be located on an elevated base—usually a tank stand—to ensure proper gravity-assisted fuel flow. Standard steel tank stands are fitted with saddles—u-shaped metal bands—which take the weight of the tank on the curved underside of the tank body. Fiberglass tanks should not be installed in this manner. The weight of a fiberglass tank must rest on the built-in pedestals and not on the body of the tank. This means that the existing tank stand must be modified. The Northwest Territories (NWT) Housing Corporation has developed a set of engineered drawings on how to modify an existing steel tank stand to accommodate a fiberglass tank. These drawings are included as [Appendix C](#).



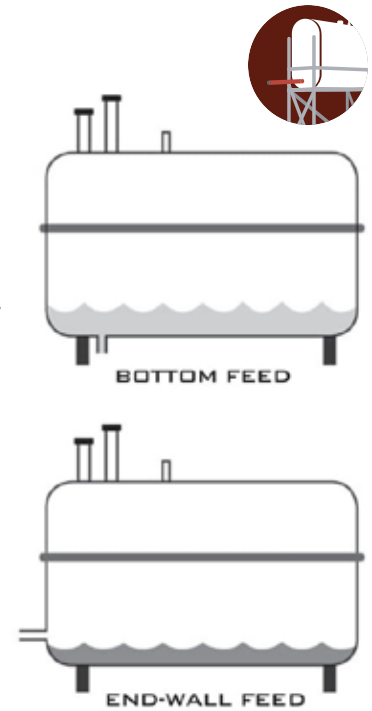
⁸ Canadian Standards Association (2019) *CSA B-139. Installation Code for Oil-Burning Equipment*, S.7.5.5

6.2 Bottom Outlet vs End-Wall Outlet

End-Wall Outlet tanks have the outlet for the **Supply Line** located at the bottom of one of the walls of the tank. The problem with this type of tank is that the outlet is not on the very bottom of the tank but approximately one inch above the bottom of the tank. As a result, water and sludge can accumulate below the outflow.

Bottom Outlet tanks were made to prevent this problem. On a **Bottom Outlet** tank, water and sludge will not accumulate in the tank at all, but will instead be immediately flushed through the **Supply Line** and into the burner. This tank will not have water accumulate in the bottom but may have another problem—large amounts of water may enter the **Drip Leg** all at once and freeze, blocking the **Supply Line** or causing a spill. Water also has the potential to cause damage to the burner if it overwhelms the in-line filter. These are some of the reasons it is important to drain the **Drip Leg** every year.

As both **End-Wall Outlets** and **Bottom Outlets** have advantages and disadvantages, it is a good idea to discuss the options with your installer before ordering a new tank.



6.3 Gravity Feed vs Top Feed

There are two ways to get heating fuel from the tank to the burner. **Gravity Feed** tanks are elevated so that gravity pushes the fuel; most tanks in Nunavut are of this type.



Top Feed tanks use a pump to draw fuel through the **Supply Line**, which is piped through the top of the tank which can then be located at ground level.

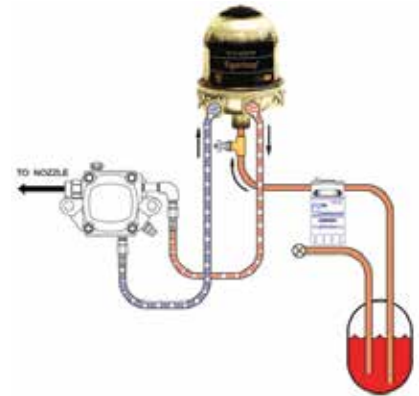
The main advantage of this system is that water will remain in the bottom of the tank, removing the need for a **Drip Leg**. However, this water cannot remain in the tank and must be removed occasionally.

Because **Top Feed** systems often have too much air mixed with the fuel, a **Return Line** is often necessary to have a constant flow of fuel from the tank to the burner and back to the tank.

One way around this is to install an **Oil De-Aerator**, which is a device that circulates the fuel in order to remove excess air, taking away the need for a **Return Line**.

The Department of Environment encourages property owners to install **Top Feed** systems as they have many advantages, such as removing the need for a **Drip Leg**.

Options should be discussed with your installation contractor.



Bottom Outlet

A **Supply Line** that starts at the very bottom of a fuel tank, ensuring that no water can build-up in the tank.

Building Permit

A permission to build now required in Nunavut under the *Nunavut Building Code Regulations* (2018) to install a heating fuel tank.

Contaminant

A substance that has been released into the environment and has the potential to harm people, plants and/or animals.

Defined in the *Environmental Protection Act* (1988) as:

“any noise, heat, vibration or substance and includes such other substance as the Minister may prescribe that, where discharged into the environment,

- endangers the health, safety or welfare of persons,
- interferes or is likely to interfere with normal enjoyment of life or property,
- endangers the health of animal life, or
- causes or is likely to cause damage to plant life or to property;”

Double-bottom

A safety feature on some fuel tanks made of a second layer of steel welded to the bottom of the tank. This creates a small space at the bottom to catch fuel that may leak through the bottom of the primary tank.

Double-wall

A safety feature on some fuel tanks made of a second layer of steel wrapped around the entire tank. This is a tank within a tank. The extra tank wall is meant to both protect the inner tank from the outside, as well as catch fuel that may leak through any part of the inner tank.

Drip Leg

A water trap made of steel pipe in a **Supply Line**. The **Drip Leg** prevents water from reaching the fuel burner. Every year, drip legs need to be drained so that this water does not:

- Accumulate and flow into the burner, causing damage to the furnace, and
- Freeze and break the **Supply Line** or **Drip Leg** pipe, leading to a spill.

End-Wall Outlet

A **Supply Line** that starts at the bottom of the end wall of a fuel tank. In this case some water can build up in the bottom of the tank.

Flex Connector

A flexible steel pipe that is used as part of a **Supply Line**. It allows the tank and building to shift a bit without breaking the **Supply Line**. Once it gets too crooked, the **Supply Line** needs to be adjusted.

Gravity Feed

Fuel tank system that uses gravity to bring fuel to the burner.

Inspection

The physical examination of a thing or area permitted under specified legislation. Typically, an inspection occurs to verify compliance with a law or regulation.

Inspection Notice

A paper notice given to tank owners by the ENV to inform them of any problems found with their fuel tank.

Inspection Port

An opening in a fuel tank made to look into the **Interstitial Space** of a **Double-Walled** Tank.

Interstitial Space

The space between the two walls or two bottoms of a tank.

NU Spill Report Line

A 24-hour service for reporting contaminant spills in Nunavut. A call can be made to **867-920-8130** or an email sent to spills@gov.nt.ca.

Oil Burner Mechanic (OBM)

A certified tradesperson trained to install, maintain, and repair oil-fired heating systems and appliances. Also referred to as an **Oil Heat Systems Technician**.

Oil Heat Systems Technician (OHST)

A certified tradesperson trained to install, maintain, and repair oil-fired heating systems and appliances. Also referred to as an **Oil Burner Mechanic**.

Oil De-Aerator

Device used to remove air from fuel before it reaches the burner in a **Top Feed** set-up.

Protection Order

Order issued under Section (4) of the *Environmental Protection Act* (1988) requiring someone to take the specified measures to prevent the discharge of a **Contaminant**.

Remediation

The actions taken to reverse or limit the damage caused by a contaminant spill.

Reportable Quantity

The amount of a given product that when spilled requires a report to be sent to the **NU Spill Report Line**. This amount is shown in [Appendix G](#).

Secondary Containment

A physical means of holding fuel that has leaked or spilled from a tank. Secondary containment can be external, like a berm, or integrated, like a **Double-wall**.

Spill Contingency Plan

A document intended to prepare a facility for the possibility of a contaminant spill. A Spill Contingency Plan is prepared in accordance with the *Spill Contingency Planning and Reporting Regulations* (1993).

Supply Line

Piping that brings heating fuel from a tank to the furnace or burner.

Top Feed

A tank system that uses a pump to draw fuel through the top of the tank and up to the burner.

Viewing Port

A clear plastic window in the top of **Double-bottom** tanks that show the presence of fuel in the **Interstitial Space**, between the two bottoms.

- Building Code Act 2012 SNU 2012 c 15, as amended. Available from: <https://canlii.ca/t/8r5g> [Accessed 25 November 2021].
- Building Code Regulations 2018 Nu Reg 009-2018. Available from: <https://canlii.ca/t/95sk> [Accessed 25 November 2021].
- Canadian Commission on Building and Fire Codes (2015) NRCC 56190. *National Building Code of Canada 2015 Volume 1*. Ottawa: National Research Council of Canada (NRCC). Available from: <https://nrc-publications.canada.ca/eng/view/ft/?id=c8876272-9028-4358-9b42-6974ba258d99&dp=2&dsl=en> [Accessed 18 November 2021].
- Canadian Commission on Building and Fire Codes (2015) NRCC 56192. *National Fire Code of Canada 2015*. Ottawa: National Research Council of Canada (NRCC). Available from: <https://nrc-publications.canada.ca/eng/view/ft/?id=cd32b653-318c-441a-bacd-08bd39332275&dp=2&dsl=en> [Accessed 18 November 2021].
- Canadian Standards Association (2019) CSA B-139. *Installation Code for Oil-Burning Equipment*. Ottawa: CSA Group. Available from: https://www.csagroup.org/store/product/CSA%20B139%20SERIES%3A19/?gclid=Cj0KCQiAweaNBhDEARIsAJ5hwbfpH-NidPjfyIVRFjsi1EUIVFFqPTW1mkC46i9DOb7u1jX9zU65elaAkbdEALw_wcB [Accessed 19 November 2021].
- Environment and Climate Change Canada (2019) En4-94/1-2019E. *Tank Tip 1: Overview of the Storage Tank Regulations*. Ottawa: ECCC. Available from: https://publications.gc.ca/collections/collection_2019/eccc/En4-94-1-2019-eng.pdf [Accessed 12 November 2021].
- Environmental Protection Act 1988 RSNWT (Nu) c E-7, as amended. Available from: <http://canlii.ca/t/52310> [Accessed 30 November 2021].
- Fire Safety Act 1988 RSNWT (Nu) 1988 c F-6, as amended. Available from: <https://canlii.ca/t/8l3q> [Accessed 25 November 2021].
- Fuel Snap (2021). *Home Heating Oil Tank Charts* [Online]. Available from: https://www.fuelsnap.com/heating_oil_tank_charts.php#275v [Accessed 30 November 2021].
- Granby Canada (2013). *Granby Storage Tanks Technical Bulletin 2013-02-18 – Water in Monitoring Tube*. Québec: Granby Industries L.P.
- Granby Canada (2018). *Installation and Maintenance Guidelines for Aboveground Steel Tanks for Fuel and Lubricating Oil*. Québec: Granby Industries L.P. Available from: https://www.granbyindustries.com/wp-content/uploads/2018/02/SI0007_Na-ULC-S602-INSTALLATION-AND-MAINTENANCE-GUIDELINES.pdf [Accessed 23 November 2021].
- Nelson Engineering Inc. (2010). *Home Ownership - FRP Fuel Oil Tank Stand - Tall Height*. Yellowknife: Northwest Territories Housing Corporation. Available from: https://www.gov.nu.ca/sites/default/files/heating_oil_tank_stand_modifications_for_fibreglass_tanks.pdf [Accessed 23 November 2021].
- Spill Contingency Planning and Reporting Regulations 1993 NWT Reg (Nu) 068-93, as amended. Available from: <http://canlii.ca/t/khb5> [Accessed 30 November 2021].
- Storage Tank Systems for Petroleum Products and Allied Petroleum Products Regulations 2008 SOR/2008-197, as amended. Available from: <http://canlii.ca/t/52z4z> [Accessed 30 November 2021].

For additional information on the remediation of contaminant spills, or to obtain a complete listing of guidelines, go to the Department of Environment website or contact the Department at:

Environmental Protection Division
Department of Environment
P.O. Box 1000, Stn. 1360
Iqaluit, Nunavut, X0A 0H0

Phone: (867) 975-7700

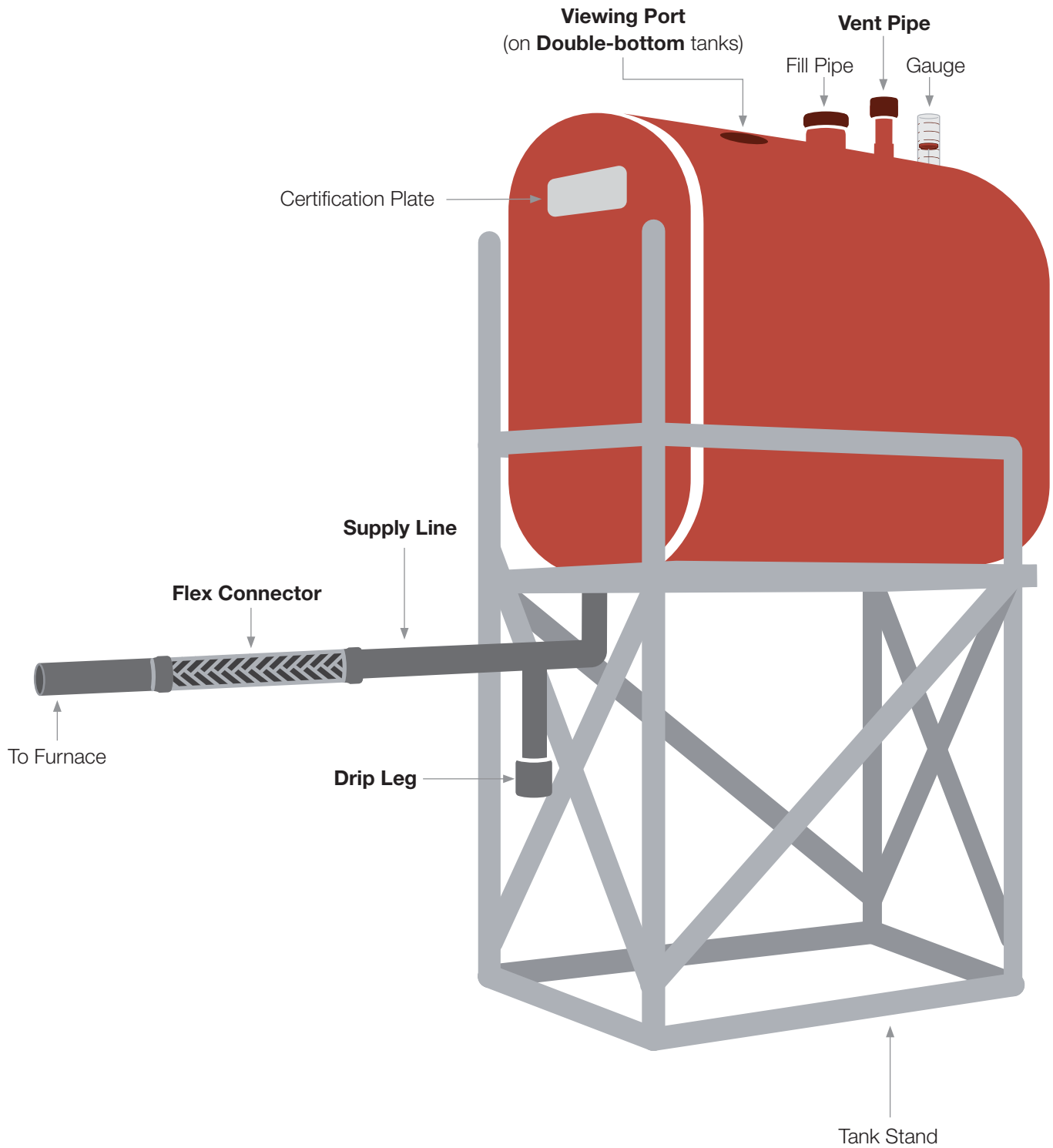
Fax: (867) 975-7742

www.gov.nu.ca/environment

Contingency plans are to be submitted to the above address.



Appendix A: Fuel Tank Components

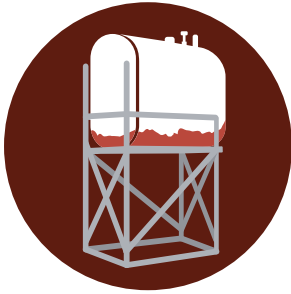


Appendix B: Fuel Tank Check List



Tip: Check your tank in the Spring and Fall!

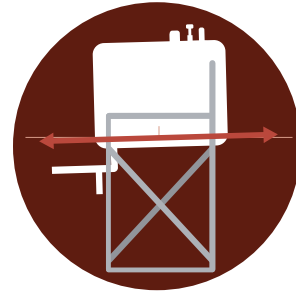
- ✓ **No Major Damage or Serious Rusting**



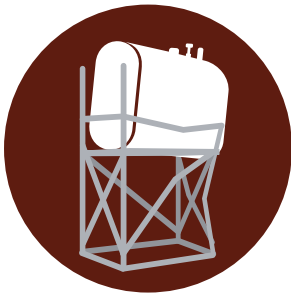
- ✓ **No Drips and Ground Staining**



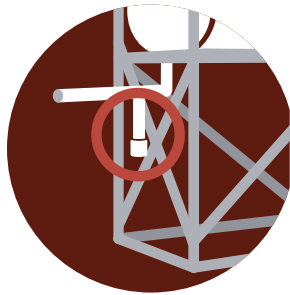
- ✓ **Tank Slope**
Should be sloping toward outlet



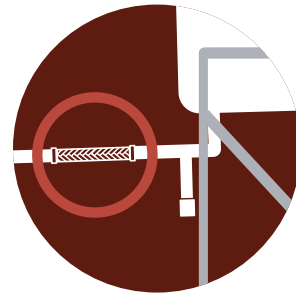
- ✓ **Tank Stand**
Should not be leaning over or wobbly



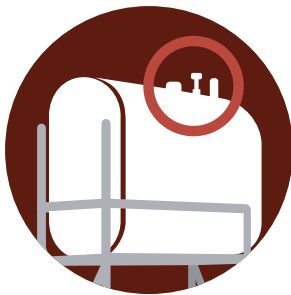
- ✓ **Drip Leg**
Must be drained



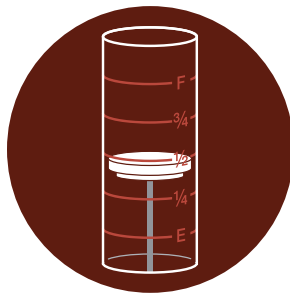
- ✓ **Flex Connector**
Should be straight



- ✓ **Rain Caps**
Replace if missing



- ✓ **Fuel Gauge**
Replace if broken

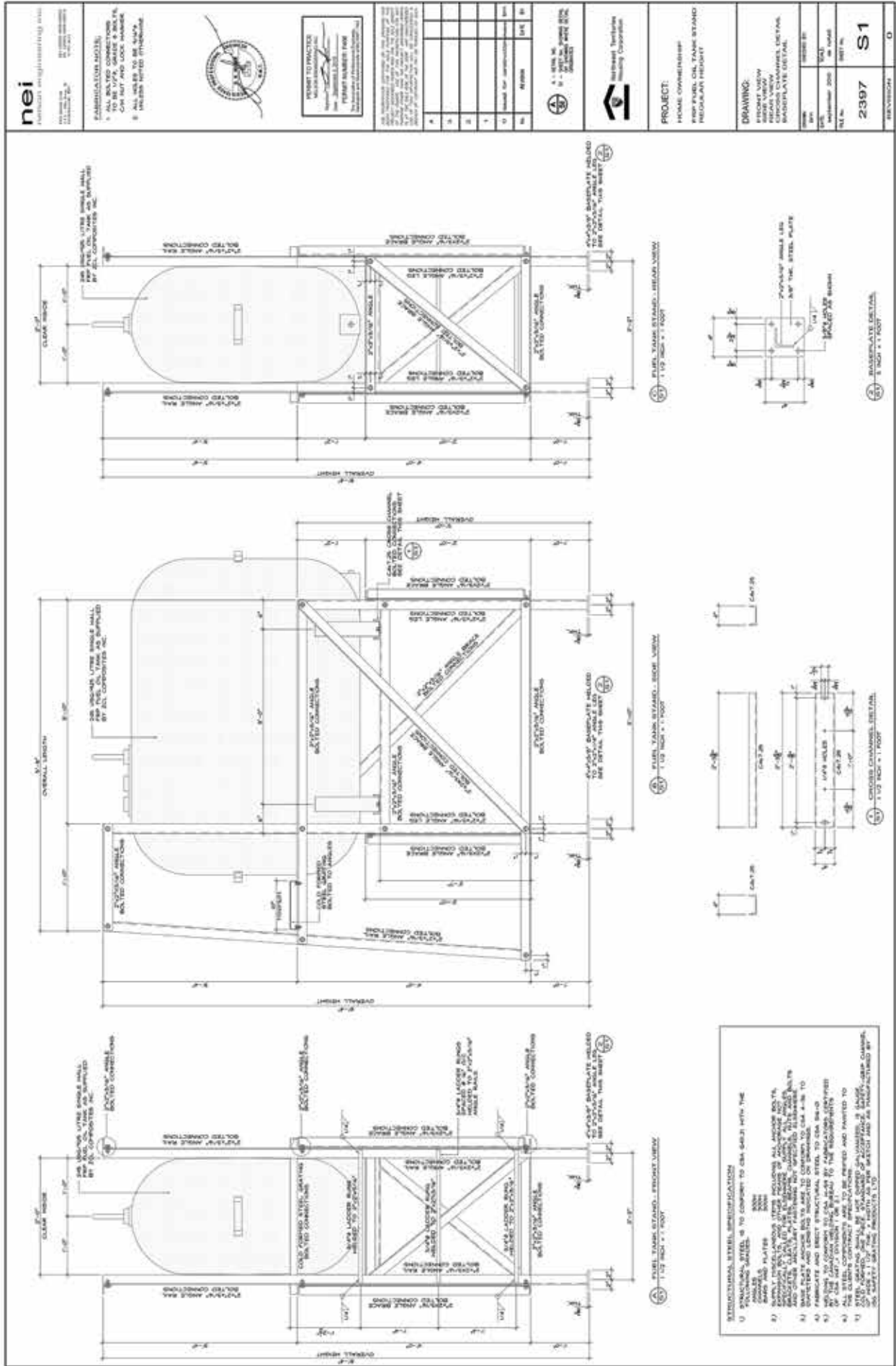


- ✓ **Secondary Containment¹⁰**



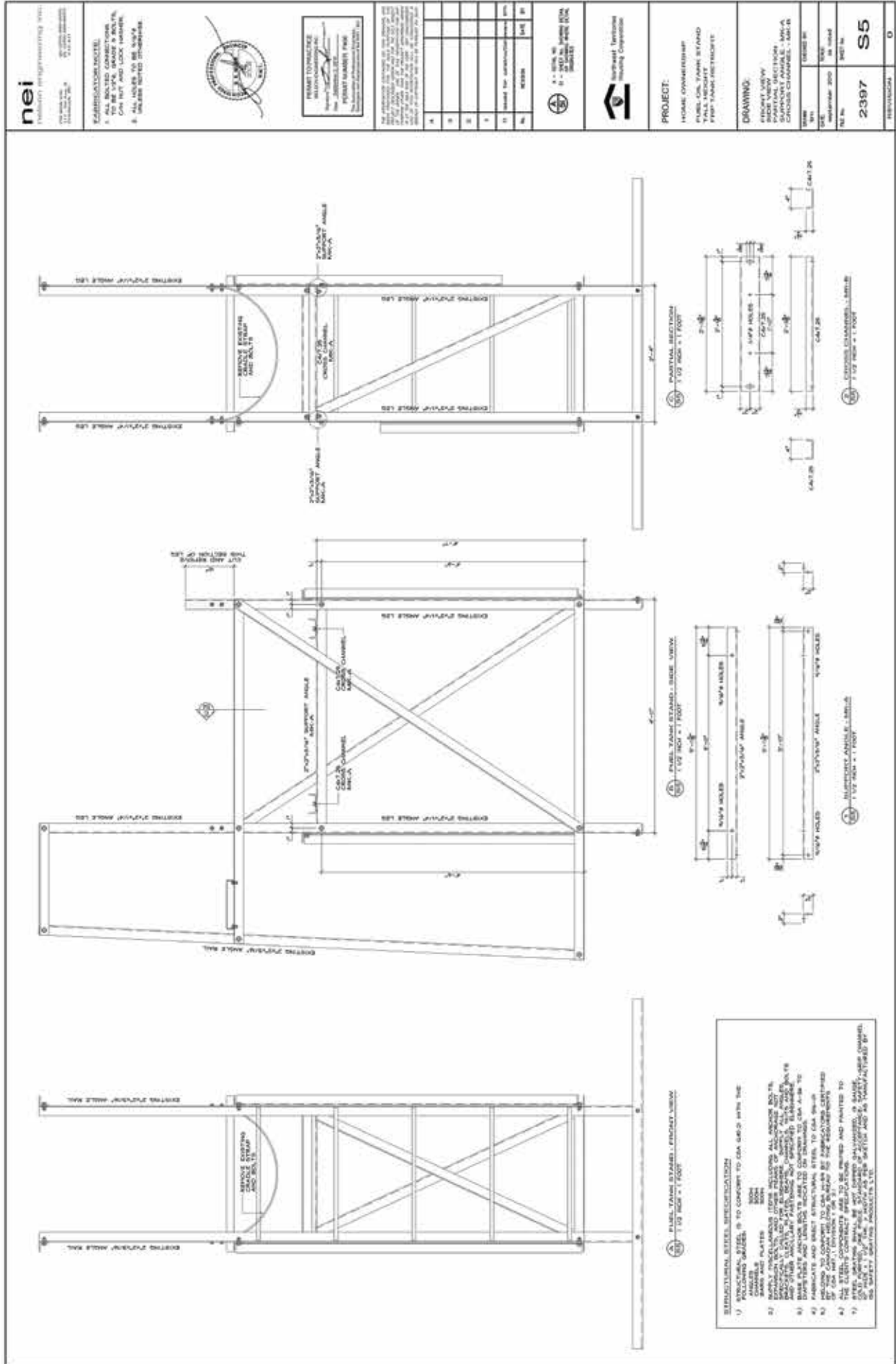
¹⁰ Granby Canada (2018). *Installation and Maintenance Guidelines for Aboveground Steel Tanks for Fuel and Lubricating Oil*

Appendix C: Tank Stand Modification for Fiberglass Tanks¹¹



¹¹ Nelson Engineering Inc. (2010). Home Ownership - FRP Fuel Oil Tank Stand - Tall Height. Provided courtesy of NWT Housing Corporation.

Appendix C: Tank Stand Modification for Fiberglass Tanks



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206.441.1100
www.nei.com

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IF ALL DIMENSIONS ARE NOT SPECIFIED, THE DIMENSIONS SHALL BE IN UNITS OF INCHES UNLESS OTHERWISE SPECIFIED.



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INDUSTRIAL ENGINEERING SERVICES
PROJECT NUMBER: 10000
DATE: 10/1/2010

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1 - 1/2" DIA. W/ 1/4" THICK PLATE
2 - 1/2" DIA. W/ 1/4" THICK PLATE



PROJECT:
INDUSTRIAL ENGINEERING SERVICES
FIBERGLASS TANK STAND
FRONT ELEVATION

DRAWING:
FRONT ELEVATION
SIDE VIEW
PERSPECTIVE VIEW
SECTION C-C
SECTION D-D

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TITLE NO.	2397
REV. NO.	S5
REVISION	0

- STRUCTURAL STEEL SPECIFICATIONS**
- 1) STRUCTURAL STEEL IS TO CONFORM TO AISC 360-10 WITH THE FOLLOWING NOTES:
a) ALL DIMENSIONS SHALL BE IN UNITS OF INCHES UNLESS OTHERWISE SPECIFIED.
b) ALL DIMENSIONS SHALL BE IN UNITS OF INCHES UNLESS OTHERWISE SPECIFIED.
 - 2) ALL DIMENSIONS SHALL BE IN UNITS OF INCHES UNLESS OTHERWISE SPECIFIED.
 - 3) ALL DIMENSIONS SHALL BE IN UNITS OF INCHES UNLESS OTHERWISE SPECIFIED.
 - 4) ALL DIMENSIONS SHALL BE IN UNITS OF INCHES UNLESS OTHERWISE SPECIFIED.
 - 5) ALL DIMENSIONS SHALL BE IN UNITS OF INCHES UNLESS OTHERWISE SPECIFIED.
 - 6) ALL DIMENSIONS SHALL BE IN UNITS OF INCHES UNLESS OTHERWISE SPECIFIED.
 - 7) ALL DIMENSIONS SHALL BE IN UNITS OF INCHES UNLESS OTHERWISE SPECIFIED.



TANK TIP 1

OVERVIEW OF THE STORAGE TANK REGULATIONS

The **Storage Tank Systems for Petroleum Products and Allied Petroleum Products Regulations** establish requirements for storage tank systems under federal jurisdiction.

The Regulations came into force in 2008 to help reduce the risk of releases of petroleum products, such as leaks and spills. At the time, about 15% of systems under federal jurisdiction were more than 20 years old and had no leak detection, corrosion protection, or structures to contain releases.

SCOPE OF THE REGULATIONS (SECTION 2)

The Regulations **apply to** storage tank systems that:

- are comprised of tanks that have a capacity of more than 230 litres and are designed to be installed in a fixed location
- contain petroleum products such as used oil, home heating oil, jet fuel, diesel and gasoline, or allied petroleum products such as biodiesel, general-purpose thinners for lacquers, isopropanol, uninhibited ethylene glycol and E85 fuel (see **Schedule 1** of the Regulations for a complete list of allied petroleum products)
- are either:

located on **Aboriginal land**, including systems owned or operated by band councils or private businesses such as gas stations

or

located on **federal land**, including systems in federal parks owned or operated by private companies

or

operated by a **federal department, board or agency**, or owned by the Crown regardless of where the systems are located

or

operated to provide a service to, or belongs to, a **federal work or undertaking**, including a railway, a port authority, or an airport

The following storage tank systems **do not** fall under the Regulations:

- storage containers with a capacity of 230 litres or less
- indoor storage tank systems where the building provides the required level of secondary containment
- pressurized tanks (e.g., for propane)
- aboveground tanks that have a total combined capacity of 2,500 litres or less and are connected to a heating appliance or an emergency generator
- storage tank systems regulated by the National Energy Board Act or the Canada Oil and Gas Operations Act



Environment and
Climate Change Canada

Environnement et
Changement climatique Canada

Canada

¹² Environment and Climate Change Canada (2019) En4-94/1-2019E. *Tank Tip 1: Overview of the Storage Tank Regulations*

Appendix D: Overview of the Storage Tank Regulations

BECOME FAMILIAR WITH THE REGULATIONS

Find reliable and useful tools on our website to help determine if the Regulations apply and how to comply with them:

- **Video** that explains the application of the Regulations
- **User's guide** for the online Federal Identification Registry for Storage Tank Systems (FIRSTS)
- Full text of the Regulations and the **Environmental Code of Practice for Aboveground and Underground Storage Tank Systems Containing Petroleum and Allied Petroleum Products**, parts of which are incorporated by reference in the Regulations
- **Tank Tip fact sheets** to become more familiar with the requirements set out in the Regulations

LIST OF FACT SHEETS*
Tank Tip 2 New Storage Tank System Installations
Tank Tip 3 Identifying Your System
Tank Tip 4 Leak Detection and Monitoring
Tank Tip 5 Handling Leaks
Tank Tip 6 Preparing Your Emergency Plan
Tank Tip 7 Containment of Releases at Transfer Areas
Tank Tip 8 Reporting a Release
Tank Tip 9 Withdrawal and Removal of Storage Tank Systems
Tank Tip 10 If You Deliver Products
Tank Tip 11 Record Keeping for Your Storage Tank System
Tank Tip 12 Storage Tank Regulations Checklists

*Note that the numbering of the fact sheets has changed from previous versions

For more information, visit our website

www.canada.ca/petroleum-products-storage-tanks

If the information you need is not available on our website, contact your regional office or the Storage Tank Program:

Pacific & Yukon	ec.reservoirspyr-tankspyr.ec@canada.ca	Quebec	ec.reservoirsqc-tankstqc.ec@canada.ca
Prairie & Northern	ec.promconrpn-compropnr.ec@canada.ca	Atlantic	ec.enviroinfo.ec@canada.ca
Ontario	ec.promcon-on-compro.ec@canada.ca	Storage Tank Program	ec.registrereservoir-tankregistry.ec@canada.ca

Disclaimer: *This material has been prepared for convenience of reference and accessibility and does not have an official character. It is of a general nature only. For all purposes of interpreting and applying the Regulations, users must consult the official version of the Storage Tank Systems for Petroleum Products and Allied Petroleum Products Regulations and seek their own legal advice as appropriate.*

Cat. No.: En4-94/1-2019E-PDF ISBN: 978-0-660-29767-5

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Aussi disponible en français



Technical bulletin 2013-02-18

Presence of moisture, water or ice in the Granby Ecogard and Ecoplus Double-bottom tanks interstitial space and alarm monitoring tube.

It was brought to our attention that, in some cases, moisture, water and possibly some ice formation were detected in the monitoring tube of some of our Double-bottom tanks. This water would be present due to either a faulty seal from the plastic monitoring cap or from a cracked or missing cap. If this problem occurs, there could be enough water accumulation in the interstitial space and inside the monitoring tube to have the interstitial space monitoring alarm show a fail (red) condition. If this condition occurs, first make sure that the liquid present in the monitoring tube is either water or fuel oil by drawing a sample of the liquid from the monitoring tube. If the sample shows that the liquid is definitely fuel oil without a doubt, please contact Granby Industries Customer Care Service to advise them of the situation and they will guide you through the next steps.

If the liquid from the sample shows that it is water, please be re-assured that, if removed within a reasonable amount of time, the water will not substantially damage the tank, its operation, its service life or its warranty as the water in the interstitial space is not in direct contact with the fuel oil contained in the primary tank, thus the water is not exposed to contaminants such as sludge or bacteria, both corrosion-aggravating factors. If ice were to be present in the interstitial space and monitoring tube, this would not be harmful to the tank as the interstitial space and monitoring tube cannot hold enough ice to exert enough force to damage the steel structure of the tank.

If water was the source of the alarm showing a fail condition, please follow the steps on page 2 and 3 of this technical bulletin to rectify the problem. If ice were to be present, proceed to the below steps on page 2 and 3 of this technical bulletin once the temperature is warm enough to have melted all the ice.

¹³ Granby Canada (2013). *Granby Storage Tanks Technical Bulletin 2013-02-18 – Water in Monitoring Tube.*

Appendix E: Granby Storage Tanks Technical Bulletin – Water in Monitoring Tube

GUIDELINES FOR UPGRADING DOUBLE-BOTTOM SIGHT CAPS FROM GENERATION 1 TO GENERATION 2

1. Using a flat head screwdriver, remove sight cap that was factory installed over the monitoring well of the double-bottom tank.



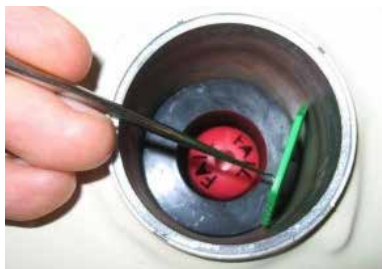
3. Make sure the float assembly remains in the monitoring well.



2. Remove the green “OK” signal from the monitoring well.



- 2.1 Lift it by the end opposite to its hinge.



- 2.2 Pull on it with your fingers.

- 2.3 The black piece of plastic that was holding the green “OK” signal can be removed OR can stay in the monitoring well.



4. Install the threaded rubber sealing component on top of the monitoring well.



NOTE:

The application of soapy water facilitates the tightening of the cap in the subsequent step of the procedure. Neglecting to apply soapy water before tightening the cap could compromise the weather tightness of the assembly.

5. Apply soapy water on the threads of a threaded observation cap.



Appendix E: Granby Storage Tanks Technical Bulletin – Water in Monitoring Tube

6. Install the threaded sight cap into the rubber sealing component and tighten with a 1 3/8" tool until the flange of the cap comes into contact with the rubber gasket.

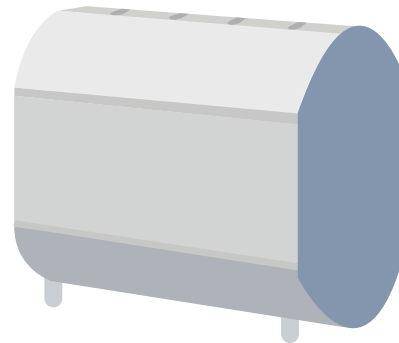


Appendix F: Chart for 275-gallon Tank

This chart can be used to estimate the amount of fuel in a tank using a measurement from a dip stick. To do this, measure the height of fuel in the tank shown on the dip stick and look up that height in inches to see how much fuel that represents.

275-gallon (Vertical) Oil Tank Level Chart ¹⁴

Length: 60 Inches
Width: 27 Inches
Height: 44 Inches





Inches	Gallons	Inches	Gallons	Inches	Gallons
1"	2	16"	94	31"	201
2"	5	17"	101	32"	209
3"	9	18"	108	33"	216
4"	14	19"	115	34"	223
5"	19	20"	123	35"	230
6"	25	21"	130	36"	236
7"	31	22"	137	37"	243
8"	37	23"	144	38"	249
9"	44	24"	151	39"	254
10"	51	25"	158	40"	260
11"	58	26"	166	41"	265
12"	65	27"	173	42"	269
13"	72	28"	180	43"	272
14"	80	29"	187	44"	275
15"	87	30"	194	-	-

¹⁴ Fuel Snap (2021). *Home Heating Oil Tank Charts*.

Appendix G: Reportable Quantities

Spills of the following quantities must be reported to the **NU 24-hr Spill Line:**

867-920-8130 / spills@gov.nt.ca

 Contaminant	 Quantity
Explosives	Any amount
Compressed gas (flammable)	Any amount of gas from containers with a capacity greater than 100 L
Compressed gas (non-corrosive, non-flammable)	Any amount of gas from containers with a capacity greater than 100 L
Compressed gas (toxic)	Any amount
Compressed gas (corrosive)	Any amount
Flammable liquid	100 L
Flammable solid	25 kg
Spontaneously combustible solids	25 kg
Water reactant solids	25 kg
Oxidizing substances	50 L or 50 kg
Organic peroxides	1 L or 1 kg
Poisonous substances	5 L or 5 kg
Infectious substances	Any amount
Radioactive substances	Any amount
Corrosive substances	5 L or 5 kg
Miscellaneous products or substances, excluding PCB mixtures	50 L or 50 kg
Environmentally hazardous substances	1 L or 1 kg
Dangerous wastes	5 L or 5 kg
PCB mixtures of 5 or more parts per million	0.5 L or 0.5 kg
Other contaminants	100 L or 100 kg

Appendix H: Spill Report Form

Fillable form: <https://gov.nu.ca/environment/documents/spill-response>



NT-NU SPILL REPORT

OIL, GASOLINE, CHEMICALS AND OTHER HAZARDOUS MATERIALS

NT-NU 24-HOUR SPILL REPORT LINE

TEL: (867) 920-8130

FAX: (867) 873-6924

EMAIL: spills@gov.nt.ca

REPORT LINE USE ONLY

A	REPORT DATE: MONTH - DAY - YEAR		REPORT TIME		<input type="checkbox"/> ORIGINAL SPILL REPORT, OR <input type="checkbox"/> UPDATE # _____ TO THE ORIGINAL SPILL REPORT	<table border="1"> <tr> <td>REPORT NUMBER</td> </tr> <tr> <td>_____</td> </tr> </table>	REPORT NUMBER	_____
	REPORT NUMBER							

B	OCCURRENCE DATE: MONTH - DAY - YEAR		OCCURRENCE TIME					
C	LAND USE PERMIT NUMBER (IF APPLICABLE)			WATER LICENCE NUMBER (IF APPLICABLE)				
D	GEOGRAPHIC PLACE NAME OR DISTANCE AND DIRECTION FROM NAMED LOCATION				REGION <input type="checkbox"/> NWT <input type="checkbox"/> NUNAVUT <input type="checkbox"/> ADJACENT JURISDICTION OR OCEAN			
E	LATITUDE			LONGITUDE				
	DEGREES	MINUTES	SECONDS	DEGREES	MINUTES	SECONDS		
F	RESPONSIBLE PARTY OR VESSEL NAME		RESPONSIBLE PARTY ADDRESS OR OFFICE LOCATION					
G	ANY CONTRACTOR INVOLVED		CONTRACTOR ADDRESS OR OFFICE LOCATION					
H	PRODUCT SPILLED		QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES		U.N. NUMBER			
	SECOND PRODUCT SPILLED (IF APPLICABLE)		QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES		U.N. NUMBER			
I	SPILL SOURCE		SPILL CAUSE		AREA OF CONTAMINATION IN SQUARE METRES			
J	FACTORS AFFECTING SPILL OR RECOVERY		DESCRIBE ANY ASSISTANCE REQUIRED		HAZARDS TO PERSONS, PROPERTY OR ENVIRONMENT			
K	ADDITIONAL INFORMATION, COMMENTS, ACTIONS PROPOSED OR TAKEN TO CONTAIN, RECOVER OR DISPOSE OF SPILLED PRODUCT AND CONTAMINATED MATERIALS							
L	REPORTED TO SPILL LINE BY	POSITION	EMPLOYER	LOCATION CALLING FROM	TELEPHONE			
M	ANY ALTERNATE CONTACT	POSITION	EMPLOYER	ALTERNATE CONTACT LOCATION	ALTERNATE TELEPHONE			

REPORT LINE USE ONLY						
N	RECEIVED AT SPILL LINE BY	POSITION	EMPLOYER	LOCATION CALLED	REPORT LINE NUMBER	
		STATION OPERATOR		YELLOWKNIFE, NT	(867) 920-8130	
LEAD AGENCY <input type="checkbox"/> EC <input type="checkbox"/> CCG <input type="checkbox"/> GNWT <input type="checkbox"/> GN <input type="checkbox"/> ILA <input type="checkbox"/> INAC <input type="checkbox"/> NEB <input type="checkbox"/> TC			SIGNIFICANCE <input type="checkbox"/> MINOR <input type="checkbox"/> MAJOR <input type="checkbox"/> UNKNOWN		FILE STATUS <input type="checkbox"/> OPEN <input type="checkbox"/> CLOSED	
AGENCY	CONTACT NAME		CONTACT TIME	REMARKS		
LEAD AGENCY						
FIRST SUPPORT AGENCY						
SECOND SUPPORT AGENCY						
THIRD SUPPORT AGENCY						

Appendix H: Spill Report Form

Instructions for Completing the NT-NU Spill Report Form

This form can be filled out electronically and e-mailed as an attachment to spills@gov.nt.ca. Until further notice, please verify receipt of e-mail transmissions with a follow-up telephone call to the spill line. Forms can also be printed and faxed to the spill line at 867-873-6924. Spills can still be phoned in by calling collect at 867-920-8130.

A. Report Date/Time	The actual date and time that the spill was reported to the spill line. If the spill is phoned in, the Spill Line will fill this out. Please do not fill in the Report Number: the spill line will assign a number after the spill is reported.
B. Occurrence Date/Time	Indicate, to the best of your knowledge, the exact date and time that the spill occurred. Not to be confused with the report date and time (see above).
C. Land Use Permit Number /Water Licence Number	This only needs to be filled in if the activity has been licenced by the Nunavut Water Board and/or if a Land Use Permit has been issued. Applies primarily to mines and mineral exploration sites.
D. Geographic Place Name	In most cases, this will be the name of the city or town in which the spill occurred. For remote locations – outside of human habitations – identify the most prominent geographic feature, such as a lake or mountain and/or the distance and direction from the nearest population center. You must include the geographic coordinates (Refer to Section E).
E. Geographic Coordinates	This only needs to be filled out if the spill occurred outside of an established community such as a mine site. Please note that the location should be stated in degrees, minutes and seconds of Latitude and Longitude.
F. Responsible Party Or Vessel Name	This is the person who was in management/control/ownership of the substance at the time that it was spilled. In the case of a spill from a ship/vessel, include the name of the ship/vessel. Please include full address, telephone number and e-mail. Use box K if there is insufficient space. Please note that, the owner of the spilled substance is ultimately responsible for any spills of that substance, regardless of who may have actually caused the spill.
G. Contractor involved?	Were there any other parties/contractors involved? An example would be a construction company who is undertaking work on behalf of the owner of the spilled substance and who may have contributed to, or directly caused the spill and/or is responding to the spill.
H. Product Spilled	Identify the product spilled; most commonly, it is gasoline, diesel fuel or sewage. For other substances, avoid trade names. Wherever possible, use the chemical name of the substance and further, identify the product using the four digit UN number (eg: UN1203 for gasoline; UN1202 for diesel fuel; UN1863 for Jet A & B)
I. Spill Source	Identify the source of the spill: truck, ship, home heating fuel tank and, if known, the cause (eg: fuel tank overfill, leaking tank; ship ran aground; traffic accident, vandalism, storm, etc.). Provide an estimate of the extent of the contaminated/impacted area (eg: 10 m ²)
J. Factors Affecting Spill	Any factors which might make it difficult to clean up the spill: rough terrain, bad weather, remote location, lack of equipment. Do you require advice and/or assistance with the cleanup operation? Identify any hazards to persons, property or environment: for example, a gasoline spill beside a daycare centre would pose a safety hazard to children. Use box K if there is insufficient space.
K. Additional Information	Provide any additional, pertinent details about the spill, such as any peculiar/unique hazards associated with the spilled material. State what action is being taken towards cleaning up the spill; disposal of spilled material; notification of affected parties. If necessary, append additional sheets to the spill report. Number the pages in the same format found in the lower right hand corner of the spill form: eg. "Page 1 of 2", "Page 2 of 2" etc. Please number the pages to ensure that recipients can be certain that they received all pertinent documents. If only the spill report form was filled out, number the form as "Page 1 of 1".
L. Reported to Spill Line by	Include your full name, employer, contact number and the location from which you are reporting the spill. Use box K if there is insufficient space.
M. Alternate Contact	Identify any alternate contacts. This information assists regulatory agencies to obtain additional information if they cannot reach the individual who reported the spill.
N. Report Line Use Only	Leave Blank. This box is for the Spill Line's use only.

