## Guide for Petroleum Inventory Control

2022

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## Petroleum Storage Systems How to take inventory and detect leaks

## Introduction

If your business has tanks that store petroleum products such as gasoline, oil, diesel, furnace oil, kerosene, and natural gas, you must, by law (the Petroleum Management Regulations), perform regular inventory checks as one way to see if your tanks are leaking. Other leak detection methods include checking interstitial space on double-walled tanks (that's the space in between the two walls) or checking monitoring wells.
You do this by comparing your PHYSICAL inventory with your BOOK inventory.
In other words, you will measure or calculate the amount of product you should have in storage after you take your starting inventory, add any deliveries, and subtract the amount of product pumped.

This guide will show you

1. how often you should check your inventory
2. how to measure and record your PHYSICAL inventory
3. how to calculate and record your BOOK inventory
4. how to compare the two to detect differences
5. how to determine if you have a leak that needs to be reported
6. some common sources of error and how to avoid them

Note: You DO NOT have to complete regular inventory checks in any tanks that

- are directly connected to a heating appliance, and
- are aboveground and have secondary containment (a system designed to catch any leaks or spills), and
- are visible for inspection, and
- have continuous leak detection for all parts, including piping and any sumps


## 1. How often should your inventory be checked?

Even small changes, including finding water in your tank, can mean you have a leak. Check your tanks according to the following schedule:

## Underground Tanks

Check your inventory every day when product is added or removed (delivered or pumped). Check it weekly if a week goes by with no product added or removed.

## Delivery Day for Underground Tanks

Check your inventory as follows on delivery days: once for your regular reading (as above) and again before and after the delivery. This will confirm that the amount delivered matches the delivery receipt. It will also help prevent overfills and will show if your delivery contained water. See Delivery Errors section 6.

## Aboveground Tanks

Check your inventory weekly if your tanks hold 4,000 litres (L) or more, or are tanks at a marina holding 230 L or more.

Tip: Factors like temperature can affect your reading, especially for aboveground tanks, so when you check your inventory, do it at about the same time of day each time.

## 2. How to measure and record your PHYSICAL inventory

Your physical inventory is the amount of fuel you manually measure with a stick or other device, such as an automatic tank gauge (ATG).

## Equipment you will use

## Gauge Stick (Dip Stick/Stick)

Just like a ruler, this stick measures the depth of liquid in a tank.
Your stick should

- start at zero and be marked in $1 / 2 \mathrm{~cm}$ increments
- be made of a material that will not cause sparks - wood or silicone are good choices
- be in good repair. Check that the bottom is not worn down or broken and that the stick is not warped

Tip: If you use a wooden stick, keep it varnished so fuel does not soak into the stick and wick upwards, as this will cause a false reading.

## Drop Tube

Each tank must have a drop tube that comes within 30 cm of the bottom of the tank. Your tank should also have a striker plate under the bottom of the tube to keep your stick from piercing the tank.

## Automatic Tank Gauges (ATGs)

An ATG is an electronic device that is permanently installed in a tank to measure the fuel level. It sends its readings either to a display on the tank or to a computer at a central location. You can use an ATG instead of a stick.

ATGs must be

- maintained and calibrated (adjusted) regularly to ensure they are giving accurate readings
- tested every month to confirm they are operating properly
- connected to their power source at all times
- responded to every time their alarm goes off - an ATG will sound an alarm if it detects a leak, an overfill, or too much water in the tank


## Tank Chart

A tank chart converts the measurement you take with your stick from centimetres (cm) to litres (L). Every model of tank will need its own tank chart because different tanks are different sizes.

If you do not have a chart for your tanks, contact the manufacturer or the company that installed your tanks.

Tip: If your tank did not originally come with a striker plate (see Drop Tube, above), and one was added afterwards, you will need a new tank chart that compensates for the size of the plate.

## Inventory Worksheets and Records

## Underground Tanks

You will need one daily inventory worksheet for each day of the month. You can use one worksheet for all tanks. You will also need one monthly inventory record for each tank. Remember: you must check your inventory every day you receive or pump product, and weekly if a week goes by with no product added or removed.

You will find copies of these sheets on pages 14, 15 and 16 of this booklet. You can also download fillable forms at https://www.novascotia.ca/nse/petroleum-regulated/.

## Aboveground Tanks

You will need one weekly inventory worksheet for each week of the month. You can use one worksheet for all tanks. You will also need one monthly inventory record for each tank.

You will find copies of these sheets on pages 17 and 18 of this booklet. You can also download fillable forms at https://www.novascotia.ca/nse/petroleum-regulated/.

Note: You must

- keep these records at the facility where the tanks are located. Digital records can be kept at a separate location (such as a head office).
- make them available to an inspector or administrator. If digital records are at a separate location they must be provided within 48 hours of a request.
- keep them for two years.

Tip: Even if you are keeping track of your tank inventory on a computer, we recommend you record the readings on a physical sheet first so you can write your measurements down immediately. Having a clipboard will make it easier to write down the measurements.

## Follow these steps to take a physical inventory

Tip: Take a stick or ATG reading of your tanks at about the same time of day each time. Do not take a reading while the tanks are being actively filled or are pumping.
a) Action step: Start by taking a new daily inventory worksheet (if you have underground tanks) or a new weekly inventory worksheet (if you have aboveground tanks) and printing your name and the date on the top.
b) Action step: On line 1 (Tank Identification), write the name or number of each tank. Use one column for each tank. Be consistent - use the same column for the same tank on every sheet.
c) Action step: On line 2 (Type of Product), write in the type of product stored in that tank (reg. gas; prem. gas; diesel; etc.)
d) Action step: On line 3 (Tank Size), fill in the tank size in litres (L).
e) Action step: If you are using a stick, remove the cap from the tank and gently lower your stick down through the drop tube until it touches the bottom of the tank. Do not let it bounce off the bottom.
f) Action step: Remove the stick and record the reading, in centimetres, on line 4 (Today's Stick Reading cm ) of your inventory worksheet. If you are using an ATG, write today's reading on line 4. Use your tank chart to convert the reading to litres and enter that figure on line 5 (Today's Stick Reading L ) of the worksheet.
g) Action step:

Underground Tanks
Look up yesterday's inventory worksheet. Write the reading from yesterday's line 4 on today's line 6 (Yesterday's Stick Reading cm ). Write the reading from yesterday's line 5 on today's line 7 (Yesterday's Stick Reading L).

Aboveground Tanks
Look up last week's inventory worksheet. Write the reading from last week's line 4 on this week's line 6 (Stick reading from previous week cm). Write the reading from last week's line 5 on this week's line 7 (Stick reading from previous week L).
h) Action step: Repeat this for each tank.

## Note about Manifolded Tanks

Manifolded tanks are two or more tanks joined together by a shared filling or dispensing pipe.
For measuring purposes, you will consider them to be ONE tank because they share the same inventory. Measure the manifolded tanks through a shared filling pipe or measure each tank separately.

Example 1: If you had two manifolded tanks, and one reading, write it on line 4. Use your tank charts to convert the readings to litres and write the total on line 5.
Example 2: If you had two manifolded tanks, and one had a reading today of 250 cm and the other had a reading of 350 cm , you would write both numbers on line 4 , then use your tank chart to convert both readings to litres and add them together. Write the total number of litres on line 5.

## 3. How to measure and record your BOOK inventory

Your book inventory is a figure you calculate using information from your pump meters and delivery receipts. It will tell you how much fuel has been pumped, and how much has been delivered.

## Equipment you will use

## Pump Totalizers

You need to know how much fuel has been removed from your tanks on a daily or weekly basis. Note that one tank may be connected to more than one pump.

Your pumps will measure how much fuel they disperse for each transaction and will also have a totalizer reading for the full amount they pump each day or week from each tank. Your point-of-sale console may also have this information.

Action step: On line 8 of your worksheet, enter the identification number of the pumps (Dispenser Totalizers) that are connected to each tank.

## Fuel Delivery Receipt

You also need a reading of how much fuel has been delivered to your tanks. Your fuel supplier will give you a receipt with each delivery that tells you how many gross litres were delivered. For underground tanks, you must double check that the receipt is accurate by taking a stick/ ATG measure of each tank before and after a delivery. See Delivery Errors section 6.

Tip: When taking a reading after a delivery, wait a minimum of five minutes until the fuel has reached a uniform temperature.

## Water-finding Paste

Underground tanks only:
You must check for water in the bottom of underground tanks every day the tank is dipped.
Water-finding paste changes colour when it comes in contact with water. Changes in water level could be a clue that your tank has a hole that is letting water in, and fuel out. Water may also get into your tank during fuel delivery. See page 9 (action step (g)) for how to use this paste.

Tip: Make sure your paste is compatible with the type of fuel in your tank.

## Follow these steps to take a book inventory

Steps a through d will tell you how much fuel has been pumped out of your tanks
a) Action step: Go to each pump and read the totalizer reading for each pump. Be sure to match the right pump(s) (dispenser(s) with the right tank. The readings will be litres (L).

## Underground Tanks

Write the daily total for each totalizer on line 8 of your daily inventory worksheet (Dispenser Totalizer Reading).

Aboveground Tanks
Write the weekly total for each totalizer on line 8 of your weekly inventory worksheet (Dispenser Totalizer Reading for Week).

Note: Pump (dispenser) totalizer readings for mid-grade fuel should be split evenly $(50 / 50)$ between the high-grade tank and the regular tank.
b) Action step: Add all the totalizer readings on line 8. Enter this figure on line 9 of your worksheet (Underground tanks: Today's Sum of Totalizers/Aboveground tanks: Week's Sum of Totalizers).
c) Action step:

Underground Tanks
Look up yesterday's inventory worksheet for line 9 and write it on line 10 (Previous Day's Sum of Totalizers) of today's worksheet.

Aboveground Tanks
Look up last week's inventory worksheet total for line 9 and write it on line 10 (Previous Week's Sum of Totalizers) of this week's sheet.
d) Action step: Subtract line 10 from line 9 and write this figure on line 11 (Underground tanks Amount Pumped Today/Aboveground tanks: Amount Pumped During the Past Week).

Steps e through i will tell you how much fuel has been delivered today, and whether your underground tanks have any water in them
e) Action step Underground Tanks Only: Use either a stick or your ATG to measure the inventory in your tanks BEFORE delivery and enter this figure on line 12 (Product Before Delivery cm ) in centimetres.
f) Action step Underground Tanks Only: Use your tank chart to convert line 12 to litres and enter that on line 13 (Product Before Delivery L).
g) Action step

Underground Tanks:

- Smear some water-finding paste on the bottom 10 cm of your stick. Measure the inventory in your tanks again AFTER delivery. Write this figure on line 14 (Product After Delivery cm). Use your tank chart to convert the centimetres to litres and write this figure on line 15 (Product After Delivery L).
- If you detect water, write that figure on line 18 (Water cm ) and use your tank chart to convert that to litres. Write that figure on line 19 (Water L).
- If the water level in the bottom of an underground tank exceeds 5 cm , report it to Nova Scotia Environment and Climate Change.

Tip: Your ATG may also have a function to check for water. If it does, use the ATG's readings to fill in these lines.

Aboveground Tanks
Using delivery receipt(s), write in the amount delivered each time on line 12 (DeliveredReceipt L ) and the date.
h) Action step

Underground Tanks
Subtract line 13 from line 15. Write this figure on line 16 (Total Delivered Measured L).

## Aboveground Tanks

Add up all the amounts on line 12 and write this figure on line 13 (Total Delivered Receipt L ).
i) Action step Underground Tanks Only: Enter the number of gross litres delivered for each tank on line 17 (Total Delivered Receipt L ) of your worksheet. You will find this number on the fuel delivery receipt. It should roughly equal the figure on line 16. See Delivery Errors in section 6 if it does not.

## 4. How to compare your PHYSICAL inventory with your Book inventory

You will use one monthly inventory record sheet for each tank or manifolded tanks.
Action step: Print your facility's name and the tank ID and product type on the sheet, along with the month and year.

## Underground Tanks Only:

The sheet has a line for each day of the month. Use line 1 for the first day, line 2 for the second, and so on.
a) Action step: Write the figure from line 7 of the previous day's worksheet (Yesterday's Stick Reading L) in column 2 of the monthly inventory record (Start Stick/ATG Inventory L).
b) Action step:

- If you received a delivery this day, write the figure from line 16 (Total Delivered Measured L) of that day's daily worksheet in column 3 (Litres Delivered).
- If you did not receive a delivery today, leave column 3 blank.
c) Action step: Write the figure from line 11 (Amount Pumped Today) of your daily worksheet in column 4 (Litres Pumped).
d) Action step:
- If you received a delivery today, add columns 2 and 3 , then subtract column 4 . Write this figure in column 5 (Book Inventory L).
- If you did not receive a delivery, subtract column 4 from column 2 and write this figure in column 5.
e) Action step:
- Write the figure from line 5 (Today's Stick Reading L) from today's daily worksheet in column 6 (End Stick/ATG Inventory L).
f) Action step:
- Subtract column 6 from column 5. The figure may be zero, or a positive or negative figure. A positive number indicates a gain and a negative number indicates a loss.
- Write that figure with a " + " if it's a gain and a " - " if it's a loss in column 7 (Daily Over + [Gain] or Under - [Loss] Book).

Tip: If you are using a computerized spreadsheet to keep track of your monthly inventory, be sure to enter negative numbers in brackets.
g) Action step: Write the figure from line 18 (Water cm ) of your daily worksheet in column 8 (Water Level cm).

## Aboveground Tanks Only:

The sheet has a line for each week of the month. Use line 1 for the first week, line 2 for the second, and so on.
a) Action step: Write the figure from line 7 (Stick Reading from previous week L ) on the weekly inventory worksheet in column 2 (Start Stick/ATG Inventory L).
b) Action step:

- If you received a delivery during this week, write the figure from line 13 (Total Delivered Receipt L) of that week's weekly worksheet in column 3 (Litres Delivered).
- If you did not receive a delivery this week, leave column 3 blank.
c) Action step: Write the figure from line 11 (Amount Pumped During the Past Week) of your weekly worksheet in column 4 (Litres Pumped).
d) Action step:
- If you received a delivery this week, add columns 2 and 3 , then subtract the figure in column 4. Write this figure in the column 5 (Book Inventory L).
- If you did not receive a delivery, subtract column 4 from column 2 and write this figure in column 5.
e) Action step:
- Write the figure from line 5 (Today's Stick Reading L) from this week's worksheet in column 6 (End Stick/ATG Inventory L).
f) Action step:
- Subtract column 6 from column 5. The figure may be zero, or a positive or negative figure. A positive number indicates a gain and a negative number indicates a loss.
- Write that figure with a + if it's a gain and a - if it's a loss in column 7 (Weekly Over + [Gain] or Under - [Loss ] Book).

Tip: If you are using a computerized spreadsheet to keep track of your monthly inventory, be sure to enter negative numbers in brackets.

## 5. Do your inventory losses or gains need to be reported?

At the end of each month, you will add up your gains and losses and check your water levels to see if your inventory shows a leak in a tank. If you detect a leak, you need to report it.
a) Action step: Add up column 4 and column 7 write the totals on the Monthly Total line.

Tip: Column 7 (Daily gains and losses) could be a mix of positive and negative numbers. If you are totalling this column using a calculator, add all the positive numbers first, then subtract all of the negative numbers. Double check your work.
b) Action step:

Underground Tanks
Take the total in column 4 (Litres Pumped) and multiply this by $0.5 \%$. Write that figure on the Maximum Losses Number Line. (Total L column $4 \times 0.005=$ maximum losses or gains number)

Aboveground Tanks
Take the total in column 4 (Litres pumped) and multiply this by $1 \%$. Write that figure on the Maximum Losses Number Line. (Total L column $4 \times 0.01=$ maximum losses or gains number)
c) Action step: Compare the total in column 7 (Gains and Losses) to the maximum losses or gains number. This will tell you if you are above or below the maximum amount of inventory you are allowed to show as a loss or gain each month under the Fire Code.

Use the answer above to select either yes or no to the question on line 1 at the bottom of the sheet.

Underground Tanks: Do you have an unexplained loss or gain of $>0.5 \%$ (greater than $0.5 \%$ )?
Aboveground Tanks: Do you have an unexplained loss or gain of $>1.0 \%$ (greater than $1.0 \%$ )?
If yes, report to Nova Scotia Department of Environment and Climate Change
d) Action step: Look at the numbers in column 7

Underground Tanks
If you had 5 or more consecutive days with a loss or gain, check "yes" on line 2. If you have 18 or more days (total) with a loss or gain, check "yes" on line 3.

## Aboveground Tanks

If you had 4 or more consecutive weeks of unexplained petroleum product losses or gains for the month. check "yes" on line 2.
e) Action step: If you have answered yes in action step d, you must call Nova Scotia Department of Environment and Climate Change. Check "yes" on line 5 for underground tanks or line 3 for aboveground tanks if you have called. If you do not need to call, check "no."
f) Action step for Underground Tanks Only: Look at the figures in column 8 (Water Level cm). Are any of them greater than $5 \mathrm{~cm}(50 \mathrm{~mm})$ ? Select "yes" or "no" on line 4. If yes, report to Nova Scotia Department of Environment and Climate Change.

Note: A water level of greater than 5 cm should have been reported when it was measured.

## 6. Common sources of errors and how to avoid them

Petroleum Creep. This occurs when your gauge stick absorbs petroleum and wicks it upwards, giving you a false reading.
Avoid it by varnishing your stick to make it non-absorbent, or by placing petroleum-finding paste on the stick. This paste changes colour when it comes in contact with petroleum.
Tank Pressure. Tanks with vapour recovery systems may have pressure differences within tanks that can affect ATGs.

Avoid it by adding a pressure relief valve into the vapour system.
Evaporation. Some products - especially gasoline - may evaporate during warmer months.
Avoid it by adding a vapour-saving device to tanks that store those products.
Mathematical Errors. Inventory must be measured carefully and recorded accurately. Different staff may take the measurement differently, or read the measures differently.

Avoid it by training a staff member to handle this task. Make sure the same person takes the measurements each day.
Mid-range Fuel Blended at Pump. Errors will occur if you do not account for how mid-range fuel is blended at the pump from the regular and premium fuel tanks.
Avoid it by crediting half the totalizer reading for this fuel type to each grade.
Equipment Error. ATGs and totalizers can lose their accuracy over time.
Avoid it by calibrating (adjusting) them regularly. Check equipment owners' manual or equipment supplier on how to do calibration for the specific system. Totalizers should be calibrated annually. You should also compare your totalizer readings to your sales terminal readings to ensure sales have not been missed.

Delivery Error. The amount ordered may not be the amount delivered. If you have more than one tank for a product, the delivery may be credited to the wrong tank, or a delivery may be split over two tanks but counted as one delivery. Tanks can be overfilled.
Avoid it by measuring before and after deliveries. This reduces the chances of overfill and confirms the amount of inventory delivered matches the invoice/delivery receipt and is credited to the proper tanks. Wait at least five minutes after product is delivered before measuring to let it come to temperature.

## Daily Inventory Worksheet for Underground Tanks

Complete this sheet for each tank or combination of manifolded tanks.

Facility name:
Person completing form:
Date: $\qquad$

| Line 1 | Tank Identification |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Line 2 | Type of Product |  |  |  |  |  |
| Line 3 | Tank Size (L) |  |  |  |  |  |
| Line 4 | Today's Stick Reading (cm) |  |  |  |  |  |
| Line 5 | Today's Stick Reading (L) |  |  |  |  |  |
| Line 6 | Yesterday's Stick Reading (cm) |  |  |  |  |  |
| Line 7 | Yesterday's Stick Reading (L) |  |  |  |  |  |


| Litres Pumped: |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Line 8 | Dispenser \#s connected to tank |  |  |  |  |  |
|  | Dispenser Totalizer Reading |  |  |  |  |  |
|  | Dispenser Totalizer Reading |  |  |  |  |  |
|  | Dispenser Totalizer Reading |  |  |  |  |  |
|  | Dispenser Totalizer Reading |  |  |  |  |  |
|  | Dispenser Totalizer Reading |  |  |  |  |  |
|  | Dispenser Totalizer Reading |  |  |  |  |  |
|  | Dispenser Totalizer Reading |  |  |  |  |  |
| Line 9 | Today's Sum of Totalizers |  |  |  |  |  |
| Line 10 | Previous Day's Sum of Totalizers |  |  |  |  |  |
| Line 11 | Amount Pumped Today |  |  |  |  |  |


| Delivery Record |  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Line 12 | Product Before Delivery (cm) |  |  |  |  |  |  |  |  |  |  |  |
| Line 13 | Product Before Delivery (L) |  |  |  |  |  |  |  |  |  |  |  |
| Line 14 | Product After Delivery (cm) |  |  |  |  |  |  |  |  |  |  |  |
| Line 15 | Product After Delivery (L) |  |  |  |  |  |  |  |  |  |  |  |
| Line 16 | Total Delivered Measured (L) |  |  |  |  |  |  |  |  |  |  |  |
| Line 17 | Total Delivered Receipt (L) |  |  |  |  |  |  |  |  |  |  |  |
| Line 18 | Water (cm) |  |  |  |  |  |  |  |  |  |  |  |
| Line 19 | Water (L) |  |  |  |  |  |  |  |  |  |  |  |

## Monthly Inventory Record for Underground Tanks

Complete this sheet for each tank or combination of manifolded tanks.
This monthly summary template to record monthly cumulative losses or gains of petroleum product in a tank system is approved by the Minister or Administrator of Nova Scotia Department of Environment and Climate Change as per section 19(3) of the Petroleum Management Regulations. A form that contains the same information and is presented in a clear and legible format shall also be accepted by the Minister/Administrator as an approved form for the purposes of section 19(3). Where a discrepancy is identified with respect to information contained on a form other than an approved form, the Minister/Administrator will make the final determination with respect to its acceptance for the purposes of s. 19(3).

Facility name: $\qquad$
Person(s) completing form: $\qquad$ Date (month/year): $\qquad$
Tank I.D. \& Product type:

|  | Column 1 | Column 2 | Column 3 | Column 4 | Column 5 | Column 6 | Column 7 | Column 8 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Date | Start <br> Stick/ATG <br> Inventory <br> (L) | Litres Delivered | Litres <br> Pumped | Book Inventory <br> (L) | End Stick/ ATG Inventory <br> (L) | Daily Over <br> (+) (GAIN) or Under <br> (-) (LOSS) Book | Water Level (cm) |
| 1 |  |  |  |  |  |  |  |  |
| 2 |  |  |  |  |  |  |  |  |
| 3 |  |  |  |  |  |  |  |  |
| 4 |  |  |  |  |  |  |  |  |
| 5 |  |  |  |  |  |  |  |  |
| 6 |  |  |  |  |  |  |  |  |
| 7 |  |  |  |  |  |  |  |  |
| 8 |  |  |  |  |  |  |  |  |
| 9 |  |  |  |  |  |  |  |  |
| 10 |  |  |  |  |  |  |  |  |
| 11 |  |  |  |  |  |  |  |  |
| 12 |  |  |  |  |  |  |  |  |
| 13 |  |  |  |  |  |  |  |  |
| 14 |  |  |  |  |  |  |  |  |
| 15 |  |  |  |  |  |  |  |  |
| 16 |  |  |  |  |  |  |  |  |
| 17 |  |  |  |  |  |  |  |  |
| 18 |  |  |  |  |  |  |  |  |
| 19 |  |  |  |  |  |  |  |  |


|  | Column 1 | Column 2 | Column 3 | Column 4 | Column 5 | Column 6 | Column 7 | Column 8 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Date | Start Stick/ATG Inventory <br> (L) | Litres Delivered | Litres Pumped | Book Inventory <br> (L) | End Stick/ ATG Inventory (L) | Daily Over <br> (+) (GAIN) or Under <br> (-) (LOSS) Book | Water Level (cm) |
| 20 |  |  |  |  |  |  |  |  |
| 21 |  |  |  |  |  |  |  |  |
| 22 |  |  |  |  |  |  |  |  |
| 23 |  |  |  |  |  |  |  |  |
| 24 |  |  |  |  |  |  |  |  |
| 25 |  |  |  |  |  |  |  |  |
| 26 |  |  |  |  |  |  |  |  |
| 27 |  |  |  |  |  |  |  |  |
| 28 |  |  |  |  |  |  |  |  |
| 29 |  |  |  |  |  |  |  |  |
| 30 |  |  |  |  |  |  |  |  |
| 31 |  |  |  |  |  |  |  |  |
|  |  |  | Monthly Total |  |  | nthly Total |  |  |
|  | Maximum | Monthly tota Losses or G | $\text { al x } 0.005=$ <br> ains Number |  |  |  |  |  |

Line 1 Do you have an unexplained loss or gain of $>0.5 \%$ ? Yes $\square$ No
Line 2 Do you have 5 or more consecutive days of unexplained losses or gains? Yes No
Line 3 Do you have 18 or more days of losses or gains?

- Yes No

Line 4 Do you have greater than $5 \mathrm{~cm}(50 \mathrm{~mm})$ of water in the bottom of an underground tank?

- Yes No

Line 5 Have issues been reported to Nova Scotia Department of Environment and Climate Change?

- Yes


## Weekly Inventory Worksheet for Aboveground Tanks

Complete this sheet at least once a week for aboveground tanks or a combination of manifolded tanks.

Facility name: $\qquad$
Person completing form: $\qquad$ Date: $\qquad$

| Line 1 | Tank Identification |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Line 2 | Type of Product |  |  |  |  |  |
| Line 3 | Tank Size (L) |  |  |  |  |  |
| Line 4 | Today's Stick Reading (cm) |  |  |  |  |  |
| Line 5 | Today's Stick Reading (L) |  |  |  |  |  |
| Line 6 | Yesterday's Stick Reading (cm) |  |  |  |  |  |
| Line 7 | Yesterday's Stick Reading (L) |  |  |  |  |  |


| Litres Pumped since previous week's inventory account: |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Line 8 | Dispenser \#s connected to tank |  |  |  |  |  |
|  | Dispenser Totalizer Reading for week |  |  |  |  |  |
|  | Dispenser Totalizer Reading for week |  |  |  |  |  |
|  | Dispenser Totalizer Reading for week |  |  |  |  |  |
|  | Dispenser Totalizer Reading for week |  |  |  |  |  |
|  | Dispenser Totalizer Reading for week |  |  |  |  |  |
|  | Dispenser Totalizer Reading for week |  |  |  |  |  |
|  | Dispenser Totalizer Reading for week |  |  |  |  |  |
| Line 9 | Week's Sum of Totalizers |  |  |  |  |  |
| Line 10 | Previous Week's Sum of Totalizers |  |  |  |  |  |
| Line 11 | Amount Pumped during the past week |  |  |  |  |  |



## Monthly Inventory Record for Aboveground Tanks

Complete this sheet for each aboveground tank or combination of manifolded tanks.
This monthly summary template to record monthly cumulative losses or gains of petroleum product in a tank system is approved by the Minister or Administrator of Nova Scotia Department of Environment and Climate Change as per section 19(3) of the Petroleum Management Regulations. A form that contains the same information and is presented in a clear and legible format shall also be accepted by the Minister/Administrator as an approved form for the purposes of section 19(3). Where a discrepancy is identified with respect to information contained on a form other than an approved form, the Minister/Administrator will make the final determination with respect to its acceptance for the purposes of s. 19(3).

Facility name: $\qquad$
Person(s) completing form: $\qquad$ Date (month/year): $\qquad$
Tank I.D. \& Product type:

|  | Column 1 | Column 2 | Column 3 | Column 4 | Column 5 | Column 6 | Column 7 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Week | Date | Start Stick/ATG Inventory <br> (L) | Litres Delivered | Litres Pumped | Book Inventory (L) | End Stick/ ATG Inventory <br> (L) | Weekly Over <br> (+) (GAIN) or Under <br> (-) (LOSS) <br> Book |
| 1 |  |  |  |  |  |  |  |
| 2 |  |  |  |  |  |  |  |
| 3 |  |  |  |  |  |  |  |
| 4 |  |  |  |  |  |  |  |
| Monthly Total <br> Monthly total $\times 0.01=$ Maximum Losses or Gains Number |  |  |  |  | Monthly Total |  |  |
|  |  |  |  |  |  |  |  |

Line 1 Do you have an unexplained loss or gain of more than $1 \%$ ?
Line 2 Do you have unexplained losses or gains on 4 or more weeks?

- Yes No

Line 3 If you have answered yes to any of the above questions, has the issue been reported to Nova Scotia Department of Environment and Climate Change?

- Yes No

