

Municipal Water Licence Annual Report

Village of Fort Providence
Licence #: MV2016L3-0001
Reporting year: _____
Expires: July 6, 2026

*Part B, item 4: The Licensee shall file an Annual Water Licence Report with the Board not later than **June 30th** of the year following the calendar year reported (April 1 – March 31), which shall contain the following information (as set out in Schedule 1):*

a) Water Use

Licensed Water Volume Withdrawal: not to exceed 60,000 m³ annually

Approximate total yearly volume of water used: m³

Table 1: Monthly and annual water quantities obtained from all sources

Month	Volume from main source: Raw Water intake at Water Supply Facilities (m ³)	Volume from any other source (m ³)	TOTAL Volume (m ³)
January			
February			
March			
April			
May			
June			
July			
August			
September			
October			
November			
December			
TOTALS			
% Increase / decrease from previous year			

Reasons for increase/decrease in water withdrawn:

Reasons for exceeding licensed withdrawal volumes (if applicable):

Name and location of other water source used (if any), and reason for its use:

General information (e.g. information regarding any modifications to the water withdrawal procedure or facilities) should be included here. If necessary, please attach any relevant reports as an appendix to this report.

b) Waste Disposal

i) Solid Waste

Approximate total yearly volume of solid waste deposited: _____ m³

*GNWT – MACA has provided a standard formula for estimating the amount of solid waste deposited into a Solid Waste Facility in the absence of a metered Garbage Truck. The following can be used: **Volume per person per day X number of days X population***

*e.g. **0.015 m³ X 30 days X 860 people = 387 m³ of domestic trash**
deposited into Solid Waste Facility in a 30 day month*

Table 2: Monthly and annual quantities of solid waste deposited at the Fort Providence Solid Waste Disposal Facilities

Month	Volume of solid waste deposited (m ³)	Volume of sludge from the Water Supply Facility (m ³)
January		
February		
March		
April		
May		
June		
July		
August		
September		
October		
November		

December		
TOTALS		
% Increase / decrease from previous year		

Reasons for increase / decrease: (e.g. an industrial project close to the Hamlet of Fort Providence, or a large influx of people into town)

ii) **Sewage**

Table 3: Monthly and annual quantities of sewage deposited at Fort Providence Sewage Disposal Facilities

Month	Volume of sewage waste deposited (m ³)
January	
February	
March	
April	
May	
June	
July	
August	
September	
October	
November	
December	
TOTALS	
Is this an estimated volume? (yes/no)	
% Increase / decrease from previous year	

To calculate monthly sewage waste deposited to the Sewage Disposal Facilities, please provide the above information if metered information is available. If metered information is not available, please fill in the table using the corresponding TOTAL water volumes from Table 1. This provides estimation only and equals water in/sewage out.

Reasons for increase / decrease: (e.g.: an industrial project close to the Hamlet of Fort Providence, or a large influx of people into town)

iii) Other Waste Sources

Are there any other types or sources of waste that are being deposited at the Hamlet of Fort Providence's Waste Disposal Facilities? Please list the type/source, where it is being deposited, and monthly/annual volumes for each waste.

c) Waste Removed from Waste Disposal Facilities

Please list in the table below wastes removed from Waste Disposal Facilities (e.g. recyclables, tires, household hazardous waste, scrap metal, and other wastes that are periodically shipped out.). Add additional columns to Table 4 if necessary.

Table 4: Monthly and annual quantities of waste removed from the Waste Disposal Facilities by Type

Month	Waste type 1 (m ³) (fill in type)	Waste type 2 (m ³) (fill in type)	Waste type 3 (m ³) (fill in type)
January			
February			
March			
April			
May			
June			
July			
August			
September			
October			
November			
December			
TOTALS			
Is this an estimated volume? (yes/no)			
% Increase / decrease from previous year			

d) Waste Volume

Table 5: Monthly waste volumes deposited by commercial and industrial operators working outside the boundaries of Fort Providence

Month	Solid Waste Disposal Facility (m³)	Sewage Disposal Facility (m³)	TOTAL (m³)
January			
February			
March			
April			
May			
June			
July			
August			
September			
October			
November			
December			
TOTALS			
Is this an estimated volume? (yes/no)			
% Increase / decrease from previous year			

General information:

Information regarding any agreements with outside organizations to be a waste receiving facility should be outlined here along with estimates of the amounts and types of waste to be received.

e) Tabular summaries of data generated under the Surveillance Network Program

Tabular summaries of all data generated under the Surveillance Network Program (SNP) should be included using the tables in Appendix A (attached).

f) Laboratory reports for all samples collected for the Surveillance Network Program

All laboratory reports should be attached as Appendix B to this report.

g) Geographic Coordinates for all Surveillance Network Program stations, and a map showing station locations

Table 6: SNP station details

Station Number	Geographic Coordinates	Effective date	Signage install date
1412-1			
1412-2			
1412-3	Discontinued		
2016-1			
2016-2			
2016-3			

Include a map showing SNP station locations as Appendix C.

h) Activities to install and maintain fencing at the Waste Disposal Facilities

Include a summary of any and all activities undertaken to install and maintain fencing at the Solid Waste Disposal Facilities and Sewage Disposal Facilities.

i) Activities to install and maintain signage at the Waste Disposal Facilities and SNP stations

Include a summary of any and all activities undertaken to install and maintain signage at the:

- Solid Waste Disposal Facilities,
- Sewage Disposal Facilities, and
- Surveillance Network Program stations.

j) Sludge Management Activities

Include a summary of sludge management activities, including results of depth and volume measurements, sludge removal and treatment.

k) Construction activities

Include a summary of construction activities conducted in accordance with Part F of this Licence. If there were no construction activities, please make note of that. If required, please attach any as-built drawings or reports as an appendix to this report.

l) Modifications and major maintenance

Include a summary of Modification activities and major maintenance work conducted on the Water Supply and Waste Disposal Facilities, including all associated structures, in accordance with Part G of the Licence. This includes any changes, repairs and modifications. If any problems occurred during the year, please note them here. If there are no changes, make note of that. If required please attach any as-built drawings or reports as an appendix to this report.

m) Unauthorized Discharges

List and describe all unauthorized discharges that occurred during the previous calendar year, including the date, NWT spill number, volume, location, and summary of the circumstances and follow-up actions taken, and the status (i.e. open or closed), in accordance with the reporting requirements referred to in Part H, item 4 of the Licence. Please attach copies of spill reports, correspondence with the GNWT Water Resources Officer (Inspector) or any other pertinent documentation as an appendix to this report.

n) Spill Training and Communications Exercises

List any spill training and communications exercises that have been carried out during the previous calendar year including courses on spills prevention, waste management, SNP sampling, etc.

o) Closure and Reclamation Activities

Summarize any closure and reclamation work completed during the year, and an outline of any work anticipated for the next year. Attach any relevant as-built drawings or reports as an appendix to this report.

p) Studies requested by the Board

If the Board has requested that specific studies related to Waste disposal, Water Use or Reclamation be completed, include details of the studies in this section with a summary of the outcome. Also include a brief description of any future studies planned. Include any studies or reports as appendices to the Annual Report.

q) Actions taken to address concerns, non-conformances, or deficiencies identified by an Inspector

Include any non-compliance items identified in GNWT Water Licence Inspection reports and detail how the Hamlet of Fort Providence is addressing them.

r) Updates to Plans

Summarize any updates or revisions to the Spill Contingency Plan, Management Plans and Operations and Maintenance Plans. Add rows to the table if necessary.

Table 7: Updates to Plans

Plan	Summary of revisions made	Effective date

s) Other Details Requested by the Board

If the Board has requested any other details on Water use, operating procedures, Modifications, maintenance work, or other topics, include details in this section with a summary of the outcome(s). Include any attachments as appendices to the Annual Report.

Other Information

- Include a summary of correspondence with the Inspector, including inspection dates and identification of any issues of non-compliance. The MVLWB is interested in this information in order to facilitate discussions to resolve any issues.
- Include any other information here that may be valuable to the MVLWB.
- Include details on upcoming studies that will be completed.
- If there are any contaminated soil piles currently in use (land farming), please list the details of containment, remediation and progress in this section.

Appendix A: Tabular summaries of all data generated under the Surveillance Network Program for Fort Providence (MV2016L3-0001)

Surveillance Network Program Lab Results Summary

Surveillance Network Program (SNP) information is to be summarized in a tabular format and shall indicate date of testing, parameters tested for and any other information requested by the GNWT Water Licence Inspector or the MVLWB. Summary tables have been provided below for your convenience. Laboratory analysis results should be appended in Appendix B.

1) SNP Lab Results Summary – Station number 1412-1 (Raw water from the Water Supply Facilities)

This station monitors the monthly and annual quantities of Water withdrawn for municipal purposes. This information is reported in Table 1 of the Annual Report.

2) SNP Lab Results Summary – Station number 1412-2 (Sewage effluent from Sewage Disposal Facilities)

This station is the site of compliance, and monitors final effluent quality prior to discharge to the Receiving Environment.

		20XX											
Water Licence Parameters	Effluent Quality Criteria	January	February	March	April	May	June	July	August	September	October	November	December
pH	Above 6												
CBOD ₅	330mg/L												
Total Suspended Solids	300mg/L												
Ammonia													
Total Phosphorus													

Nitrate													
Nitrite													
Faecal Coliforms	1x10 ⁵ CFU/100ml												
Oil and Grease	5mg/L												

3) SNP Lab Results Summary – Station number 1412-3 (Raw sewage from pump out truck)

This station has been discontinued.

4) SNP Lab Results Summary – Station number 2016-1 (Sewage effluent flowing through ponded area of wetland)

At issuance, this station’s exact location was to be determined with the Inspector. It monitors the quality of effluent discharged from the Sewage Disposal Facilities and determines effectiveness of wetland treatment before final discharge to the Mackenzie River. Sampling frequency is at the beginning (one week following freshet) and end (before freeze-up) of the open water season.

Parameter	Sample 1 (one week following freshet) Date	Sample 2 (before freeze-up) Date
pH		
CBOD ₅		
Total Suspended Solids		
Ammonia		
Total Phosphorus		
Nitrate		
Nitrite		
Faecal Coliforms		
Oil and Grease		

5) SNP Lab Results Summary – Station number 2016-2 (Ponded water within or adjacent to domestic waste cells at Solid Waste Disposal Facilities)

At issuance, this station’s exact location was to be determined with the Inspector. This station monitors potential impacts of the Solid Waste Disposal Facilities on groundwater and surface Water, and water quality and quantity prior to discharge. Sampling frequency is twice per year in June and September, and prior to discharge of accumulated water. Add additional columns to table if necessary.

	Sample 1 (June) Date	Sample 2 (September) Date	Sample 3 (prior to discharge of accumulated water) Date	Sample 4 (prior to discharge of accumulated water) Date
Volume of water discharged (m³)				
Total Suspended Solids				
Total Cadmium				
Total Chromium				
Total Cobalt				
Total Copper				
Total Iron				
Total Lead				
Magnesium				
Total Manganese				
Total Mercury				
Total Nickel				
Oil and Grease				
Total Petroleum Hydrocarbons				

BTEX				
Total Phenols				
Total Phosphate				
Calcium				
Potassium				
Sodium				
Sulphate				
Total Zinc				
pH				
Conductivity				

6) SNP Lab Results Summary – Station number 2016-3 (Ponded Water within or adjacent to the construction waste cell at the Solid Waste Disposal Facilities)

At issuance, this station’s exact location was to be determined with the Inspector. This station monitors potential impacts of the Solid Waste Disposal Facilities on groundwater and surface Water, and monitors water quality and quantity prior to discharge. Sampling frequency is twice per year in June and September, and prior to discharge of accumulated water. Add additional columns to table if necessary.

	Sample 1 (June) Date	Sample 2 (September) Date	Sample 3 (prior to discharge of accumulated water) Date	Sample 4 (prior to discharge of accumulated water) Date
Volume of water discharged (m³)				
Total Suspended Solids				
Total Cadmium				
Total Chromium				
Total Cobalt				
Total Copper				

Total Iron				
Total Lead				
Magnesium				
Total Manganese				
Total Mercury				
Total Nickel				
Oil and Grease				
Total Petroleum Hydrocarbons				
BTEX				
Total Phenols				
Total Phosphate				
Calcium				
Potassium				
Sodium				
Sulphate				
Total Zinc				
pH				
Conductivity				

Appendix B: Laboratory reports for all samples collected for the Surveillance Network Program for Fort Providence (MV2016L3-0001)

Appendix C: Map showing Surveillance Network Program stations for Fort Providence (MV2016L3-0001)