



## DRINKING WATER WORKS PERMIT

**Permit Number: 224-201**

**Issue Number: 2**

Pursuant to the *Safe Drinking Water Act*, 2002, S.O. 2002, c. 32, and the regulations made thereunder and subject to the limitations thereof, this drinking water works permit is issued under Part V of the *Safe Drinking Water Act*, 2002, S.O. 2002, c. 32 to:

### **The Corporation of the Town of Fort Frances**

**320 Portage Avenue  
Fort Frances, ON  
P9A 3P9**

For the following municipal residential drinking water system:

### **Fort Frances Drinking Water System**

This drinking water works permit includes the following:

<b>Schedule</b>	<b>Description</b>
Schedule A	Drinking Water System Description
Schedule B	General
Schedule C	All documents issued as Schedule C to this drinking water works permit which authorize alterations to the drinking water system
Schedule D	Process Flow Diagrams

DATED at TORONTO this 13th day of May, 2016

Signature

A handwritten signature in black ink that reads "A. Ahmed". The signature is written in a cursive style with a horizontal line underneath the name.

Aziz Ahmed, P.Eng.  
Director  
Part V, *Safe Drinking Water Act*, 2002

## Schedule A: Drinking Water System Description

System Owner	The Corporation of the Town of Fort Frances
Permit Number	224-201
Drinking Water System Name	Fort Frances Drinking Water System
Schedule A Issue Date	May 13th, 2016

### 1.0 System Description

- 1.1 The following is a summary description of the works comprising the above drinking water system:

#### Overview

The **Fort Frances Drinking Water System** consists of a drinking water treatment plant, a two-celled storage ground reservoir, an elevated storage tank and approximately 6.0 kilometers of trunk watermains and 70.4 kilometers of distribution watermains.

The Fort Frances Water Treatment Plant is a conventional surface water treatment plant. Raw water is drawn from Rainy River through low lift pumps. Liquid alum is added to the raw water ahead of the in-line mixer for coagulation while polyelectrolytes are added to the solids contact tanks for assisting flocculation. The water then flows to the two solids contact clarifiers units, operating in parallel, where flocculation and sedimentation occurs. The settled floc is disposed of to the sanitary sewer. Powdered activated carbon, soda ash, and hydrofluosilicic are also added ahead of in-line mixer, in solids contact clarifiers, and/or in chemical contact chambers, as needed, for taste and odour and pH adjustment. The settled effluent is gravity fed to four dual media gravity sand filters. The filters are equipped with a backwash pump. The filtered water flows to a two-celled, ground storage reservoir through a chemical contact chamber. Chlorine and fluoride are added in the chemical contact chamber. The treated water then flows to the high lift pump wells where it is pumped to the distribution system. Chlorine residual and fluoride are monitored with continuous on-line analyzers just prior to the water leaving the plant. The Fort Frances Drinking Water System also includes an elevated water storage tank within the distribution system equipped with re-chlorination facilities.

## Fort Frances Water Treatment Plant

### Treatment Plant

#### Location and General Description

Name	Fort Frances Water Treatment Plant housed in an approximately 46 m by 32 m masonry structure
Street Address	901 Colonization Road East
UTM Coordinates	NAD 83: Zone 15 +/- 10m: Easting 472938: Northing 5384735
System Type	Treatment, storage and distribution
Notes	Houses screen chamber, low and high lift pumps, solids contact clarifiers, filters, chemical storage and feeding equipment, instrumentation and control, an administration area comprising of an office, lunchroom, washrooms and control room/laboratory

### Surface Water Supply

#### Raw Water Intake

Description	Approximately 190 m of 630 mm diameter intake pipe located in the Rainy River including an upturned elbow intake structure with a coarse bar screen
Source	Rainy River
Location	Approximately 190 m east of the Water Treatment Plant in Rainy River
Notes	

### Low Lift Works

#### Screens

Description	A raw water screen chamber equipped with two sets of screens
Dimensions	Each screen 2.25 m <sup>2</sup> in area
Notes	Screen chamber located ahead of raw water pumping well

**Low Lift Pumps**

Description	Three (3) vertical turbine low lift pumps
Capacity	<ul style="list-style-type: none"> <li>- Two (2) pumps rated at 100 L/s against a total dynamic head (TDH) of 14 m</li> <li>- One (1) VFD pump capable of providing flows in the range of 40 to 150 L/s against a total dynamic head (TDH) of 14m</li> </ul>
Metering Device	Equipped with one metering device for measuring raw water flows
Notes	

**Coagulation****In-Line Mixer**

Description	An in-line mixer located downstream of the low lift pumps within the influent (raw water) line to facilitate the dosing of liquid alum, activated carbon slurry and soda ash solution
Dimensions	450 mm diameter
Notes	Located between low lift pumps and solids contact clarifiers

**Flocculation/Clarification****Flocculation/Clarification Tanks - Solids Contact Clarifiers**

Description	Two (2) solids contact clarifier units, operating in parallel equipped with facilities for polymer dosing
Dimensions	Each solids contact clarifier approximately 13.7 m x 13.7 m x 3.75 m side water depth (s.w.d.)
Notes	The settled floc is discharged to sanitary sewer

**Filtration****Filters**

Description	Four (4) dual media, gravity filters (sand and anthracite)
Dimensions	Each filter approximately 4.9 m x 4.9 m providing a total filtration area of 96 m <sup>2</sup>
Equipment	One (1) vertical turbine backwash pump capable of delivering 290.3 L/s at 14 m TDH
	A turbidimeter on each filter
	All filters equipped with an underdrain and air scouring system
Notes	

## Instrumentation and Control

### SCADA System

Description	A computerized control system monitoring the critical components of the process including raw and finished water quantity and quality
Equipment	Four (4) turbidimeters for continuously monitoring filter effluent
	One (1) laboratory model turbidimeter for manual testing
	One (1) continuous chlorine/fluoride analyzer monitoring free chlorine and fluoride residual in the discharge pipe of the high lift pumps
	Three (3) flowmeters to measure flow at various locations
Notes	Status of the elevated storage tank by telemetry, receiving alarms and controlling the operation

## Waste Residual Management

### Outfall Pipe

Description	Filter backwash disposal
Dimensions	Approximately 60 m of 800 mm diameter pipe
	One (1) vertical turbine backwash pump capable of delivering 290.3 L/s at 14 m TDH
Notes	Filter backwash water returned to Rainy River through outfall line

### Sludge Disposal

Description	Solids contact clarifier settled sludge disposal
Equipment	Settled sludge discharged through a 150 mm pipe using pneumatic blow down valves - gravity system, no pumps utilized
Notes	Solids contact clarifier settled sludge discharged to the sanitary sewer system

## High Lift Works

### High Lift Pumps

Description	Four (4) vertical turbine high lift pumps and one (1) diesel engine driven vertical turbine fire pump
Capacity	Two (2) vertical turbine pumps rated at 63.1 L/s. at TDH of 55m
	One (1) vertical turbine pump rated at 94.7 L/s at TDH of 55m
	One (1) vertical turbine pump rated at 126.2 L/s at a TDH of 55m
High Lift Pump Chamber	470 m <sup>3</sup> capacity
Notes	

## On-Site Storage

### Chemical Contact Chamber

Description	One (1) chemical contact chamber to provide chlorine contact time
Volume	240 m <sup>3</sup>
Notes	

### Clearwell/Reservoir

Description	Two-celled, ground storage reservoir
Capacity	Cell No. 1 = 2,565 m <sup>3</sup> Cell No. 2 = 1,465 m <sup>3</sup> Total = 4,030 m <sup>3</sup>
Notes	The two cells receive filtered water after passing through chemical contact chamber

## Emergency Power

### Backup Power Supply

Description	One (1) 450 kW diesel generator set for use during power outage situations
Notes	

## Chemical Addition

### Alum

Description	Alum feed system for coagulation
Feed Point	Liquid alum to the raw water ahead of the in-line mixer for coagulation
Equipment	A chemical metering pump with a calibration cylinder controlled automatically on the basis of the raw water flow complete with alum storage A day tank with secondary spill containment
Notes	

### Chlorine

Description	Chlorine gas disinfection System
Feed Point(s)	1. Chemical contact chamber; and 2. Before the flash mixer
Equipment	One (1) duty chlorinator One (1) standby chlorinator including: <ul style="list-style-type: none"> <li>- two (2) chlorine cylinders with an automatic switch over device in a separate room</li> <li>- a weight scale</li> <li>- one (1) chemical metering pump</li> <li>- a free chlorine analyzer for monitoring finished water residuals</li> </ul>
Notes	

### Hydrofluosilicic Acid

Description	Fluoridation system
Feed Point	Chemical Contact Chamber
Equipment	One (1) day tank One (1) chemical metering pump Secondary spill containment
Notes	

**Polyelectrolytes/Polymer**

Description	<ul style="list-style-type: none"> <li>- A polyelectrolytes feed system for assisting in flocculation</li> <li>- A polymer feed system for assisting in flocculation (used as back-up)</li> </ul>
Feed Point	Solids Contact Clarifiers
Equipment	<ul style="list-style-type: none"> <li>- Two (2) chemical metering pumps for polyelectrolytes injection complete with aging and batch tanks</li> <li>- Two (2) chemical metering pumps for polymer injection complete with aging and solution tanks (used as back-up)</li> </ul>
Notes	

**Powdered Activated Carbon**

Description	Powdered activated carbon for taste and odor control
Feed Point	Ahead of in-line mixer or solids contact clarifiers
Equipment	One (1) slurry tank
	One (1) chemical metering pump
	Secondary spill containment
	A dust control system
Notes	

**Soda Ash**

Description	Soda ash dosing system for pH adjustment
Feed Point #1	Chemical contact chamber
Feed Point #2	Solid contact clarifiers
Feed Point #3	In-line mixture
Equipment	A silo inside the building
	One (1) day tank
	Volumetric feeder
	A dust collector
Notes	



## Elevated Storage Tank

Description	An elevated storage tank
Location	South-east side of the intersection of Colonization Road West and McIrvine Road
UTM Coordinates	NAD 83: Zone 15 +/- 10: Easting 468540: Northing 5383616
Capacity	4,500 m <sup>3</sup>
Equipment	Includes calcium hypochlorite re-chlorination facility along with: <ul style="list-style-type: none"> <li>- a telemetry system providing the water level information to the main computer at the plant; and</li> <li>- a looped circulation system</li> </ul>
Notes	

## Watermains

### 1.2 Watermains within the distribution system comprise:

- 1.2.1 Watermains that have been set out in each document or file identified in column 1 of Table 1.

Table 1: Watermains	
Column 1 Document or File Name	Column 2 Date
WATER DISTRIBUTION SYSTEM - December 16, 2015.pdf	December 16, 2015

- 1.2.2 Watermains that have been added, modified, replaced or extended further to the provisions of Schedule C of this drinking water works permit on or after the date identified in column 2 of Table 1 for each document or file identified in column 1.
- 1.2.3 Watermains that have been added, modified, replaced or extended further to an authorization by the Director on or after the date identified in column 2 of Table 1 for each document or file identified in column 1.

## Schedule B: General

System Owner	The Corporation of the Town of Fort Frances
Permit Number	224-201
Drinking Water System Name	Fort Frances Drinking Water System
Schedule B Issue Date	May 13th, 2016

### 1.0 Applicability

- 1.1 In addition to any other requirements, the drinking water system identified above shall be altered and operated in accordance with the conditions of this drinking water works permit and the licence.
- 1.2 The definitions and conditions of the licence shall also apply to this drinking water works permit.

### 2.0 Alterations to the Drinking Water System

- 2.1 Any document issued by the Director as a Schedule C to this drinking water works permit shall provide authority to alter the drinking water system in accordance, where applicable, with the conditions of this drinking water works permit and the licence.
- 2.2 All Schedule C documents issued by the Director for the drinking water system shall form part of this drinking water works permit.
- 2.3 All parts of the drinking water system in contact with drinking water which are:
- 2.3.1 Added, modified, replaced, extended; or
- 2.3.2 Taken out of service for inspection, repair or other activities that may lead to contamination,
- shall be disinfected before being put into service in accordance with a procedure approved by the Director or in accordance with the applicable provisions of the following documents:
- a) The ministry's Watermain Disinfection Procedure, effective January 01, 2017;
  - b) AWWA C652 – Standard for Disinfection of Water-Storage Facilities;
  - c) AWWA C653 – Standard for Disinfection of Water Treatment Plants; and
  - d) AWWA C654 – Standard for Disinfection of Wells.
- 2.4 The owner shall notify the Director within thirty (30) days of the placing into service or the completion of any addition, modification, replacement or extension of the drinking water system which had been authorized through:
- 2.4.1 Schedule B to this drinking water works permit which would require an alteration of the description of a drinking water system component described in Schedule A of this drinking water works permit;

- 2.4.2 Any Schedule C to this drinking water works permit respecting works other than watermains; or
- 2.4.3 Any approval issued prior to the issue date of the first drinking water works permit respecting works other than watermains which were not in service at the time of the issuance of the first drinking water works permit.
- 2.5 For greater certainty, the notification requirements set out in condition 2.4 do not apply to any addition, modification, replacement or extension in respect of the drinking water system which:
  - 2.5.1 Is exempt from subsection 31(1) of the SDWA by subsection 9.(2) of O. Reg. 170/03;
  - 2.5.2 Constitutes maintenance or repair of the drinking water system; or
  - 2.5.3 Is a watermain authorized by condition 3.1 of Schedule B of this drinking water works permit.
- 2.6 The owner shall notify the legal owner of any part of the drinking water system that is prescribed as a municipal drinking water system by section 2 of O. Reg. 172/03 of the requirements of the licence and this drinking water works permit as applicable to the prescribed system.
- 2.7 For greater certainty, any alteration to the drinking water system made in accordance with this drinking water works permit may only be carried out after other legal obligations have been complied with including those arising from the *Environmental Assessment Act*, *Niagara Escarpment Planning and Development Act*, *Oak Ridges Moraine Conservation Act*, 2001 and *Greenbelt Act*, 2005.

### 3.0 Watermain Additions, Modifications, Replacements and Extensions

- 3.1 The drinking water system may be altered by adding, modifying, replacing or extending a watermain within the distribution system subject to the following conditions:
  - 3.1.1 The design of the watermain addition, modification, replacement or extension:
    - a) Has been prepared by a Professional Engineer;
    - b) Has been designed only to transmit water and has not been designed to treat water;
    - c) Satisfies the design criteria set out in the Ministry of the Environment and Climate Change publication "Watermain Design Criteria for Future Alterations Authorized under a Drinking Water Works Permit – June 2012", as amended from time to time; and
    - d) Is consistent with or otherwise addresses the design objectives contained within the Ministry of the Environment and Climate Change publication "Design Guidelines for Drinking Water Systems, 2008", as amended from time to time.

- 3.1.2 The maximum demand for water exerted by consumers who are serviced by the addition, modification, replacement or extension of the watermain will not result in an exceedance of the rated capacity of a treatment subsystem or the maximum flow rate for a treatment subsystem component as specified in the licence, or the creation of adverse conditions within the drinking water system.
  - 3.1.3 The watermain addition, modification, replacement or extension will not adversely affect the distribution system's ability to maintain a minimum pressure of 140 kPa at ground level at all points in the distribution system under maximum day demand plus fire flow conditions.
  - 3.1.4 Secondary disinfection will be provided to water within the added, modified, replaced or extended watermain to meet the requirements of O. Reg. 170/03.
  - 3.1.5 The watermain addition, modification, replacement or extension is wholly located within the municipal boundary over which the owner has jurisdiction.
  - 3.1.6 The owner of the drinking water system consents in writing to the watermain addition, modification, replacement or extension.
  - 3.1.7 A Professional Engineer has verified in writing that the watermain addition, modification, replacement or extension meets the requirements of condition 3.1.1.
  - 3.1.8 The owner of the drinking water system has verified in writing that the watermain addition, modification, replacement or extension meets the requirements of conditions 3.1.2 to 3.1.6.
- 3.2** The authorization for the addition, modification, replacement or extension of a watermain provided for in condition 3.1 does not include the addition, modification, replacement or extension of a watermain that:
- 3.2.1 Passes under or through a body of surface water, unless trenchless construction methods are used;
  - 3.2.2 Has a nominal diameter greater than 750 mm;
  - 3.2.3 Results in the fragmentation of the drinking water system; or
  - 3.2.4 Connects to another drinking water system, unless:
    - a) Prior to construction, the owner of the drinking water system seeking the connection obtains written consent from the owner or owner's delegate of the drinking water system being connected to; and
    - b) The owner of the drinking water system seeking the connection retains a copy of the written consent from the owner or owner's delegate of the drinking water system being connected to as part of the record that is recorded and retained under condition 3.3.

- 3.3** The verifications required in conditions 3.1.7 and 3.1.8 shall be:
- 3.3.1 Recorded on “Form 1 – Record of Watermains Authorized as a Future Alteration”, as published by the Ministry of the Environment and Climate Change, prior to the watermain addition, modification, replacement or extension being placed into service; and
  - 3.3.2 Retained for a period of ten (10) years by the owner.
- 3.4** For greater certainty, the verification requirements set out in condition 3.3 do not apply to any addition, modification, replacement or extension in respect of the drinking water system which:
- 3.4.1 Is exempt from subsection 31(1) of the SDWA by subsection 9.(2) of O. Reg. 170/03; or
  - 3.4.2 Constitutes maintenance or repair of the drinking water system.
- 3.5** The document or file referenced in Column 1 of Table 1 of Schedule A of this drinking water works permit that sets out watermains shall be retained by the owner and shall be updated to include watermain additions, modifications, replacements and extensions within 12 months of the addition, modification, replacement or extension.
- 3.6** The updates required by condition 3.5 shall include watermain location relative to named streets or easements and watermain diameter.

#### **4.0 Minor Modifications to the Drinking Water System**

- 4.1** The drinking water system may be altered by adding, modifying or replacing the following components in the drinking water system:
- 4.1.1 Raw water pumps and treatment process pumps in the treatment system;
  - 4.1.2 Coagulant feed systems in the treatment system, including the location and number of dosing points;
  - 4.1.3 Valves;
  - 4.1.4 Instrumentation and controls, including SCADA systems, and software associated with these devices;
  - 4.1.5 Filter media, backwashing equipment and under-drains in the treatment system; or,
  - 4.1.6 Spill containment works.
- 4.2** The drinking water system may be altered by adding, modifying, replacing or removing the following components in the drinking water system:
- 4.2.1 Treated water pumps and associated equipment;
  - 4.2.2 Re-circulation devices within distribution system storage facilities;

- 4.2.3 In-line mixing equipment;
  - 4.2.4 Chemical metering pumps and chemical handling pumps;
  - 4.2.5 Chemical storage tanks (excluding fuel storage tanks) and associated equipment; or,
  - 4.2.6 Measuring and monitoring devices that are not required by regulation, by a condition in the Drinking Water Works Permit, or by a condition otherwise imposed by the Ministry of the Environment and Climate Change.
- 4.3** The drinking water system may be altered by replacing the following:
- 4.3.1 Raw water piping, treatment process piping or treated water piping within the treatment subsystem;
  - 4.3.2 Fuel storage tanks and spill containment works, and associated equipment; or
  - 4.3.3 Coagulants and pH adjustment chemicals, where the replacement chemicals perform the same function;
    - a) Prior to making any alteration to the drinking water system under condition 4.3.3, the owner shall undertake a review of the impacts that the alteration might have on corrosion control or other treatment processes; and
    - b) The owner shall notify the Director in writing within thirty (30) days of any alteration made under condition 4.3.3 and shall provide the Director with a copy of the review.
- 4.4** Any alteration of the drinking water system made under conditions 4.1, 4.2 or 4.3 shall not result in:
- 4.4.1 An exceedance of a treatment subsystem rated capacity or a treatment subsystem component maximum flow rate as specified in the licence;
  - 4.4.2 The bypassing of any unit process within a treatment subsystem;
  - 4.4.3 A deterioration in the quality of drinking water provided to consumers;
  - 4.4.4 A reduction in the reliability or redundancy of any component of the drinking water system;
  - 4.4.5 A negative impact on the ability to undertake compliance and other monitoring necessary for the operation of the drinking water system; or
  - 4.4.6 An adverse effect on the environment.
- 4.5** The owner shall verify in writing that any addition, modification, replacement or removal of drinking water system components in accordance with conditions 4.1, 4.2 or 4.3 has met the requirements of the conditions listed in condition 4.4.

- 4.6** The verifications and documentation required in condition 4.5 shall be:
- 4.6.1 Recorded on “Form 2 – Record of Minor Modifications or Replacements to the Drinking Water System”, as published by the Ministry of the Environment and Climate Change, prior to the modified or replaced components being placed into service; and
  - 4.6.2 Retained for a period of ten (10) years by the owner.
- 4.7** For greater certainty, the verification requirements set out in conditions 4.5 and 4.6 do not apply to any addition, modification, replacement or removal in respect of the drinking water system which:
- 4.7.1 Is exempt from subsection 31(1) of the SDWA by subsection 9.(2) of O. Reg. 170/03; or
  - 4.7.2 Constitutes maintenance or repair of the drinking water system.
- 4.8** The owner shall update any drawings maintained for the drinking water system to reflect the modification or replacement of the works, where applicable.

## **5.0 Equipment with Emissions to the Air**

- 5.1** The drinking water system may be altered by adding, modifying or replacing any of the following drinking water system components that may discharge or alter the rate or manner of a discharge of a compound of concern to the atmosphere:
- 5.1.1 Any equipment, apparatus, mechanism or thing that is used for the transfer of outdoor air into a building or structure that is not a cooling tower;
  - 5.1.2 Any equipment, apparatus, mechanism or thing that is used for the transfer of indoor air out of a space used for the production, processing, repair, maintenance or storage of goods or materials, including chemical storage;
  - 5.1.3 Laboratory fume hoods used for drinking water testing, quality control and quality assurance purposes;
  - 5.1.4 Low temperature handling of compounds with a vapor pressure of less than 1 kilopascal;
  - 5.1.5 Maintenance welding stations;
  - 5.1.6 Minor painting operations used for maintenance purposes;
  - 5.1.7 Parts washers for maintenance shops;
  - 5.1.8 Emergency chlorine and ammonia gas scrubbers and absorbers;
  - 5.1.9 Venting for activated carbon units for drinking water taste and odour control;
  - 5.1.10 Venting for a stripping unit for methane removal from a groundwater supply;
  - 5.1.11 Venting for an ozone treatment unit;

- 5.1.12 Natural gas or propane fired boilers, water heaters, space heaters and make-up air units with a total facility-wide heat input rating of less than 20 million kilojoules per hour, and with an individual fuel energy input of less than or equal to 10.5 gigajoules per hour; or
- 5.1.13 Emergency generators that fire No. 2 fuel oil (diesel fuel) with a sulphur content of 0.5 per cent or less measured by weight, natural gas, propane, gasoline or biofuel, and that are used for emergency duty only with periodic testing.
- 5.2 The owner shall not add, modify or replace a drinking water system component set out in condition 5.1 for an activity that is not directly related to the treatment and/or distribution of drinking water.
- 5.3 The emergency generators identified in condition 5.1.13 shall not be used for non-emergency purposes including the generation of electricity for sale or for peak shaving purposes.
- 5.4 The owner shall prepare an emission summary table for nitrogen oxide emissions only, for each addition, modification or replacement of emergency generators identified in condition 5.1.13.

### Performance Limits

- 5.5 The owner shall ensure that a drinking water system component identified in conditions 5.1.1 to 5.1.13 is operated at all times to comply with the following limits:
  - 5.5.1 For equipment other than emergency generators, the maximum concentration of any compound of concern at a point of impingement shall not exceed the corresponding point of impingement limit;
  - 5.5.2 For emergency generators, the maximum concentration of nitrogen oxides at sensitive populations shall not exceed the applicable point of impingement limit, and at non-sensitive populations shall not exceed the Ministry of the Environment and Climate Change half-hourly screening level of 1880 ug/m<sup>3</sup> as amended; and
  - 5.5.3 The noise emissions comply at all times with the limits set out in publication NPC-300, as applicable.
- 5.6 The owner shall verify in writing that any addition, modification or replacement of works in accordance with condition 5.1 has met the requirements of the conditions listed in condition 5.5.
- 5.7 The owner shall document how compliance with the performance limits outlined in condition 5.5.3 is being achieved, through noise abatement equipment and/or operational procedures.
- 5.8 The verifications and documentation required in conditions 5.6 and 5.7 shall be:
  - 5.8.1 Recorded on "Form 3 – Record of Addition, Modification or Replacement of Equipment Discharging a Contaminant of Concern to the Atmosphere", as published by the Ministry of the Environment and Climate Change, prior to the additional, modified or replacement equipment being placed into service; and



5.8.2 Retained for a period of ten (10) years by the owner.

**5.9** For greater certainty, the verification and documentation requirements set out in conditions 5.6 and 5.8 do not apply to any addition, modification or replacement in respect of the drinking water system which:

5.9.1 Is exempt from subsection 31(1) of the SDWA by subsection 9.(2) of O. Reg. 170/03; or

5.9.2 Constitutes maintenance or repair of the drinking water system.

**5.10** The owner shall update any drawings maintained for the works to reflect the addition, modification or replacement of the works, where applicable.

## **6.0 Previously Approved Works**

**6.1** The owner may add, modify, replace or extend, and operate part of a municipal drinking water system if:

6.1.1 An approval was issued after January 1, 2004 under section 36 of the SDWA in respect of the addition, modification, replacement or extension and operation of that part of the municipal drinking water system;

6.1.2 The approval expired by virtue of subsection 36(4) of the SDWA; and

6.1.3 The addition, modification, replacement or extension commenced within five years of the date that activity was approved by the expired approval.

## **7.0 System-Specific Conditions**

**7.1** Not Applicable.

## **8.0 Source Protection**

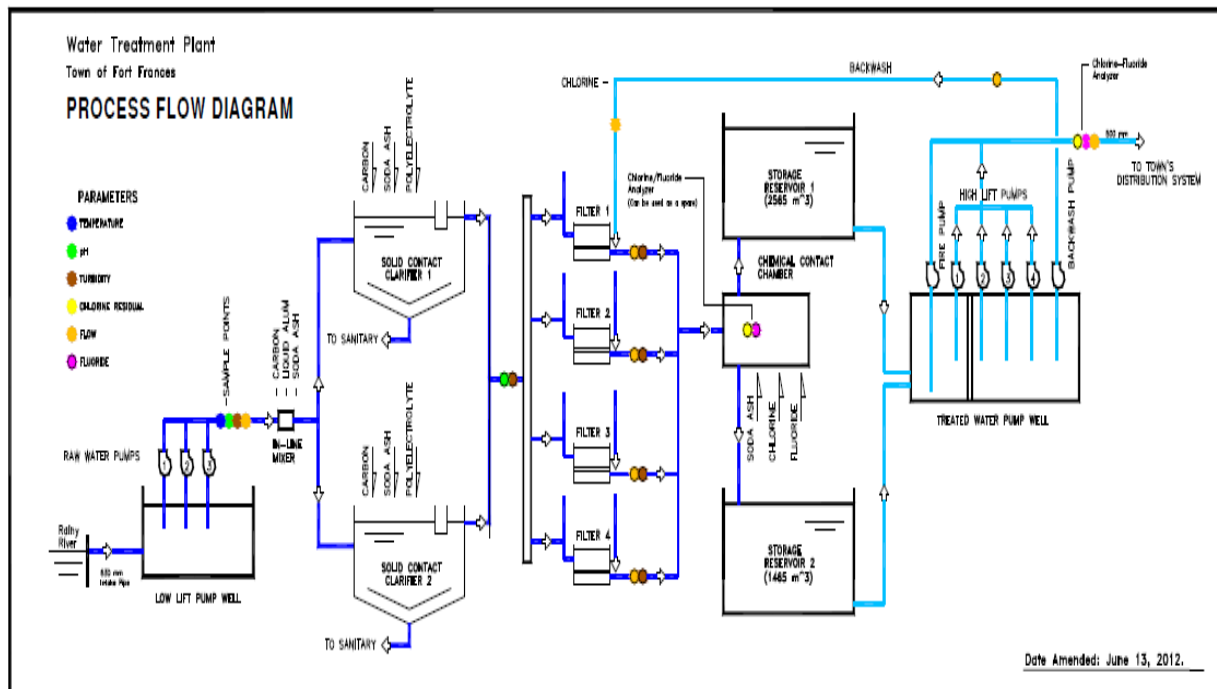
**8.1** Not Applicable.

## Schedule D: Process Flow Diagrams

System Owner	The Corporation of the Town of Fort Frances
Permit Number	224-201
Drinking Water System Name	Fort Frances Drinking Water System
Schedule D Issue Date	May 13th, 2016

### 1.0 Process Flow Diagrams

#### Fort Frances Water Treatment Plant



[Source: Quality Management System Operational Plan Town of Fort Frances Water System, Revision No. 8, October 30, 2015]