

# TOWN OF FORT FRANCES

## Operations and Facilities Executive Committee

### AGENDA - June 21, 2017, 8:30 AM

#### MEETING - Civic Centre

Session #009

	Page
1. <b><u>Call to Order</u></b>	
2. <b><u>Disclosure of pecuniary interest and the general nature thereof</u></b>	
3. <b><u>Approval of Previous Committee Minutes</u></b>	
3.1 Minutes from the meeting of this Committee on June 7, 2017.	2 - 3
4. <b><u>Non-agenda Items</u></b>	
5. <b><u>New Business</u></b>	
5.1 Drinking Water Quality Management System - Management Review	4 - 80
5.2 Award Tender of 17-OF-08 - Surface Treatment of Roadways at Various Locations	81 - 83
5.3 Residential Subdivision Development	84
6. <b><u>Information</u></b>	
6.1 Fort Frances Wastewater Treatment Facility May 2017 Monthly Report	85 - 91
6.2 Aircraft Statistics as of June 16, 2017	92 - 93
6.3 2017 - Tonnage t the Landfill Site - updated June 16, 2017	94
7. <b><u>Adjourn / Next Meeting Date</u></b>	

TOWN OF FORT FRANCES

MINUTES

SESSION NO. #008

June 7, 2017

The meeting of Operations & Facilities Executive Committee of the Town of Fort Frances was held in the Wastewater Treatment Plant on June 7, 2017 from 8:30 a.m. to 9:50 a.m.

PRESENT: Paul Ryan, Chairperson, June Caul, Doug Brown, CAO and Travis Rob.

ALSO PRESENT: Tyson Dennis, Mayor Avis (8:40 a.m.)

**1. Call to Order**

The meeting was called to order at 8:36 a.m.

**2. Disclosure of pecuniary interest and the general nature thereof**

None

**3. Approval of Previous Committee Minutes**

3.1 Minutes from the previous meeting on May 17, 2017- the minutes were approved as circulated.

**4. Non-agenda Items**

None

**5. New Business**

5.1 Residential Property Review and Future Residential Development Planning - the Operations and Facilities Executive Committee supported the recommendations put forward by the Administration and Finance Executive Committee.

5.2 Letter Dated May 16, 2017 from the BIA to Paint Maple Leafs on the 200 Block of Scott Street Sidewalk - the administration report was approved as recommended.

5.3 April 2017 Drinking Water Systems Monthly Summary Report - the administration report was reviewed and approved as recommended.

5.4 Clean Water and Wastewater Fund Funding Agreement - Second Street Reconstruction - the recommendation was approved as presented.

5.5 Award of Quotation - Public Works Tractors - the administration will be forwarded on to Council as information only. No action required.

5.6 Adoption of a SOP for the Installation of Portable Piping Systems During an Extreme Wet Weather Event - the administration report was approved as recommended.

**6. Information**

6.1 Operations and Facilities Division - Public Works Area - Operations Statistics - March 2017 - the statistics for the Public Works Area for March 2017 were reviewed and will be forwarded to Council as information only. No action required.

6.2 Operations and Facilities Division - Public Works Area - Operations Statistics - April 2017 - the statistics for the Public Works Area for April 2017 were reviewed and will be

forwarded on to Council as information only. No action required.

- 6.3 Sewer and Water Data for 2017 - updated June 2, 2017 - the data for the sewer and water was reviewed and will be forwarded on to Council as information only. No action required.
- 6.4 Operations and Facilities Division - Environmental Area - Operations Statistics - March 2017 - the statistics for the Environmental Area for March 2017 were reviewed and will be forwarded to Council as information only. No action required.
- 6.5 Operations and Facilities Division - Environmental Area - Operational Statistics - April 2017 - the statistics for the Environmental Area for April 2017 were reviewed and will be forwarded to Council as information only. No action required.

**7. Adjourn / Next Meeting Date**

The meeting adjourned at 9:50 a.m.

---

Executive Committee Chair

---

T. Rob, Manager of Operations & Facilities

June 21, 2017

Report To: Mayor and Council

From: Travis Rob, Manager of Operations and Facilities

**RE: Drinking Water Quality Management System - Management Review**

---

Over the past 12 months a couple of significant milestones have been completed in regards to the Drinking Water Quality Management System and are summarized below:

- 1) **External Surveillance Audit** (off-site table top verification) completed by SAI Global on November 9, 2016 - Auditor Mr. Rod Seabrook
- 2) **6th Internal Audit**, first audit completed by Mr. Tyson Dennis from April 11 to May 30, 2017.
- 3) **6th Management Review Meeting** held on Thursday June 16, 2017 to review the implementation of the DWQMS for the period June 1 2016 to May 31, 2017.

Please find attached the agenda package plus the associated documents which were reviewed at the June 15, 2017 Management Review meeting. Presently under the process outlined in the Operational Plan Element No. 20 - Management Review (See pages No. 75 & 76 of Operational Plan), there were four (4) action items that Council (owner) must review and endorse at this time:

Action Item No. 1) **Replace approximately 500 meters of 150mm diameter water main along Colonization Road West** (from 1302 Colonization Road West to 1448 Colonization Road West). The timeline is in accordance with the 2018 budget process where the O & F Division Management will prepare the cost estimate for installation and present this capital expenditure to Council (owner).

Action Item No. 2) **Installation of two additional valves along Sinclair Avenue between Victoria Avenue & Armit Avenue in order that the hospital facility can avoid unnecessary boil water advisories being issued** In 2016 a letter was sent to Riverside Healthcare requesting that their internal plumbing be upgraded or upsized to ensure proper fire flow protection can be achieved from the water supplied from either Sinclair or Front Street watermains prior to the installation of two additional isolation valves along Sinclair Avenue. To date no response has been received.

Action Item No. 3) **Ensure both Cemetery Irrigation Systems are properly plumbed to ensure the proper backflow protection c/w meter is in place.** The timeline is in accordance with the 2018 budget process where the O & F Division Management will prepare the cost estimate for installation and present this capital expenditure to Council (owner). The Riverview Cemetery Irrigation system modifications can take place at the same time as completing action item No. 1

Action Item No. 4) – **Complete the installation of a watermain along Frenette Avenue between First Street and Second Street.** First Street dead-ends at Frenette Avenue which leads to water quality issues at the Memorial Sports Centre as well as the residents along First Street from Crowe Avenue to Frenette Avenue. Further the amount of water available for fire protection is limited due to the limitations on flow caused by a dead-end line. The timeline is in accordance with the 2018 budget process where the O & F Division Management will prepare the cost estimate for installation and present this capital expenditure to Council (owner).

The Operations & Facilities Executive Committee recommends the following:

- 1) That Council (owner) has reviewed the agenda package of the management review meeting held on June 15, 2017.
- 2) That Council (owner) has reviewed and accepted the following four (4) action items as a result of the management review meeting held on June 15, 2017

Action Item No. 1) **Replace approximately 500 meters of 150mm diameter water main along Colonization Road West**

Action Item No. 2) **Installation of two additional valves along Sinclair Avenue between Victoria Avenue & Armit Avenue in order that the hospital facility can avoid unnecessary boil water advisories being issued.**

Action Item No. 3) **Ensure both Cemetery Irrigation Systems are properly plumbed to ensure the proper backflow protection c/w meter is in place.**

Action Item No. 4) – **Complete the installation of a watermain along Frenette Avenue between First Street and Second Street.**

Respectfully Submitted



Travis Rob, EIT  
Manager of Operations and Facilities

**Council approval of this report will ensure:**

- 1) That Council (owner) has reviewed the agenda package and minutes of the management review meeting held on June 15, 2017.
- 2) That Council (owner) has reviewed and accepted the following four (4) action items as a result of the management review meeting held on June 15, 2017

Action Item No. 1) **Replace approximately 500 meters of 150mm diameter water main along Colonization Road West.**

Action Item No. 2) **Installation of two additional valves along Sinclair Avenue between Victoria Avenue & Armit Avenue in order that the hospital facility can avoid unnecessary boil water advisories being issued.**

Action Item No. 3) **Ensure both Cemetery Irrigation Systems are properly plumbed to ensure the proper backflow protection c/w meter is in place.**

Action Item No. 4) – **Complete the installation of a watermain along Frenette Avenue between First Street and Second Street.**



June 9, 2017

Quality Management Systems Team Members

Please find attached your agenda packages for the Management Review Meeting that is scheduled for Thursday June 15, 2017 at 1:00 p.m. at the Fort Frances Water Treatment Plant.

Along with your agenda package you will also find attached a copy of the Management Review Minutes from Monday June 20, 2016 as well as a copy of the report that was submitted to Mayor and Council for their approval on July 11, 2016.

## Fort Frances Drinking Water System Management Review - Meeting Agenda

**Date:** Thursday June 15, 2017

**Time:** 1:00 p.m.

**Location:** Fort Frances Water Treatment Plant

---

### **A. Introduction:**

Reference to Operational Plan - Element 20 Management Review

- See attached Element No. 20.

**Period: June 01, 2016 to May 31, 2017**

### **B. Review Items:**

#### **1. Incidents of regulatory non-compliance:**

Ministry of the Environment (MOE) Annual Inspection Report (2016 - 17)

Date of Inspection: January 12<sup>th</sup> – 13<sup>th</sup>, 2017

Non-compliance with Regulatory Requirements: One (1) items identified.

- 1. *There is one (1) incidence of non-compliance with the Terms and Conditions of Ontario Regulation 170/03 during this reporting period.***

C. of A. No. PB220000978RR-01 granted relief from standard sampling (Schedule 15.1-4) in exchange for complying with reduced sampling requirements (Schedule 15.1-5). Section 6, of Schedule 15.1-5 states that this section ceases to apply to a drinking water system and standard sampling applies (Section 15.1-4) again, if in any sampling period, more than 10% of all the samples taken from plumbing exceed the lead standard of 10 ug/L. In April 2013, lead samples were taken from 22 plumbing locations (44 samples in total). There were lead exceedances at 3 of the locations: therefore, 13.6% of the samples exceeded that standard. As a result, the Town of Fort Frances was to return to standard lead sampling, but this has not yet taken place and the Town continues to sample at a reduced frequency.

#### ***Action(s) Required:***

*During the December 15, 2016 to April 15, 2017 sampling period, the Town of Fort Frances shall return to Standard Lead Sampling, as outlined in Schedule 15.1, section 15.1-4 of O. Reg. 170/03. Standard lead sampling shall continue to be conducted in subsequent sampling periods until the Town has met the criteria that will allow for reduced sampling or has been directed otherwise by the Ministry.*

## Fort Frances Drinking Water System Management Review - Meeting Agenda

*By April 21, 2017, the Town of Fort Frances shall provide the undersigned officer with a copy of chain of custody forms, for the December 15, 2016 to April 15, 2017 sampling period, demonstrating that the required number of samples were taken*

### **Action(s) Taken:**

*On April 18, 2017, the Town of Fort Frances submitted to the Carolyn Lacroix, Drinking Water Inspector, MOECC copies of the chain of custody forms for the December 15, 2016 to April 15, 2017 sampling period, thus complying with non-conformances item outlined in the 2016-17 Fort Frances Drinking Water Inspection Report.*

2016 Annual Summary Report (Schedule 22) – O. Reg. 170/03

Regulatory requirement: No later than March 31

Reported to O. & F. Executive Committee and Council.

Council Approval March 27, 2017.

Date submitted to Ministry of the Environment (MOE): March 28, 2017

Letters sent March 28, 2017 to the Owners that connect and receive water from the Town's Water Distribution System:

Non-compliance with Regulatory Requirements: None

2016 Annual Report – O. Reg. 170/03

Regulatory requirement: Not later than February 28

Date submitted to Ministry of the Environment (MOE): February 24, 2017

Non-compliance with Regulatory Requirements: None

O. Reg. 450/07: Charges for Industrial and Commercial Water Users

Regulatory requirement: Not later than March 31

Date submitted to Ministry of the Environment (MOE): January 25, 2017

Non-compliance with Regulatory Requirements: None

O. Reg. 387/04: Water Taking and Reporting

Regulatory requirement: Not later than March 31

Date submitted to Ministry of the Environment (MOE): January 27, 2017

Non-compliance with Regulatory Requirements: None

## **2. Incidents of adverse drinking water tests:**

### Water Treatment Plant:

No adverse treated water samples.

### Water Distribution System:

No adverse treated water samples

See Attachment. – B.2.



## Fort Frances Drinking Water System Management Review - Meeting Agenda

### **3. Deviations from critical control-point limits and response actions:**

The QMS Team had undertaken a Risk Assessment review of the risks and their critical control-points/response actions March 8, 2017.

No changes in limits or response actions. Wording change to Risk Item No. 1 only - see below.

Risks with a threshold above or equal 8 (Threshold – 8):

1. Rail car derailment (Spill of chemical or contamination): Wording amended “Railway Activity (Spill of chemical or contamination)”.
2. Loss of pressure: water mains break, major fire
3. Cross connection

Reference - Element 7/8

### **4. The effectiveness of the risk assessment process:**

Operators reviewed the Risk Assessment process March 8, 2017, with one risk added to the Risk Assessment chart – under Source Water – Fuel Storage Tanks. All other remained unchanged.

(Reviewed on a yearly basis in accordance with Element 7.)

### **5. Internal and third party audit results:**

#### Internal Audit results:

Latest Internal Audit:

May 30, 2016, with follow up audit meeting June 01, 2017 - undertaken by Tyson Dennis.

No corrective actions identified.

List CAR's and copies of Corrective Action Records are attached.  
Operational Plan to be amended reflecting non-conformances.

Previous Audit:

## **Fort Frances Drinking Water System Management Review - Meeting Agenda**

Issued May 20, 2016, resolved June 16, 2016 – undertaken by Travis Rob.  
Five (5) corrective action identified and action taken to resolve them.  
(Identified in the previous Management Review)

### **External Audit results:**

Latest Off-site External Audit:

12-Month Surveillance Audit –

- Off site (November 09, 2016) - undertaken by SAI GLOBAL -  
Accreditation Program for Operating Authorities.  
No non-conformances were identified.

Previous Off-Site External Audit:

Re-Accreditation Systems Audit –

- Off site (October 6, 2015), resolved November 2, 2015 - undertaken by  
SAI GLOBAL - Accreditation Program for Operating Authorities.

One (1) non-conformances was identified and action taken to resolve them.

- On site (November 4, 2015) - undertaken by SAI GLOBAL -  
Accreditation Program for Operating Authorities.

No non-conformances were identified

See Attachment B.5.

### **6. Results of emergency response testing:**

Standard Operating Procedures identified in the Emergency Response Binder  
had been reviewed with the Water System Operators April 5, 2017.

Emergency SOP's Reviewed:

1. Policy 4.24 – SOP No. 1 – for the Destruction (Bombing/Major Fire) of  
Water Treatment Plant or Water Tower.
2. Policy 4.23 – SOP No. 2 – for Pandemic Situation – Affecting the Water  
Treatment Plant Operators & Community.
3. Policy 4.15 – SOP No.3 – for Water Main Breaks and Repairs.
4. Policy 4.6 – SOP No. 4 – for breakdown of equipment at the Water  
Treatment Plant
5. Policy 4.4 – SOP No. 6 – for Raw Water Source Contamination
6. Policy 4.27 – SOP for Standby Generator – WTP (NEW)

Update Municipal Emergency Management listing in Emergency Response  
Binder June 5, 2017.

## Fort Frances Drinking Water System Management Review - Meeting Agenda

Note: SOP No. 5 has become redundant since the installation of the new emergency standby generator.

Emergency response training took place in February/March leading up to the creation of SOP for Standby Generator – WTP (NEW).

### **7. Operational performance:**

#### **WTP:**

##### Actions & recommendations from MOE:

As a result of the October 2016/17 MOE inspection.

Operators signed their logbook entries, but they did not always sign additional papers with notes or sample results that were added to the logbook. Operators should ensure that it can be unambiguously identified who made the extra notes that form part of the logbook, especially since the additional papers typically support actions taken during an event that deviates from normal operating procedures.

##### Personnel:

Full complement

##### Maintenance issues:

No other issues.

#### **Distribution System:**

##### Actions & recommendations from MOE:

No issues.

##### Personnel:

Water Distribution Operator added to workforce as of December 5, 2016 – Linda Carmody.

Full complement.

##### Maintenance issues:

Numerous water main/service breaks throughout the Town, since the last Management Review.

See Attachment B.7.

## **Fort Frances Drinking Water System Management Review - Meeting Agenda**

No frozen water services to report. Winter was mild winter compared to ones in the past.

Valve replacements done in 2016 – as part of the roadway/infrastructure replacement on:

- a. Colonization Rd. E.: Scott St. to Fifth St. E.
- b. Phair Ave.: Third St. E. to Sixth St. E.

During valve exercising some of the isolation valves began leaking or are very hard to turn. Replacement of these valves is recommended. Six (6) valves were scheduled for replacement in 2017, but due to costs only three (3) will be changed. These are over and above those to be replaced during the roadway/infrastructure reconstruction projects.

Fire hydrant replacements done in 2016 – as part of the roadway/infrastructure replacement on:

- c. Colonization Rd. E.: Scott St. to Fifth St. E.
- d. Phair Ave.: Third St. E. to Sixth St. E.

Some existing fire hydrants are obsolete, no parts to maintain them. Six (6) fire hydrants were scheduled for replacement in 2017, but due to costs only three (3) will be changed. These are over and above those to be replaced during the roadway/infrastructure reconstruction projects.

### **8. Raw water supply and drinking water quality trends:**

No changes in raw water supply and drinking water quality trends.

Regular seasonal water turnover of Rainy Lake.

See Chart - Attachment B.8. (Information obtained from DWSP sampling).

### **9. Follow-up on action items from previous management reviews:**

#### 2016 Management Review Items:

Four (4) follow-up items identified.

1. Replacement of approximately 500 metres of 150 mm diameter water main along Colonization Road West (from 1302 Colonization Rd. W. to 1448 Colonization Rd. W.)

## **Fort Frances Drinking Water System Management Review - Meeting Agenda**

Status: Due to lack of funding in 2017 the project has been postponed to 2018. To go through the 2018 Capital Budget process. Construction season.

2. Installation of two additional valves along Sinclair St. between Victoria Ave. and Armit Ave in order that the hospital facility can avoid unnecessary boil water advisories being issued.

Status: Due to lack of funding the project has been postponed.

3. Ensure both Cemetery Irrigation Systems are properly plumbed to ensure the proper backflow protection c/w meter is in place.

Status: See Item No. 1 above.

4. Cancellation of Policy 4.5 – Standard Operating Procedure (SOP) No. 5 for Hydro Power Outage for Operating the Water System.

Status: Policy cancelled. New generator installed July 28, 2015.

### **10. The status of management action items identified between reviews:**

No management action items identified between reviews.

### **11. Changes that could affect the Quality Management System (QMS):**

Internal/External Audit: No issues.

Management Review: No issues.

Any new business development upstream of water intake could potentially cause contamination of raw water source or supply. No concerns at this time.

#### Information Only:

Where to find – electronically: Revision Updates – Last version. Check electronic version (latest version) found in W:\QMS Documentation\QMS Operational Plan\...file name. (March 24, 2017; Revision No. 10)

## **Fort Frances Drinking Water System Management Review - Meeting Agenda**

### **12. Consumer feedback:**

Customer complaints: Last period – 8 complaints, this period 11 complaints.

Notes:

1. Construction projects in 2016, therefore dead-end mains have been temporarily created as a result – causes stagnate and discoloured water issues.
2. Result of water main breaks.
3. Maintenance activities – valve exercising

Customer Complaint Processing form – See Attachment B.12

### **13. The resources needed to maintain the Quality Management System (QMS):**

Council's commitment to provide the following:

Personnel – No issues.

Financial – No issues.

### **14. The results of infrastructure review:**

Six (6) year capital plan (In OP – Appendix I)

On an annual basis –

Proposed Infrastructure upgrades are discussed and reviewed with operators.

Council reviews and approves.

#### **WTP:**

On a monthly basis the WTP Overall Responsible Operator generates a report outlining operational and maintenance activities. The report is circulated and reviewed by the Environmental & Facilities Supt., Manager of O. & F., the O. & F. Executive Committee and Council.

#### Upgrades for this period:

Interior painting of floors and process piping – in progress.

Replaced one of the two air compressors

## **Fort Frances Drinking Water System Management Review - Meeting Agenda**

### **Water Distribution System:**

On a monthly basis Environmental & Facilities Supt. generates a report outlining maintenance activities. The report is circulated and reviewed by the Manager of O. & F. and the O. & F. Executive Committee and Council.

### Upgrades during this period:

Water main valve exercise program: 20% per year (Area 1 – East End)

Hydrant flushing: flushing annually

Fire hydrant replacements:

- 2016 - Phair Avenue Reconstruction (Bay City) – 2 of 4 hydrants.
- Colonization Road East (Makkinga) – 3 of 4 hydrants.

Water main isolation valve replacements:

- 2016 - Phair Avenue (Bay City) – 3 of 6 valves.
- Colonization Road East (Makkinga) – 7 of 10 valves

Water main replacement (Construction Projects):

- Phair Avenue: Third Street East to Sixth Street East
- Colonization Road East: Scott Street to Elizabeth Street

Water meters/backflow device installations – ICI sector, on going.

### Scheduled for 2017 Construction:

Replacement/new installation of water mains and services along the following streets:

- a. Nelson Street: Mosher Avenue west to midblock.
- b. Second Street East: Mowat Avenue to Portage Avenue

### **15. Operational plan currency, content and updates:**

Current revision date – March 24, 2017, Rev. 10

### Updates (since previous period):

Audits - Amended OP after the audit review.

List CAR's and provide copies of Corrective Action Records. See Attachment B.5

Document Request Changes (DRC) – document changes to Operation Plan other than the CAR changes as described above. (Spelling, grammar, personnel

## Fort Frances Drinking Water System Management Review - Meeting Agenda

change, etc.). A result of conducting staff meetings to review the Elements within the Operation Plan. The Operation Plan will be amended following the Management Review.

### **16. Staff suggestions:**

Any concerns from operators/staff.



PROCEDURE TITLE: Management Review

REVISION #5

QMS REFERENCE: ELEMENT NO. 20

QMS REPRESENTATIVE: 

## **20 Management Review**

### **20.1 Review Frequency**

Top management shall review the QMS once every twelve (12) months to assess and ensure the continuing suitability, adequacy and effectiveness of the QMS.

Management review(s) shall be included in the internal audit schedule.

### **20.2 Review Participants**

Management review participants shall include:

- CAO
- Operations & Facilities Manager
- Environmental & Facilities Superintendent (QMS Representative)
- Overall Responsible Operator
- Operator In Charge (Water Distribution System)

The Operations & Facilities Manager may include other personnel at his discretion.

Attendees shall be notified of the management review meeting by e-mail and/or internal memo.

### **20.3 Review Input**

The QMS Representative and the Secretary/Receptionist shall provide a summary of the following information in a suitable format to the management review meeting attendees at least seven (7) days prior to the meeting:

- Incidents of regulatory non-compliance.
- Incidents of adverse drinking-water tests.
- Deviations from critical control-point limits and response actions.
- The effectiveness of the risk assessment process.
- Internal and third-party audit results.
- Results of emergency response testing.
- Operational performance.
- Raw water supply and drinking water quality trends.
- Follow-up on action items from previous management reviews.
- The status of management action items identified between reviews.
- Changes that could affect the QMS.
- Consumer feedback.
- The resources needed to maintain the QMS.

PROCEDURE TITLE: Management Review

REVISION #5

QMS REFERENCE: ELEMENT NO. 20

QMS REPRESENTATIVE: 

- The results of the infrastructure review.
- Operational plan currency, content and updates.
- Staff suggestions.

## 20.4 Review Process

The QMS Representative shall prepare a meeting agenda and distribute the meeting agenda with the management review data.

The management review participants shall review all data presented, and where necessary, identify opportunities for improvements. These may include opportunities for improvement related to the:

- Effectiveness of the QMS and related procedures.
- Ability of the Operating Authority to implement the QMS
- Provision of adequate human and financial resources.
- The level of consumer satisfaction.

For all opportunities identified, the management review participants shall identify action items, personnel responsible for implementing action items and timelines for action items.

Records of management reviews, recommendations, decisions, action items, personnel responsibilities, and timelines shall be forwarded to the Operations & Facilities Executive Committee upon completion for acceptance and then forward to Council (Owner) of the Town of Fort Frances for review and acceptance.

Records shall be maintained by the QMS Representative. The records shall reflect all new action items and any decisions made by the Management Review Team, deficiencies, personnel responsible for action items, and timelines.

**Item B.2**

**Incidents of Adverse Drinking Water Tests**  
**Distribution System**

Location	Incident Date	Parameter	Work Being Done	Resolution/Corrective Action
1. NO ADVERSES REPORTED DURING THIS PERIOD.				



# EMERGENCY BINDER RECORD SHEET

PERSON	DATE	TIME	ACTIVITY OR DESCRIPTION OF WORK
Brad Webb	Dec 16/13	10:00 AM	Read SOP # 1-6
Doug Brown	May 12/14	7:45 AM	Read SOP # 1, 2, 3, 4, 5 & 6
Brad Webb	May 26/14	3:00 PM	Read SOP 1-6 and rest of book
Lori Pattison	May 28/14	11:45 AM	Updated Municipal Emergency Management List
Doug Herr	SEPT. 25. 2014	2:30 P.M.	READ SOPs 1-6 WITH THE FOLLOWING STAFF: MIKE ALLEN, PAUL LEMESURIER, GREG WIEDENHEFT, TRAVIS GEORGE, DOUG WEBB, DOUG HERR & LORI PATTISON.
Randy White	Sept 29/14	2:00 PM	Read SOPs 1 to 6 Randy White
Doug Brown	March 11/15	12:00 noon	Read SOP No. 1, 2, 3, 4, 5 & 6.
Travis George	March 27/15	7:30 AM	Read SOP # 1, 2, 3, 4, 5, 6
Lori Pattison	March 24/15	9:00 AM	Updated Municipal Emergency Management List
Lori Pattison	March 31/15	10:45 AM	Read SOP # 1-6
Lori Pattison	19 Sept 27/15	4:00 PM	Read SOP # 1-6
Doug Herr	SEPT. 24/15	4:20 PM	Read SOPs #1 through #6.
Greg Wiedenheft	Sept 25/15	8:10 AM	Read SOP. 1-6
PAUL LEMESURIER	25 SEPT 2015	09:00	READ SOP 1-6
Brad Webb	25 Sept 15	2:00	Read SOP 1-6
Randy White	Sept 28/2015	9:00 AM	Read S.O.P.s 1 to 6

# EMERGENCY BINDER RECORD SHEET

PERSON	DATE	TIME	ACTIVITY OR DESCRIPTION OF WORK
Doug Brown	June 12 / 12	1:30 to 3:30	Read - SOP No. 1, 2, 3, 4, 5 & 6 with the following staff: Randy White, Brad Webb, Mike Allen, Paul Stevenson & Travis Rob Doug Herr
Doug Brown	June 13 / 12	8:30 am	up dated / Revised public Works Emergency Contact list
Doug Brown	June 13 / 12	10:20 am	Replaced SOP No. 3, 4, 5 & 6 with unapproved or Draft policies
DOUGLAS HERR	JUNE 27, 2012	1:00 P.M.	REPLACED DRAFT SOPs No. 3, 4, 5 & 6 WITH APPROVED SOPs
DOUGLAS HERR	JUNE 28, 2012	8:35 AM	REPLACED COMMUNITY CONTROL GROUP CONTACT LISTING WITH AN UPDATED EMERGENCY MANAGEMENT PROGRAM COMMITTEE LISTING.
Sandra Robertson	Nov 26, 2012	1:45 pm	Updated Suppliers of Bottle Drinking Water, removed outdated Resource Contacts and updated Table of Contents
Grey Wiedenhoef	Dec 19, 2012	7:30 AM - 9:30 AM	Read - SOP No. 1, 2, 3, 4, 5 & 6
Sandra Robertson	Jan 21, 2013	12:30 pm	Updated Public Works Emergency Contact Listing EMERGENCY RESPONSE TRAINING - SOP No. 3 - COMPLETED.
DOUGLAS HERR	FEB. 21, 2013	9:30 a.m.	UPDATED SOP No. 3 (JUNE 2012 to FEBRUARY 2013)
DOUGLAS HERR	APRIL 29 / 13	3:00 pm	Read sop 1-6
Doug Herr	SEPT. 26, 2013	8:00 a.m.	Read - SOP 1, 2, 3, 4, 5 & 6 WITH THE FOLLOWING STAFF: RANDY WHITE, MIKE ALLEN, PAUL LEWIS, RANDY WAGNER & GREG WIEDENHOEF. AND LOE PATTERSON
Loe Patterson	Oct 16 / 2013	1:00 pm	Revised emergency contact listing

## CAR LOG

### Attachment B.5

CAR NUMBER	ELEMENT	DESCRIPTION (Non-conforming situation)	DATE ISSUED	ASSIGNED TO	REPLY REQUIRED BY	DATE RESOLVED	COMMENTS	OPERATIONAL PLAN REV. NUMBER
November 9, 2016 - External 12 Month Surveillance Audit by SAI Global - Accreditation Program for Operating Authorities. No non-conformances reported.								
May 30, 2017 - Internal Audit by Tyson Dennis (Auditor) - No non-conformances reported.								

**Attachment B.7**

**Water Main Breaks**  
**(June 01, 2016 to May 31, 2017)**

1.	Scott Street – 300 blk.	August 05, 2016
2.	Mosher Avenue – 400 blk.	January 05, 2017
3.	Sinclair Avenue – 400 blk.	February 07, 2017
4.	First Street West at Wright Avenue	April 25, 2017
5.	Banta Boulevard – 900 blk.	May 04, 2017
5.	Victoria Avenue North - 1000 blk.	May 18, 2017



## **Water Service Breaks**

**(June 01, 2016 to May 31, 2017)**

- |    |                                   |                    |
|----|-----------------------------------|--------------------|
| 1. | Portage Avenue - 606              | June 29, 2016      |
| 2. | Point Park – Camp Site            | July 19, 2016      |
| 3. | First Street East – 515           | August 04, 2016    |
| 4. | Victoria Avenue – 513             | September 04, 2016 |
| 5. | Second Street West – 610          | November 22, 2016  |
| 6. | Victoria Avenue North - 1000 blk. | May 02, 2017       |

## Attachment B.8

### Raw Water Supply and Drinking Water Quality Trends

Raw Water Quality Trends:

Date Sampled	Parameters			
	Alkalinity (mg/L)	Colour (TCU)	pH	THMs (ug/L)
May 20, 2011	17.3	39.9	7.45	0.5
Aug. 15, 2011	17.9	32.9	7.44	0.5
Nov. 29, 2011	20.9	26.9	7.62	0.5
Feb. 13, 2012	21	28.1	7.36	0.5
May 15, 2012	20.1	25.3	7.37	0.5
Aug. 28, 2012	20.5	25.5	7.56	0.5
Aug. 19, 2013	16.9	38.6	7.52	0.1
Oct. 29, 2013	20.4	30.4	7.46	0.1
Feb. 11, 2014	Samples Froze			
April 29, 2014	20.1	25.3	7.37	0.5
July 22, 2014		40.7	6.91	0.1
Nov. 24, 2014	Samples Froze			
April 8, 2015	15	41.9	7.13	0.1
May 25, 2015	Data not received from lab			
August 4, 2015	17.2	38.0	7.35	0.1
October 26, 2015	16.1	32.9	7.28	0.1
March 9, 2016	16.3	38.0	7.37	0.1
May 16, 2016	16.3	38.0	7.37	0.1
October 7, 2016		38.0	7.05	0.1
February 28, 2017		32.9	7.37	0.1

Alkalinity - defined as its capacity to neutralize acid. (pH less than 7)  
pH - A measure of the acidity or alkalinity of a solution (Neutral is 7)  
THMs (Trihalomethanes) - Are created when chlorine is added to water. They are toxic chemical substances that consist of a methane molecule and one of the halogen elements.

Data collected from other sources

## Attachment B.8

### Treated Water Quality Trends:

Date Sampled	Parameters			
	Alkalinity (mg/L)	Colour (TCU)	pH	THMs (ug/L)
May 20, 2011	30.4	1.3	7.87	56.5
August 15, 2011	28.7	1.1	7.53	77.5
Nov. 29, 2011	36	0.8	7.9	50
February 13, 2012	35.2	1.0	7.59	49
May 15, 2012	30.5	3.5	7.46	53.5
August 28, 2012	25.6	1.2	7.63	71
Nov. 14, 2012	33.9	0.2	7.73	42.3
May 6, 2013	29.3	2.6	7.59	43.5
August 19, 2013	22.6	1.1	7.43	68.3
October 29, 2013	27.2	1.1	7.49	56
February 11, 2014	Samples Froze			
April 29, 2014	30.5	3.5	7.46	53.5
July 22, 2014	33.4	1.5	7.09	95.0
Nov. 24, 2014	Samples Froze			
April 8, 2015	31.3	1.8	7.43	53.7
May 25, 2015	Data not received from lab			
August 4, 2015	27.4	1.6	7.38	86.5
October 26, 2015	29.1	1.0	7.39	61.3
March 9, 2016	24.0	1.8	7.36	50.1
May 16, 2016	24.0	1.8	7.36	50.1
October 7, 2016		1.0	7.18	81.7
February 28, 2017		1.7	7.28	44.1

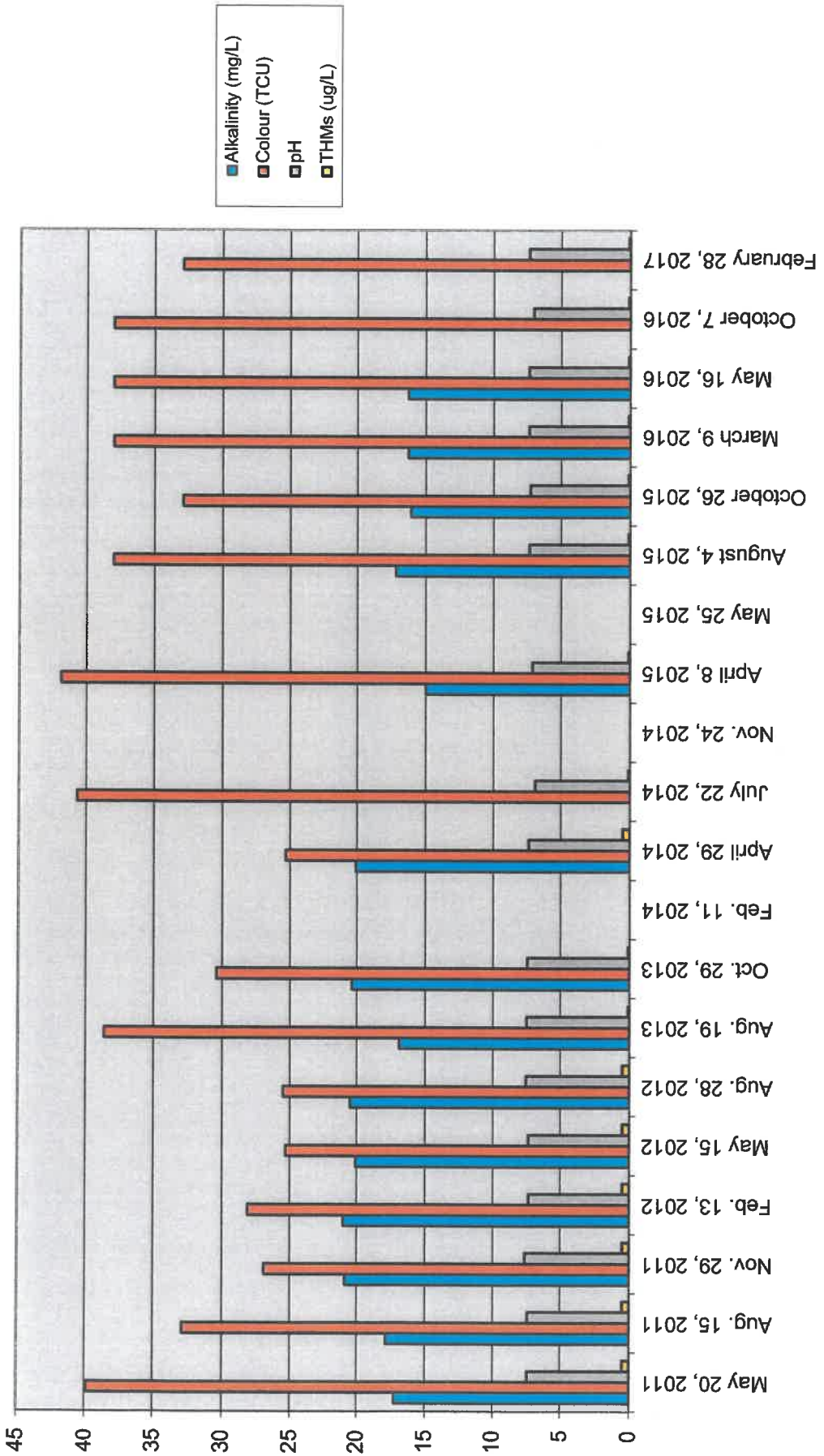
Alkalinity - defined as its capacity to neutralize acid. (pH less than 7)

pH - A measure of the acidity or alkalinity of a solution (Neutral is 7)

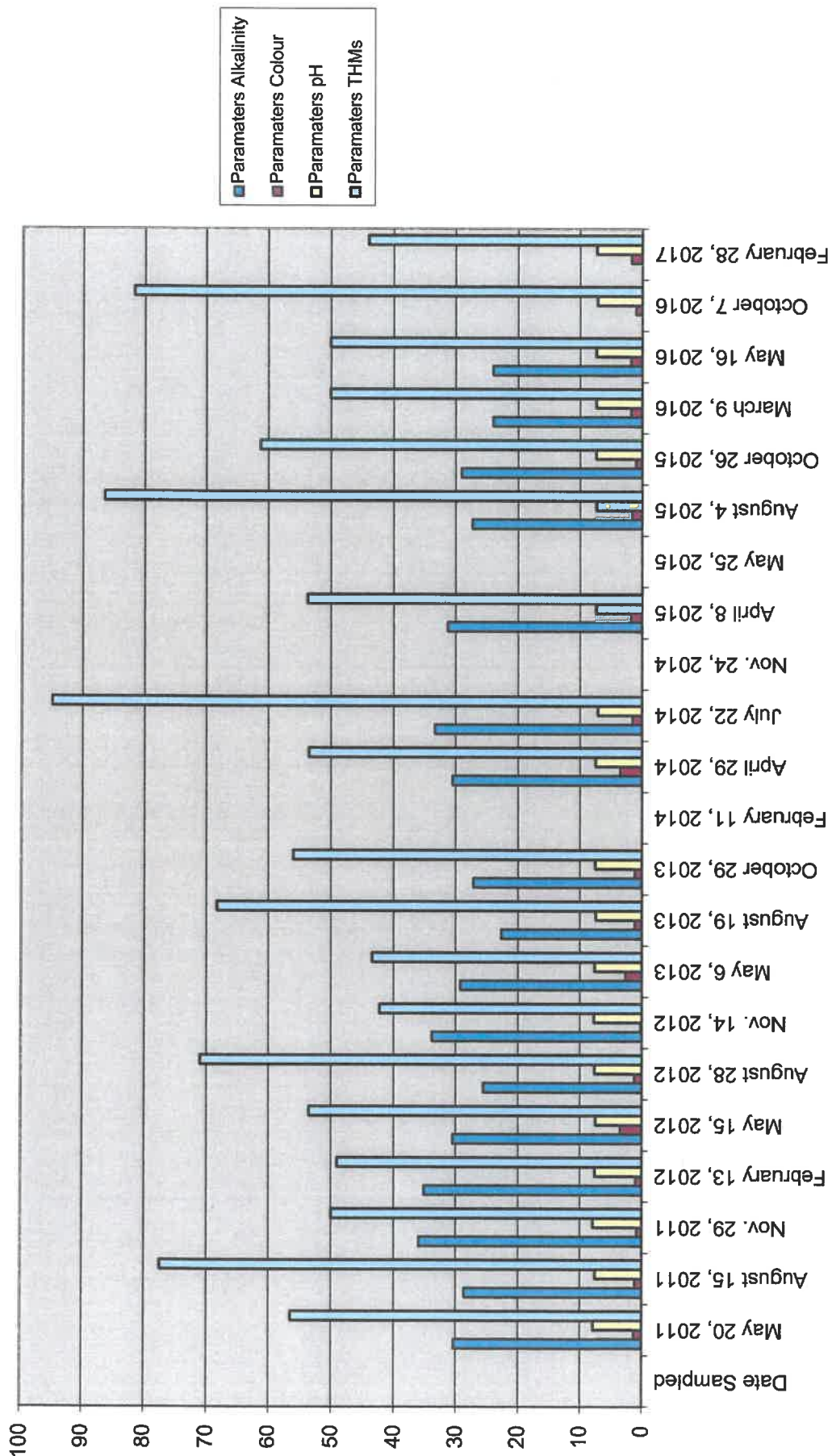
THMs (Trihalomethanes) - Are created when chlorine is added to water. They are toxic chemical substances that consist of a methane molecule and one of the halogen elements.

Data collected from other sources

Raw Water Quality Trends



Treated Water Quality Trends



**Attachment B.12****Customer Complaints**

	<b>Location</b>	<b>Received</b>	<b>Resolved</b>	<b>Complaint</b>	<b>Resolution</b>
1.	1117 Church St.	June 08, 2016	June 08, 2016	Poor Water Quality	Visited site – no issue.
2.	901 Crowe Ave.	June 13, 2016	June 13, 2016	Discoloured Water	Owner told to run cold water until cleared. No further action required. Dead end main due to reconstruction of work on Phair Ave.
3.	661 First St. E.	June 17, 2016	June 22, 2016	Discoloured Water	Flushed the fire hydrant at the Memorial Sports Centre until water the cleared. Due to construction.
4.	317 Butler Ave.	June 19, 2016	June 20, 2016	Discoloured Water	June 19, 2016 - Owner told to run cold water until cleared. June 20, 2017 - No issue, all cleared up.
5.	317 Butler Ave.	June 20, 2016	June 20, 2016	Discoloured Water	Contacted Owner by telephone. Informed them that the Town's sewer television contractor is using the fire hydrant at Butler Ave./Nelson St. to obtain water for flushing the sewer mains. This will continue for another week or so. Told her to Run their cold water until it clears.
6.	660 First St. E.	June 22, 2016	June 22, 2016	Discoloured Water	Flushed the fire hydrant at the Memorial Sports Centre until water the cleared. Due to construction.
7.	835 Crowe Ave.	July 13, 2016	July 13, 2016	Discoloured Water	Informed the Owner that the water is safe at that we will flush the system in the area this morning. Owner told to run the cold water until it clears. Flushed fire hydrant at Fifth St. E./Crowe Ave. until clear. Dead end main due to reconstruction of work on Phair Ave.

9.	933 Banta Blvd.	Oct. 05, 2016	Oct. 05, 2016	Discoloured Water	Flushed the fire hydrants in the area. Talked with her, she said it cleared up. Dead end main due to reconstruction of work on Phair Ave.
10.	933 Banta Blvd.	Oct. 12, 2016	Oct. 25, 2016	Discoloured Water	Flushed the fire hydrants in the area two different occasions. Met with the customer several times and took a water sample for testing. Lab results came back with no adverse. Dropped off results to the customer. Dead end due to reconstruction of work on Phair Ave.
11.	925 Banta Blvd.	Oct. 14, 2016	Oct. 14, 2016	Water Quality	Flushed the fire hydrant (HYD 235) in front of 920 Crowe Ave. until water cleared. Dead end main due to reconstruction of work on Phair Ave.

# **DOCUMENT CHANGE REQUEST (DCR) REVISION SUMMARY**

NUMBER	ELEMENT	REQUESTED BY	DATE ISSUED	DESCRIPTION	DATE APPROVED	DATE OPERATIONAL PLAN UPDATED	OPERATIONAL PLAN REV. NUMBER
31	6	Doug Herr	June 7, 2016	Refer to 2016 DCR 4 (3 pages - Page 1 of 1)	June 8, 2016	June 30, 2016	9
32	5	QMS Team	March 1, 2017	Refer to 2017 DCR 1 (2 pages - Page 1 of 1)	March 22, 2017	March 24, 2017	10
33	6	QMS Team	March 8, 2017	Refer to 2017 DCR 2 (4 pages - Page 1 of 2)	March 22, 2017	March 24, 2017	10
34	8	QMS Team	March 8, 2017	Refer to 2017 DCR 2 (3 pages - Page 2 of 2)	March 22, 2017	March 24, 2017	10
35	13	QMS Team	March 9, 2017	Refer to 2017 DCR 3 (2 pages - Page 1 of 1)	March 22, 2017	March 24, 2017	10
36	16	QMS Team	March 15, 2017	Refer to 2017 DCR 4 (4 pages - Page 1 of 2)	March 22, 2017	March 24, 2017	10
37	Cover Page & Appendices (Schedule "C")	QMS Team	March 15, 2017	Refer to 2017 DCR 4 (3 pages - Page 2 of 2)	March 22, 2017	March 24, 2017	10
38	18	QMS Team	March 17, 2017	Refer to 2017 DCR 5 (3 pages - Page 1 of 2)	March 22, 2017	March 24, 2017	10
39	18 (cont'd)	QMS Team	March 17, 2017	Refer to 2017 DCR 5 (3 pages - Page 2 of 2)	March 22, 2017	March 24, 2017	10
40	15	QMS Team	March 20, 2017	Refer to 2017 DCR 6 (3 pages - Page 1 of 1)	March 22, 2017	March 24, 2017	10
41							
42							



The Town of Fort Frances Water System  
General QMS Administration

PROCEDURE TITLE: Document Change Request Form  
QMS REFERENCE: Element No. 5 - APPENDIX "A"

REVISION #4  
QMS REPRESENTATIVE:

## DOCUMENT CHANGE REQUEST FORM

Requested By: QMS Team

Date: June 7, 2016

Department: O. & F. Division

### Type of Change:

☐ Edit Existing Document   ☐ Create New Document   ☐ Delete Document

### Changes Requested:

1. Element 6 Drinking Water System - wording pertaining to the fire pump.

### Justification for Changes:

1. Page 24 - 26 – subsection **6.7 Water Treatment Description – Brief Description**
  - a) The existing fire pump within the plant is now redundant since the commissioning of the new emergency standby generation.

### Proposed Changes:

1. Page 24 – subsection **6.7 Water Treatment Description – Brief Description**
  - a) Treated Water Pump Wells: first line – remove the wording "the fire pump".
  - b) Plant Effluent Discharge Header: first sentence – remove the wording "and the fire pump".
2. Page 26 – **Process Flow Diagram**

The process flow diagram has been amended by removing the fire pump.

Page 1 of 1

### Approval:

QMS Representative: *D. L. A.* Date: *08-06-2016*

### Comments:

*IN REFERENCE TO CAR # 2016-002*

The Town of Fort Frances Water System  
General QMS Administration

PROCEDURE TITLE: Drinking Water System

REVISION #9

QMS REFERENCE: ELEMENT NO. 6

QMS REPRESENTATIVE: *[Signature]*

### Treated Water Pump Wells

The treated water pump well contains ~~the fire pump~~, the filter backwash pump and high lift pumps number 1, 2, 3 and 4. It is located between the two reservoirs cells.

### High Lift Pumps

These four units draw water from the treated water pump wells and are of varying capacities and are controlled by the water elevation in the Elevated Storage Tank/Water Tower.

High lift pump No. 1 and No. 4 – equipped with a 60hp variable frequency drive electric motor capable of providing flows up to 63.1 L/s.

High Lift Pump No. 2 – equipped with a 100hp electric motor, rated to deliver 94.7 L/s.

High Lift Pump No. 3 – equipped with a 125hp electric motor rated to deliver 126.2 L/s.

### Backwash Pump

The backwash pump is used for back washing the filters and draws water from the pump well. This unit is rated to deliver 300 L/s and is equipped with a 75 hp electric motor.

### Plant Effluent Discharge Header

The plant effluent discharge header receives the flow from the high lift pumps ~~and the fire pump~~ and directs it to the Town's water distribution system. Also there is one chlorine-fluoride analyzer, which continually monitors the concentration of these two chemicals prior to entering the water distribution system.

### Rated Capacity Of The Plant

17,000 m<sup>3</sup>/d or 3,744,493 gallons per day.  
196.76 litres/sec or 11.806 m<sup>3</sup>/min

### Computer

The computer process control system known as a S.C.A.D.A. System (Supervisory Control and Data Acquisition) is the heart of the Water Treatment Plant. It starts the plant, opens and closes valves, starts and stops motors, maintains the set chemical dosages, back washes filters and many more operational adjustments.

**Water Treatment Plant  
Town of Fort Frances**



The Town of Fort Frances Water System  
General QMS Administration

PROCEDURE TITLE: Document Change Request Form  
QMS REFERENCE: Element No. 5 - APPENDIX "A"

REVISION #4  
QMS REPRESENTATIVE:

## DOCUMENT CHANGE REQUEST FORM

Requested By: QMS Team

Date: March 1, 2017

Department: O. & F. Division

### Type of Change:

☒ Edit Existing Document    Create New Document    Delete Document

### Changes Requested:

1. Element 5 Quality Management System (QMS) Document & Records Control

### Justification for Changes:

The following section is being revised to update the Town of Fort Frances Drinking Operation Plan.

1. Page 14 – subsection 5.4 Document & Record Master Control Table – Location of Printed Documents – Item 1 (Town of Fort Frances Emergency Plan): Too specific, documents may not necessarily be stored in banker boxes.

### Proposed Changes:

1. Page 14 – subsection 5.4 Document & Record Master Control Table – Location of Printed Documents – Item 1 (Town of Fort Frances Emergency Plan): – removed the wording "in banker boxes". Should read "Town Hall".

Page 1 of 1

### Approval:

QMS Representative:  Date: 22-03-2017

### Comments:

<p>The Town of Fort Frances Water System General QMS Administration</p>	
<p>PROCEDURE TITLE: Documents and Records Control</p>	<p>REVISION #9</p>
<p>QMS REFERENCE: ELEMENT NO. 5</p>	<p>QMS REPRESENTATIVE: <i>[Signature]</i></p>

Document & Record Master Control Table								NR= not required
		Document Requirements				Record Requirements		
		Type of Document	File Location (of Master)	Location of Printed Documents	Authorized Editor	Internal/external	File Location	Disposal Method
1	D	Town of Fort Frances Emergency Plan	Town's Central Computer System	Town Hall in banker boxes	Fire Chief- Town of Fort Frances	External	NR	If possible Recycle Hard Copy
2	R	Water Treatment Plant Monthly Reports	NR	NR	NR	Internal	O & F Division office & W: Drive	If possible Recycle Hard Copy
3	D	WTP - Equipment Maintenance Manuals	WTP Control Room	WTP Control Room	Various equipment manufacturers	External	NR	If possible Recycle Hard Copy
4	R	Water Tower Logbook	NR	NR	NR	NR	Current year at Water Tower, previous years at WTP control room	If possible Recycle Hard Copy
5	R	Water Treatment Plant Logbook	NR	NR	NR	NR	WTP Control Room	If possible Recycle Hard Copy
6	R	Water Distribution System Logbook	NR	NR	NR	NR	O & F Division (Sewer & Water) office	If possible Recycle Hard Copy
7	R	Water Distribution System Sampling & Chlorine Residual Logbook for WTP Operators	NR	NR	NR	NR	WTP Control Room	If possible Recycle Hard Copy
8	R	ALS laboratory Results for Microbiological Tests	NR	NR	NR	NR	WTP Control Room	If possible Recycle Hard Copy

The Town of Fort Frances Water System  
General QMS Administration

PROCEDURE TITLE: Document Change Request Form  
QMS REFERENCE: Element No. 5 - APPENDIX "A"

REVISION #4  
QMS REPRESENTATIVE:

## DOCUMENT CHANGE REQUEST FORM

Requested By: QMS Team

Date: March 8, 2017

Department: O. & F. Division

### Type of Change:

☒ **Edit Existing Document**      **Create New Document**      **Delete Document**

### Changes Requested:

1. Element 6 Drinking Water System Process Description

### Justification for Changes:

The following section is being revised to update the Town of Fort Frances Drinking Operation Plan.

1. a) Page 17 – subsection 6.4 Threats to Raw Water Quality: First paragraph, last line - Grammar.  
b) Page 18 - subsection 6.4 Threats to Raw Water Quality: Remainder of section wording requires clarification. Due to the source water being shared by Canada/USA the potential affects to raw water quality may not be known at the time or future development could take place.  
c) Page 19 - subsection 6.4 Threats to Raw Water Quality: Second paragraph, second sentence – Word spelling and fifth paragraph, first sentence – missing a word.

### Proposed Changes:

1. a) Page 17 – subsection 6.4 Threats to Raw Water Quality: First paragraph, last line – removed the word "on". To read "...impact raw water quality."  
b) Page 18 - subsection 6.4 Threats to Raw Water Quality: Remainder of section reworded as attached.  
c) Page 19 - subsection 6.4 Threats to Raw Water Quality: Second paragraph, second sentence - "Poly electrolyte" to read "Polyelectrolyte" and fifth paragraph, first sentence – existing wording is "...on the filter effluent, which..." to read "...on the filter effluent **line**, which..."

Page 1 of 2

### Approval:

QMS Representative:  Date: 22-03-2017

### Comments:

## **6 Drinking Water System Process Description**

### **6.1 Introduction**

The Town of Fort Frances water supply system provides a potable water supply to the residents and businesses of the Town of Fort Frances. Connected to the Town's water system is Couchiching First Nation, which borders the northeast limits of the Town, Lakeview Trailer Court and Walleye Trailer Court. The Owner and operating authority for each subsystem is as follows:

- a) Couchiching First Nation Reserve: Partnership – Couchiching First Nation and Federal Government.
- b) Lakeview Trailer Park: Cheryl Elaine Armstrong
- c) Walleye Trailer Park: Walleye Trailer Park Ltd. (Carl Felix and Norma May Piotrowski).

The facility consists of a Class III conventional design water treatment plant having an approved capacity of 17,000 m<sup>3</sup>/day and a Class II distribution system both owned and operated by the Town of Fort Frances.

### **6.2 Source Water**

The water treatment plant draws water from Upper Rainy River. Raw water characteristics are as follows:

pH range from 6.0 – 7.6  
Temperature range from 0.5 – 24 Celsius  
Colour range 5 – 60 True Colour Units  
Turbidity range 1 – 16 N.T.U.

### **6.3 Events Affecting Source Water Quality**

Spring and fall turnover of the river water affect plant operations for a short duration, which can be corrected by making the appropriate physical and/or chemical adjustments to the elevated levels of turbidity in the treatment process. Also due to the cold water temperature during the winter months some minor chemical adjustments may be necessary.

### **6.4 Threats to Raw Water Quality**

Based on a source or raw water protection pre-screening survey completed by Cambium Environmental Inc. in October of 2006, there are a few potential hazards or risks near the Water Treatment Plant's (WTP) source water intake which could negatively impact ~~on~~ raw water quality.



PROCEDURE TITLE: Drinking Water System

REVISION #9

QMS REFERENCE: ELEMENT NO. 6

QMS REPRESENTATIVE: 

~~The Area of Interest (as defined by MOE) contains a few petroleum fuel storage tanks, as well as an active railway line where railcars containing inorganic and organic toxic chemicals and compounds cross the Ranier Bridge on a regular basis. The railway line is approximately 400 meters northeast of the WTP's raw water intake. Should a derailment take place within the area of interest there is a potential for contaminating the Town's raw water supply. Also on the USA side of the Ranier Bridge, railway ties are being stored within the area of interest that poses a risk to raw water quality.~~

The "Area of Interest" (as defined by the MOECC) identifies items, which could potentially affect the raw water quality to the Town's water treatment plant. They are as follows:

1. petroleum fuel storage tanks
2. an active railway line where railcars may contain inorganic and organic toxic chemicals and compounds
3. railway tie storage - USA side by the Ranier Bridge
4. residential home heating products (furnace oil) and improperly engineered septic system

The railway line, which crosses into the USA, via Ranier Bridge is approximately 400 metres northeast (upstream) of the plant's raw water intake.

With Rainy River bordering both Canada and USA there could be other potential risks that may not be known at this time or future development could take place. With little or no control as to what takes place on the USA side of the border that could pose a risk to the raw water quality in the future; once the Town becomes aware of a potential risk item(s) a risk assessment will be completed (Element 8) and the Operational Plan amended accordingly.

~~Finally, within the area of interest along both sides of the shoreline there are residential properties where home heating products (furnace oil) and improperly engineered septic system could pose a risk to raw water quality.~~

## 6.5 System Start Up and Operation

The Water Treatment Plant in Fort Frances is located at 901 Colonization Road East, UTM Coordinates: NAD83, Zone 15, Easting 472938.00m, Northing 5384735.00m.

Raw water is supplied from the upper portion of Rainy River through an intake structure located approximately 190 metres northeast of the Water Treatment Plant. The intake structure is equipped with bar screens to prevent logs and other debris from entering the intake line. The raw water is gravity fed into the plant through a 630mm diameter polyethylene pipe passing through two (2) sets of stainless steel screens before entering the raw water well.



The raw water well is equipped with two (2) 30 horsepower electric motors with vertical turbine pumps with each capable of delivering 100 L/s. Also one (1) 40 horsepower electric motor with vertical turbine, variable speed drive pump capable of providing flows in the range of 40 to 150 L/s. Raw water is pumped from the raw water well to the solid contact clarifiers. En route the raw water passes through a flow meter (MagMeter), which maintains an accurate flow measurement as well as integrates with the operational control of the chemical feed pumps. Liquid alum is introduced to the raw water through injection points then passes through an inline flash mixer where rapid mixing occurs before flowing into the clarifiers.

The alum-water solution splits off into two (2) separate lines before entering the clarifiers. ~~Poly-electrolyte~~ **Polyelectrolyte** is added and rapidly mixed to promote the formation of floc masses. Settling of the floc particles in the process water occurs forming a sludge blanket. The sludge blanket acts as a filter media where water flowing up through the blanket works like a finely meshed net catching other smaller particles. The processed water at the top of the clarifiers flows into collector flumes to the filter influent flumes to the four (4) dual media gravity filters.

The sludge blanket in each clarifier is on an automatic blow-down controlled through the computer control system. Operators inspect the sludge blanket at least once per day and can increase/decrease the blow-down to maintain an optimum sludge blanket in the clarifiers.

The dual media filters are made up of a top layer of anthracite, 500 mm thickness while the filter media below is silica sand, 400 mm thick. The processed water is carried over the filter media where suspended solids are removed as it gravity flows through the media.

Each of the four (4) filters is equipped with a turbidity meter installed on the filter effluent **line**, which are alarmed in case of media breakthrough or an upset in process. Periodically the filter media will need to be backwashed to remove/flush out the suspended particles.

The processed water flows to the contact chamber, located between the two (2) reservoir cells or clear wells. In the contact chamber chlorine, soda ash and hydrofluorosilic acid (fluoride) is added. The contact chamber is baffled to enhance proper mixing and contact time for the chlorine entering the reservoirs or clear wells.

The treated water then enters clear wells (two wells) located beneath the Water Treatment Plant main floor. Clear Well No. 1 and No. 2 have a capacity of 2565 m<sup>3</sup> and 1465m<sup>3</sup>, respectively. Treated water from the clear well is pumped into the distribution system through the four high lift vertical turbine pumps. Each pump is equipped with electric motors. High lift pump No. 1 and No. 4 have 60 horsepower variable speed drive

The Town of Fort Frances Water System  
General QMS Administration

PROCEDURE TITLE: Document Change Request Form  
QMS REFERENCE: Element No. 5 - APPENDIX "A"

REVISION #4  
QMS REPRESENTATIVE:

## DOCUMENT CHANGE REQUEST FORM

Requested By: QMS Team

Date: March 8, 2017

Department: O. & F. Division

### Type of Change:

☒ **Edit Existing Document**    ☐ **Create New Document**    ☐ **Delete Document**

### Changes Requested:

2. Element 8 Risk Assessment Outcomes

### Justification for Changes:

The following section is being revised to update the Town of Fort Frances Drinking Operation Plan.

2a) Page 30 – subsection 8.2 Town of Fort Frances Risk Assessment: Chart amended to

- i. clarify hazard "Rail car derailment".
- ii. include the potential hazard – Fuel Storage Tanks

2b) Page 35 – subsection 8.2 Town of Fort Frances Risk Assessment: Chart amended to include chart description header, missing

### Proposed Changes:

2a) Page 30 – subsection 8.2 Town of Fort Frances Risk Assessment: Chart amended as follows:

- i) wording "Rail car derailment" amended to read "Railway Activity"
- ii) the potential hazard of Fuel Storage Tanks identified in the source water protection pre-screening survey has been added. See attachment.

2b) Page 35 - chart description header added. See attachment.

Page 2 of 2

### Approval:

QMS Representative: 

Date: 22-03-2017

### Comments:

PROCEDURE TITLE: Risk Assessment Outcomes

REVISION #9

QMS REFERENCE: ELEMENT NO. 8

QMS REPRESENTATIVE: 

## TOWN OF FORT FRANCES RISK ASSESSMENT

Element or Process Step	Description of Hazard	Potential Result of Hazard	Comments	Available Monitoring & Control Measures	Emergency Procedure or Contingency Plan	Likelihood	Severity	Detectability	RISK PRIORITY NUMBER	CRITICAL CONTROL POINT	CRITICAL CONTROL LIMIT	Control Procedure
Source Water	Railway Activity ear derangement (Spill of chemical or contaminant)	Chemical/Biological Contamination of source water	Depends on location and type of Contamination	Notification to MOE Spills Action Centre of the spill and potential for contamination of source water.	Shut off raw water intake line valve. Stop producing water until plume passes. Run off water tower. Implement water restriction. Haul water, if necessary. Test water raw & treated.	1	4	3	8	YES	No Controllable limit	Refer to Emergency Response Binder (ERB) – S.O.P. #6 for Raw Water Source Contamination
	Highway Accident (Spill of chemical or contaminant)	Chemical/Biological Contamination of source water	Depends on location and type of Contamination	Notification to MOE Spills Action Centre of spill and potential for contamination of source water.	Shut down intake. Stop producing water until plume passes. Run off water tower. Implement water restriction. Haul water, if necessary. Test water raw & treated.	1	2	1	4	NO		
	Fuel Storage Tanks	Chemical/Biological Contamination of source water	Depends on location and type of Contamination	Notification to MOE Spills Action Centre of spill and potential for contamination of source water.	Shut down intake. Stop producing water until plume passes. Run off water tower. Implement water restriction. Haul water, if necessary. Test water raw & treated.	1	4	2	7	NO		
	Proximity of septic fields on Rainy Lake	Biological Contamination of source water		Conventional water treatment operations to treat source water. Weekly bacteriological testing of raw & treated water. Continuous monitoring for chlorine & filtered water turbidity.		1	1	5	7	NO		

PROCEDURE TITLE: Risk Assessment Outcomes

REVISION #9

QMS REFERENCE: ELEMENT NO. 8

QMS REPRESENTATIVE: 

## TOWN OF FORT FRANCES RISK ASSESSMENT

Element or Process Step	Description of Hazard	Potential Result of Hazard	Comments	Available Monitoring & Control Measures	Emergency procedure or contingency plan	Likelihood	Severity	Detect ability	RISK PRIORITY NUMBER	CRITICAL CONTROL POINT	CRITICAL CONTROL LIMIT	Control Procedure
Distribution	Loss of pressure due to a water main break or major fire	Biological & Chemical Contamination		Customer Complaints, low level alarm at water tower.	If system pressure compromised and potential for backflow exists, report to MOH & MOE SAC. Follow procedure for water main breaks and repairs. Refer to Emergency Response Binder (ERB) – S.O.P. #3 for Water Main Breaks and Repairs.	3	2	3	8	YES	Tower: 6m – 8m Reservoir: 3600mm – 5000mm	See Appendix “D” Standard Operating Procedure for Flushing of Water Mains
	Cross Connection	Biological & Chemical Contamination	Backflow prevention devices	Visual / high risk.	If backflow suspected, report to MOH & MOE SAC. Isolate area, flush the system and sample as needed. Re-pressurize system.	1	3	4	8	YES	No Controllable limit	See Appendix “D” Standard Operating Procedure for Flushing of Water Mains
	Water Tower Structural / Contaminated	Quantity/ Quality Biological & Chemical Contamination		Low pressure/Low level.	Isolate water tower.	1	2	3	6	NO		
	Hypo Pump Failure (Plugged)	Biological & Chemical Contamination		Low chlorine residual in distribution system.	Switch lines, repair/replace defective pump with spare pump at water plant/tower.	3	1	3	7	NO		
	Bio-film	Quantity/ Quality		Weekly checks	Refer to Appendix “D” S.O.P. for Flushing of Water Mains	1	3	3	7	NO		

The Town of Fort Frances Water System  
General QMS Administration

PROCEDURE TITLE: Document Change Request Form  
QMS REFERENCE: Element No. 5 - APPENDIX "A"

REVISION #4  
QMS REPRESENTATIVE:

## DOCUMENT CHANGE REQUEST FORM

Requested By: QMS Team

Date: March 9, 2017

Department: O. & F. Division

### Type of Change:

☒ Edit Existing Document    ☐ Create New Document    ☐ Delete Document

### Changes Requested:

1. Element 13 Essential Suppliers & Services

### Justification for Changes:

The following section is being revised to update the Town of Fort Frances Drinking Operation Plan.

1. Page 56 – subsection 13.2 Suppliers and Services, d) Water Distribution: Water Meters – Addition of a new suppliers and removal of another to keep listing current.

### Proposed Changes:

1. Page 56 – subsection 13.2 Suppliers and Services, d) Water Distribution: Water Meters – Addition of new suppliers – FLOCOR – Winnipeg & Watermark Solutions Ltd. Removal of Elster Metering (do not supply meters the Town currently uses). See attachment.

Page 1 of 1xxx

### Approval:

QMS Representative:  Date: 22-03-2017

### Comments:

The Town of Fort Frances Water System  
General QMS Administration

PROCEDURE TITLE: Essential Supplies & Services

REVISION #9

QMS REFERENCE: ELEMENT NO. 13

QMS REPRESENTATIVE: 

#### d) Water Distribution:

##### System Parts

Wolseley Waterworks  
1300 St. Mathews Avenue  
Winnipeg, Manitoba  
R3G 3K4  
204-786-7861

Emco Western Supply  
933 Tungsten Street  
Thunder Bay, Ontario  
P7B 5Z3  
807-345-6543

##### Water Meters

Wolseley Waterworks  
1300 St. Mathews Avenue  
Winnipeg, Manitoba  
R3G 3K4  
204-786-7861

FLOCOR - Winnipeg  
777 Century St.  
Winnipeg, Manitoba  
R3H 0M2  
204-774-3461

~~Elster Metering~~ Watermark Solutions Ltd.  
~~1100 Walkers Line, Ste 101~~ 169 Dufferin St. South (Unit 20)  
~~Burlington~~ Alliston, Ontario  
~~L7N 2G3~~ L9R 1E6  
~~905-634-4895~~ 519-217-3734

### 13.3 Quality Control Procedure

The Fort Frances Water Treatment Plant and Distribution System Operators ensure the quality of products delivered through a number of initiatives;

1. Formal contracts and agreements
2. Tender process
3. Engineering specifications

Documentation must be provided prior to delivery, which specifies the intended delivery time, proper licensing, accreditation and/or specifications outlined in the purchasing agreements. If all conditions set out in the agreements are met, delivery of goods or services will be accepted.

### 13.4 Purchase Agreement

When purchasing any goods and services pertaining to the Town's water system, the Town's Procurement Policy shall be followed.



The Town of Fort Frances Water System  
General QMS Administration

PROCEDURE TITLE: Document Change Request Form  
QMS REFERENCE: Element No. 5 - APPENDIX "A"

REVISION #4  
QMS REPRESENTATIVE:

## DOCUMENT CHANGE REQUEST FORM

**Requested By:** QMS Team

**Date:** March 15, 2017

**Department:** O. & F. Division

### Type of Change:

☒ **Edit Existing Document**      **Create New Document**      **Delete Document**

### Changes Requested:

1. Element 16 Sampling, Testing & Monitoring

### Justification for Changes:

The following section is being revised to update the Town of Fort Frances Drinking Operation Plan.

1. Page 64 - subsection 16.1 Water Treatment Plant Sampling, Testing & Monitoring Procedures:  
Table 2: Chemical Testing (Minimum Requirements) – table to be amended to bring the required sampling to date.
2. Page 65 - subsection 16.1 Water Treatment Plant Sampling, Testing & Monitoring Procedures:  
APPENDIX "E" – Procedure For Identifying & Responding to Adverse Sample Results – "New Cellular Phone Numbers": update listing.

### Proposed Changes:

1. Page 64 - subsection 16.1 Water Treatment Plant Sampling, Testing & Monitoring Procedures:  
Table 2: Chemical Testing (Minimum Requirements) – table amended to show the lead sampling requirements as per O. Reg. 170/03. See attachment.
2. Page 65 - subsection 16.1 Water Treatment Plant Sampling, Testing & Monitoring Procedures:  
APPENDIX "E" – Procedure For identifying & Responding to Adverse Sample Results – "New Cellular Phone Numbers": Listing updated to reflect new Operations & Facilities Manager:  
"Doug Brown – 275-9755" to be amended to read "Travis Rob – 275-9757." See attachment.

Page 1 of 2

### Approval:

**QMS Representative:**       **Date:** 22-03-2017

### Comments:

PROCEDURE TITLE: Sampling, Testing & Monitoring

REVISION #5

QMS REFERENCE: ELEMENT NO. 16

QMS REPRESENTATIVE: *[Signature]*

**Table 2: Chemical Testing (Minimum Requirements)**

	Sample Type	Frequency (Regulatory Reference)	Notes
<b>Inorganics</b> (Schedule 23)	Treated	One (1) sample every 12 months (O. Reg. 170, 13-2)	
<b>Organics</b> (Schedule 24)	Treated	One (1) sample every 12 months (O. Reg. 170, 13-4)	
<b>Nitrate &amp; Nitrite</b>	Treated	One (1) sample every 3 months (O. Reg. 170, 13-7)	
<b>Sodium</b>	Treated	One (1) sample every 60 months (O. Reg. 170, 13-8)	
<b>Lead</b>	Private Residences (Plumbing System)	<del>20-40</del> sample locations during each period ( <del>Reduced - C of A No. PB220000978RR-04</del> ) (O. Reg. 170, 15.1)	In every third 12-month period samples are to be taken in each sampling periods (December 15 to April 15 and June 15 to October 15). Require for two consecutive periods. (3 samples to be taken at each location and tested for lead, total alkalinity & pH)
	Non-Residences (Plumbing System)	<del>2-4</del> sample locations during each period ( <del>Reduced - C of A No. PB220000978RR-04</del> ) (O. Reg. 170, 15.1)	
	Distribution System (**)	<del>3-8</del> sample locations during each period ( <del>Reduced - C of A No. PB220000978RR-04</del> ) (O. Reg. 170, 15.1)	
<b>Total Alkalinity</b> <b>pH</b>	Distribution System (**) Only when lead testing is not performed as outlined above)	3 sample locations, every 12-month period in each sampling period (O. Reg. 170, 15.1 – 5(10))	Three (3) distribution locations in each sampling periods (December 15 to April 15 and June 15 to October 15) every 12-month period. (2 samples taken at each location and tested for total alkalinity & pH)
<b>Lead</b>		Same sample locations as above, every third 12-month period in each sampling period (O. Reg. 170, 15.1 – 5(10))	In conjunction with total alkalinity and pH testing, in every third 12-month period samples are to be taken in each sampling periods (December 15 to April 15 and June 15 to October 15). (1 sample taken at each location and tested for lead)
<b>THMs</b>	Distribution	One (1) sample every 3 months (O. Reg. 170, 13-6)	Must be collected from a point that is likely to have elevated THMs.



PROCEDURE TITLE: Sampling, Testing & Monitoring

REVISION #6

QMS REFERENCE: ELEMENT NO. 16

QMS REPRESENTATIVE: 

A competent certified operator oversees all water sampling taken at the Water Treatment Plant (WTP). A competent certified operator performs in-house testing at least once per day and the results are recorded on a monthly log sheet.

In-house daily testing consists of the following:

- PH testing done on the raw, settled and treated water.
- Turbidity testing done on the raw, settled and treated water.
- Free and total chlorine done on the treated water.
- Fluoride residual is measured on the treated water.
- Alum residual is measured on the filtered water.

On a weekly basis bacteriological samples, consisting of one (1) raw water sample and one (1) treated water sample are taken at the WTP. These samples are sent to an accredited lab for analysis.

Appendix “E” is devoted to identifying and responding to adverse sample results.

The SCADA computer process control system monitors and trends process treatment parameters as well as levels of raw water in the raw water wells, level of treated water in the reservoirs and whether or not the pumps in the WTP are in the “running” position or in “off” position such pumps as the backwash pumps and the low lift pumps and the high lift pumps and the chemical feed pumps (soda ash pumps, polymer pumps, fluoride pumps, carbon pumps and alum pumps). Chemical residuals are also monitored and trended such as chlorine and fluoride. There is a turbidity meter on the downstream side of each one of the four dual media filters, which is monitored and trended. The WTP operators may adjust treatment processes affecting water quality based upon the information and data provided by the SCADA system. Any adjustments made to process treatment parameters are recorded in the daily logbook at the WTP.

## **16.2 Water Distribution System Sampling, Testing & Monitoring Procedures**

Fort Frances’ Water Distribution System has a sampling program based on the requirements set out in O. Reg. 170/03 and its Drinking Water System Licence (Lic. #224-101). See sampling plan and schedule as outlined in Table 1 and 2 in Section 16.1.

A competent certified water system operator oversees all water sampling taken within the water distribution system. Water samples are collected in the distribution system for bacterial and chemical properties. On a weekly basis, four (4) bacteriological samples are taken from the water distribution system, where they are sent to an accredited lab for analysis. Chemical samples are collected as outlined in Section 13 of the O. Reg. 170/03, which are sent to an accredited lab for analysis as well. The water distribution

The Town of Fort Frances Water System  
General QMS Administration

PROCEDURE TITLE: Procedure for Identifying &  
Responding to Adverse Sample Results

REVISION #9

QMS REFERENCE: Element No. 16 - APPENDIX "E"

QMS REPRESENTATIVE: 

**THE TOWN OF FORT FRANCES**  
**NEW CELLULAR PHONE NUMBERS**

**WATER TREATMENT PLANT**

RANDY WHITE (ORO)	275-8733
BRAD WEBB (Alternate ORO)	275-5215
PAUL LEMESURIER (OIC - Distribution)	275-5045

**DISTRIBUTION SYSTEM**

GREG WIEDENHOEFT	275-8814
TRAVIS GEORGE	271-0407
JAY BRUYERE	271-2925

PUBLIC WORKS STANDBY (After Hours)	275-9754
------------------------------------	----------

FORT FRANCES AIRPORT	275-9760
----------------------	----------

LANDFILL SCALES	275-5147
-----------------	----------

**OPERATIONS & FACILITIES MANAGER**

<del>DOUG BROWN</del> TRAVIS ROB	275-
97559757	

**ENVIRONMENTAL & FACILITIES SUPERINTENDENT**

DOUGLAS HERR	275-5254
--------------	----------

**TRANSPORTATION SUPERINTENDENT**

MILT STRACHAN	275-5255
---------------	----------

The Town of Fort Frances Water System  
General QMS Administration

PROCEDURE TITLE: Document Change Request Form  
QMS REFERENCE: Element No. 5 - APPENDIX "A"

REVISION #4  
QMS REPRESENTATIVE:

## DOCUMENT CHANGE REQUEST FORM

Requested By: QMS Team

Date: March 15, 2017

Department: O. & F. Division

### Type of Change:

☒ Edit Existing Document    ☐ Create New Document    ☐ Delete Document

### Changes Requested:

1. Cover page of document
2. Appendices - Schedule "C" - Subject System Description Form

### Justification for Changes:

The following section is being revised to update the Town of Fort Frances Drinking Operation Plan.

1. Cover Page: Date and revision number of OP document.
2. Page 79 - APPENDICES - Schedule "C" - Subject System Description Form - Update new Contact Information

### Proposed Changes:

1. Cover page: Updated OP to current date/revision - March 24, 2017, Revision No. 10.
2. Page 79 - APPENDICES - Schedule "C" - Subject System Description Form - New Contact Information - Remove "Doug Brown" and add "Travis Rob" as new Operations & Facilities Manager including contact information (Phone Number - ext. 1316 and email address - [trob@fortfrances.ca](mailto:trob@fortfrances.ca)). Douglas Herr contact information amended as follows: Phone Number - ext. 1313 and email address - [dherr@fortfrances.ca](mailto:dherr@fortfrances.ca).

Page 2 of 2

### Approval:

QMS Representative:  Date: 22-03-2017

### Comments:

# ***QUALITY MANAGEMENT SYSTEM***

## **OPERATIONAL PLAN**

### **TOWN OF FORT FRANCES Water System**

~~June~~ ~~March 30~~ ~~24~~, ~~2016~~ ~~2017~~  
Revision No. ~~9~~ **10**

The Town of Fort Frances Water System  
General QMS Administration

PROCEDURE TITLE: Drinking Water System

REVISION #7

QMS REFERENCE: N/A

QMS REPRESENTATIVE: *[Signature]*

**Schedule "C"**

**Subject System Description Form  
Municipal Residential Drinking Water System**

Owner of Municipal Residential Drinking Water System:

The Corporation of the Town of Fort Frances

Name of Municipal Residential Drinking Water System:

Fort Frances Drinking Water System

**Subject Systems**

Name of Operational Subsystems (If Applicable)	Name of Operating Authority	DWS Number(s)
<input type="checkbox"/> Check here if the Municipal Residential Drinking Water System is operated by one operating authority. Enter the name of the operating authority in adjacent column.	The Corporation of the Town of Fort Frances	220000978
Operational Subsystem 1:		
Operational Subsystem 2:		
Operational Subsystem 3:		
Operational Subsystem 4:		

**Add attachments if there are additional "Operational Subsystems"**

**Contact Information**

Name	Title	Phone Number	email address
Travis Rob	Operations & Facilities Manager	(807) 274-9893 ext. 1316	trob@fortfrances.ca
Douglas Herr	Environmental & Facilities Sup't.	(807) 274-9893 ext. 1313	dherr@fortfrances.ca

The Town of Fort Frances Water System  
General QMS Administration

PROCEDURE TITLE: Document Change Request Form  
QMS REFERENCE: Element No. 5 - APPENDIX "A"

REVISION #4  
QMS REPRESENTATIVE:

## DOCUMENT CHANGE REQUEST FORM

Requested By: QMS Team

Date: March 17, 2017

Department: O. & F. Division

### Type of Change:

☒ Edit Existing Document    ☐ Create New Document    ☐ Delete Document

### Changes Requested:

1. Element 18 Emergency Management

### Justification for Changes:

The following section is being revised to update the Town of Fort Frances Drinking Operation Plan.


1. Page 68 - subsection 18.1 Introduction: New Standard Operating Procedure to be added as a potential emergency situation or service interruption. Also wording in this section to be cleaned up.
2. Page 69 - subsection 18.2 Town of Fort Frances – Water System - Potential Emergency Situations: Addition of wording to include the new Standard Operating Procedure - "Water Treatment Plant Emergency Standby Generator".
3. Page 69 - subsection 18.3 Emergency Response Binder: Addition of wording to include the new Standard Operating Procedure and grammar/spelling amendments.

### Proposed Changes:

1. Page 68 - subsection 18.1 Introduction: See attachment.
2. Page 69 - subsection 18.2 Town of Fort Frances – Water System - Potential Emergency Situations: At the end of the subsection include the wording "6. Water Treatment Plant Emergency Standby Generator – A Standard Operating Procedure is in place. See procedure in the emergency response binder."
3. Page 69 - subsection 18.3 Emergency Response Binder: Amend first sentence from: "In the Control Room at the Water Treatment Plant," to "In the Water Treatment Plant Control Room," and amend Bullet 1. to read "six (6)" instead of "five (5)".

Page 1 of 2

### Approval:

QMS Representative:  Date: 22-03-2017

### Comments:



## 18 Emergency Management

### 18.1 Introduction

During the course of developing a new Drinking Water Quality Management System for the Town of Fort Frances water system, several QMS team meetings took place, where a list of ~~five (5)~~ potential emergency situations or service interruptions ~~was~~ ~~were~~ developed, circulated and agreed ~~on~~ ~~upon~~ by the QMS team. The process of approving these ~~five (5)~~ potential emergency situations or service interruptions is recorded in the QMS meeting minutes. There are ~~five (5)~~ ~~six (6)~~ main emergency situations where Standard Operating Procedures (SOP) were ~~developed~~ ~~created~~. An ~~emergency~~ ~~Emergency response~~ ~~Response binder~~ ~~Binder~~, located ~~at~~ ~~in~~ the Water Treatment Plant ~~in the~~ ~~Control Room~~ has been ~~developed which outlines~~ ~~put together~~ ~~incorporating~~ the ~~five (5)~~ ~~six (6)~~ standard operating procedures for ~~each~~ emergency situations, ~~including~~ emergency contact information, contact information for bottled ~~d~~ water suppliers and a binder record sheet. Water system staff as part of their training requirements will review this emergency response binder.

### 18.2 Town of Fort Frances – Water System - Potential Emergency Situations

1. Destruction (Bombing/Major Fire) of Water Treatment Plant or Water Tower - A Standard Operating Procedure is in place. See Standard Operating Procedure No. 1 in the emergency response binder.
2. One or More Water Treatment Plant Operators are Sick and can't perform their duties to ensure a safe continuous supply of potable drinking water is available to the community. See Standard Operating Procedure No. 2 in the emergency response binder.
3. Water Main Breaks & Repairs - A Standard Operating Procedure is in place. See Standard Operating Procedure No. 3 in the emergency response binder.
4. Breakdown or Malfunction of Critical Treatment Process Equipment at the Water Treatment Plant - A Standard Operating Procedure is in place. See Standard Operating Procedure No. 4 in the emergency response binder.
5. Contamination of Raw Water Source - due to a derailment or highway spillage where toxic chemicals are discharged into the river near Water Treatment Plant raw water intake piping. A Standard Operating Procedure is in place. See Standard Operating Procedure No. 6 in the emergency response binder.

PROCEDURE TITLE: Emergency Management

REVISION #6

QMS REFERENCE: ELEMENT NO. 18

QMS REPRESENTATIVE: 

6. Water Treatment Plant Emergency Standby Generator – A Standard Operating Procedure is in place. See procedure in the emergency response binder.

### 18.3 Emergency Response Binder

In the ~~Control Room at~~ Water Treatment Plant **Control Room**, there exists an Emergency Response Binder that contains the following;

1. All ~~five (5)~~**six (6)** Standard Operating Produces (SOP) for these emergency situations.
2. A contact list of all water staff, all Public Works staff, the Town Community Control Group members, suppliers of bottled ~~drinking~~ water, and the resource contact list from the Town of Fort Frances Emergency Plan.
3. Record Sheet indicating when the water system staff or supervisors have annually reviewed and/or used the emergency information binder for a training exercise and/or when the information in the Binder has been revised or updated.

The Secretary/Receptionist will update the Emergency Response Binder as necessary when new information or revised information becomes available. The Secretary/Receptionist will be required to fill-in the record sheet contained in the binder once information is updated in the binder.

### 18.4 Connection to Town's Emergency Community Control Group (Municipal Emergency Planning Measures)

Municipal departments and divisions routinely respond to situations requiring fire, police, ambulance and Public Works services; however, some emergency situations may escalate beyond the scope of normal operations. The Town of Fort Frances has developed an Emergency Plan to aid/assist or guide in the response to any emergency situation. Under Provincial legislation, the Town is required to develop, implement and annually train on its Emergency Plan.

The Operations & Facilities Manager or designate is a key member of the Town Community Control Group. The ~~five (5)~~**six (6)** potential emergency situations or service interruptions for the water system would eventually trigger the Town Community Control Group to be assembled to assist in the situation.



The Town of Fort Frances Water System  
General QMS Administration

PROCEDURE TITLE: Document Change Request Form  
QMS REFERENCE: Element No. 5 - APPENDIX "A"

REVISION #4  
QMS REPRESENTATIVE:

## DOCUMENT CHANGE REQUEST FORM

**Requested By:** QMS Team

**Date:** March 17, 2017

**Department:** O. & F. Division

### Type of Change:

☒ **Edit Existing Document**      **Create New Document**      **Delete Document**

### Changes Requested:

1. Element 18 Emergency Management (cont'd)

### Justification for Changes:

The following section is being revised to update the Town of Fort Frances Drinking Operation Plan.

4. Page 69 - subsection 18.4 Connection to Town's Emergency Community Control Group (Municipal Emergency Planning Measures): Amend second paragraph to include six (6) potential emergency situations or service interruptions.
5. Page 70 - subsection 18.5 Annual Training on Emergency Preparedness: Amend paragraph to include six (6) potential emergency situations or service interruptions instead of five (5).

### Proposed Changes:

4. Page 69 - subsection 18.4 Connection to Town's Emergency Community Control Group (Municipal Emergency Planning Measures): Second paragraph, second sentence; remove the words "five (5)" and replace with "six (6)".
5. Page 70 - subsection 18.5 Annual Training on Emergency Preparedness: Amend first sentence to remove word "five (5)" and replace with "six (6)".

Page 2 of 2

### Approval:

**QMS Representative:** *[Signature]*      **Date:** 22-03-2017

### Comments:

PROCEDURE TITLE: Emergency Management

REVISION #6

QMS REFERENCE: ELEMENT NO. 18

QMS REPRESENTATIVE: 

6. Water Treatment Plant Emergency Standby Generator – A Standard Operating Procedure is in place. See procedure in the emergency response binder.

### 18.3 Emergency Response Binder

In the ~~Control Room at~~ Water Treatment Plant **Control Room**, there exists an Emergency Response Binder that contains the following;

1. All ~~five (5)~~**six (6)** Standard Operating Produces (SOP) for these emergency situations.
2. A contact list of all water staff, all Public Works staff, the Town Community Control Group members, suppliers of bottled drinking water, and the resource contact list from the Town of Fort Frances Emergency Plan.
3. Record Sheet indicating when the water system staff or supervisors have annually reviewed and/or used the emergency information binder for a training exercise and/or when the information in the Binder has been revised or updated.

The Secretary/Receptionist will update the Emergency Response Binder as necessary when new information or revised information becomes available. The Secretary/Receptionist will be required to fill-in the record sheet contained in the binder once information is updated in the binder.

### 18.4 Connection to Town's Emergency Community Control Group (Municipal Emergency Planning Measures)

Municipal departments and divisions routinely respond to situations requiring fire, police, ambulance and Public Works services; however, some emergency situations may escalate beyond the scope of normal operations. The Town of Fort Frances has developed an Emergency Plan to aid/assist or guide in the response to any emergency situation. Under Provincial legislation, the Town is required to develop, implement and annually train on its Emergency Plan.

The Operations & Facilities Manager or designate is a key member of the Town Community Control Group. The ~~five (5)~~**six (6)** potential emergency situations or service interruptions for the water system would eventually trigger the Town Community Control Group to be assembled to assist in the situation.

The Town of Fort Frances Water System  
General QMS Administration

PROCEDURE TITLE: Emergency Management

REVISION #6

QMS REFERENCE: ELEMENT NO. 18

QMS REPRESENTATIVE: 

## 18.5 Annual Training on Emergency Preparedness

On an annual basis all the staff within the water system will review the Emergency Response Binder and the ~~five (5)~~ **six (6)** potential emergency situations or service interruptions where at a minimum the Standard Operating Procedures or Contingency Plans will be reviewed. The Town's Emergency Community Control Group will annually be involved in a table-top exercise or mock field exercise, which at times may include the water system staff. All training activities will be recorded in minutes of meetings or internal memo minutes. These avenues of record will outline training activities, participants, date and time. A copy of training memos will be placed in all participant personnel file.

The Town of Fort Frances Water System  
General QMS Administration

PROCEDURE TITLE: Document Change Request Form  
QMS REFERENCE: Element No. 5 - APPENDIX "A"

REVISION #4  
QMS REPRESENTATIVE:

## DOCUMENT CHANGE REQUEST FORM

Requested By: QMS Team

Date: March 20, 2017

Department: O. & F. Division

### Type of Change:

☒ Edit Existing Document    ☐ Create New Document    ☐ Delete Document

### Changes Requested:

1. Element 15 Infrastructure Maintenance, Rehabilitation & Renewal

### Justification for Changes:

The following section within the QMS Operation Plan is being revised to update the 5-year capital budget.

1. Page 62 - subsection 15.4 Summary of Rehabilitation, Renewal and Routine Maintenance Activities for the Water System:
  - Appendices have been amended
  - In Appendices - Spreadsheet outlining 5-year capital budget updated.

### Proposed Changes:

1. Subsection 15.4 Summary of Rehabilitation, Renewal and Routine Maintenance Activities for the Water System:
  - Page 62 – paragraph 1, fourth line: Appendix "I" amended to read "Appendix "H"
  - In Appendices - APPENDIX "I" to read APPENDIX "H" – Spreadsheet outlining the updated 5-year capital budget.

Page 1 of 1

### Approval:

QMS Representative: [Signature]

Date: 22-03-2017

### Comments:



PROCEDURE TITLE: Infrastructure Maintenance, Rehabilitation & Renewal  
QMS REFERENCE: Element No. 15 APPENDIX "H"

REVISION #9  
QMS REPRESENTATIVE: *[Signature]*

O & F Division -Draft - 2017 to 2022 Capital Budget	2017	2017	2017	2017	2017	2018	2018	2018	2019	2019	2019	2020	2020	2020	2021	2021	2021
	Total	Grants or LTD or Trust Fund	Town's Cost	Total	Grants or LTD or Trust Fund	Town's Cost	Total	Grants or LTD or Trust Fund	Total	Grants or LTD or Trust Fund	Town's Cost	Total	Grants or LTD or Trust Fund	Town's Cost	Total	Grants or LTD or Trust Fund	Town's Cost
6-Year Capital Budget																	
Water System																	
Water Distribution System																	
Replacing main line water valves/hydrants (Carry-over)	\$100,000.00			\$100,000.00			\$100,000.00		\$100,000.00		\$100,000.00	\$100,000.00		\$100,000.00	\$100,000.00		\$100,000.00
GIS Equipment and Mapping	\$4,560.00			\$4,560.00			\$25,000.00		\$5,000.00		\$5,000.00	\$5,000.00		\$5,000.00	\$5,000.00		\$5,000.00
Design for Infrastructure Renewal Project	\$37,500.00																
2009-Phase 1 - Reconstruction - Scott Street - Reid Ave. to Colonization Rd. East	\$528,600.00			\$528,600.00					\$528,573.48		\$528,573.48						
Phase 2 - Reconstruction - Scott Street - Reid Ave. to Colonization Rd. East																	
General Miscellaneous Tools/Equipment	\$12,000.00			\$12,000.00			\$10,000.00		\$10,000.00		\$10,000.00	\$464,924.11		\$10,000.00	\$10,000.00		\$10,000.00
Front Street - East of Crowe to South of Scott Street - 1355 meters				\$468,897.00			\$468,897.00										
Upgrades to Water Distribution System as a result from Infiltration & Inflow Study				\$400,000.00			\$400,000.00		\$400,000.00		\$400,000.00	\$400,000.00		\$400,000.00	\$400,000.00		\$400,000.00
Mowat Ave. - Scott St. to First St. E. (130 m)																	
First St. E. - Mowat Ave. to Central Ave. (182 m)															\$152,000.00		\$152,000.00
2nd Street- Mowat Ave. to Portage Ave. (175 m)	\$80,500.00			\$80,500.00					\$1,000,038.00		\$1,000,038.00	\$1,000,000.00		\$1,000,000.00			
5th St. W. - Wright Ave. N. to McIrvine Rd. (823 m)																	
Phair Ave. - Third St. E. to Fifth St. E. (205 m)																	
Phair Ave. - Fifth St. E. to Sixth St. E.(190 m)				\$0.00													
Colonization Rd. W. - Armstrong Pl. to E of Riverview Cemetery (481 m)	\$247,700.00	-\$165,133.33		\$82,566.67													
Lane between Webster Ave. and Lillie Ave. (135m)																	
3rd Street East - Minnie Ave. to Colonization Road East- 470 meters																	
Mill Road Overpass - Water Distribution Replacement	\$231,500.00			\$231,500.00											\$289,372.00		\$289,372.00
Nelson St. - Mosher Ave. west to mid block	\$138,000.00			\$138,000.00					\$20,000.00		\$20,000.00						
Modelling of Water System																	



June 20, 2016

Report To: Mayor & Council

From: Doug Brown, Manager of Operations & Facilities

**Subject: Drinking Water Quality Management System (DWQMS) –  
Management Review Meeting - Endorsement by Owners**

Over the past 12 months a couple of significant milestones have been completed in regards to the Drinking Water Quality Management System and are summarized below:

- 1) **2<sup>nd</sup> External** (on-site verification) completed by SAI Global on November 4, 2015-Auditor Mr. Rod Seabrook
- 2) **5<sup>th</sup> Internal Audit** completed by Mr. Travis Rob from April 20 to May 16, 2016.
- 3) **5<sup>th</sup> Management Review Meeting** held on Monday June 20, 2016 to review the implementation of the DWQMS for the period June 2015 to May 31, 2016.

Please find attached the agenda package plus the associated documents which were reviewed at the June 20th, 2016 Management Review meeting and the corresponding meeting minutes. Presently under the process outlined in the Operational Plan Element No. 20 - Management Review (See pages No. 74 & 75 of Operational Plan) - there were four (4) action items that Council (owner) must review and endorse at this time:

Action Item No. 1) **Replace approximately 500 meters of 150mm diameter water main along Colonization Road West** (from 1302 Colonization Road West to 1448 Colonization Road West). The timeline is in accordance with the 2017 budget process where the O & F Division Management will prepare the cost estimate for installation and present this capital expenditure to Council (owner).

Action Item No. 2) **Installation of two additional valves along Sinclair Avenue between Victoria Avenue & Armit Avenue in order that the hospital facility can avoid unnecessary boil water advisories being issued.** Staff at the management review meeting on June 20, 2016 are of the opinion that the Town should send a letter to the Riverside Healthcare requesting that their internal plumbing be upgraded or upsized to ensure proper fire flow protection can be achieved from the water supplied from either Sinclair or Front Street watermains, prior to the installation of two additional isolation valves along Sinclair Avenue.

Action Item No. 3) **Ensure both Cemetery Irrigation Systems are properly plumbed to ensure the proper backflow protection c/w meter is in place.** The timeline is in accordance with the 2017 budget process where the O & F Division Management will prepare the cost estimate for installation and present this capital

expenditure to Council (owner). The Riverview Cemetery Irrigation system modifications can take place at the same time as completing action item No. 1

Action Item No. 4) – **Cancellation of Policy 4.5 - STANDARD OPERATING PROCEDURE (SOP) NO. 5 FOR HYDRO POWER OUTAGE FOR OPERATING THE WATER SYSTEM-** As a result of the new generator for the Water Treatment Plant becoming fully operational on July 28, 2015, this Standard Operating procedure is redundant going forward as the Town has the ability to manufacture and distribute potable water to its customers at all times.

The Operations & Facilities Executive Committee recommends the following;

- 1) That Council (owner) has reviewed the agenda package and minutes of the management review meeting held on June 20, 2016.
- 2) That Council (owner) has reviewed and accepted the following four (4) action items as a result of the management review meeting held on June 20, 2016

Action Item No. 1) **Replace approximately 500 meters of 150mm diameter water main along Colonization Road West** (from 1302 Colonization Road West to 1448 Colonization Road West). The timeline is in accordance with the 2017 budget process where the O & F Division Management will prepare the cost estimate for installation and present this capital expenditure to Council (owner).

Action Item No. 2) **Installation of two additional valves along Sinclair Avenue between Victoria Avenue & Armit Avenue in order that the hospital facility can avoid unnecessary boil water advisories being issued.** Staff at the management review meeting on June 20, 2016 are of the opinion that the Town should send a letter to the Riverside Healthcare requesting that their internal plumbing be upgraded or upsized to ensure proper fire flow protection can be achieved from the water supplied from either Sinclair or Front Street watermain, prior to the installation of two additional isolation valves along Sinclair Avenue.

Action Item No. 3) **Ensure both Cemetery Irrigation Systems are properly plumbed to ensure the proper backflow protection c/w meter is in place.** The timeline is in accordance with the 2017 budget process where the O & F Division Management will prepare the cost estimate for installation and present this capital expenditure to Council (owner). The Riverview Cemetery Irrigation system modifications can take place at the same time as completing action item No. 1

Action Item No. 4) – **Cancellation of Policy 4.5 - STANDARD OPERATING PROCEDURE (SOP) NO. 5 FOR HYDRO POWER OUTAGE FOR OPERATING THE WATER SYSTEM-** As a result of the new generator for the Water Treatment Plant becoming fully operational on July 28, 2015, this Standard Operating procedure is redundant going forward as the Town has the



ability to manufacture and distribute potable water to the its customers at all times.

Respectfully Submitted,  
Operations & Facilities Division



D. Brown, P. Eng.  
Manager of Operations & Facilities

**Council approval of this report will ensure the following:**

- 1) 1) That Council (owner) has reviewed the agenda package and minutes of the management review meeting held on June 20, 2016.
- 2) That Council (owner) has reviewed and accepted the following four (4) action items as a result of the management review meeting held on June 20, 2016

Action Item No. 1) **Replace approximately 500 meters of 150mm diameter water main along Colonization Road West** (from 1302 Colonization Road West to 1448 Colonization Road West). The timeline is in accordance with the 2017 budget process where the O & F Division Management will prepare the cost estimate for installation and present this capital expenditure to Council (owner).

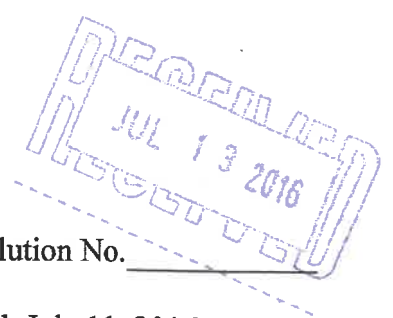
Action Item No. 2) **Installation of two additional valves along Sinclair Avenue between Victoria Avenue & Armit Avenue in order that the hospital facility can avoid unnecessary boil water advisories being issued.** Staff at the management review meeting on June 20, 2016 are of the opinion that the Town should send a letter to the Riverside Healthcare requesting that their internal plumbing be upgraded or upsized to ensure proper fire flow protection can be achieved from the water supplied from either Sinclair or Front Street watermains, prior to the installation of two additional isolation valves along Sinclair Avenue.

Action Item No. 3) **Ensure both Cemetery Irrigation Systems are properly plumbed to ensure the proper backflow protection c/w meter is in place.** The timeline is in accordance with the 2017 budget process where the O & F Division Management will prepare the cost estimate for installation and present this capital expenditure to Council (owner). The Riverview Cemetery Irrigation system modifications can take place at the same time as completing action item No. 1

Action Item No. 4) – **Cancellation of Policy 4.5 - STANDARD OPERATING PROCEDURE (SOP) NO. 5 FOR HYDRO POWER OUTAGE FOR OPERATING THE WATER SYSTEM-** As a result of the new generator for the Water Treatment Plant becoming fully operational on July 28, 2015, this Standard Operating procedure is redundant going forward as the Town has the ability to manufacture and distribute potable water to its customers at all times.



**TOWN OF FORT FRANCES  
COUNCIL**



Session No. 044

Resolution No. \_\_\_\_\_

Moved by Jane Caul

Dated July 11, 2016

Seconded by Paul Ryan

THAT the report dated June 20, 2016 from D. Brown, Manager of Operations & Facilities re: Drinking Water Quality Management System (DWQMS) – Management Review Meeting – Endorsement by Owners be approved to agree with the recommendation of the Operations & Facilities Executive Committee to review and accept the report and action items outlined in the report.

TO: <u>Travis</u>
Approved by <u>Consent</u>
FROM: <u>Lisa</u>
CLERK TOWN OF FORT FRANCES
DATE: <u>July 12/16</u>

	Yea	Nay	Disclosure of Interest
R. Avis			
J. Albanese			
W. Brunetta			
J. Caul			
D. Kitowski			
K. Perry			
G. Paul Ryan			

☐ CARRIED

☐ DEFEATED

\_\_\_\_\_  
 MAYOR or DEPUTY MAYOR

# Town of Fort Frances Fort Frances Drinking Water System Meeting Minutes

**DATE: Monday June 20, 2016**

**TIME: 1:00 p.m.**

**LOCATION: Fort Frances Water Treatment Plant**

**IN ATTENDANCE:** Mark McCaig, Doug Brown, Doug Herr, Paul Lemesurier, Brad Webb, Travis George and Jay Bruyere.

Part of the QMS Operational Plans requires that management shall review the QMS once every twelve (12) months to assess and ensure the continuing suitability, adequacy and effectiveness of the QMS. Element 20 – Management Review was discussed. Management Reviews shall be included in the internal audit schedule.

Item #	Item Discussed	Action Taken
1.	<p><b>Incidents of regulatory non-compliance:</b></p> <p>Ministry of the Environment (MOE) Annual Inspection Report (2015-16) Date of Inspection: November 30<sup>th</sup> – December 1<sup>st</sup>, 2015. Non-compliance with regulatory Requirements – Two (2) items identified.</p> <p>1. Existing parts of the distribution system that were taken out of service for inspection, repair or other activities that may lead to contamination and all new parts of the distribution system that came in contact with drinking water, were not disinfected in accordance with Schedule B Condition 2.3 of the Drinking Water Works Permit.</p> <p>For watermains that form part of a distribution system, DWWP #224-201 Schedule B, Condition 2.3 requires that all parts in contact with the drinking water which are:</p> <ul style="list-style-type: none"> <li>- Added, modified, replaced, extended or</li> <li>- Taken out of service for inspection, repair or other activities that may lead to contamination.</li> </ul> <p>Shall be disinfected before being put into service in accordance with the provisions of the AWWA C651-Standard for Disinfecting Water Mains or an equivalent procedure.</p> <p>Inspector stated “Although operators indicated that some form of disinfection is occurring during waterman replacements and repairs, the</p>	

Regular Meeting Minutes

	<p>logbook contained no information with respect to disinfection procedures; therefore, the undersigned Water Inspector was unable to verify that appropriate disinfection procedures were being applied throughout the inspection period.</p> <p><b>Actions Required:</b></p> <p>For the purpose of DWWP #224-201, Condition 2.3 the document titled "Watermain Disinfection Procedure" (November 2015) is considered by the MOECC as the equivalent procedure which replaces ANSI/AWWA C651 – Standard for Disinfecting Water Mains with respect to the cleaning, tapping, maintenance and repair of watermain, appurtenances and fittings.</p> <p>By January 29, 2016 all personnel working in the distribution system must review the Watermain Disinfection Procedure found in Appendix B. By January 29, 2016, confirmation that all personnel working in the distribution system have reviewed the Watermain Disinfection Procedure must be provided in writing to the undersigned Water Inspector by email: <a href="mailto:aaron.causyn@ontario.ca">aaron.causyn@ontario.ca</a>.</p> <p><b>Actions Taken</b></p> <p>On January 27, 2016 a meeting with all the distribution operators was held to review the disinfection procedure "Watermain Disinfection Procedure". Following the meeting an email was sent to the Water Inspector, Aaron Causyn informing him that the procedure had been reviewed, a copy of the Water Disinfection Procedure operator review sign-off sheet was attached. See attachments for email/operator sign-off sheet.</p> <p>2. The record system did not allow the reader to unambiguously identify the person who made the logbook entry.</p> <p>O.Reg. 128/04, section 27(4) states: "A person who makes an entry in a log or other record keeping mechanism shall do so in a manner that permits the person to be unambiguously identified as the maker of the entry."</p> <p>On the following days during the inspection review period, up to three operators made entries into the WTP logbook; however, there was no way of identifying who made the entry (ie. No initials or signatures):</p> <p>January 28, 2015 February 4, 2015 February 10, 2015 June 29, 2015.</p>	<p>A copy of the sign-off sheet was emailed to Aaron Causyn on January 27, 2016.</p>
--	---	--

Regular Meeting Minutes

	<p><b>Actions Required:</b></p> <p>Effective immediately, operators must clearly identify themselves in the logbook as the writer during all logbook entry occurrences, in accordance with O.Reg. 128/04, section 27(4).</p> <p>By January 26, 2016 the Town of Fort Frances must provide the undersigned Water Inspector with a copy of the Fort Frances WTP logbook for the period of December 7, 2015 to January 22, 2016. A copy of the logs may be provided by email: 808 Robertson Street, 2<sup>nd</sup> Floor, Kenora, Ontario, P9N 1X9 or email: <a href="mailto:aaron.causyn@ontario.ca">aaron.causyn@ontario.ca</a></p> <p><b>Actions Taken:</b></p> <p>On January 25, 2016 a copy of the logbook entries from December 7, 2015 to January 22, 2016 were emailed to the Water Inspector Aaron Causyn. A copy of the email/logbook entries for the days requested are attached.</p>	<p>A copy of the logbook entries was email to Aaron Causyn on January 25, 2016.</p>
2.	<p><b>Incidents of adverse drinking water tests:</b></p> <p>WTP: No adverse treated water samples</p> <p>Distribution: Adverse water quality – Total Coliform 401 Kings Highway – October 8, 2015 due to a watermain replacement.</p>	<p>Resolved in a timely manner</p>



5.	<p><b>Internal and third party audit results:</b></p> <p><b>Internal Audit Results:</b></p> <p>Latest Internal Audit: Issued May 20, 2016 – resolved June 16, 2016 – undertaken by Travis Rob.</p> <p>Five (5) Corrective Action were identified and the actions have been resolved.</p> <p>Operational Plan to be amended reflecting non-conformances.</p> <p><b>Previous Audits:</b> April 24, 2015 – Resolved May 28, 2015 One (1) corrective action identified and action taken to resolve it. ( undertaken by Travis Rob – Identified in the previous management review).</p> <p><b>External Audit Results:</b> Latest off-site External Audit: 24 Month Surveillance Audit (October 6, 2015) – resolved November 2, 2015 undertaken by SAI Global – accreditation program for operating authorities – One (1) non-conformance was identified and action taken to resolve it.</p> <p>Previous ON-Site External Audit 12 Month Surveillance Audit ( November 4, 2015) by SAI Global – no non-conformances were identified.</p> <p>Previous On-Site External Audit 24 –Month Surveillance Audit (November 25, 2014 ) – by SAI GLOBAL Two (2) non-conformances were identified and actions taken to resolve them.</p> <p>.</p>	<p>All Corrective Actions have been resolved</p> <p>All Corrective Actions have been resolved</p> <p>All Corrective Actions have been resolved.</p>
----	--	---



6.	<p><b>Results of emergency response testing:</b></p> <p>Standard Operating Procedures identified in the Emergency Response Binder had been reviewed with the Water System Operators on September 25, 2015</p> <p>Emergency SOP's Reviewed</p> <ol style="list-style-type: none"> <li>1. Policy 4.24 – SOP No.1 – for the Destruction (Bombing/Major fire) of Water Treatment Plant of Water Tower.</li> <li>2. Policy 4.23 – SOP No. 2 – for Pandemic Situation – Affecting the Water Treatment Plant Operators and Community.</li> <li>3. Policy 4.15 – SOP No. 3 – for Water Main Breaks and Repairs.</li> <li>4. Policy 4.6 – SOP No. 4 – for breakdown of equipment at the Water Treatment Plant.</li> <li>5. Policy 4.5 – SOP No. 5 – for Hydropower Outage for Operating the Water System.</li> <li>6. Policy 4.4 – SOP No. 6 – for Raw Water Source Contamination</li> </ol> <p>Updated Municipal Emergency Management Listing in Emergency Response Binder November 2, 2015.</p> <p>Note: SOP No. 5 has become redundant since the installation of the new emergency standby generator.</p> <p>Additional emergency response training is scheduled for the fall of 2016.</p>	<p>Updated September 25, 2015.</p>
----	--	------------------------------------

7.	<p><b>Operational performance:</b></p> <p><b>WTP:</b>  Actions &amp; recommendations from MOE  As a result of the October 2015/16 MOE Inspection</p> <p>Effective immediately, operators must clearly identify themselves in the logbook as the writer during all logbook entry occurrences. By January 26, 2016 the Town of Fort Frances must provide the undersigned Water Inspector with a copy of the Fort Frances WTP logbook for the period of December 7, 2015 to January 22, 2016.</p> <p>On January 25, 2016 a copy of the logbook entries from December 7, 2015 to January 22, 2016 were emailed to the Water Inspector.</p> <p>Personnel – as of June 1, 2015 – Vacancy filled by Paul Lemesurier  Full complement</p> <p>Emergency Standby Generator and associated switching gear, wiring, etc. installed July 28, 2015.</p> <p>No other issues.</p> <p><b>Distribution System:</b>  Actions &amp; recommendations from MOE  As a result of the October 2015/16 MOE Inspection</p> <p>Review with all personnel working in the distribution system the new disinfection procedure “Watermain Disinfectin Procedure”.</p> <p>On January 27, 2016 a meeting with all the distribution operators was held to review the disinfection procedure “Watermain Disinfection Procedure”.</p> <p>Personnel – Water Distribution Operator vacancy filled as of November 2, 2015 – Jay Bruyere</p> <p>Full complement.</p> <p>Maintenance issues:  Numerous water main/service breaks through the Town since the last Management Review.</p> <p>One additional water main break has occurred on Colonization Road West (1400 blk). Was slated for replacement in 2014 – postponed due to lack of funding. Still recommended for replacement.</p> <p>During valve exercising some of the isolation valves began leaking</p>	
----	---	--

Regular Meeting Minutes

	<p>Or are very hard to turn. Replacement of these valves is recommended. Six (6) valves were replaced in 2015. No additional valve replacements scheduled for 2016.</p> <p>Some existing fire hydrants are obsolete, no parts to maintain them. Six (6) fire hydrants were scheduled for replacement in 2015. No additional hydrant replacements scheduled for 2016.</p>	
8.	<p><b>Raw water supply and drinking water quality trends:</b></p> <p>No changes in raw water supply and drinking water quality trends.</p> <p>Regular seasonal water turnover of Rainy Lake.</p>	No Changes
9.	<p><b>Follow-up on action items from previous management review:</b></p> <p>2014 Management Review Items Two (2) items were identified in the last management review.</p> <ol style="list-style-type: none"> <li>1. Replacement of approximately 500 meters of 150 mm diameter Water main along Colonization Road West (from 1302 Colonization Road West to 1448 Colonization Road West).</li> </ol> <p>Status: Due to lack of funding the project has been postponed to 2015. To go through the 2016 Capital Budget Process. Construction season.</p> <ol style="list-style-type: none"> <li>3. Installation of a back up electrical generator at the WTP to ensure potable drinking water can be manufactured during extended periods of time when there is no electrical power available had been approved in the 2013 Capital Budget. The value budgeted for the purchase of the standby generator was insufficient for size of generator required. Therefore the purchase of the standby generator had been deferred to the 2014 Capital Budget.</li> </ol> <p>Status: back up generator has been installed on July 28, 2015. In July 2016 Hatch Mott McDonald Ltd. Retained to design, tender, environmental review, contract administration services is to contact Wajax and MC Lough Electrical to complete their one year maintenance warranty.</p> <p>2015 Management Review Items Three (3) follow-up items identified in the last management review:</p> <ol style="list-style-type: none"> <li>1. Replacement of approximately 500 metres of 150 mm diameter water main along Colonization Road West (from 1302 Colonization Road West to 1448 Colonization Road West.)</li> </ol> <p>Status due to lack of funding the project has been postponed to 2016. To go through the 2017 Capital Budget Process.</p>	<p>Determined that this would not be beneficial</p> <p>Put in 2017 budget process</p> <p>Completed.</p> <p>Put in 2017 budget process</p>

Regular Meeting Minutes

	<p>2. Installation of two additional valves along Sinclair St. between Victoria Avenue and Armit Avenue in order that the hospital facility can avoid unnecessary boil water advisories being issued.</p> <p>Status: Due to lack of funding the project has been postponed.</p> <p>3. Installation of a looping water main along laneway between Lillie Ave and Armit Ave abutting the old West End Rink property.</p> <p>Status: Water main and appurtenances have been completed.</p>	Completed.
10.	<p><b>The status of management action items identified between reviews:</b></p> <p>No management action items identified between reviews.</p>	.
11.	<p><b>Changes that could affect the Quality Management System (QMS)</b></p> <p>Internal/External Audit: No Issues.</p> <p>Management Review: No issues.</p> <p>Any new business development upstream of water intake could potentially contaminate raw water source or supply. No concerns at this time.</p> <p>Information only:</p> <p>Where to find – electronically: Revision Updates – Last version – check electronic version ( latest version) found in W:\QMS Operational Plan\....file name ( March 31, 2016; Revision No. 8)</p>	Ongoing

12.	<p><b>Consumer Feedback:</b></p> <p>Customer complaints: Last period – 13 complaints – this period 8 complaints.</p> <p>Notes:</p> <ol style="list-style-type: none"> <li>1. Construction projects last year and in 2016, therefore dead end mains have been temporarily created as a result – causes stagnate and discoloured water issues.</li> <li>2. Result of water main breaks</li> <li>3. Maintenance activities – valve exercising.</li> </ol>	Ongoing
13.	<p><b>The Resources needed to maintain the Quality Management System (QMS):</b></p> <p>Council's commitment to provide the following</p> <p>Personnel – No issues</p> <p>Financial – No issues</p>	Ongoing
14.	<p><b>The results of infrastructure review:</b></p> <p>Six (6) year capital plan ( In OP – Appendix I)</p> <p>On an annual basis</p> <p>Proposed infrastructure upgrades are discussed and reviewed with operators.</p> <p>Council reviews and approves.</p> <p><b>WTP</b></p> <p>On a monthly basis the WTP Overall Responsible Operator generates a report outlining operational and maintenance activities. The report is circulated and reviewed by the Environmental and Facilities Superintendent, Manager Operations and Facilities, the O &amp; F Executive Committee and Council.</p> <p>Upgrades for this period</p> <p>Interior painting of floors and process piping – in progress.</p>	Ongoing

	<p><b>Water Distribution System:</b>  On a monthly basis Environmental &amp; Facilities Supt. generates a report outlining maintenance activities. The report is circulated and reviewed by the Manager of O. &amp; F. and the O. &amp; F. Executive Committee and Council.</p> <p>Upgrades during this period:  Water Main valve exercise program – 20% per year  Hydrant flushing: flushing annually  Fire Hydrant replacements:  - (2015) King’s Highway Reconstruction (Bay City) 2 hydrants  - 2016 – Phair Avenue Reconstruction (Bay City) 2 of 4 hydrants  - Colonization Road East (Makkinga) 1 of 4 hydrants  - Laneway between Webster Ave and Lillie Ave – 1 hydrant</p> <p>Water main isolation valve replacements:  2015 – King’s Highway Reconstruction (Bay City) - 13 valves  Nelson Street – Butler Ave to wood yard – 2 valves  2016 - Phair Avenue (Bay city) 3 of 6 valves  Colonization Road East ( Makkinga) 3 of 10 valves  Laneway between Webster Ave and Lillie Ave – 2 valves</p> <p>Water main replacement (Construction Projects):  King’s Highway: York Avenue to Wright Avenue  Nelson Street: Butler Avenue to Mill Wood Yard  Phair Avenue: Third Street East to Sixth Street East  Laneway between Webster Avenue and Lillie Avenue  Colonization Road East: Scott Street to Elizabeth Street</p> <p>Water main installations (new) (construction projects)  None</p> <p>Water meters/backflow device installations – ICI sector, ongoing</p> <p><u>Scheduled for 2016 Construction</u></p> <p>Replacement/new installation of water mains and services along the following streets:  a. Phair Avenue: Third Street East to Sixth Street East  b. Laneway between Webster Avenue and Lillie Avenue  c. Colonization Road East: Scott Street to Elizabeth Street</p>	<p>Ongoing</p> <p>Ongoing</p> <p>Ongoing</p>
--	--	--

15.	<p><b>Operational plan currency, content and updates:</b></p> <p>Current revision date – March 31, 2016 – Revision 8</p> <p>Updates – since previous period Audits – Amended OP after the audit review</p> <p>Document Request Changes (DRC) – document changes to Operation Plan other than the CAR changes as described above. (Spelling, grammar, personnel change, etc.). A result of conducting staff meetings to review the Elements within the Operation Plan. The Operation Plan will be amended following the Management Review.</p>	Ongoing
16.	<p><b>Staff Suggestions</b></p> <ol style="list-style-type: none"> <li>1. Replace approximately 500 meters of 150 mm diameter water main along Colonization Road West (from 1302 Colonization Road West to 1448 Colonization Road West).</li> <li>2. Installation of two additional valves along Sinclair Avenue between Victoria and Armit Avenue in order that the hospital facility can avoid unnecessary boil water advisories being issued.</li> <li>3. Ensure both Cemetery Irrigation Systems are properly plumbed to ensure the proper backflow protection c/w meter is in place. The timeline is in accordance with the 2017 budget process where the O &amp; F Division Management will prepare the cost estimate for installation and present this capital expenditure to Council (owner). The Riverview Cemetery Irrigation system modifications can take place at the same time as completing action item No. 1</li> <li>4. Cancellation of policy 4.5 – Standard Operating Procedure (SOP) No. 5 for Hydro Power Outage for Operating the Water System – as a result of the new generator for the Water Treatment Plant becoming fully operational on July 28, 2015, this Standard Operating Procedure is redundant going forward as the Town has the ability to manufacture and distribute potable water to its customers at all times.</li> </ol>	

	Meeting Adjourned 2:35 p.m. Please report any errors or omissions. Minutes prepared by: Lori Pattison	
--	---	--

Regular Meeting Minutes



June 21, 2017

Report To: Mayor and Council

From: Travis Rob, Manager of Operations and Facilities

**RE: Award of Tender 17-OF-08 – Surface Treatment of Roadways at Various Locations**

---

During the week of May 18, 2017, the Town advertised for a Tender Call for the above stated work with the tender closing on Tuesday June 13, 2017. Advertisements were placed in the Fort Frances Times,

One (1) tender package was distributed to construction contractors and/or suppliers with One (1) Contractor submitting tender bids;

Contractor	Price (HST included )
MSO Construction Ltd.	\$ 61,318.49

The work tendered consists of two (2) individual roadways to be completed in 2017 as follows:

Double Application;

- 1) Oakwood Road just north of Lyndy Place North intersection to approximately 30 meters North
- 2) Oakwood Road approximately 220m north of Lyndy Place North intersection to 10m north approximately 10 meters in length
- 3) Oakwood Road approximately 440m north of Lyndy Place North intersection to 10m north approximately 10 meters in length

Single Application;

- 1) Oakwood Road north of Lyndy Place North intersection to just south of Hwy. 11/71 intersection approximately 875 meters in length
- 2) Frog Creek Road 30 meters west of 1675 Frog Creek Road House to just west of McIrvine Road intersection approximately 1266 meters in length

The work is scheduled to begin sometime around the end of July and to be completed by September 15, 2017.

In accordance with the Town's procurement policy, Administration has an obligation to point out to Council any tender irregularities. There were no mathematical errors with the tender bids submitted. **See Spreadsheet No. 1**, which outlines details on the tender bid received and the associated costs for each individual project.

The total cost of the tender bid by MSO Construction Ltd. was \$61,318.49 which includes HST. The net cost to the Town is \$30,659.24 where the Township of Alberton will be responsible for 50% of the costs (\$11,935.26) for the Oakwood Road project and MTO will be responsible for 50% of the costs (\$18,347.19) for the Frog Creek Road project. Since the original application on

Oakwood Road, a number of soft spots have come up. The Town's workforce will be repairing these areas and ready them to receive the surface treatment prior to MSO coming to site. MSO will apply a patch to these areas then apply a single lift to the entire length of the roadway.

It is recommended by Operations & Facilities Executive Committee that the following be approved:

1. That Tender 17-OF-08, Surface Treatment of Roadways at Various Locations within The Town of Fort Frances be awarded to MSO Construction Ltd.
2. That the Mayor and Clerk be authorized to execute the contract documents on behalf of the Corporation of the Town of Fort Frances.

Respectfully Submitted

A handwritten signature in black ink, appearing to read 'Travis Rob', with a stylized flourish at the end.

Travis Rob, EIT

**Council approval of this report will ensure the following:**

- 1. That Tender 17-OF-08, Surface Treatment of Roadways at Various Locations within The Town of Fort Frances be awarded to MSO Construction Ltd.**
- 2. That the Mayor and Clerk be authorized to execute the contract documents on behalf of the Corporation of the Town of Fort Frances.**

Manager of Operations and Facilities

2017JuneSurfaceTreatmentTenderAward

### Spreadsheet No. 1 - Detailed Results Tender 17-OF-08

	Road	West Limit	East Limit	Single or Double Application	Width (m)	Length (m)	Area (m <sup>2</sup> )	Unit Price (per m <sup>2</sup> )	Total
1	Oakwood Road	Just North of Lyndy Place North Intersection	30m North	Double	7.8	30	234	\$ 6.00	\$ 1,404.00
2	Oakwood Road	220m North of Lyndy Place North Intersection	10m North	Double	7.8	10	78	\$ 6.00	\$ 468.00
3	Oakwood Road	440m North of Lyndy Place North Intersection	10m North	Double	7.8	10	78	\$ 6.00	\$ 468.00
4	Oakwood Road	Just North of Lyndy Place North Intersection	Just South of Hwy. 11/71 Intersection	Single	7.8	845	6591	\$ 2.85	\$ 18,784.35
									\$ 21,124.35
5	Frog Creek Road	30m West of 1675 Frog Creek Road House	Just West of McIrvine Road Intersection	Single	9	1266	11394	\$ 2.85	\$ 32,472.90

June 19, 2017

Report To: Planning and Development Executive Committee

From: Operations and Facilities Executive Committee

**RE: Residential Subdivision Development**

---

At the June 7, 2017 meeting of the Operations and Facilities Executive Committee, the next residential subdivision development was discussed as referred from Planning and Development Executive Committee. The information presented originally to PDEC as well as the recommendation from Administration and Finance Executive Committee were discussed.

Operations and Facilities Executive Committee recommends the following to the Planning and Development Executive Committee:

1. That the Operations and Facilities supports, in principle, Erin Crescent as the location of the next residential development
2. That when developing Erin Crescent, consideration be given to having multi-residential lots being developed on the larger size lots.
3. That in the near future, an open house be scheduled to determine if there is a demand for residential lots in the price range from \$60,000 to \$133,000 excluding HST and legal costs.
4. That, at this time it is suggested that the new residential development project be deferred to the 2018 capital budget process. The Committee is open to revising their position, based on the outcome of the open house, and completing the installation of the municipal underground infrastructure in the fall of 2017.

Respectfully Submitted

Paul Ryan, Chair  
Operations and Facilities Executive Committee

2017JuneResidentialDevelopmentOFECRecommendation

June 12, 2017

Town of Fort Frances  
320 Portage Avenue  
Fort Frances Ontario  
P9A 3M5

Attention: Mr. Doug Herr  
Environmental and Facilities Superintendent

Dear Doug:

**Re: Fort Frances Wastewater Treatment Facility  
May 2017 Monthly Report**

As per the operating agreement, the attached document is the May 2017 monthly report for the Fort Frances Wastewater Treatment Facility.

The report highlights the influent and effluent quality and the process parameters. Additionally, the routine operation and maintenance activities conducted by the operators are summarized.

If you have any questions regarding this report do not hesitate to contact Mr. Larry Wachter – Operations Manager.

Yours truly,



Kelly Cunningham  
Senior Operator

For Larry Wachter  
Operations Manager

**The Corporation of the Town of Fort Frances  
Wastewater Treatment Plant  
(Sewage Plant)  
May 2017 Monthly Operations Report**

## **INTRODUCTION**

In accordance with the Agreement between the Ontario Clean Water Agency (Operating Authority) and the Town of Fort Frances, the Fort Frances Sewage Treatment Plant is required to prepare a monthly report. This document covers the reporting month of May 2017; the facility performance report summarizes important information regarding the quality of the effluent, wastewater, analytical test results, maintenance operations, and relevant activities of the WWTP.

## **DESCRIPTION OF WORKS**

Capacity of Works	9000 m <sup>3</sup> /day (average flow)
Service Area	Town of Fort Frances and Couchiching Reserve
Service Population	9000
Effluent Receiver	Rainy River
Major Process	Secondary treatment facility complete with a phosphorus removal system; ultra violet disinfection; aerobic sludge stabilization and dewatering

The Fort Frances Sewage Treatment Plant operates under *Environmental Compliance Approval Number 6786-A44PWG*. The ECA outlines the terms and conditions, and the report captures these terms and conditions in the following sections.

## **LABORATORY**

ALS Laboratory Group – Thunder Bay is contracted to conduct the required analytical tests of the influent (raw) and effluent samples; weekly requirement.

## MAY 2017 EFFLUENT QUALITY

<i>Parameters</i>	<i>Monthly Actual Concentration mg/L</i>	<i>Compliance Criteria Concentration mg/L</i>	<i>Performance Objective Concentration mg/L</i>	<i>Monthly Actual Loading, kg/d</i>	<i>Compliance Criteria Loading kg/d</i>	<i>Performance Objective Loading kg/d</i>
CBOD <sub>5</sub>	2.0 mg/L	25 mg/L	15 mg/L	15.3 kg/d	225 kg/d	135 kg/d
Total Suspended Solids	3.8 mg/L	25 mg/L	15 mg/L	28.2 kg/d	225 kg/d	135 kg/d
Total Phosphorus	0.15 mg/L	1.0 mg/L	0.9 mg/L	1.1 kg/d	9 kg/d	8.1 kg/d
Total Nitrogen Nitrate Nitrogen	6.80 mg/L 4.98 mg/L					
Total Cl <sub>2</sub> Residual		<0.01 mg/L (when in use)				
E-Coli		15 count/100 ml (geometric mean )		200 count/100ml (geometric mean )		E-coli not to exceed 150 organisms/100ml (monthly geometric mean density)
pH			pH range 7.5 to 8.0; average pH was 7.7			
Temperature degrees C			Temperatures ranged from 9.5 to 12.0 C; average temperature of effluent was 10.7 C			

Compliance criteria are mandatory requirements of the ECA and performance objectives are a goal to be achieved using best reasonable efforts.

## WASTEWATER LIQUID PROCESS

The average daily flow for May was 7372.6 m<sup>3</sup>/day. This represents 82% of the design average flow. Total treated flow for the month was 228551 m<sup>3</sup>.

The Fort Frances WWTP met all effluent compliance criteria for the parameters listed above and additionally was well within the recommended more stringent monthly performance objective levels as outlined in the Environmental Compliance Approval.

## INVENTORY

Chemical	End of Month Status	Units
Hypochlorite	1100 +/- @ 8.0% +3x205 L @ 12%	Litres
Alum	12.3 +/- @ 55 %	Cubic meters
Polymer	1 x 205 L drums	Liters

## MAINTENANCE

The operators performed the routine operations and maintenance at the treatment plant and pumping stations. The activities are highlighted as follows:

### Treatment Plant:

- Alternated lead/lag pumps
- Adjusted fluidizing water to head cell and grit snail as needed
- Greased all blowers
- Regular cleaning of head works EW basket strainer
- Greased Grit Snail and lubricated drive chain
- Weekly inspection of spiral screen access hatch, removed wrapped debris as required
- Repaired digester valve
- Changed oil in blowers 4 and 5
- Weekly manifold wash on the Fournier press
- Removed debris from the Teacup and hosed Snail
- Replaced bulbs UV bank A and acid washed sleeves
- Greased Flocculator
- Torqued the bolts on the Fournier channel covers
- Replaced 2 fuses UV bank A
- Wiped DO probes

### Pump Stations:

- Ran gensets
- Changed seal water strainers
- Pulled and cleaned pump 2 at Central Avenue lift station
- Replaced the UPS unit at White Pine lift station



## **PROCESS AND OPTIMIZATION ISSUES**

The lack of a booster pump for the polymer system dilution water is preventing further optimization of the new sludge thickener.

## **SLUDGE SUMMARY**

Asselin Storage and Transportation Limited hauled a calculated total of 66.8 m<sup>3</sup> (9 bins) of thickened digested sludge to the Town of Fort Frances landfill site. The hauled sludge averaged 18.1 % TS for the month.

## **COMPLAINTS**

There were no complaints during the report period.

## **BYPASS/OVERFLOW REPORT(S)**

There were no bypass or overflow events during the reporting period.

## **COMMENTS**

Plant power consumption for the month was 618 (x 180 multiplier) kWh.

The polymer/water solution flow for the month of May was 197 m<sup>3</sup> at a polymer concentration of 0.2%.

Screen and Dewatering Upgrades at the FFWWTP have been under way since May 30, 2016.

The annual fire extinguisher inspections were completed.

## **REPORTS**

ALS – Environmental Analytical Reports (on-file at plant)

Fort Frances WPCP Equipment Run Time Report (on-file at plant)

Bypass Report (on-file at plant as per occurrence)

Incident Report (on-file at plant as per occurrence)

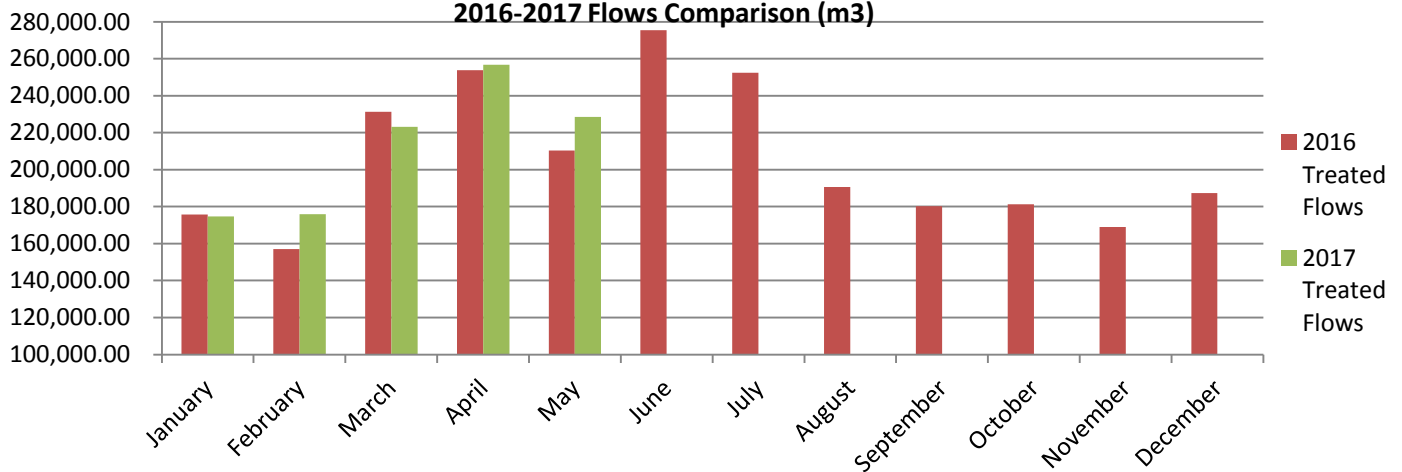
Month	Sewage Flows Year 2016					Usage	Sludge	Sludge	Removal Efficiency	
	Avg. Day	Max Day	Total	Total	Total	% Plant	Volume	Bins	CBOD5 0.965009208	
	Flow	Flow	Treated	ByPass	Volume	Capacity	Hauled	Hauled	Suspended Solids 0.962063492	
	m3	m3	Volume ML	Volume ML	ML		M3		Total Phosphorus 0.915625	
January	5636.9	6162	174745		174745	63%	85.3	11		
February	6284.1	9818	175956		175956	70%	63.3	8		
March	7199.5	8844	223183		223183	80%	85.4	12		
April	8558.6	10641	256759	350	256759	95%	83.8	11		
May	7372.6	9480	228551		228551	82%	66.8	9		
June						0%				
July						0%				
August						0%				
September						0%				
October						0%				
November						0%				
December						0%				
Sum				350	1059194		384.6	51		
Average	7010		211839		211839	78%	76.9	10.2		
Max		10641	256759		256759			12		
C of A	9000	18000								

	BOD5/CBOD5			Suspended Solids			Total Phosphorus			Nitrogen		E. Coli
	Avg. Raw	Avg. Eff.	Avg. Load	Avg. Raw	Avg. Eff.	Avg. Load	Avg. Raw	Avg. Eff.	Avg. Load	Avg. Raw	Avg. Eff.	Geo Mean
	BOD	CBOD	CBOD	S.S	S.S	S.S	T.P	T.P	T.P	TKN	Total N	Counts
	(mg/L)	(mg/L)	(kg/day)	(mg/L)	(mg/L)	(kg/day)	(mg/L)	(mg/L)	(kg/day)	(mg/L)	(mg/L)	/100ml
January	84.0	2.0	11.3	138.4	3.2	18.1	2.31	0.11	0.63	17.5	8.8	3.6
February	64.3	2.3	15.5	142.6	5.8	35.2	2.04	0.18	1.09	16.5	8.0	11.8
March	70.0	2.8	20.5	118.7	5.7	42.0	1.98	0.20	1.42	15.8	8.0	39.5
April	48.3	2.3	19.9	107.3	5.4	46.5	1.50	0.17	1.50	12.5	7.7	53.0
May	59.2	2.0	15.3	123.0	3.8	28.2	1.77	0.15	1.10	13.9	6.8	15.0
June												
July												
August												
September												
October												
November												
December												
Average	65.2	2.3	16.5	126.0	4.8	34.0	1.9	0.16	1.15	15.2	7.9	24.6
Max	84	2.8	20.5	142.6	5.8	46.5	2.3	0.20	1.50	17.5	8.8	53
C of A		25	225		25	225		1.0	9.0	200	6.0	200

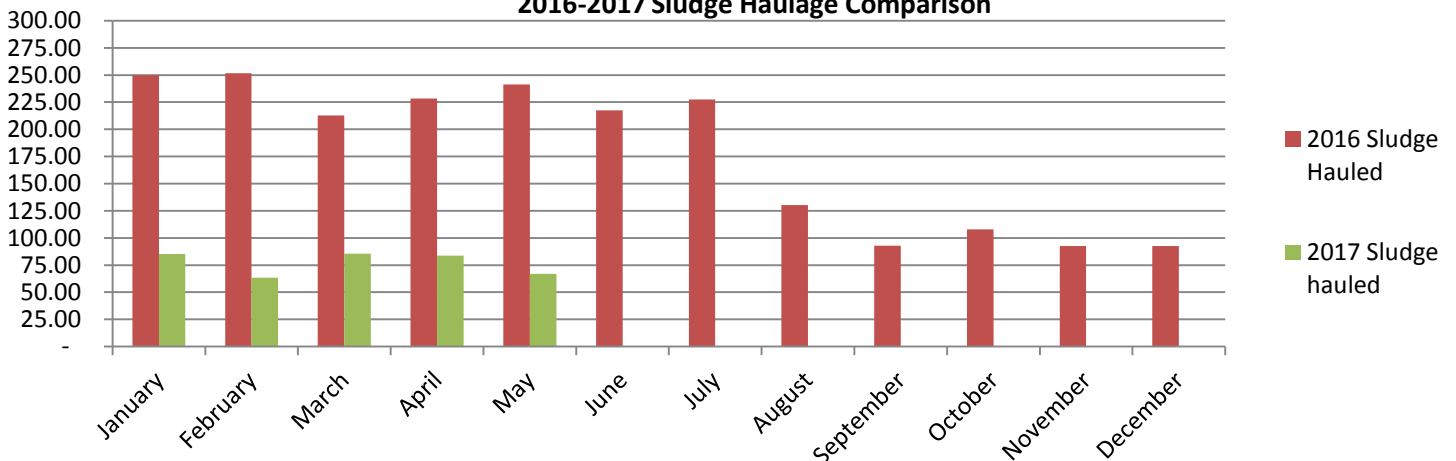
**2016-2017 Comparison Chart**

Month	2016 Treated Sewage	2017 Treated Sewage	% Variance 2016 to 2017	2016 Hauled Sludge	2017 Hauled Sludge	% Variance 2016 to 2017
	m3	m3	m3	m3 (9% solid)	m3 (18% solid)	m3
January	175,712.00	174,745.00	-1%	249.90	85.30	-65.87%
February	157,117.00	175,956.00	11%	251.70	63.30	-74.85%
March	231,365.00	223,183.00	-4%	212.70	85.40	-59.85%
April	253,871.00	256,759.00	1%	228.30	83.80	-63.29%
May	210,352.00	228,551.00	8%	241.20	66.80	-72.31%
June	275,522.00			217.40		
July	252,416.00			227.50		
August	190,658.00			130.30		
September	180,285.00			92.80		
October	181,205.00			108.00		
November	169,075.00			92.60		
December	187,407.00			92.60		
<b>Totals</b>	<b>2,464,985.00</b>	<b>1,059,194.00</b>		<b>2,145.00</b>	<b>384.60</b>	

**2016-2017 Flows Comparison (m3)**



**2016-2017 Sludge Haulage Comparison**



Aircraft Landings 2017  
As of June 15, 2017 Statistics - Page 1/2

Month	Bearskin Flights			Bearskin- Passengers			Government			Private			Med-I-vacs			International			Commercial			Totals			Variance
	2017	2016	2015	2017	2016	2015	2017	2016	2015	2017	2016	2015	2017	2016	2015	2017	2016	2015	2017	2016	2015	2017	2016	2015	2017-2016
January	76	70	76	308	261	256	0	1	6	2	3	6	42	30	43	4	3	4	48	36	42	172	143	177	29
February	80	69	67	334	233	241	1	1	2	1	1	7	32	35	36	0	1	3	39	49	40	153	156	155	-3
March	90	69	78	336	199	341	10	0	5	4	17	30	50	34	36	14	3	5	51	55	38	219	178	192	41
1/4 Total	246	208	221	978	693	838	11	2	13	7	21	43	124	99	115	18	7	12	138	140	120	544	477	524	67
April	67	81	81	289	288	330	0	7	1	18	8	23	40	47	41	3	3	2	41	40	53	169	186	201	-17
May	87	88	82	389	309	365	8	4	1	8	9	28	50	37	37	33	32	34	54	59	77	240	229	259	11
June		76	80		273	322		0	11		30	36		38	31		77	74		52	96	0	273	328	-273
1/2 Total	400	453	464	1656	1563	1855	19	13	26	33	68	130	214	221	224	54	119	122	233	291	346	953	1165	1312	-212
July		72	81		221	297		2	8		48	40		51	35		66	83		47	77	0	286	324	-286
August		84	79		256	297		6	4		42	39		66	31		71	73		53	87	0	322	313	-322
September		78	76		277	328		1	0		15	17		40	36		45	44		51	76	0	230	249	-230
3/4 Total	400	687	700	1656	2317	2777	19	22	38	33	173	226	214	378	326	54	301	322	233	442	586	953	2003	2198	-1050
October		85	83		357	309		2	4		10	20		41	47		18	9		47	51	0	203	214	-203
November		72	68		328	260		3	0		20	9		28	30		7	1		38	38	0	168	146	-168
December		64	68		231	200		0	0		0	4		29	31		0	2		29	34	0	122	139	-122
Total	400	908	919	1656	3233	3546	19	27	42	33	203	259	214	476	434	54	326	334	233	556	709	953	2496	2697	-1543

Fort Frances Airport- Page 2/2 - Fuel Sales - As of June 15, 2017

Fuel Sales Recap - 2017									2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	9 year	Variance 2016-2015
Month	100LL		Jet Trk		Jet Cab		Month	Year	per	per	per	per	per	per	per	per	per	per	Average	per month
	Liters	Total	Liters	Total	Liters	Total	Total	Total	month	month	month	month	month	month	month	month	month	month	2015 to 2007	month
January	8,175	8,175	17,500	17,500	0	0	25,675	25,675	7,528	8,692	11,543	7,216	10,252	7,308	10,971	15,989	29,926	16,283	13,002	18,147
February	8,377	16,552	4,126	21,626	0	0	12,503	38,178	11,904	11,231	12,304	6,197	6,918	3,687	5,782	13,135	21,134	11,782	10,316	599
March	4,574	21,126	16,954	38,580	200	200	21,728	59,906	13,255	17,795	10,508	12,077	9,329	10,390	15,539	9,612	27,435	19,969	14,235	8,473
April	4,322	25,448	8,780	47,360	0	200	13,102	73,008	8,592	13,219	8,377	4,453	8,251	5,294	24,825	10,676	22,466	28,609	13,505	4,510
May	3,044	28,492	18,318	65,678	0	200	21,362	94,370	24,681	16,161	29,753	18,350	21,891	19,790	25,375	24,033	30,287	47,258	26,824	-3,319
June		28,492		65,678		200	0	94,370	26,015	45,698	30,789	22,786	23,537	25,723	27,768	22,395	35,995	40,736	28,416	-26,015
July		28,492		65,678		200	0	94,370	29,002	28,150	14,441	19,232	32,650	19,124	30,455	24,925	33,390	44,875	27,566	-29,002
August		28,492		65,678		200	0	94,370	21,119	36,638	20,450	20,075	30,783	21,467	33,139	28,250	40,177	41,630	28,566	-21,119
September		28,492		65,678		200	0	94,370	21,325	24,238	21,837	18,005	19,431	22,511	23,363	18,937	28,822	30,341	22,730	-21,325
October		28,492		65,678		200	0	94,370	30,655	8,216	15,472	13,109	11,325	13,677	15,033	21,304	16,631	28,020	18,358	-30,655
November		28,492		65,678		200	0	94,370	22,349	11,616	7,238	6,398	8,170	6,785	17,747	10,754	16,951	16,842	12,582	-22,349
December		28,492		65,678		200	0	94,370	13,797	7,592	6,849	2,028	8,179	2,446	7,641	7,596	13,083	14,733	8,484	-13,797
Total	28,492		65,678		200		94,370		230,222	229,246	189,561	149,926	190,716	158,202	237,638	207,606	316,297	341,078	224,583	-135,852
								Jan to May	65,960	67,098	72,485	48,293	56,641	46,469	82,492	73,445	131,248	123,901	77,882	28,410

Lowest month in last 9 years	
Highest month in last 9 years	
Highest month	
lowest month	

2017 - tonnage at Landfill Site - updated June 15, 2017

2017 - tonnage at Landfill Site - updated June 15, 2017															
MONTH	Residential Waste tonnes	Res %	ICI Waste tonnes	ICI %	Non Community Waste tonnes	Non Com %	Covering Material tonnes	2016	Average last 10 years	2017	2016	Average last 10 years	2017	2017-2016 Tonnes	2017-2016 Fees
								Total Tonne	Total Tonne	Total Tonne	Total Fees	Total Fees	Total Fees		
								2007 to 2016							
JAN	137.74	30.55	304.18	67.47	8.93	1.98	0.00	369.18	360.75	450.85	\$20,490.00	\$17,849.10	\$26,266.82	81.67	\$5,776.82
FEB	111.80	31.97	230.26	65.85	7.60	2.17	0.00	314.92	306.73	349.66	\$17,474.70	\$15,355.62	\$20,191.04	34.74	\$2,716.34
MAR	149.38	32.06	309.46	66.41	7.17	1.54	0.00	395.39	411.69	466.01	\$23,164.20	\$21,321.44	\$28,951.58	70.62	\$5,787.38
APRIL	217.26	34.44	405.17	64.22	8.48	1.34	20.73	573.09	574.04	630.91	\$34,152.50	\$30,505.60	\$40,385.84	57.82	\$6,233.34
MAY	243.32	32.81	491.78	66.31	6.49	0.88	0.00	641.69	719.34	741.59	\$34,655.80	\$36,978.61	\$43,112.32	99.90	\$8,456.52
JUNE		#DIV/0!		#DIV/0!		#DIV/0!		1,246.89	846.85	0.00	\$37,412.30	\$38,270.35		-1,246.89	-\$37,412.30
JULY		#DIV/0!		#DIV/0!		#DIV/0!		618.23	673.76	0.00	\$37,556.30	\$37,267.74		-618.23	-\$37,556.30
AUG		#DIV/0!		#DIV/0!		#DIV/0!		897.44	657.07	0.00	\$43,194.40	\$34,723.56		-897.44	-\$43,194.40
SEPT		#DIV/0!		#DIV/0!		#DIV/0!		695.10	651.51	0.00	\$42,510.30	\$34,879.94		-695.10	-\$42,510.30
OCT		#DIV/0!		#DIV/0!		#DIV/0!		686.35	803.03	0.00	\$36,305.40	\$40,187.03		-686.35	-\$36,305.40
NOV		#DIV/0!		#DIV/0!		#DIV/0!		615.60	569.91	0.00	\$37,603.60	\$29,432.34		-615.60	-\$37,603.60
DEC		#DIV/0!		#DIV/0!		#DIV/0!		587.46	416.38	0.00	\$21,415.30	\$21,716.47		-587.46	-\$21,415.30
Average per monthly	171.90	32.25	348.17	65.99	7.73	1.76	4.15	636.78	582.59	219.92	\$32,161.23	\$29,873.98	\$31,781.52	244.85	-8,441.90
Total	859.50		1740.85		38.67		20.73	7641.34	6991.06	2639.02	\$385,934.80	\$358,487.81	\$158,907.60	-5002.32	-\$227,027.20
Town of Fort Frances Tonnage											\$385,934.80	Actual	\$158,907.60		
	2600.35										\$384,888.00	Budget	\$391,084.00		
								Includes 603.005t associated with the Fight the Blight Campaign							
Total Tonnage	2639.02										\$385,934.80	Forecasted	\$381,378.24		
Residential Tonnage	859.50	32.57%													
ICI Tonnage	1740.85	65.97%													
Coverage material	20.73														