

Fort Frances Drinking Water System Management Review - Meeting Agenda

Date: Friday June 15, 2018

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, 2017 to May 31, 2018

B. Review Items:

1. Incidents of regulatory non-compliance:

Ministry of the Environment (MOE) Annual Inspection Report (2017/2018)

Date of Inspection: January 22nd – 23rd, 2018

Non-compliance with Regulatory Requirements: None

2017 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 12, 2018.

Date submitted to Ministry of the Environment (MOE): March 15, 2018

Letters sent March 15, 2018 to the Owners that connect and receive water from the Town's Water Distribution System:

Non-compliance with Regulatory Requirements: None

2017 Annual Report – O. Reg. 170/03

Regulatory requirement: Not later than February 28

Date submitted to Ministry of the Environment (MOE): February 12, 2018

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 29, 2018

Non-compliance with Regulatory Requirements: None

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

Regulatory requirement: Not later than March 31

Date submitted to Ministry of the Environment (MOE): January 29, 2018

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.

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 January 29, 2018 and April 4, 2018.

No changes in limits or existing response actions.

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

NEW

The Ministry of the Environment and Climate Change approved revisions to the DWQMS Standard covering “Potential Hazardous Events for Municipal Residential Drinking Water Systems” which came into effect April 6, 2017. The hazards identified in the document are to be considered at the time of the next scheduled Risk Assessment.

All the hazards identified in the “Potential Hazardous Events for Municipal Residential Drinking Water Systems” were considered – the following hazards were added to the Town’s Risk Assessment:

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- i) Long Term Impacts of Climate Change
- ii) Source Water Supply Shortfall
- iii) Extreme Weather Events
- iv) Algal Blooms

Reference - Element 7/8

4. The effectiveness of the risk assessment process:

Operators reviewed the Risk Assessment process January 29, 2018 and April 4, 2018. Added four (4) new potential risks to listing. See Item 3, above.

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

5. Internal and third-party audit results:

Internal Audit results:

Latest Internal Audit:

May 22, 2018 - 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:

Issued May 29, 2017 – undertaken by Tyson Dennis.
No corrective actions identified.

External Audit results:

Latest Off-site External Audit:

24-Month Surveillance Audit –

- Off site (November 01, 2017) - undertaken by SAI GLOBAL -
Accreditation Program for Operating Authorities.
No non-conformances were identified.

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Previous Off-Site External Audit:

Re-Accreditation Systems Audit –

- Off site November 9, 2016 - undertaken by SAI GLOBAL - Accreditation Program for Operating Authorities.

No non-conformances were identified.

- 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 4, 2018.

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

Update Municipal Emergency Management listing in Emergency Response Binder March 7, 2018.

7. Operational performance:

WTP:

Actions & recommendations from MOECC:

As a result of the 2017/18 MOECC inspection.

No non-compliances identified.

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Personnel:

Full complement

Maintenance issues:

No other issues.

Distribution System:

Actions & recommendations from MOECC:

No issues.

Personnel:

Water Distribution Operators:

Other employment – Travis George left April 6, 2018.

Addition – Bryan Patterson as of Tuesday April 24, 2018.

Full complement.

Maintenance issues:

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

See Attachment B.7.

Frozen water services to report – 35 residences

Valve replacements done in 2017 – as part of the roadway/infrastructure replacement on:

- a. Nelson Street.: Crowe Ave. to Mosher Ave. – half blk.
- b. Second Street East: Mowat Ave. to Portage Ave.

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) were changed. These are over and above those to be replaced during the roadway/infrastructure reconstruction projects.

Main Valves replacements done in 2017:

1. Fifth Street West at Cornwall Avenue – E. Side (VAL181)
2. Fifth Street East at Smith Street – E. Side (VAL372)
3. Strachan Place at Williams Avenue – E. Side (VAL550)

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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) were changed. These are over and above those to be replaced during the roadway/infrastructure reconstruction projects.

Fire hydrant replacements done in 2017:

1. Sixth Street East at Frenette Avenue (HYD252)
2. Second Street East at Shevlin Avenue (HYD283)
3. King's Highway approximately 100 m west of Pit Road No. 1 (HYD055)

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:

2017 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.)

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: Letter sent to Riverside Healthcare requesting that their internal plumbing be upgraded to ensure adequate flow for fire protection from either Sinclair Street or Front Street. To date no response.

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

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Status: See Item No. 1 above.

4. Complete the installation of a watermain along Frenette Avenue between First Street East and Second Street East. First St. E. is a dead end which causes water quality issues for customers and the Memorial Sports Centre.

Status: Scheduled to be completed in the 2018 Capital Construction Works.

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. (April 20, 2018; Revision No. 11)

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12. Consumer feedback:

Customer complaints: Last period – 8 complaints, this period 4 complaints.

Notes:

1. Construction projects in 2017, 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 bucket elevator on Soda Ash System.

Installed a new soda ash dust collector motor.

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Installed new valve stems in Reservoir No. 2.

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 2)

Hydrant flushing: flushing annually

Fire hydrant replacements:

- 2017 – Nelson Street Reconstruction (Bay City) – 1 of 1 hydrants.
- Second Street East (Bay City) – 1 of 1 hydrants.
- Various locations (Bay City) – 3 of 6 hydrants.

Water main isolation valve replacements:

- 2017 - Nelson Street Reconstruction (Bay City) – 3 of 3 valves.
- Second Street East (Bay City) – 0 of 0 valves.
- Various locations (Bay City) – 3 of 6 valves.

Water main replacement (Construction Projects):

- Nelson Street: Mosher Ave. to Butler Ave. – half blk.
- Second Street East: Mowat Avenue to Portage Avenue

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

Scheduled for 2018 Construction:

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

- a. Third Street East: Williams Avenue to Colonization Road East
- b. Colonization Road East/Mill Road: Elizabeth Street to Lake Road.

15. Operational plan currency, content and updates:

Current revision date – April 20, 2018, Rev. 11

Updates (since previous period):

Audits - Amended OP after the audit review.

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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 change, etc.). A result of conducting staff meetings to review the Elements within the Operation Plan these Elements were amended as follows:

1. Element 8 Risk Assessment Outcomes: revisions to the DWQMS Standard covering “Potential Hazardous Events for Municipal Residential Drinking Water Systems”.
2. Element 13 Essential Supplies and Services: Equipment supplier and services update.
3. Element 16 Sampling, Testing & Monitoring: include testing for Haloacetic Acid (HAA) in drinking water systems and correction regarding in-house daily testing for fluoride and alum.

Update – Revision to the Drinking Water Quality Management Standard

Revisions have been made by the Ministry of the Environment and Climate Change to the Drinking Water Quality Management Standard, which came into effect April 6, 2017. As part of the revisions a supplementary document “Potential Hazardous Events for Municipal Residential Drinking Water Systems” was introduced. The hazards identified within this document were addressed and included in the Town's present DWQMS Operational Plan. As for the remaining changes they must be incorporated in the Operational Plan before the first audit taking in 2019.

16. Staff suggestions:

Any concerns from operators/staff.