The Corporation of the Town of Fort Erie
Drinking Water Distribution System

Drinking Water Quality Management System
Operational Plan

As decision-makers for the drinking water system and representatives of Top Management and the Owner, we endorse this Operational Plan and are committed to:

a) ensuring that a Quality Management System is in place that meets the requirements of the DWQMS,
b) ensuring that the operating authority is aware of all applicable legislative and regulatory requirements,
c) communicating the Quality Management System according to the procedure for communications,
d) determining, obtaining or providing the resources needed to maintain and continually improve the Quality Management System.

Top Management:

Chair, Infrastructure Services Business Subcommittee – Tom Lewis	Date
Chief Administrative Officer – Chris McQueen	Date
Director, Infrastructure Services – Kelly Walsh	Date
Director, Corporate Services / Treasurer – Jonathan Janzen	Date
Chief Building Official – Keegan Gennings	Date
Manager, Engineering Division – Jordan Frost	Date
Manager, Water and Wastewater Division – Thomas Peazel	Date

Owner Representative:

Mayor– Wayne Redekop	Date

Table of Contents

Glossary

AC – asbestos-cement pipe

AWWA – American Water Works Association

Certified – certified drinking water Operator in possession of a license issued by the MOE

CAO – Chief Administrative Officer

Calendar Year – A period of one year beginning and ending with the dates conventionally accepted as marking the beginning and end of a year (January 1st to December 31st).

CI – cast iron pipe

Consumer – metered end user purchasing water from the Fort Erie DWDS

Corrective Action – Action to eliminate the cause of a detected nonconformity of the QMS with the requirements of the DWQMS or other undesirable situation.

Council – elected council of The Corporation of the Town of Fort Erie, exercising the powers of the Owner

CCP – Critical Control Point – an essential step or point in the Fort Erie DWDS at which control can be applied by the operating authority to prevent or eliminate a drinking water health hazard or to reduce it to an acceptable level.

CCL – Critical Control Limit – The point at which a Critical Control Point response procedure is initiated.

CPP – concrete pressure pipe

Document – designed with the capacity and intent to communicate information

DWQMS – Drinking Water Quality Management Standard and its collective requirements for a quality management system approved by the MOE

DWDS – Drinking Water Distribution System

ERPM – the Niagara Region's Emergency Response Procedures Manual

Fort Erie DWDS – the physical infrastructure that comprises the Fort Erie Drinking Water Distribution System

Drinking Water QMS – the Town of Fort Erie's quality management system under which the Fort Erie DWDS is operated

FAC – Free Available Chlorine

Glossary, Continued

GAC – granular activated carbon

GIS – Geographic Information System

Health Department – Public Health Unit of the Niagara Region

ICI – refers to Industrial, Commercial and Institutional consumers (as opposed to residential consumers), purchasing water from the Fort Erie DWDS

Infrastructure Services – the department within The Corporation of the Town of Fort Erie that is responsible for the Fort Erie DWDS

MAC - Maximum Acceptable Concentration

MOE – the Ontario Ministry of the Environment, Conservation and Parks

MOH – Medical Officer of Health

Non-Conformance – Non-fulfillment of a requirement.

OIC – "Operator-in-Charge", as defined by the regulations of the Safe Drinking Water Act. For the Fort Erie DWDS, the Supervisor, Water and Wastewater Division primarily fills the role of OIC. The Crew Leaders, Water and Wastewater Division and designated Duty/On-Call Supervisor act as supplemental OICs. Others may act as supplemental OIC as determined by the Manager or Supervisor, Water and Wastewater Division. Refer to Operating Procedure IS-QMS-P003 – Water Utility Personnel Coverage for further detail.

Drinking Water QMS Operational Plan – this document describing the Drinking Water QMS.

Operator – Operators regulated under the Certification of Drinking-Water and Water Quality Analysts Regulation (Ontario Regulation 128/04).

Operating Authority – The person or entity that is given responsibility by the Owner for the operation, management, maintenance or alteration of the Fort Erie DWDS.

Opportunity for Improvement – An area where improvement is suggested but is not considered a non-conformance.

ORO – "Overall-Responsible-Operator", as defined by the regulations of the Safe Drinking Water Act. For the Fort Erie DWDS, the Manager, Water and Wastewater Division primarily fills the role of ORO. Refer to Operating Procedure IS-QMS-P003 – Water Utility Personnel Coverage for further detail.

Glossary, Continued

Owner (Town) – The Corporation of the Town of Fort Erie and refers to ownership of the Fort Erie DWDS.

Potential Non-Conformance – A finding where conformance to a requirement is found but where an action or lack of action could lead to a non-conformance over time.

Preventative Action – Action to prevent the occurrence of nonconformity of the QMS with the requirements of the DWQMS or other undesirable situation.

PVC –polyvinyl chloride pipe

QMS – quality management system.

QMS Representative – the Coordinator, Quality Management Systems or designate.

RA – Risk Assessment.

Record – a document showing results achieved or providing proof of activities performed

Residential service – the connection between the consumer and the Fort Erie DWDS and includes a private system such as a trailer park.

SAC – Spills Action Centre

SDWA – Safe Drinking Water Act.

SOP – Standard Operating Procedure

Staff (Personnel) – persons employed by the Owner.

Supplier – an organization or person that provides a product or service to the Owner.

Top Management – the group comprised of the Chair of Infrastructure Services Business Subcommittee, the Chief Administrative Officer, the Director, Infrastructure Services, the Director, Corporate Services / Treasurer, the Chief Building Official, the Manager, Engineering Division, and the Manager, Water and Wastewater Division, of The Corporation of the Town of Fort Erie.

24/7 – 24 hours a day, seven days a week

WTP – Rosehill Water Treatment Plant

WWT – the Water/Wastewater Technician employed by the Owner

1. Quality Management System

The Fort Erie Drinking Water Distribution System (Fort Erie DWDS) is owned and operated by The Corporation of the Town of Fort Erie (Owner). In its operation of the Fort Erie DWDS, the Owner strives to adhere to the Drinking Water Quality Management Standard (DWQMS). The Fort Erie DWDS is managed through the use of the Drinking Water Quality Management System (Drinking Water QMS). The Drinking Water QMS is documented utilizing the Owner's *QMS Document and Record Control Database*, a cornerstone of which is this document, the "Drinking Water QMS Operational Plan".

The Owner operates a distribution system network supplying potable water to the serviced areas within urban and rural areas of Fort Erie. The Owner purchases treated water from Niagara Region. Niagara Region draws the raw source water from Lake Erie and provides treatment at the Rosehill Water Treatment Plant (WTP).

The Fort Erie DWDS is a Class II Large Municipal Residential System, as defined by the MOE, extending from Old Fort Erie at the juncture of Lake Erie and the Niagara River westerly through Crescent Park, Thunder Bay, Ridgeway into Crystal Beach and Point Abino, northerly into Douglastown through Stevensville.

2. Quality Management System Policy

On July 21, 2014, the Owner adopted By-law 108-2014, Being a By-Law to adopt a Drinking Water Quality Management System Policy for The Town of Fort Erie.

By-Law 108-2014 in its entirety is attached as Appendix F.

The Fort Erie Drinking Water QMS Policy is a Schedule to By-law 108-2014 which contains, in part, the following:

> It is the Policy of the Corporation to;
>
> i) Provide Fort Erie consumers with safe drinking water
> ii) Comply with all applicable drinking water legislation and regulations
> iii) Manage and operate the Town of Fort Erie Distribution System in a responsible manner in accordance with the Drinking Water Quality Management System, Operational Plan, policies and procedures
> iv) Maintain and continually improve the Drinking Water Quality Management System
> v) Communicate these commitments to all consumers, our employees and vendor partners

The Owner has implemented this Drinking Water QMS Operational Plan to reinforce its commitment to delivering safe drinking water to our customers.

3. Commitment and Endorsement

Initial endorsement of this Drinking Water QMS Operational Plan was demonstrated by Resolution 16 of Council meeting April 27, 2009.

Endorsement updates are demonstrated through the signatures of Top Management and Owner Representative (Mayor) using the cover of this Drinking Water QMS Operational Plan. These updates take place when there is a change in Top Management or Owner Representative (Mayor). The Owner and Top Management endorse the implementation, maintenance and continual improvement of the Drinking Water QMS by:

a) Ensuring that a Quality Management System is in place that meets the requirements of the DWQMS,
b) Ensuring that the Operating Authority is aware of all applicable legislative and regulatory requirements,
c) Communicating the Quality Management System according to the procedure for communications,
d) Determining, obtaining or providing the resources needed to maintain and continually improve the Quality Management System.

Revisions to the Drinking Water QMS Operational Plan are communicated to Top Management and the Owner (Mayor and Council) through the QMS Document and Record Control Database.

The corporate commitment to the Drinking Water QMS Operational Plan is reinforced to staff and the public through strategically placed Drinking Water QMS Commitment Plaques within Town Hall and the John L. Gibson Operations Centre and postings to the Town website. Appendix A illustrates an example of our posted commitment.

4. Quality Management System Representative

The Coordinator, Quality Management Systems is the QMS Representative.

In general, the QMS Representative is responsible to:

a) Ensure that processes and procedures needed for the Drinking Water QMS are established and maintained;
b) Report to Top Management on the performance of the Drinking Water QMS and any needed improvement;
c) Make certain that current versions of documents required by the Drinking Water QMS are being used at all times;
d) Ensure that personnel are aware of all applicable legislative and regulatory requirements that pertain to their duties for the operation of the subject system; and,
e) Promote awareness of the Drinking Water QMS throughout the Operating Authority.

5. Document and Record Control

Document and record control is maintained in accordance with the formal municipal procedure, Operating Procedure IS-QMS-P001 – Document and Record Control. This procedure describes how documents and records pertaining to the Drinking Water QMS are created, approved, managed and controlled.

The Owner maintains an electronic database of documents and some records, as indicated in Operating Procedure IS-QMS-P001 – Document and Record Control, pertaining to the Drinking Water QMS in the QMS Document and Record Control Database. Updates and enhancements to the Drinking Water QMS Operational Plan and associated procedures will be stored in this database. Additional documents pertinent to the Drinking Water QMS that are developed will be added to this database.

6. Drinking Water System

The service delivery model for the Fort Erie DWDS is a split jurisdictional model between the Owner/operator (The Municipal Corporation of the Town of Fort Erie) and Niagara Region. A schematic of the Fort Erie DWDS is included in Appendix B.

Niagara Region is responsible for water treatment, transmission watermain facilities, water storage, and residual disinfection. Niagara Region owns and operates the Rosehill Water Treatment Plant and approximately 50 kilometres of transmission watermain, ranging in size from 150 mm to 600 mm diameter. The transmission watermains are mainly constructed of polyvinyl chloride (PVC), asbestos-cement (AC) and concrete pressure pipe (CPP).

Niagara Region supplies drinking water to the Fort Erie DWDS from the Rosehill Water Treatment Plant (WTP). Lake Erie is the single raw water source of the plant. Niagara Region is responsible for all sampling, testing and monitoring at the WTP.

The WTP consists of the following principle components:

- Raw water intake (Lake Erie);
- Prechlorination;
- Pretreatment (coagulation, flocculation & sedimentation);
- Filtration (granulated activated carbon);
- Primary disinfection (chlorination);
- Secondary disinfection (re-chlorination station);
- Process waste management;
- Transmission; and
- Finished water storage.

6. Drinking Water System (Cont'd)

System storage within the Fort Erie DWDS is provided by three (3) storage facilities including one (1) elevated tank (Central Avenue), a reservoir (Stevensville) and treatment plant ground storage, all owned and operated by Niagara Region for a combined storage capacity of approximately 15.1 megalitres.

To ensure that the regulatory requirements for chlorine residual are met throughout the Fort Erie DWDS, Niagara Region owns and operates a Single Chlorination Booster Station that provides the addition of sodium hypochlorite in the western limits of the Fort Erie DWDS.

The Owner relies upon the Niagara Region to assist in ensuring the provision of safe drinking water. The Owner purchases treated water from Niagara Region and supplies it to serviced areas within urban and rural areas of the municipality including residential, industrial, commercial and institutional (ICI) consumers.

The Owner has delegated the responsibility of drinking water distribution to Town of Fort Erie staff, as described in Appendix C.

The Fort Erie DWDS, classified as a Class II Large Municipal Residential System, as defined by the MOE, is comprised of approximately 279 km of distribution watermain ranging in size from 50 mm – 400 mm diameter, within a single pressure zone. The majority of these watermains are cast iron (CI), AC, or polyvinyl chloride (PVC) pipe. Other components of the Fort Erie DWDS include fire hydrants, isolation valves and bulk water stations.

As of September 2024, the Fort Erie DWDS serves 13,657 residential and 605 ICI connections. Consumption for every connection is measured through mandatory water meters. Monthly bills are comprised of both a base charge and a volumetric charge, at rates approved by the Owner.

Infrastructure Services staff conduct regular water quality sampling and testing on the Fort Erie DWDS and additionally undertake routine flushing to address the adequacy of chlorine residual in low flow and dead end areas. (See Section 16 – Sampling, Testing, and Monitoring and Section 15 – Infrastructure Maintenance, Rehabilitation or Renewal)

Fluctuations in water supply as may be attributed to emergency repair (See Operating Procedure IS-WAT-P001 - Water Main Break Repair) or scheduled maintenance are managed through adopted best practice operating procedures that ensure post works flushing and sampling of the affected areas. (See Operating Standard IS-WAT-S004 - Water Quality Monitoring, Sampling, & Testing)

The Owner works in close collaboration with the Niagara Region, sharing test results and immediately reporting instances of adverse results to the Health Department as well as follow-up actions. (See Operating Standard IS-WAT-S004 – Water Quality Monitoring, Sampling & Testing)

7. Risk Assessment

A risk assessment procedure was developed to identify potential hazards and critical control points (CCP) existing within the Fort Erie DWDS. (See Operating Procedure IS-QMS-P002 – Risk Assessment.)

A risk assessment is completed by a Risk Assessment Team at least once every thirty-six months. The Manager, Water and Wastewater Division and QMS Representative review the risk assessment at least once every calendar year to ensure that the information and assumptions used in the rating process remain current and valid. Refer to Operating Procedure IS-QMS-P002 – Risk Assessment for further details on these processes.

8. Risk Assessment Outcomes

The findings of the most recent Risk Assessment are described in Appendix D along with revisions made based on findings from Risk Assessment Reviews.

In the case of responding to hazards/emergencies, records will be kept per Operating Procedure IS-ERP-P001 – Emergency Response Procedures Water and Wastewater Services.

9. Operational Structure, Roles, Responsibilities and Authorities

The corporate operational structure, roles, responsibilities and authorities are under the direction of the CAO and the Director, Infrastructure Services. The QMS Representative will ensure operational structure, roles, responsibilities and authorities described in the Drinking Water QMS Operational Plan are kept current. The QMS Representative and relevant Managers are responsible for ensuring staff remain aware of their respective roles, responsibilities and authorities. See Appendices C and E.

10. Competencies

Core competencies are deemed to be those that are minimally required to fill a respective position. Leverage competencies describe knowledge, skill and ability in excess of the minimum that may enhance an Operator's succession within the corporation. See Operating Procedure IS-QMS-P007 – Competencies which describes practices employed to develop and/or maintain competencies for Water and Wastewater Division staff whose duties directly affect drinking water quality.

Table 1 outlines the competencies required by all staff whose duties directly affect drinking water quality.

Table 1 – Minimum Staff Competencies

Director, Infrastructure Services	
Core competencies	*Leverage competencies*
• Licensed as a Professional Engineer by Professional Engineers of Ontario • Seven to ten years progressive experience • Technical knowledge of planning, design, construction, maintenance and repair of water infrastructure • Technical knowledge of computers and engineering software applications • Technical knowledge of budgeting and asset management • Technical knowledge of applicable legislation • Technical knowledge of local government structure, protocol, procedures and policy development	• Executive leadership training
Manager, Engineering Division	
Core competencies	*Leverage competencies*
• Professional Engineer, Civil or Municipal • Eight years experience in a relevant field • Valid Ontario driver's license • Technical knowledge of water works standards, design, construction, maintenance and repair • Technical knowledge of applicable legislation • Technical knowledge of budgeting, asset management and procurement • Technical knowledge of computers and engineering software	• Senior leadership training • Advanced financial management training
Manager, Water and Wastewater Division (Overall-Responsible-Operator)	
Core competencies	*Leverage competencies*
• Certified Engineering Technician/Two years post-secondary education in Civil Engineering Technology or equivalent experience • Possess and maintain valid provincial government Class II distribution certificate or greater • Valid Ontario driver's license • Four to five years' relevant experience • Technical knowledge of drinking water system construction, maintenance and repair • Technical knowledge of applicable legislation including Ontario Drinking Water legislation and standards • Technical knowledge of computer hardware and software applications • Technical knowledge of management practices and procedures • Technical knowledge of fleet and heavy equipment management • Technical knowledge of consultant and construction contract supervision • Technical knowledge of budgeting and tendering procedures	• Leadership training • Financial management training • Advanced project planning

Table 1 Minimum Staff Competencies (continued)	
Supervisor, Water and Wastewater Division (Primary Operator-in-Charge)	
Core competencies	*Leverage competencies*
• Ontario Secondary School Diploma or equivalent plus post-secondary or equivalent experience • Valid Class II Water Distribution System Operator's Certificate • At least three years related supervisory experience in infrastructure operations • Valid driver's license DZ Drivers or higher • Technical knowledge of various applicable statutes and regulations • Technical knowledge of Ontario Traffic Manual Book 7, OPS Standards and Specifications, local special provisions and similar standards • Technical knowledge of construction methods, trenching/shoring, confined space entry and heavy equipment operation • Knowledge of supervisory practices and procedures, budgeting and procurement • Knowledge of the use and care of hand tools, small power tools and construction equipment • Knowledge of drinking water distribution/wastewater collection systems operations, maintenance and fixtures • Knowledge of water quality monitoring techniques • Knowledge of plumbing techniques • Knowledge of municipal government and good customer service • General knowledge of administrative forms and record keeping • Knowledge in organizing, leading and directing routine operations and emergency service requests • Knowledge in troubleshooting	• Supervisor competency training • Leadership training • Policy development
Crew Leaders, Water and Wastewater Division (Supplemental Operator-in-Charge)	
Core competencies	*Leverage competencies*
• Ontario Secondary School Diploma or equivalent • Class II Water Distribution System Operator's Certificate • Three to four years' relevant experience • Minimum DZ Driver's License • Technical knowledge of various applicable statutes and regulations • Technical knowledge of Ontario Traffic Manual Book 7, OPS Standards and Specifications • Technical knowledge of construction methods, trenching/shoring and confined space entry • Technical knowledge of use of hand tools, small power tools and construction equipment • Technical knowledge of heavy equipment operation and safe vehicle operation • Technical knowledge of water systems, operations and maintenance • Technical knowledge of water quality monitoring techniques • Technical knowledge of plumbing techniques • General knowledge of supervisory practices and procedures, budgeting and procurement • General knowledge of municipal government and good customer service • General knowledge of administrative forms and record keeping • Knowledge in organizing, leading and directing routine operations and emergency service requests • Knowledge in troubleshooting	• Policy development • Supervisor Competency Training

Table 1 Minimum Staff Competencies (continued)	
Water/Wastewater Technician	
Core competencies	*Leverage competencies*
• Ontario Secondary School Diploma or equivalent • Two to three-year post-secondary education in civil engineering-environmental or water quality technology or equivalent experience • Operator in Training up to Class II Water Distribution System Operator's Certificate • Minimum DZ Driver's License • Over three years experience in a similar environment • Technical knowledge of drinking water system engineering, concepts and operations • Technical knowledge of various applicable statutes and regulations • Technical knowledge of water quality sampling, analysis and lab techniques • Technical knowledge computer hardware and software applications • Technical knowledge of watermain maintenance and construction methods • General knowledge of municipal government and good customer service • General knowledge of administrative forms and record keeping	• Policy development • Cross Connection training
Extraneous Flow Inspector	
Core competencies	*Leverage competencies*
• Three-year diploma from a community college in a related field • Operator in Training up to Class II Water Distribution System Operator's Certificate • Over three years on the job experience • Technical knowledge of water distribution system operation and maintenance • Technical knowledge of water quality sampling and testing • Technical knowledge of safe and acceptable construction practices • Technical knowledge of the use and care of testing equipment and tools • Technical knowledge of various applicable statutes and regulations • Technical knowledge of computer aided drafting techniques, Auto Cad • General knowledge of municipal government and customer service • General knowledge of administrative forms and record keeping • Minimum DZ Driver's License	• Policy development
Water Meter Technician	
Core competencies	*Leverage competencies*
• OSSD or equivalent plus at least one-year relevant experience • Class II Water Distribution System Operator's Certificate • Technical knowledge of plumbing practices • Technical knowledge of the operation and repair of water meters, remote reading systems and attachments • Technical knowledge of various applicable statutes and regulations • Technical knowledge of computers, with an emphasis on water meter, database and accounting applications • Knowledge of the use and maintenance of hand and power tools • General knowledge of municipal government and customer service • General knowledge of administrative forms and record keeping • Minimum DZ Driver's License	• Policy development • Cross Connection training
Operators	
Core competencies	*Leverage competencies*
• Minimum Ontario Secondary School Diploma or equivalent • Operator in Training up to Class II Water Distribution System Operator's Certificate • Over three years' relevant experience to attain appropriate certificates • Minimum DZ Driver's License • Knowledge of use of hand tools, small power tools and construction equipment • Technical knowledge of heavy equipment operation • Technical knowledge of safe vehicle operation, construction practices, trenching and shoring techniques and confined space entry • Technical knowledge of various applicable statutes and regulations • Technical knowledge of water systems operations and maintenance • Technical knowledge of water quality monitoring techniques • Technical knowledge of plumbing techniques • General knowledge of administrative forms and record keeping • General knowledge of municipal government and customer service	• Policy development • Cross Connection training

11. Personnel Coverage

The 24/7 personnel coverage is established in accordance with, Operating Procedure IS-QMS-P003 – Water Utility Personnel Coverage. This procedure describes personnel coverage to address after-hour response and ensure continuity of the designation of the ORO and OIC.

In other than exceptional situations, only Certified Operators are permitted to undertake work on the Fort Erie DWDS. In exceptional situations, work may be done under the supervision of a Certified Operator.

In the event of a labour interruption, staff who are not Certified Operators may perform day-to-day operations and maintenance, under the supervision of a Certified Operator, with the MOE's prior approval. Refer to Operating Procedure IS-QMS-P003 – Water Utility Personnel Coverage for further details.

12. Communications

Operating Procedure IS-QMS-P009 – Communications has been developed to document the methods used by Top Management in communicating with the Owner, Operating Authority personnel, the public and suppliers that have been identified as essential under Plan (a) of Element 13 of the Drinking Water Quality Management Standard on matters relating to the Drinking Water QMS.

13. Essential Supplies and Services

Operating Procedure IS-QMS-P010 – Essential Supplies and Services has been developed to list supplies and services essential for the delivery of safe drinking water, provide procurement information and identify quality and / or service requirements.

14. Review and Provision of Infrastructure

Operating Procedure IS-QMS-P006 – Infrastructure Adequacy Review has been developed to outline the process followed by the Town of Fort Erie in reviewing the adequacy of its drinking water system infrastructure.

Selected documentation and records are compiled to be used as inputs to the infrastructure adequacy review. The documentation and records provide valuable information about the operation and maintenance of the drinking water system infrastructure.

The Infrastructure Adequacy Review record describes the outcomes of the infrastructure adequacy review. The results of the Infrastructure Adequacy Review are communicated to the Owner.

15. Infrastructure Maintenance, Rehabilitation and Renewal

Infrastructure Services conducts the following routine planned, preventative maintenance on the Fort Erie DWDS:

- fire hydrant maintenance (IS-WAT-P020 Fire Hydrant Maintenance)
- watermain flushing (IS-WAT-P021 Watermain Flushing)
- watermain valve maintenance (IS-WAT-P014 Watermain Valve Maintenance)
- leak detection; and,
- system-wide water quality monitoring / sampling.

Planned, preventative maintenance is scheduled and delegated to Operators by the ORO/OIC. Maintenance records are retained and stored in accordance with the Operating Procedure IS-QMS-P001 Document and Record Control.

Unplanned (reactive) maintenance activities are conducted as required. The ORO/OIC prioritizes and schedules these maintenance activities. A permanent record of maintenance and service request resolutions is maintained in an electronic work order system (Customer Relationship Management (CRM)). In the Fort Erie DWDS, unplanned maintenance consists primarily of watermain break repairs and water service, valve, and hydrant repairs. Watermain break data is reviewed as described in Operating Procedure IS-QMS-P006 Infrastructure Adequacy Review.

Equipment to operate and maintain the Fort Erie DWDS is replaced as needed, based on repair history and effectiveness as identified by Infrastructure Services staff.

The Town of Fort Erie has a water meter replacement program that is based on an industry-accepted life expectancy of approximately 15 to 18 years for water meters. The replacement program assists in ensuring a high level of confidence in water meter consumption readings. The replacement program, funded through the capital budget, allows for the on-going systematic replacement of aging residential meters throughout the Fort Erie DWDS.

In determining annual capital works priorities, a review of infrastructure maintenance and replacement programs is conducted in accordance with Operating Procedure IS-QMS-P006 - Infrastructure Adequacy Review, to reduce the risk of any unplanned failure of some part of the Fort Erie DWDS. By reviewing unplanned maintenance required throughout the year, revisions can be made to planned maintenance activities and prioritized replacement projects to reflect current conditions. These changes are then discussed with Infrastructure Services management and communicated to the Owner during annual budget deliberations.

The Town of Fort Erie maintains a 10-year capital budget forecast, which is a long term forecast of major infrastructure maintenance, rehabilitation and renewal activities. The 10-year capital forecast is reviewed at least once every calendar year. A copy of the 10-year capital forecast is stored in the QMS Document and Record Control Database along with the records of the regular reviews of the forecast.

16. Sampling, Testing and Monitoring

As a split jurisdictional model, Infrastructure Services is responsible for the operation and maintenance of the Fort Erie DWDS. Infrastructure Services staff is responsible for all required sampling, testing and monitoring of the Fort Erie DWDS.

Niagara Region is responsible for upstream sampling at point of entry areas within the Fort Erie DWDS. Sample results data is reciprocally provided between the Town and Niagara Region.

Certified Operators within the Water and Wastewater Division conduct all required regulatory sampling. Routine and representative field-testing for free chlorine residuals is undertaken to ensure the adequacy of a disinfectant residual throughout the Fort Erie DWDS. Dead end sections of water main and areas of low flow / high residence time is monitored regularly to ensure the maintenance of water quality.

The Owner's Water Distribution System Sampling Program, described in Operating Standard IS-WAT-S004 – Water Quality Monitoring, Sampling and Testing, is located in the QMS Document and Record Control Database. This guide clearly describes all water quality monitoring, sampling and testing standards and procedures including the corrective actions for responding to adverse water quality results. The sampling procedures have been developed to ensure full compliance to the requirements of the Safe Drinking Water Act (SDWA) and associated regulations.

Table 2 summarizes sample parameters and their appropriate sample frequencies as directed by the MOE.

Samples requiring laboratory analysis are submitted to accredited laboratories. Contact information for these laboratories can be found in Section 13: Essential Supplies and Services.

Laboratory analysis results are received and reviewed by the ORO/OIC, entered into the Water Sampling Results database by the WWT, and subsequently filed into binders accordingly. Additionally, all monthly sampling analysis results are posted on the Owner's website. Infrastructure Services staff submits an Annual/Summary Water Quality Report to the Owner within the prescribed timelines, and then places copies of the documents on the Owner's website.

Table 2 – Sample Parameters and Frequency

Parameter	Criteria	Common Source	Frequency
Microbiological Analysis			
E. Coli	Not Detectable	Indicates the presence of fecal matter.	The Owner collects 11 samples weekly. All of the samples are analyzed by membrane filtration analysis.
Total Coliform	Not Detectable	Indicates the possible presence of pathogenic bacteria.	
Heterotrophic Plate Count	<500 Colonies per sample	Indication of water quality deterioration.	
Organics			
Lead	0.010 mg/L (MAC)	Corrosion of plumbing systems: erosion of natural deposits in Lake Erie water.	30 residential, 3 non-residential, 4 distribution samples bi-annually or as directed by the MOE.
Trihalomethanes	0.10 mg/L (MAC) (expressed as a running annual average of quarterly results)	By-product of chlorination-reaction of chlorine and organic matter.	Minimum one (1) sample taken every quarter.
Haloacetic Acids	0.08 mg/L (MAC) (expressed as a running annual average of quarterly results)	By-product of chlorination – reaction of chlorine and organic matter.	Minimum one (1) sample taken every quarter.
Disinfectant			
Free Chlorine Residual	Min. - 0.05 mg/L Max. - 4.0 mg/L	Level of disinfectant present.	Conducted in conjunction with micro. samples as well as weekly FAC monitoring.
Aesthetics			
Alkalinity	30-500 mg/L per provincial Operational Guideline	Corrosion within the distribution system.	Conducted in conjunction with bi-annual lead sampling from distribution system.

MAC – Maximum Acceptable Concentration

17. Measurement and Recording Equipment

Colorimeters, turbidity meters, and pH meters are calibrated to manufacturers' specifications on an annual basis by a technician approved by the manufacturer. All such equipment has a calibration sticker noting the date and name of the technician who performed the calibration.

Analytical equipment is maintained and repaired by a technician approved by the manufacturer when required and checked for calibration by verifying each piece of equipment quarterly by the WWT.

Operating Procedure IS-WAT-P012 – Equipment Calibration and Verification provides further detail on the calibration and verification of measurement and recording equipment used in the operation of the Fort Erie DWDS.

18. Emergency Management

Emergency situations within the Fort Erie DWDS are managed in accordance with the adopted operating procedures as outlined in Operating Procedure IS-ERP-P001 - Emergency Response Procedures for Water and Wastewater Services.

19. Internal Audit

Internal audits are conducted to ensure that the Drinking Water QMS conforms to the requirements of the DWQMS. (See Operating Procedure IS-QMS-P004 – Internal Audits regarding the Internal Audit process.)

20. Management Review

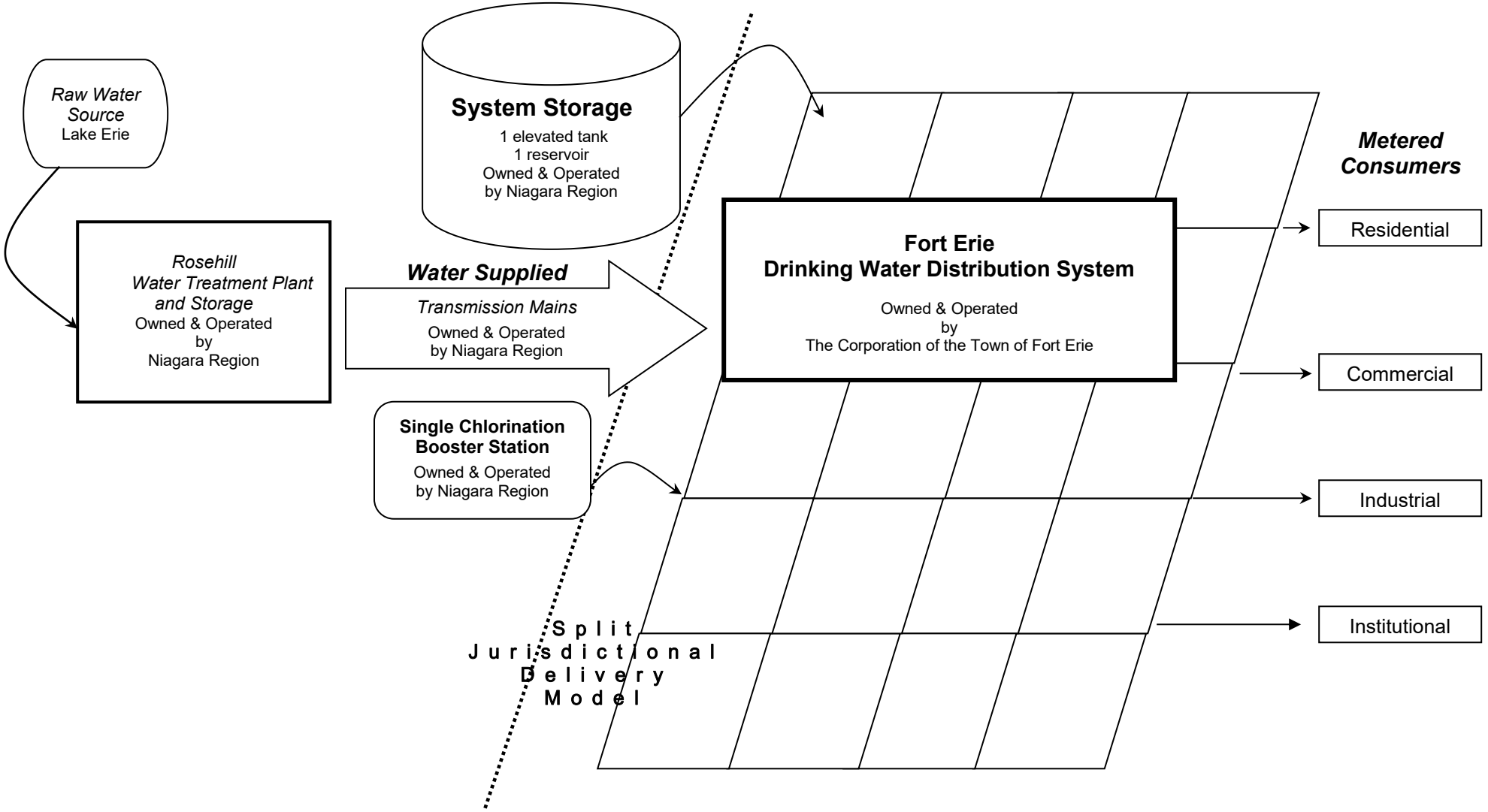
Management Reviews are completed by Top Management and the QMS Representative to evaluate the suitability, adequacy and effectiveness of the Drinking Water QMS. (See Operating Procedure IS-QMS-P005 – Management Review Procedure)

21. Continual Improvement

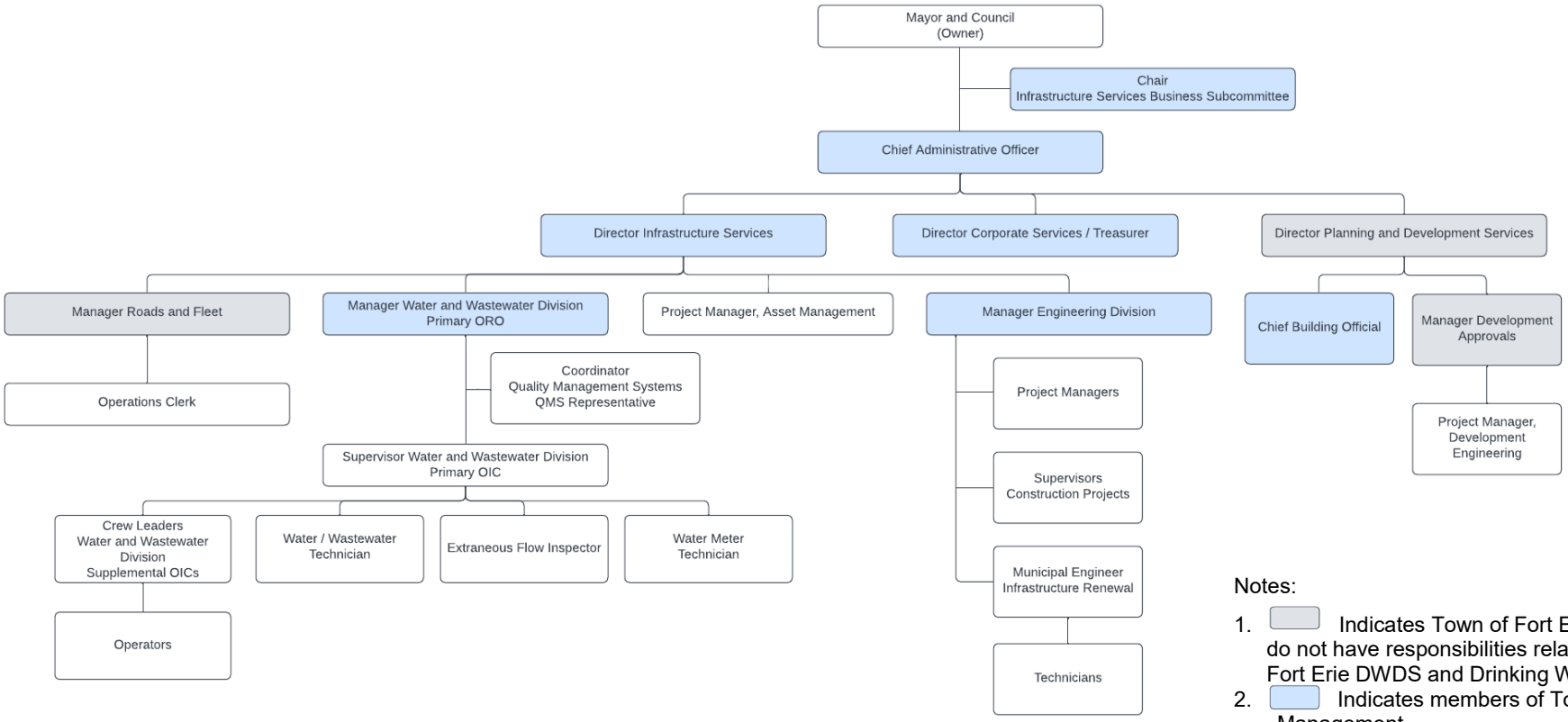
The Operating Authority has a procedure in place for tracking and measuring continual improvement of its QMS. (See Operating Procedure IS-QMS-P008 Continual Improvement)

Appendix A
Drinking Water QMS Commitment Plaque

Appendix B
Town of Fort Erie
Drinking Water Distribution System Schematic



Appendix C
Drinking Water QMS Organizational Structure



Notes:

1. Indicates Town of Fort Erie staff who do not have responsibilities related to the Fort Erie DWDS and Drinking Water QMS
2. Indicates members of Top Management
3. Refer to Operating Procedure IS-QMS-P003 Water Utility Personnel Coverage for additional detail on coverage of Overall-Responsible-Operator and Operator-In-Charge
4. With regards to the Drinking Water QMS, the Operations Clerk provides Drinking Water QMS support as described in Appendix E.

Appendix D

Town of Fort Erie Drinking Water QMS
Risk Assessment Table

Risk Assessment Review July 19, 2022, July 18, 2024
36 Month Risk Assessment conducted on July 19, 2023

	Process Step	Description of Hazardous Event	Description of Associated Hazard	Like.	Severity	Detect.	Risk Rating	Control Measures (CM)	Critical Control Points	Critical Control Limit	Procedures for Monitoring, Responding and Reporting/Recording Deviations from CCL
1	Distribution System	Illegal use of fire hydrants	Physical (Sediment) Biological (Microbiological) Chemical	4	3	3	10	By-law 66-2016 & Anti Tampering Devices installed on private fire hydrants, remote hydrants (ongoing program) when actual and/or suspected unauthorized usage occurs	Yes (As Regulated)	MAC as per O.Reg. 169/03 and O.Reg. 170/03	Monitoring: - IS-WAT-P020 - Fire Hydrant Maintenance - IS-WAT-S004 - Water Quality Monitoring Sampling Testing Responding/Reporting/Recording: - IS-WAT-S004 - Water Quality Monitoring Sampling Testing - Anti Tampering Devices installed on private fire hydrants, remote hydrants (ongoing program) when actual and/or suspected unauthorized usage occurs
2	Distribution System	Watermain Break or Frozen Water Main within TOFE Distribution	Physical (Sediment) Biological (Microbiological) Chemical	4	3	3	10	T.O.F.E. Operating Standards and Procedures Water Main Break Repair IS-WAT-P001, and Frozen Services IS-WAT-P018 MOE Watermain Disinfection Procedure	Yes (Adherence to SOP and legislation)	MAC as per O.Reg. 169/03 and O.Reg. 170/03 and Any limits as outlined in MOE Watermain Disinfection Procedure	Monitoring: - IS-WAT-P001 - Water Main Break Repair (includes MOE Watermain Disinfection Procedure reqs) - IS-WAT-S004 - Water Quality Monitoring Sampling Testing - IS-WAT-P018 Frozen Services - Pressure monitors at bulk water stations and smart hydrants Responding/Reporting/Recording: - IS-WAT-S004 - Water Quality Monitoring Sampling Testing - IS-WAT-P001a - Special Case Contamination -IS-WAT-P009 Public Health Notification Water Service Disruption
3	Distribution System	Allowable use of fire hydrants	Physical (Sediment) Biological (Microbiological) Chemical	5	3	2	10	Fire Chief provides training on proper fire hydrant use to Fire & Emergency Services staff	Yes Adherence to Training	MAC as per O.Reg. 169/03 and O.Reg. 170/03	Monitoring: - If an issue were to occur Fire & Emergency Services would notify the Water and Wastewater Division Responding/Reporting/Recording: - IS-WAT-S004 - Water Quality Monitoring Sampling Testing
4	Distribution System	Contractor working **on** the Water Distribution System damages infrastructure	Physical (Sediment) Biological (Microbiological) Chemical	4	3	1	8	T.O.F.E. Operating Standards and Procedures Commissioning New Watermain IS-WAT-P010, Notification to Contractors IS-QMS-S001 , Water Main Break Repair IS-WAT-P001 MOE Watermain Disinfection Procedure	Yes Adherence to SOP and legislation	MAC as per O.Reg. 169/03 and O.Reg. 170/03 and Any limits as outlined in MOE Watermain Disinfection Procedure	Monitoring: - IS-WAT-P010 - Commissioning New Watermain (includes MOE Watermain Disinfection Procedure reqs) - IS-WAT-S004 - Water Quality Monitoring Sampling Testing - IS-WAT-P001 - Water Main Break Repair (includes MOE Watermain Disinfection Procedure reqs) - Pressure monitors at bulk water stations and smart hydrants Responding/Reporting/Recording: - IS-WAT-S004 - Water Quality Monitoring Sampling Testing -IS-WAT-P009 Public Health Notification Water Service Disruption - IS-WAT-P001a - Special Case Contamination - IS-WAT-P001 - Water Main Break Repair(includes MOE Watermain Disinfection Procedure reqs)

Appendix D, continued

Town of Fort Erie Drinking Water QMS

Risk Assessment Table

Risk Assessment Review July 19, 2022, July 18, 2024
36 Month Risk Assessment conducted on July 19, 2023

	Process Step	Description of Hazardous Event	Description of Associated Hazard	Like.	Severity	Detect.	Risk Rating	Control Measures (CM)	Critical Control Points	Critical Control Limit	Procedures for Monitoring, Responding and Reporting/Recording Deviations from CCL
5	Distribution System	Contractor working **near** the Distribution System damages infrastructure	Physical (Sediment) Biological (Microbiological) Chemical	3	3	1	7	Ontario Underground Infrastructure Notification Systems Act 2012 (Ontario One Call) and Water Main Break Repair IS-WAT-P001 MOE Watermain Disinfection Procedure	Yes Adherence to Act and legislation	MAC as per O.Reg. 169/03 and O.Reg. 170/03 Any limits as outlined in MOE Watermain Disinfection Procedure	Monitoring: - IS-WAT-S004 - Water Quality Monitoring Sampling Testing - IS-WAT-P001 - Water Main Break Repair (includes MOE Watermain Disinfection Procedure reqs) - Pressure monitors at bulk water stations and smart hydrants Responding/Reporting/Recording: - IS-WAT-S004 - Water Quality Monitoring Sampling Testing -IS-WAT-P009 Public Health Notification Water Service Disruption - IS-WAT-P001a - Special Case Contamination - IS-WAT-P001 - Water Main Break Repair (includes MOE Watermain Disinfection Procedure reqs)
6	Distribution System	ICI Cross Connection and Contamination (Backflow)	Physical (Sediment) Biological (Microbiological) Chemical	2	3	4	9	By-law 66-2016 & T.O.F.E. Operating Standards and Procedures Cross Connection Control Program IS-WAT-P005 (this program is in development)	Yes Adherence to SOP	MAC as per O.Reg. 169/03 and O.Reg. 170/03	Monitoring: - IS-WAT-P005 - Cross Connection Control Program (program in development) - IS-WAT-S004 - Water Quality Monitoring Sampling Testing Responding/Reporting/Recording: - IS-WAT-S004 - Water Quality Monitoring Sampling Testing
7	Distribution System	Rosehill Plant Failure	Physical (Sediment) Biological (Microbiological) Chemical	2	5	1	8	Under Regional Control Short term reliance on system storage / Region responsibility Niagara Region has an Emergency Drinking Water Provision Plan (provides information about emergency water sources)	No No Control	MAC as per O.Reg. 169/03 and O.Reg. 170/03	Monitoring: - IS-WAT-S004 - Water Quality Monitoring Sampling Testing - Pressure monitors at bulk water stations and smart hydrants Responding/Reporting/Recording: - IS-WAT-S004 - Water Quality Monitoring Sampling Testing
8	Distribution System	Reduced pressure loss other than main break related (<20 psi)	Physical (Sediment) Biological (Microbiological) Chemical	2	2	3	7	T.O.F.E. Operating Standards and Procedures -Water Quality Site Visit IS-WAT-P011 Pressure monitors at bulk fill stations and smart hydrants	Yes Adherence to SOP	MAC as per O.Reg. 169/03 and O.Reg. 170/03	Monitoring: - IS-WAT-S004 - Water Quality Monitoring Sampling Testing - Pressure monitors at bulk water stations and smart hydrants Responding/Reporting/Recording: - IS-WAT-S004 - Water Quality Monitoring Sampling Testing - IS-WAT-P011 - Water Quality Site Visit

Appendix D, continued

Town of Fort Erie Drinking Water QMS
Risk Assessment Table

Risk Assessment Review: July 19, 2022, July 18, 2024
36 Month Risk Assessment conducted on: July 19, 2023

	Process Step	Description of Hazardous Event	Description of Associated Hazard	Like.	Severity	Detect.	Risk Rating	Control Measures (CM)	Critical Control Points	Critical Control Limit	Procedures for Monitoring, Responding and Reporting/Recording Deviations from CCL
9	Distribution System	Residential Cross Connection and contamination resulting	Physical (Sediment) Biological (Microbiological) Chemical	2	2	4	8	Cross Connection Control Program not currently enforced for residential connections	No No Control	MAC as per O.Reg. 169/03 and O.Reg. 170/03	Monitoring: - IS-WAT-S004 - Water Quality Monitoring Sampling Testing Responding/Reporting/Recording: - IS-WAT-S004 - Water Quality Monitoring Sampling Testing - IS-WAT-P001a - Special Case Contamination
10	Distribution System	Watermain Break within Regional Trans.	Physical (Sediment) Biological (Microbiological) Chemical	3	4	3	10	Under Regional Control Niagara Region procedure - Watermain Break ERP-WT-ALL-P-010 MOE Watermain Disinfection Procedure	No Adherence to SOP	MAC as per O.Reg. 169/03 and O.Reg. 170/03 and Any limits as outlined in MOE Watermain Disinfection Procedure	Monitoring: - IS-WAT-P001 - Water Main Break Repair (includes MOE Watermain Disinfection Procedure reqs) - IS-WAT-S004 - Water Quality Monitoring Sampling Testing - Pressure monitors at bulk water stations and smart hydrants Responding/Reporting/Recording: - IS-WAT-S004 - Water Quality Monitoring Sampling Testing - IS-WAT-P001a - Special Case Contamination
11	Distribution System	Low Chlorine Residual (< 0.05 mg/L - Regulatory threshold)	Biological	4	2	3	9	T.O.F.E. Operating Standards and Procedures Water Quality Monitoring Sampling Testing IS-WAT-S004 and Watermain Flushing IS-WAT-P021 Auto Flushers (Pt Abino, Cherry Hill Blvd, Niagara Blvd)	Yes Adherence to SOP & Regulatory Compliance O. Reg. 170/03 Auto Flushers	Chlorine Residual < 0.05 mg/L O.Reg. 170/03	Monitoring: - IS-WAT-P004b - Chlorine Residual Sampling -IS-WAT-P021 - Watermain Flushing Responding/Reporting/Recording: - IS-WAT-P004b - Chlorine Residual Sampling
12	Distribution System	Low Chlorine Residual (< 0.20 mg/L - Town of FE threshold)	Biological	4	1	3	8	T.O.F.E. Operating Standards and Procedures Water Quality Monitoring Sampling Testing IS-WAT-S004 and Watermain Flushing IS-WAT-P021 Auto Flushers (Pt Abino, Cherry Hill Blvd, Niagara Blvd)	Yes Adherence to SOP Auto Flushers	Chlorine Residual < 0.20 mg/L O.Reg 170/03	Monitoring: - IS-WAT-P004b - Chlorine Residual Sampling -IS-WAT-P021 - Watermain Flushing Responding/Recording: - IS-WAT-P004b - Chlorine Residual Sampling
13	Distribution System	Microbiological Parameter Exceedance (T.O.F.E or Region)	Biological - E. Coli	1	3	3	7	T.O.F.E. Operating Standards and Procedures Water Quality Monitoring Sampling Testing IS-WAT-S004	Yes Adherence to SOP & Regulatory Compliance O. Reg. 170/03	Microbiological parameters detectable O.Reg. 169/03	Monitoring: - IS-WAT-P004 - Microbiological Sampling Responding/Reporting/Recording - IS-WAT-P004a - Corrective Action for Adverse Microbiological Sampling Result
			Biological - Total Coliforms / Heterotrophic Plate Count	4	2	3	9				

Appendix D, continued

Town of Fort Erie Drinking Water QMS
Risk Assessment Table

Risk Assessment Review July 19, 2022, July 18, 2024
36 Month Risk Assessment conducted on July 19, 2023

	Process Step	Description of Hazardous Event	Description of Associated Hazard	Like.	Severity	Detect.	Risk Rating	Control Measures (CM)	Critical Control Points	Critical Control Limit	Procedures for Monitoring, Responding and Reporting/Recording Deviations from CCL
14	Distribution System	Chemical (THM) Parameter Exceedance	Chemical	1	2	3	6	T.O.F.E. Operating Standards and Procedures Water Quality Monitoring Sampling Testing IS-WAT-S004	Yes Adherence to SOP & Regulatory Compliance O. Reg. 170/03	THM > 0.100 mg/L running annual average of quarterly results	Monitoring: - IS-WAT-P004d - Trihalomethane Sampling Responding/Reporting/Recording - IS-WAT-P004d - Trihalomethane Sampling
15	Distribution System	Contamination from Biofilm slough within distribution pipes	Biological	2	2	3	7	T.O.F.E. Operating Standards and Procedures -Water Quality Site Visit IS-WAT-P011, Chlorine Residual Sampling IS-WAT-P004b for flushing, Watermain Flushing IS-WAT-P021	Yes Adherence to SOP	MAC as per O.Reg. 169/03 and O.Reg. 170/03	Monitoring: - IS-WAT-S004 - Water Quality Monitoring Sampling Testing -IS-WAT-P021 - Watermain Flushing Responding/Reporting/Recording: - IS-WAT-S004 - Water Quality Monitoring Sampling Testing - IS-WAT-P011 Water Quality Site Visit
16	Distribution System	Commissioning of new watermains	Physical (Sediment) Biological (Microbiological) Chemical	4	1	1	6	T.O.F.E. Operating Standards and Procedures Commissioning New Watermain IS-WAT-P010 MOE Watermain Disinfection Procedure	Yes Adherence to SOP and legislation	MAC as per O.Reg. 169/03 and O.Reg. 170/03 Any limits as outlined in MOE Watermain Disinfection Procedure	Monitoring: - IS-WAT-P010 - Commissioning New Watermain (includes MOE Watermain Disinfection Procedure reqs) - IS-WAT-S004 - Water Quality Monitoring Sampling Testing Responding/Reporting/Recording: - IS-WAT-S004 - Water Quality Monitoring Sampling Testing
17	Distribution System	Critical Staff loss (>30%) (Pandemic, Sickness, Strike)	Physical (Sediment) Biological (Microbiological) Chemical	2	1	1	4	T.O.F.E. Operating Standards and Procedures Water Utility Personnel Coverage IS-QMS-P003 (provincial requirement to report insufficient staff to run the utility) Business Continuity Program Delivery Plan	No Adherence to SOP	MAC as per O.Reg. 169/03 and O.Reg. 170/03	Monitoring: - IS-WAT-S004 - Water Quality Monitoring Sampling Testing Responding/Reporting/Recording: - IS-WAT-S004 - Water Quality Monitoring Sampling Testing - IS-WAT-P003 - Water Utility Personnel Coverage - Covid-19 Pandemic Safe Work Standard 05-032 - Business Continuity Program Delivery Plan

Appendix D, continued

Town of Fort Erie Drinking Water QMS
Risk Assessment Table

Risk Assessment Review: July 19, 2022, July 18, 2024
Note: Grey shading indicates potential hazardous events identified in the MOE document titled "Potential Hazardous Events for Municipal Residential Drinking Water Systems" — 36 Month Risk Assessment conducted on: July 19, 2023

	Process Step	Description of Hazardous Event	Description of Associated Hazard	Like.	Severity	Detect.	Risk Rating	Control Measures (CM)	Critical Control Points	Critical Control Limit	Procedures for Monitoring, Responding and Reporting/Recording Deviations from CCL
18	Distribution System	Water Supply Shortfall (exceed capacity)	Physical (Sediment) Biological (Microbiological) Chemical	1	5	1	7	Under Regional Control Niagara Region Emergency Response Procedure - Inability to Meet Water Demand - ERP-WT-ALL-P-008	No No Control	MAC as per O.Reg. 169/03 and O.Reg. 170/03	Monitoring: - IS-WAT-S004 - Water Quality Monitoring Sampling Testing Responding/Reporting/Recording: - By-Law 66-2016 (Water Restrictions Section) - Adhereance to Corporate Communications protocols - IS-WAT-S004 - Water Quality Monitoring Sampling Testing
19	Distribution System	Extreme Weather Events (e.g. tornado, ice storm)	Potential for infrastructure damage and/or water quality issues Physical (Sediment) Biological (Microbiological) Chemical	3	4	1	8	No controls however there are monitoring, responding, reporting and recording procedures in place as indicated in Niagara Region Emergency Response Procedures Manual ERP-ALL-ALL-P-001 Emergency Response Procedures Water and Wastewater Services IS-ERP-P001 Town of Fort Erie Emergency Plan Frozen Services IS-WAT-P018	No No Control	MAC as per O.Reg. 169/03 and O.Reg. 170/04	Monitoring: - IS-WAT-S004 - Water Quality Monitoring Sampling Testing - IS-WAT-P018 Frozen Services Responding/Reporting/Recording: - IS-WAT-S004 - Water Quality Monitoring Sampling Testing - IS-ERP-P001 - Emergency Response Procedures Water and Wastewater Services - IS-WAT-P018 Frozen Services
20	Distribution System	Sustained Extreme Temperatures (e.g. heat wave, deep freeze)	Sustained extreme temperatures may lead to watermain breaks, frozen watermain breaks, frozen services and water quality issues (e.g. low chlorine, microbiological exceedance) Risk ratings for this hazardous event are found under the following: - Item 2 - Watermain Break or Frozen Watermain - Item 11 & 12 - Low Chlorine - Item 13 - Microbiological Exceedance - Item 32 - Frozen Services								
21	Distribution System	Long Term Impacts of Climate Change	Long term impacts of climate change may lead to extreme weather events and sustained extreme temperatures. This results in watermain breaks, frozen watermain breaks, frozen services and water quality issues (e.g. low chlorine, microbiological exceedance). Risk ratings for this hazardous event are found under the following: - Item 2 - Watermain Break or Frozen Watermain - Item 11 & 12 - Low Chlorine - Item 13 - Microbiological Exceedance - Item 19 - Extreme Weather Events - Item 20 - Sustained Extreme Temperatures - Item 32 - Frozen Services								
22	Distribution System	Chemical Spill Impacting Source Water / Source Contamination	Physical (Sediment) Biological (Microbiological) Chemical Radiological	1	4	2	7	Under Regional Control Niagara Region procedure - Source Water Quality - Possible Compromise ERP-WT-ALL-P-006	No Adherence to SOP	MAC as per O.Reg. 169/03 and O.Reg. 170/03	Monitoring: - IS-WAT-S004 - Water Quality Monitoring Sampling Testing Responding/Reporting/Recording: - IS-WAT-S004 - Water Quality Monitoring Sampling Testing - IS-WAT-P001a - Special Case Contamination

Appendix D, continued

Town of Fort Erie Drinking Water QMS
Risk Assessment Table

Risk Assessment Review: July 19, 2022, July 18, 2024

Note: Grey shading indicates potential hazardous events identified in the MOE document titled "Potential Hazardous Events for Municipal Residential Drinking Water Systems"

36 Month Risk Assessment conducted on: July 19, 2023

	Process Step	Description of Hazardous Event	Description of Associated Hazard	Like.	Severity	Detect.	Risk Rating	Control Measures (CM)	Critical Control Points	Critical Control Limit	Procedures for Monitoring, Responding and Reporting/Recording Deviations from CCL
23	Distribution System	Terrorist and Vandalism Actions	Physical (Sediment) Biological (Microbiological) Chemical Radiological	1	4	4	9	Anti-Tampering devices installed on private and remote fire hydrants (ongoing program) No additional controls for vandalism or terrorism however there are monitoring, responding, reporting and recording procedures in place as indicated in this table. Direct access to water plant is under Regional control. Niagara Region procedure - Threat to a Water or Wastewater Facility, System or Supply ERP-ALL-ALL-001	Yes See Control Measures	MAC as per O.Reg. 169/03 and O.Reg. 170/03	Monitoring: - IS-WAT-S004 - Water Quality Monitoring Sampling Testing Responding/Reporting/Recording: - IS-WAT-S004 - Water Quality Monitoring Sampling Testing - IS-WAT-P001a - Special Case Contamination
24	Distribution System	Cyber Security Threat	Cyber Security Threats (cyber attacks and unauthorized access)	1	1	5	7	Firewalls, endpoint protection software and access control lists	No Have control measures in place	Not Applicable	Corporate Cyber Security Policy
25	Distribution System	Sustained Pressure Loss	Sustained pressure loss may result from illegal use of fire hydrants, watermain break, frozen watermain, allowable use of fire hydrants, reduced pressure loss other than main break related. Risk rating for this hazardous event is found under: - Item 1 - Illegal Use of Fire Hydrants - Item 2 - Watermain Break or Frozen Watermain - Item 3 - Allowable use of Fire Hydrants - Item 8 - Reduced Pressure Loss Other Than Main Break Related								
26	Distribution System	Backflow	Risk rating for this hazardous event is found under: - Item 6 - ICI Cross Connection - Item 9 - Residential Cross Connection								
27	Treatment Systems	Sudden Changes to Raw Water Characteristics (e.g. turbidity, pH)	Not applicable Applies to Treatment Systems only as indicated in MOE Document titled Potential Hazardous Events for Municipal Residential Drinking Water Systems								
28	Treatment Systems	Failure of Equipment or Process Associated with Primary Disinfection (e.g. coagulant dosing system, filters,UV system, chlorination system)	Not applicable Applies to Treatment Systems only as indicated in MOE Document titled Potential Hazardous Events for Municipal Residential Drinking Water Systems								

Appendix D, continued

Town of Fort Erie Drinking Water QMS
Risk Assessment Table

Risk Assessment Review: July 19, 2022, July 18, 2024

Note: Grey shading indicates potential hazardous events identified in the MOE document titled "Potential Hazardous Events for Municipal Residential Drinking Water Systems"

36 Month Risk Assessment conducted on: July 19, 2023

	Process Step	Description of Hazardous Event	Description of Associated Hazard	Like.	Severity	Detect.	Risk Rating	Control Measures (CM)	Critical Control Points	Critical Control Limit	Procedures for Monitoring, Responding and Reporting/Recording Deviations from CCL
29	Treatment Systems and Distribution Systems Providing Secondary Disinfection	Failure of Equipment or Process Associated with Secondary Disinfection (eg Chlorination Equipment, Chloramination Equipment)	Not applicable Applies to Treatment Systems and Distribution Systems Providing Secondary Disinfection only as indicated in MOE Document titled Potential Hazardous Events for Municipal Residential Drinking Water Systems								
30	Treatment Systems using Surface Water	Algal blooms	Not applicable Applies to Treatment Systems only as indicated in MOE Document titled Potential Hazardous Events for Municipal Residential Drinking Water Systems								
31	Distribution System	Chemical (HAA) Parameter Exceedance	Chemical	1	2	3	6	T.O.F.E. Operating Standards and Procedures Water Quality Monitoring Sampling Testing IS-WAT-S004	Yes Adherence to SOP & Regulatory Compliance O. Reg. 170/03	HAA > 0.080 mg/L running annual average of quarterly results	Monitoring: - IS-WAT-P004e - Haloacedic Acid Sampling Responding/Reporting/Recording - IS-WAT-P004e - Haloacedic Acid Sampling
32	Distribution System	Frozen Services	Physical (Sediment) Biological (Microbiological) Chemical	2	1	1	4	T.O.F.E. Operating Standards and Procedures Frozen Services IS-WAT-P018	No Adherence to SOP	MAC as per O.Reg. 169/03 and O.Reg. 170/03	Monitoring: - IS-WAT-P018 Frozen Services Responding/Reporting/Recording: - IS-WAT-P018 Frozen Services
33	Distribution System	Low Water Use Conditions - Private Facilities / Properties (Due to operating restrictions during pandemic or other emergency)	Physical (Sediment) Biological (Microbiological) Chemical	2	1	3	6	T.O.F.E. Operating Standards and Procedures Water Quality Monitoring Sampling Testing IS-WAT-S004 and Watermain Flushing IS-WAT-P021	Yes Adherence to SOP	MAC as per O.Reg. 169/03 and O.Reg. 170/03	Monitoring: - IS-WAT-S004 Water Quality Monitoring Sampling Testing - IS-WAT-P021 Watermain Flushing Responding/Reporting/Recording: - IS-WAT-S004 Water Quality Monitoring Sampling Testing - IS-WAT-P021 Watermain Flushing - Made in Niagara Guide to Flushing Your Facilty

Appendix E

Operational Roles, Responsibilities and Authorities

Council of The Corporation of the Town of Fort Erie (Representing Owner)	
Roles & Responsibilities	**Authorities**
• Complete oversight of entire drinking water distribution system and the Drinking Water QMS • Monitors the Drinking Water QMS and the need for resources to support the Drinking Water QMS • Strive to continuously improve the Drinking Water QMS • Ultimate responsibility for the provision of safe drinking water • Ensure overall compliance	• Financial and administrative authority related to the distribution of safe drinking water • Approve and/or delegate approval of changes to the Drinking Water QMS • Endorse composition of Top Management • Endorse Drinking Water QMS • Recommend changes to Drinking Water QMS
Top Management **(**Chair of Infrastructure Services Business Subcommittee; the Chief Administrative Officer; the Director, Infrastructure Services; the Director, Corporate Services/Treasurer; the Manager, Engineering Division; Chief Building Official; and the Manager, Water and Wastewater Division)	
Roles & Responsibilities	**Authorities**
• Operational oversight of entire drinking water distribution system and the Drinking Water QMS • Provide and/or obtain resources and necessary infrastructure for the Drinking Water QMS and to operate and maintain the drinking water distribution system safely and effectively • Ensure the drinking water distribution system is operated in accordance with all applicable legislation • Ensure all staff, contractors and other third parties work in accordance with all applicable legislation • Ensure staff attain and maintain core competencies and maintain records of these activities • Ensure staff are aware of the relevance of their duties and how they affect safe drinking water and maintain records of these activities • Promote the Drinking Water QMS throughout the utility • Review reports from Overall-Responsible-Operator and/or Operator-in-Charge • Communicate with the Owner, Manager, Water and Wastewater Division and QMS Representative regarding Drinking Water QMS and drinking water distribution system • Submit capital and operating budgets and planning materials to the Owner • Review Drinking Water QMS Operational Plan annually • Ensure QMS Representative is aware of the position's roles and responsibilities • Communicate operational roles, responsibilities and authorities throughout the organization • Conduct management reviews • Recommend Drinking Water QMS Operational Plan and system improvements to the Owner • Approve procedures and processes for assuring water quality • Emergency response planning, training	• Financial, administrative and technical authority related to the distribution of safe drinking water • Appoint QMS Representative • Review, recommend and/or approve changes and improvements to the Drinking Water QMS • Staffing and resource allocation within budget and procedural guidelines • Activity and program scheduling • Oversee adverse drinking water quality incidents and responses • Identify and address staff training needs • Recommend changes to Drinking Water QMS

Appendix E, continued

Operational Roles, Responsibilities and Authorities

Primary Overall-Responsible-Operator (Manager, Water and Wastewater Division)	
Roles & Responsibilities	**Authorities**
• General management of drinking water distribution system in conjunction with Director, Infrastructure Services • General management of equipment maintenance and replacement • Formulate and administer short and long-term policy and operational objectives and special projects • Prepare annual estimates and budgets for Director, Infrastructure Services • Regularly communicate with Director, Infrastructure Services • Promote the Drinking Water QMS throughout the utility • Remain apprised of current statutory and regulatory enactments and recommend appropriate action • Ensure that all identified training is completed • Coordinate the development and mentoring of new Water and Wastewater Division staff • Ensure staff coverages • Prepare annual summary of regular and unplanned infrastructure maintenance, rehabilitation and new programs for review by Top Management • Identify opportunities for drinking water distribution system improvement • Act on and report any incidents of non-compliance	• Administrative and technical authority related to the distribution of safe drinking water • Staffing and purchasing within budget and procedural guidelines • Activity and program scheduling • Attend Council meetings as required • Delegate Overall-Responsible-Operator to Supervisor, Water and Wastewater Division when absent • Ensure personnel are aware of all current regulatory and legislative requirements relevant to the operation of the drinking water distribution system • Technical authority related to the distribution of safe drinking water • Assign and direct Crew Leaders, Water and Wastewater Division and contractors in day-to-day operation and maintenance of the drinking water distribution system • Develop and maintain procedures to direct personnel coverage • Direct responses to adverse water quality incidents • Order materials and supplies as needed • Recommend changes to Drinking Water QMS
Manager, Engineering Division	
Roles & Responsibilities	**Authorities**
• General management of the Engineering Division, including activities of the Development Section, Municipal Projects Section, and Construction Inspection Section • Prepare the Division's annual and ten-year capital expenditure programs • Formulate and administer short and long-term and operational objectives and special projects • Stay current with legislative and regulatory changes, recommend and/or take appropriate action in response; ensure knowledge of relevant legislation, regulations, practices remain current • Regularly communicate with Director, Infrastructure Services • Promote the Drinking Water QMS throughout the utility	• Staffing and purchasing within budget and procedural guidelines • Attend Council meetings as required • Ensure personnel are aware of relevant regulatory and legislative requirements • Recommend changes to Drinking Water QMS

Appendix E, continued

Operational Roles, Responsibilities and Authorities

Primary Operator-in-Charge (Supervisor, Water and Wastewater Division)	
Roles & Responsibilities	**Authorities**
• Provide on-site supervision to ensure work is conducted in compliance with applicable legislation. • Coordinate, schedule and supervise staff and equipment, and oversee contractors • Respond to public requests, inquiries and complaints regarding water operations • Regularly communicate with the Manager, Water and Wastewater Division on work activities • Prepare/present or contribute to preparation and presentation of administrative reports, capital and operating budgets, policy recommendations, by-laws and resolutions for the Owner's consideration • Direct or approve the purchase of necessary supplies and services and manage inventories, subject to budgetary guidelines and purchasing policies • Fill the role of Overall-Responsible-Operator in the absence of the Manager, Water and Wastewater Division • Maintain current knowledge of applicable legislation and regulations and recommend appropriate operation and/or policy responses • Promote the Drinking Water QMS throughout the utility • Identify opportunities for drinking water distribution system improvement • Act on and report any incidents of non-compliance • Manage valve mapping program	• Assign and direct Operators, contractors and equipment in day-to-day operation and maintenance of drinking water distribution system • Recommend changes to Drinking Water QMS • Activity and program scheduling • Ensure personnel are aware of all current regulatory and legislative requirements relevant to the operation of the drinking water distribution system • Direct responses to adverse water quality incidents • Order materials and supplies as needed
Supplemental Operator-in-Charge (Crew Leaders, Water and Wastewater Division and Duty/On Call Supervisor)	
Roles & Responsibilities	**Authorities**
• Regularly communicate with Operators, Supervisor, Water and Wastewater Division and Manager, Water and Wastewater Division • Organize day-to-day activities relating to drinking water distribution system construction, inspection, maintenance, repair and operation • Investigate customer complaints, faults or problems and remedy where possible • Ensure work is performed in accordance with legislation and standards • Ensure proper documentation and adherence to QMS Document and Record Control Database • Contribute to development of procedures and processes for assuring drinking water quality • Assist in the development and mentoring of new Water and Wastewater Division staff • Promote the Drinking Water QMS throughout the utility	• Assign and direct Operators, contractors and equipment in day-to-day operation and maintenance of drinking water distribution system • Recommend changes to Drinking Water QMS

Appendix E, continued

Operational Roles, Responsibilities and Authorities

QMS Representative (Coordinator, Quality Management Systems)	
Roles & Responsibilities	**Authorities**
• Ensure Owner has a current copy of the Drinking Water QMS Operational Plan • Ensure that processes and procedures needed for the Drinking Water QMS are established and maintained, in consultation with the Manager, Water and Wastewater Division • Report to Top Management on the performance of the Drinking Water QMS and any need for improvement • Make certain current versions of Drinking Water QMS documents are being used • Participate in Management Reviews of the Drinking Water QMS • Ensure personnel are aware of current regulatory and legislative requirements relevant to the operation of the drinking water distribution system, in consultation with the Manager, Water and Wastewater Division • Promote awareness of the Drinking Water QMS throughout the utility • Keep Owner informed of status of Drinking Water QMS • Maintain a current list of emergency contacts in consultation with Manager, Water and Wastewater Division • Maintain a current list of essential suppliers and service providers in consultation with Manager, Water and Wastewater Division • Regularly communicate any changes/updates to the Drinking Water QMS to the appropriate parties • Develop procedures and processes for assuring water quality in consultation with Manager, Water and Wastewater Division • Post Drinking Water QMS Operational Plan to Town website. • Provide written notification to essential product suppliers to inform them of the development of the Drinking Water QMS • Lead Auditor	• Recommend changes to Drinking Water QMS

Operations Clerk	
Roles & Responsibilities	**Authorities**
• Respond to and document public complaints and requests for service • Provide documentation and records management support to Manager, Water and Wastewater Division and QMS Representative • Provide support to staff for Locate, CRMs, and QMS Document and Record Control Database requests • Promote the Drinking Water QMS throughout the utility	• Recommend changes to Drinking Water QMS

Appendix E, continued

Operational Roles, Responsibilities and Authorities

Municipal Engineer Infrastructure Renewal	
Roles & Responsibilities	**Authorities**
• Prepare/oversee preparation of plans, designs, specifications, and tender documents for municipal infrastructure projects • Manage project implementation and contract administration • Administer IS-QMS-S001 – Notification to Contractors, for contractors working on the drinking water distribution system • Coordinate in-house evaluation of infrastructure; conduct in-house system modelling • Manage in-house studies/investigations regarding water quality and supply, unaccounted-for water, extraneous flow prevention and pollution prevention • Provide input to development charges background study • Use/maintain water and wastewater system models • Prepare/oversee preparation of engineering drawings for capital projects • Promote the QMS throughout the utility	• Provide technical support to infrastructure projects • Provide technical support to Niagara Region water and wastewater servicing plan updates • Forecast flows, chlorine residuals • Direct technicians • Recommend changes to Drinking Water QMS
Project Manager	
Roles & Responsibilities	**Authorities**
• Prepare/oversee preparation of plans, designs, specifications, and tender documents for municipal infrastructure projects • Manage project implementation and contract administration • Administer IS-QMS-S001 – Notification to Contractors, for contractors working on the drinking water distribution system • Ensure GIS is updated as required • Promote the QMS throughout the utility	• Provide technical support to infrastructure projects • Recommend infrastructure improvements • Direct technicians • Prepare and/or review MOE Form 1s – *"Form 1 – Record of Watermains Authorized as a Future Alteration"* • Recommend changes to Drinking Water QMS
Supervisor Construction Projects	
Roles & Responsibilities	**Authorities**
• Administer in-house projects and oversee consultant administered projects, studies and plans • Attend project/site meetings; conduct field inspection and site supervision to ensure works are performed in accordance with contract documents, health & safety and legislative standards • Perform final inspection on primary and secondary servicing for private development • Review/approve/issue service connection permits • Promote the QMS throughout the utility	• Provide technical support to infrastructure projects • Consult on infrastructure works • Report construction/servicing deficiencies • Recommend changes to Drinking Water QMS

Appendix E, continued

Operational Roles, Responsibilities and Authorities

Technician (Infrastructure Asset Technician/Technologist & Infrastructure Technician/Technologist)	
Roles & Responsibilities	**Authorities**
• Assist with the design of municipal infrastructure projects • Assist with planning, layout and inspection of construction works • Collect, organize, record and retrieve engineering data • Create detailed engineering drawings for infrastructure projects • Maintain/update engineering/infrastructure databases, maps and drawings • Promote the QMS throughout the utility	• Provide technical support to infrastructure projects • Recommend changes to Drinking Water QM
Chief Building Official	
Roles & Responsibilities	**Authorities**
• Responsible for the enforcement of the Building Code and the issuance of any plumbing permits related to construction, maintenance or operation of any part of buildings and facilities served by the Town of Fort Erie's water works systems and sewer works systems, and for the inspection of work done under plumbing permits. • Assess each application for new water service connection to the Town of Fort Erie's water works system. Provide approval for the application inclusive of mandatory premise isolation through backflow device installation as may be required. • Promote the QMS through the utility	• Recommend changes to the Drinking Water QMS
Project Manager, Asset Management	
Roles & Responsibilities	**Authorities**
• Manage the assets by developing, implementing and sustaining asset management practices and processes • Lead the development and maintenance of the Town's 10+1 year rolling Capital Plan for the Infrastructure Services Department (Long Term Forecast of Major Infrastructure Maintenance, Rehabilitation and Renewal activities) • Promote the QMS throughout the utility	• Recommend changes to Drinking Water QMS

Appendix E, continued

Operational Roles, Responsibilities and Authorities

Project Manager, Development Engineering	
Roles & Responsibilities	**Authorities**
• Support development approval process by providing engineering and technical support in the review/approval of new developments • Provide project management of engineering construction works applicable to on-site development lands • Review/approve engineering drawings for proposed developments • Obtain completed MOE Form 1s – *"Form 1 – Record of Watermains Authorized as a Future Alteration"* for work related to developments • Administer IS-QMS-S001 – Notification to Contractors, for contractors working on the drinking water distribution system for work related to developments • Ensure GIS is updated as required for work related to developments	• Recommend changes to Drinking Water QMS
Water/Wastewater Technician	
Roles & Responsibilities	**Authorities**
• Monitor adherence to operational maintenance and repair standards and procedures • Organize and maintain specific water quality monitoring initiatives • Organize and conduct collection of samples; test and/or submit samples for testing • Oversee the care and calibration of analytical equipment • Conduct water quality site visits as directed or requested • Create and maintain databases and record management systems to document activities • Support maintenance of Drinking Water QMS, including QMS Document and Record Control Database • Assist in the development and mentoring of new Water and Wastewater Division staff • Perform regular and emergency system construction, inspection, maintenance, repair and operation • Promote the Drinking Water QMS throughout the utility • Post monthly and annual water quality reports to Town website	• Schedule sample collection and system flushing • Regularly monitor the system against quality parameters • Organize and coordinate remedial works in response to adverse sample results • Recommend changes to the Drinking Water QMS
Extraneous Flow Inspector	
Roles & Responsibilities	**Authorities**
• Perform regular and emergency system construction, inspection, maintenance, repair and operation • Promote the Drinking Water QMS throughout the utility • Assist with valve mapping program	• Monitor programs and equipment effectiveness • Recommend changes to the Drinking Water QMS

Appendix E, continued

Operational Roles, Responsibilities and Authorities

Water Meter Technician	
Roles & Responsibilities	**Authorities**
• Develop and maintain schedule for meter repairs • Prepare new meters and coordinate establishment of water meter accounts with Corporate Services, in consultation with Manager or Supervisor, Water and Wastewater Division and Manager, Revenues and Collections • Repair meters, fittings, remotes and attachments. Order and inventory parts and supplies • Relocate, adjust or replace outdated/damaged water meters and remote reading equipment • Develop and follow a work schedule for conducting water meter readings in consultation with the Manager, Water and Wastewater Division and Manager, Revenues and Collections • Investigate questionable meter readings • Develop and maintain schedule for conducting building control valve maintenance • Identify and report the existence and/or need for cross connection control on water service lateral connections • Continuously review and improve water meter services and procedures to identify and eliminate non-value-added processes and make recommendations to Manager, Water and Wastewater Division, Manager, Revenues and Collections and/or Chief Building Official • Perform regular and emergency system construction, inspection, maintenance, repair and operation • Promote the Drinking Water QMS throughout the utility	• Monitor programs and equipment effectiveness • Recommend changes to the Drinking Water QMS
Operators	
Roles & Responsibilities	**Authorities**
• Perform regular and emergency system construction, inspection, maintenance, repair and operation • Water quality sampling and monitoring • Report incidents of non-compliance to Supervisor Water and Wastewater Division or Manager, Water and Wastewater Division or designate • Ensure proper documentation • Assist in the development and mentoring of new Water and Wastewater Division staff • Promote the Drinking Water QMS throughout the utility	• Monitor programs and equipment effectiveness • Respond to customer enquiries • Recommend changes to the Drinking Water QMS

Appendix F

By-law 108-2014 to Adopt a Drinking Water QMS Policy

The Municipal Corporation of the Town of Fort Erie

BY-LAW NO. 108-2014

BEING A BY-LAW TO ADOPT A DRINKING WATER QUALITY MANAGEMENT SYSTEM POLICY FOR THE TOWN OF FORT ERIE

WHEREAS the *Safe Drinking Water Act, 2002* provides in part that every owner and accredited operational authority of a drinking water system shall adopt and maintain an Operational Plan consistent with the directions issued by the Ministry of Environment for its preparation and content, and

WHEREAS the directions issued by the Ministry provide in part, that every Operational Plan shall document a Quality Management System Policy, and

WHEREAS at the Regular Council Meeting held April 27, 2009 Council passed Resolution No. 16 and endorsed a Drinking Water Quality Management System Operational Plan ("the Plan") for the Town of Fort Erie, and

WHEREAS the Plan documents a Quality Management System Policy for the Town of Fort Erie, and

WHEREAS an internal audit of the Plan has identified an opportunity to improve the Plan by having Council adopt a separate, formal Water Quality Management System Policy re-affirming the Corporation's commitment to the delivery of safe drinking water to consumers, and

WHEREAS it is deemed desirable to adopt the Drinking Water Quality Management System Policy in the form of Schedule "A" attached to and forming part of this by-law;

NOW THEREFORE the Municipal Council of the Town of Fort Erie hereby enacts as follows:

1. **THAT** the Town of Fort Erie Drinking Water Quality Management System Policy in the form of Schedule "A" attached hereto and forming part of this by-law, be and it is hereby adopted.

Appendix F, continued

By-law 108-2014 to Adopt a Drinking Water QMS Policy

By-law No. 108-2014 **Page 2**

2. **THAT** pursuant to the provisions of Sections 23.1 to 23.5 inclusive of the *Municipal Act, 2001*, as amended, the Clerk of the Town of Fort Erie is hereby authorized to effect any minor modifications or corrections solely of an administrative, numerical, grammatical, semantical or descriptive nature or kind to this by-law or its schedules as such may be determined to be necessary after the passage of this by-law.

READ A FIRST, SECOND AND THIRD TIME AND FINALLY PASSED THIS 21ST DAY OF JULY, 2014.

MAYOR

CLERK

I, Carolyn J. Kett, the Clerk, of The Corporation of the Town of Fort Erie hereby certifies the foregoing to be a true certified copy of By-law No. 108-2014 of the said Town. Given under my hand and the seal of the said Corporation, this day of , 201 .

Appendix F, continued

By-law 108-2014 to Adopt a Drinking Water QMS Policy

Schedule "A" to By-law No. 108-2014

Town of Fort Erie Drinking Water Quality Management System Policy

Definitions

"Corporation" means The Corporation of the Town of Fort Erie

Background

The Corporation owns and operates a large municipal drinking water distribution system and has adopted a Quality Management System and an Operational Plan to guide system operation.

Purpose

This Policy affirms the Corporation's important commitment to the safety of its drinking water supply system and addresses obligations to comply with prevailing legislation. It reflects council's vision and corporate goals.

This Policy is the foundation upon which the Quality Management System and Operational Plan are grounded. It is put into practice through the dedication, support and participation of Corporation employees. Combined, the System, the Plan, this Policy and our People demonstrate a collective commitment to the operation, maintenance and continuous improvement of a safe drinking water system.

By adopting this Policy, Fort Erie consumers can be confident in the safety and quality of the Corporation's drinking water supply.

Policy

It is the Policy of the Corporation to;

i) Provide Fort Erie consumers with safe drinking water
ii) Comply with all applicable drinking water legislation and regulations
iii) Manage and operate the Town of Fort Erie Distribution System in a responsible manner in accordance with the Drinking Water Quality Management System, Operational Plan, policies and procedures
iv) Maintain and continually improve the Drinking Water Quality Management System
v) Communicate these commitments to all consumers, our employees and vendor partners