

# TOWN OF IROQUOIS FALLS DWQMS OPERATIONAL PLAN

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# **HISTORY OF CHANGES**

Revision	Date	Description	Ву
0	December, 2009	Original	M. Kearns
1	September, 2011	Minor Revisions	M. Kearns
2	June 2012	Multiple revisions	M. Kearns
3	September 2012	Multiple revisions	G.Guppy
4	November 2012	Multiple Revisions	G.Guppy
5	January 2013	Minor Revisions	G.Guppy
6	May 2013	Revised Process Flow Chart	G.Guppy
7	January 2015	General Revisions	J. Cyr
8	December 2015	Multiple Revisions	J. Cyr
9	November 2016	Minor Revisions	R. Mineault
10	December 2017	Minor Revisions	S.Poliquin
11	November 2018	Minor Revisions	L. Gagnon
12	January 2019	Update Endorsement	M. Chassé
13	October 2019	Update to Version 2.0	L. Gagnon
14	November 2020	Minor Revisions	L. Gagnon
15	September 2022	Add: New MGMT Commitment & Endorsement	L. Gagnon

# PART A

# INTRODUCTION

# **Purpose**

The purpose of this Operational Plan is to describe the comprehensive Drinking Water Quality Management Standard (DWQMS) developed and implemented by the Town of Iroquois Falls for the operation and maintenance of its drinking water systems.

This DWQMS Operational Plan addresses all components of the DWQMS.

# Scope

This Operational Plan covers the activities and personnel associated with all operational aspects of the drinking water systems for the Town of Iroquois Falls, identified by waterworks numbers 220005535 (Porquis Junction – Limited Groundwater System), 260005554 (Monteith Distribution System) and 220002556 (Iroquois Falls Water Treatment and Distribution Systems).

This Operational Plan, the procedures, work instructions and other DWQMS documentation that are referenced herein are complementary to the legislated requirements for safe drinking water in the Province of Ontario.

The Iroquois Falls Drinking Water system begins with Raw Well Water and progresses through the transmission mains to the treatment facilities and continues through the distribution system to the customer service lines and standpipe.

The Monteith Distribution System begins at the point where treated water enters the water main from the Monteith Correctional Facility treatment facilities, and ends at the property lines of the consumers.

The Porquis Junction Drinking Water System begins with raw well water that is treated and proceeds to the customer service connections and elevated storage tower.

### References

Drinking Water Quality Management Standard, February 2017

# Ontario Safe Drinking Water Act and associated Regulations

# **Definitions and Acronyms**

QMS - Quality Management System
DWQMS - Drinking Water Quality Management Standard
Distribution System - Watermains and related items (i.e. Hydrants, valves)
M³- Cubic Meter
MECP - Ministry of the Environment, Conservation and Parks
ORO - Overall Responsible Operator
Waterworks - Town of Iroquois Falls Waterworks Department
WTP - Water Treatment Plant
Booster Station - Water Treatment Plant

# PART B

# **OPERATIONAL PLAN**

# 1.0 Quality Management System

This Operational Plan describes the QMS which covers the drinking water system that is owned and operated by the Town of Iroquois Falls.

The Town of Iroquois Falls owns and operates a Drinking Water Treatment Facility and Distribution system servicing the urbanized area of Iroquois Falls, a Limited Groundwater system servicing the Village of Porquis Junction and a distribution system servicing the Village of Monteith.

The Town of Iroquois Falls receives treated water from the Monteith Correctional Facility to service the Village of Monteith.

# 2.0 Quality Management System Policy

The Town of Iroquois Falls has developed and documented a Quality Management System Policy.

The policy shall serve as the foundation for the Town of Iroquois Falls' Drinking Water Quality Management System. It will be in a form that can be communicated to all Operating Authority personnel, the Owner and the public. It can be found posted at the Public Works Building and on the Town's website

The policy addresses the following minimum requirements:

- Includes a commitment to the maintenance and continual improvement of the Quality Management System;
- Includes a commitment to the consumer to provide safe drinking water;
- Includes a commitment to comply with applicable legislation and regulations.



# Town of Iroquois Falls Quality Management System

# **POLICY**

The Town of Iroquois Falls is committed to operating our drinking water systems by establishing, maintaining and continually improving its Drinking Water Quality Management System to provide its customers effective, safe and sustainable drinking water at all times.

Consumer confidence in the drinking water quality will be achieved through a proactive approach to meet or exceed applicable drinking water legislation, regulations and standards.

Drinking water quality is ensured by a comprehensive risk-based process control system that is staffed by competent and dedicated employees who are committed to providing reliable, safe drinking water to the communities of Iroquois Falls, the Village of Porquis Junction and the Village of Monteith.

# 3.0 Commitment and Endorsement

This Operational Plan supports the overall goal of the Town of Iroquois Falls to provide safe drinking water.

The Town of Iroquois Falls Water Works department is responsible for developing, implementing, maintaining and continually improving its QMS and will do so in a manner that ensures compliance with applicable legislation. Through the endorsement of this Operational Plan, Top Management commits to supporting the Town of Iroquois Falls Water Works Department to facilitate this goal.

Top Management have approved the QMS for the drinking water system as documented in this Operational Plan.

Signed by all parties on Monday October 18, 2021

Osei Bosompem Chief Administrative Officer Kim Lauzon Clerk / Deputy CAO

Goel Cyr Director of Public Works Richard Mineault O.R.O. / Waterworks Supervisor

The owners (Mayor and Council) endorsement of the Operational Plan shall be demonstrated by a copy of the council meeting minutes where the operational plan is accepted and endorsed.

# **4.0 Quality Management System Representative**

Louis Gagnon, water and wastewater operator for the Town of Iroquois Falls was appointed to the role of the Quality Management System Representative (QMS).

As the QMS Representative, Louis Gagnon has the responsibility and authority to:

- Ensure that the processes and procedures required by the DWQMS are established, implemented and maintained;
- Ensure that the most current version of documents required by the DWQMS are in use at all times;
- Ensure that all personnel are aware of all applicable current legislative and regulatory requirements within the operation of the drinking water system;
- Ensure the promotion of awareness and the effectiveness of the DWQMS throughout the operating authority;
- Report to Top Management on the performance of the QMS and any need for improvement;

**Note:** The Waterworks Supervisor is designated as an alternate QMS Representative.

# **5.0 Document and Record Control**

# **Purpose**

The purpose of this procedure is to describe the method used for the control of documents and records for the Town of Iroquois Falls Waterworks Department. Proper maintenance of documents and records is critical for conformance with the DWQMS and for compliance with drinking water legislation.

# Scope

This procedure is applicable to all data and documentation used or generated during the operations and management of the water treatment and distribution systems.

# General

Effective control of the issue and changes to data and documentation is essential to DWQMS. Therefore the QMS Representative will implement and maintain a system that exercises these controls throughout the water treatment and distribution process. Current versions of documents will be made available at all locations where operations affecting the drinking water system are performed.

# **Documents** in the scope of this procedure are:

- Operational Plan
- Drinking Water Policy
- Standard Operating Procedures relating to the DWQMS
- WTP Operator and Maintenance Manual
- WTP Emergency Response Plans
- WTP and Water Distribution Forms
- Training material for DWOMS
- Water Treatment Process Schematic

# **Records** in the scope of this procedure are:

- Operator Certificates
- Certificate of Approval (Licenses and Permits)
- Laboratory testing results (Internal and External)
- Monitoring records
- Legislative Regulations
- Associated meeting minutes
- Operator log book

# **Related Documents**

Drinking Water Quality Management Standard - Element 5 SOP# IFDWQMS-05 Document and Record Control

# 6.0 Drinking-Water System

# **Purpose**

The purpose of this procedure is to describe the drinking water systems owned and operated by the Town of Iroquois Falls in the Town of Iroquois Falls, and the Villages of Porquis Junction and Monteith. This outline documents a description of the drinking water systems as prescribed by the DWQMS.

# Scope

The Town of Iroquois Falls owns and operates the Class 1 Treatment Subsystem and class 1 Distribution Subsystem, including the treatment plant, storage and pumping facilities, trunk and distribution water mains, appurtenances and individual water services up to the private property line in the Town of Iroquois Falls.

Additionally the Town of Iroquois Falls also owns and operates the municipal Limited Groundwater system, including the treatment facility, storage and pumping facilities, distribution water mains, appurtenances and individual water services up to the private property line in the Village of Porquis Junction.

The final system owned and operated by the Town of Iroquois Falls is the class 1 Distribution Subsystem including distribution water mains, appurtenances and individual water services up to the private property line in the Village of Monteith. This system receives water from the Treatment Facility serving the Monteith Correctional Facility, owned by Ontario Realty Corporation and operated by the Ontario Clean Water Agency.

# **Responsibilities and Authorities**

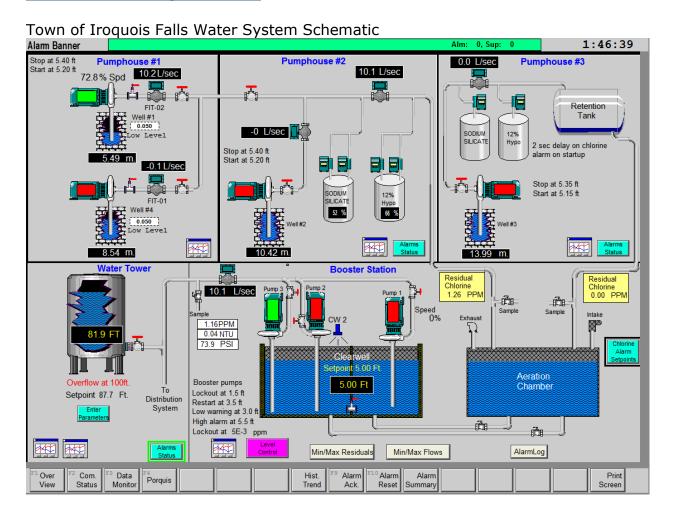
It is the responsibility of the QMS Representative to ensure that this procedure is kept up-to-date. Any changes to the drinking water system must be changed in accordance with the document control procedures shown in section 5.0 of this Operational Plan.

# **Related Documents**

Drinking Water Quality Management Standard – Element 6 Operational Plan – 5.0 Document and Records Control

### **Procedure**

# 6.1 Town of Iroquois Falls



# **6.1.1 Water Treatment Plant**

The water treatment plant (WTP) (Booster) is located at 1771 Hwy #67 in the Town of Iroquois Falls. The current system began producing water in 1988. The Water Treatment Plant consists of a washroom, a pump room, testing area, and an office/ storage area. An aeration chamber (methane stripping) and two clearwells (#1 clearwell is also an aeration chamber used during maintenance) are located below the main floor of the booster station. The Pump room contains three high lift pumps which send treated water into the distribution system.

The current rated capacity of the plant is 53 L/s. The Permit to Take Water (PTTW) currently authorizes water taking at a total of 58.3L/s. This water system utilizes sodium silicate for iron and manganese sequestration,

sodium hypochlorite for primary and secondary disinfection and employs stripping for the removal of dissolved methane.

# **6.1.2 Water Storage Tanks and Reservoirs**

Treated water is stored in an elevated storage tank located near Anson Drive in the Town of Iroquois Falls. Storage is used to supplement supply during times of high water demand and in emergency situations such as firefighting. The water storage capacity in the storage tank is 3883 m<sup>3</sup>.

# 6.1.3 Water Distribution Piping System

The water distribution system serves a population of approximately 4500, which includes approximately 1600 individual water services. The system consists of a total of 32.8 km of piping made up of ductile iron, cast iron, PVC and asbestos cement. Within the system there are approximately 140 fire hydrants, 220 mainline valves and 7 air releases.

# 6.1.4 Monitoring

The following parameters are monitored on a continuous basis at the WTP:

- Treated Water Flow
- Raw water flow
- Turbidity
- Chlorine residuals
- Pressure
- Water storage level

# 6.1.5 Raw water Supply

The raw water supply for the Iroquois Falls Water Treatment Plant is groundwater obtained from a combination of 4 production wells. The Monteith road pump house contains Well #1 and Well #4. The water is pumped to the Brousseau Road pump house where it combines with the raw water from Well #2. At this point sodium hypochlorite and sodium silicate is added.

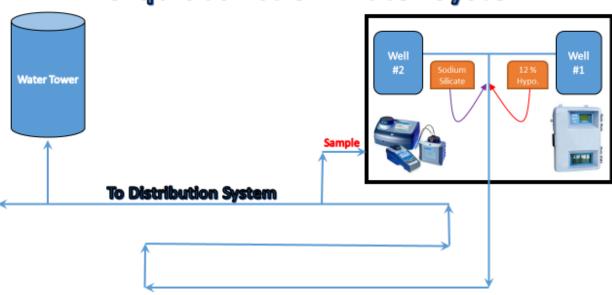
Raw water from Well #3 is pumped as needed and sodium hypochlorite and sodium silicate is added in the Well #3 pump house.

Typical characteristics of the raw water include stable levels of pH, iron, manganese and no indication of microbiological contamination. This system

does not experience common event driven fluctuations and as such does not experience operational challenges or threats.

# **6.2 Porquis Junction**

# **Porquis Junction Water System**



# **6.2.1 Water Production Facility**

The current rated capacity of the facility is 388 m³/day. The PTTW currently authorizes water taking at 4.5 L/s. Water is drawn from two production wells and then sodium silicate is added for iron and manganese sequestration and sodium hypochlorite is added for primary and secondary disinfection.

# 6.2.2 Water Storage Tank

Treated water is stored at an elevated storage tank located on Edward Street in Porquis Junction. The standpipe has a recirculation pump providing mixing that maintains adequate secondary disinfection levels in the distribution system. Storage is used to supplement supply during times of high water demand and in emergency situations such as firefighting. The water storage capacity in the storage tank is 409 m<sup>3</sup>.

# 6.2.3 Water Distribution Piping System

The water distribution system serves a population of 50. The water distribution system consists of a total of 3.3km of piping made of PVC with sizes ranging from 150 mm to 250 mm, 5 air releases, 13 main line valves and 11 fire hydrants in service.

# 6.2.4 Monitoring

The following parameters are monitored on a continuous basis at the WTP:

- Flow
- Turbidity
- Chlorine residuals
- Water Storage levels

# 6.2.5 Raw Water Supply

Typical Characteristics of the raw water include stable levels of pH, iron, manganese and no indication of microbiological contamination. This system does not experience common event driven fluctuations and as such does not experience operational challenges or threats.

# 6.2.6 Critical Upstream/Downstream processes

None

# **6.3 Monteith**



# 6.3.1 Water Distribution Piping System

The water distribution system serves a population of 40. The system consists of a total of 1.3 km of piping made up of ductile iron, cast iron and PVC with 26 individual water services, 5 main line valves and 8 fire hydrants.

# 6.3.2 Monitoring

Distribution residuals are monitored in accordance with regulatory requirements and SOP# IFDWQMS-16 Sampling and Monitoring

# 6.3.3 Water Supply

Monteith is a standalone water distribution system which receives all water from the Monteith Correctional Complex Drinking Water System (Drinking Water System #230000138) which is owned by Ontario Realty Corporation and is operated by Ontario Clean Water Agency. Water is supplied from GUDI wells and is processed through the correctional facilities water treatment processes. Received water typically has stable levels of pH, iron, manganese and no indication of microbiological contamination. This system does not experience common event driven fluctuations and as such does not experience operational challenges or threats.

# 6.3.4 Critical Upstream/Downstream processes

Regulated water treatment facility at the Monteith correctional Facility.

# **Related Documents**

Drinking Water Quality Management Standard – Element 16 SOP# IFDWQMS-16 Sampling and Monitoring

# 7.0 Risk Assessment Procedure

# **Purpose**

The purpose of the risk assessment procedure is to describe the method used to analyze risks associated with the drinking water system and the items listed in the Ministry of the Environment and Climate Change Document titled Potential Hazardous Events for Municipal Residential Drinking Water Systems. This includes a process-based system for risk identification and risk assessment, Critical Control Point (CCP) and CCP threshold limits.

# Scope

This procedure is applicable to the risk identification, risk assessment and CCP's in the drinking water systems including treatment, storage, pumping and distribution.

# **Related Document**

Drinking Water Quality Management Standard - Element 7 SOP# IFDWQMS-07 Risk Assessment Appendix 1

### **Procedure**

The Risk Assessment Procedure is outlined in detail in SOP# IFDWQMS-07 Risk Assessment

# **8.0 Risk Assessment Outcomes Procedure**

# **Purpose**

The purpose of this procedure is to detail the outcomes from the risk analysis procedure in section 7.0 of this Operational Plan. The results include a list of ranked hazards with appropriate control measures, CCP's, control limits for CCP's, monitoring methods and method used for recoding and reporting deviation from CCP limits.

# Scope

This procedure is applicable to the risks identified by the risk analysis process as outlined in section 7.0 of this Operational Plan, which covers the drinking water systems including treatment, storage, pumping and distribution.

### **Related Documents**

Drinking Water Quality Management Standard - Element 8 SOP# IFDWQMS-07 Risk Assessment SOP# IFDWOMS-07.01 Critical Control Point

# 9.0 Organizational Structure, Roles, Responsibilities and Authorities

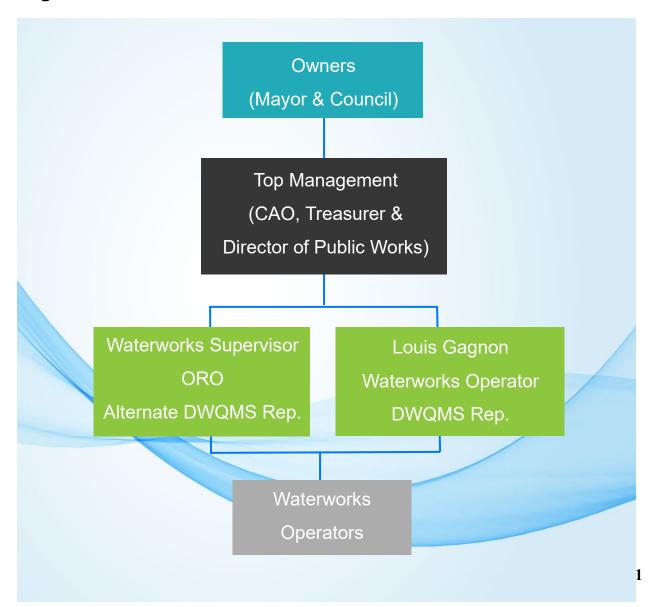
# **Purpose**

The purpose of this procedure is to outline the organizational structure of the drinking water system. It is also to define the roles, responsibilities and authorities used to ensure the drinking water system is adequate.

# Scope

This procedure is applicable to the outlined roles and responsibilities within the Operational Plan governed by the DWQMS. This covers the entire water treatment and distribution process.

# **Organizational Structure**



# **MAYOR AND COUNCIL**

Responsibilities	Authorities
Complete oversight of drinking	Financial and Administrative
water systems, endorse and	authority related to the provision
support the DWQMS	of safe drinking water
Overall responsibility for the	
provision of safe drinking water	
Ensure compliance with all	
applicable legislation	
Endorse and support the DWQMS	

# **CAO and/or TREASURER**

Responsibilities	Authorities
•	Financial Authority related to the
of the DWQMS	preparation of the budget
Preparation of budget information	
Collection of user fees for water	
systems	
Endorse and support DWQMS	

# **DIRECTOR OF PUBLIC WORKS**

Responsibilities	Authorities
Complete oversight and	Financial and administrative
operational responsibility for all	authority related to the provision
water systems	of safe drinking water.
Communicate with Mayor and	Waterworks Supervisor
Council regarding system	
operations and DWQMS	
Carry out activities and manage	Overall responsible operator for all
programs related to the drinking	systems
water systems	
Endorse and support the DWQMS	Staffing recommendations
Ensure availability of resources for	Operational and capital purchase in
the DWQMS, infrastructure and	accordance with the municipal
operation and maintenance of all	purchasing policy
systems.	

Lead for communications	Administering and maintaining the
regarding system operations and	DWQMS
emergencies	
Ensuring regulatory compliance	
Preparation of budget	
Assessment of personnel	
performance	
Lead for management reviews	

# **WATERWORKS SUPERVISOR**

Responsibilities	Authorities
Emergency response planning	Operational and capital purchase in accordance with the municipal purchasing policy
Schedule and oversee day to day operations involving water systems	
Report and respond to non- compliance issues	
Assessment of operators performance	
Ensure systems operate in compliance with all relevant legislation	
Overall Responsible Operator	
Designated as the Alternate DWQMS Representative	

# **DWQMS** Representative

Responsibilities	Authorities
Lead all aspects of the Operational	
plan and DWQMS	
Lead the yearly Overview	
meeting, including the agenda and	
meeting minutes	
Lead the yearly Internal Audit and	
make all necessary changes to the	
DWQMS	
Assist in external Audits, review	
the findings and make necessary	
changes	

Assist with management meetings which relate to the DWQMS (Risk Assessment/Infrastructure/MGMT review)	
Assist with Emergency response planning	
Ensure that all parties are aware of any changes to the DWQMS	

# **WATERWORKS OPERATORS**

Responsibilities	Authorities
Monitor, maintain and operate all	Monitor and adjust processes in
drinking water systems in	conjunction with the operator in
accordance with operation	charge.
manuals and relevant legislation	
Document all activities in relevant	Recommend corrective actions or
facility logs for all drinking water	preventative actions
systems	
Report and act on all incidents of	Recommend changes to the
non-compliance	DWQMS
Report to waterworks supervisor	Respond to and document public
and act on all abnormal operating	complaints
conditions	
Carry out duties and tasks as	
assigned by the waterworks	
supervisor or designate in	
accordance with established	
policies and procedures.	

# **Related Documents**

Drinking Water Quality Management Standard - Element 9 SOP# IFDWQMS-11 Personnel Coverage

# **10.0 Competencies**

# **Purpose**

The purpose of this procedure is to describe the competencies of personnel whose job activities directly affect the quality of the drinking water.

# Scope

This procedure applies to the personnel identified by this procedure as personnel whose job can directly affect the quality of the drinking water of the Town of Iroquois Falls and the Villages of Porquis Junction and Monteith.

# **Related Documents**

Drinking Water Quality Management Standard - Element 10 SOP# IFDWQMS-10 Satisfying Competencies SOP# IFDWQMS-11 Personnel Coverage

# **Procedure**

The following personnel perform duties that directly affect the quality of the drinking water. The competencies are described in SOP# IFDWQMS-10 Satisfying Competencies

- Water Distribution Level I/Treatment Plant Operator Level I
- Waterworks Supervisor
- Director of Public Works
- 10.1 Satisfying competencies
- 10.1.1 The detailed procedure describing competencies for employees whose job directly affects the drinking water is outlined in SOP# IFDWQMS 10 Satisfying Competencies

# 11.0 Personnel Coverage

# **Purpose**

The purpose of this procedure is to document the practice used within the Waterworks Department to ensure that sufficient personnel meeting the outline competencies in section 10 are available to perform duties that directly affect the drinking water quality system.

# Scope

This procedure applies to the waterworks department for the Town of Iroquois Falls

# General

The Town of Iroquois Falls employs certified operators, all of whom are required to have and maintain provincial certifications (distribution and treatment) according to the Certification of Drinking Water System Operators and Water Quality Analysts (O. Reg. 128/04).

Call out for additional staff to cover emergency or sick time is done as per the Waterworks department on-call schedule.

# **Related Documents**

Drinking Water Quality Management Standard - Element 11 Operational Plan - 10.0 Competencies SOP# IFDWQMS-11 Personnel Coverage

# **Procedure**

The detailed procedure to ensure that sufficient competent personnel are available for duties that directly affect drinking water is contained in SOP# IFDWQMS-11 Personnel Coverage

# **Collective Agreement**

Employment within the waterworks department is according to the terms and conditions of a collective agreement between the Town of Iroquois Falls and CUPE Local 259. During a strike/lock-out, certified and competent management personnel will be required to run the facilities.

# **12.0 Communication**

# **Purpose**

The purpose of this procedure is to identify the method for communicating the Quality Management System to all stakeholders.

# Scope

The procedure applies to the communication of relevant aspects of the Operational Plan between Top Management, the Owner, Operating Authority Personnel, suppliers (which have been identified as essential under Element 13) and the public.

# **Related Documents**

Drinking Water Quality Management Standard – Element 12 SOP# IFDWQMS-12 Communication

The communication procedure is outline in detail in the SOP# IFDWQMS-12 Communication

# 13.0 Essential Supplies and Services

# **Purpose**

The purpose of this procedure is to identify essential suppliers and services that may affect quality of drinking water and to ensure availability of those supplies and services.

# Scope

This procedure applies to the essential supplies and services.

# **Related Documents**

Drinking Water Quality Management Standard – Element 13 SOP# IFDWQMS-13 Essential Supplies and Services SOP#IFDWQMS-13.01 Chemical Deliveries to the WTP

### **Procedure**

The procedure by which the Waterworks Department ensures the quality and availability of essential supplies and services is outlined in SOP# IFDWQMS-13 Essential Supplies and Services

# **14.0 Review and Provision of Infrastructure**

# **Purpose**

The purpose of this procedure is to outline the method used by the Town of Iroquois Falls to review, at least once every calendar year, the infrastructure of the drinking water systems for the Town of Iroquois Falls and the Villages of Monteith and Porquis Junction. This review shall take into consideration the outcomes of the risk assessment document under element 8 and shall also determine if the infrastructure is adequate to operate and maintain the drinking water systems.

# Scope

This procedure applies to the infrastructure relating to the provision of safe drinking water.

The infrastructure is reviewed once every calendar year during the management review process outlined in Section 20 of this Operational Plan, additional details on the review and provision of infrastructure are provided in SOP# IFDWQMS-14 Infrastructure.

# **Related Documents**

Drinking Water Quality Management Standard - Element 14 Operation Plan - 20.0 Management Review SOP# IFDWQMS-14 Infrastructure Procedure

# 15.0 Infrastructure Maintenance, Rehabilitation and Renewal

# **Purpose**

The purpose of this procedure is to summarize the infrastructure capital program used by the Town of Iroquois Falls in order to maintain the drinking water system's infrastructure maintenance, rehabilitation and renewal programs for the Town of Iroquois Falls, Village of Monteith and the Village of Porquis Junction drinking water systems.

# Scope

This procedure applies to the maintenance, rehabilitation and renewal of infrastructure related to the provision of safe drinking water. This procedure also applies to the long term forecast of major infrastructure maintenance, rehabilitation and renewal activities.

### **Procedure**

A summary of the Town of Iroquois Falls, Waterworks Department infrastructure maintenance program of rehabilitation and renewal is described in SOP# IFDWQMS-14 Infrastructure. A detailed list of all Infrastructure and Equipment, along with a forecast for maintenance, rehabilitation and renewal can be found in Appendix 3.

The maintenance of equipment within the municipality is completed as stated in the operations manuals.

Unplanned maintenance is conducted as required and is completed by certified operators under the direction of the OIC and /or ORO. All maintenance is completed in accordance with regulations and AWWA standards.

The effectiveness of maintenance programs will be monitored during management review meetings using water quality data, usage, frequency of complaints, frequency of infrastructure failures and any other relevant criteria or information.

# **Related Documents**

Drinking Water Quality Management Standard - Element 15 SOP# IFDWQMS-14 Infrastructure Appendix 3 Infrastructure & Equipment Maintenance, Rehabilitation and Renewal Forecast Systems Operations Manuals

# 16.0 Sampling, Testing and Monitoring

# **Purpose**

The purpose of the following procedure is to describe the sampling, monitoring and testing activities for the treatment and distribution system to ensure compliance to applicable drinking water legislation and for the provision of safe drinking water.

# Scope

This procedure is applicable to the water treatment plant and water distribution operations.

### **Related Documents**

Drinking Water Quality Management Standard – Element 16 Water Treatment Plant Operation and Maintenance Manual SOP# IFDWQMS-16 Sampling and Monitoring SOP# IFDWQMS-16.01 Adverse Water Quality Incidents

# **Procedure**

The procedure developed to meet the requirements of Element 16; Sampling, Testing and Monitoring are described in SOP# IFDWQMS-16 Sampling and Monitoring.

The Monteith Distribution system is strictly a receiver system that obtains water from the Monteith correctional complex well supply system. This system is a small municipal residential system that is owned by Ontario Realty Corporation and operated by the Ontario Clean Water Agency. OCWA operates the system in accordance with all applicable legislation and provides the municipality with both annual and summary reports. Any adverse test results are to be conveyed to the Town of Iroquois Falls in accordance with any and all relevant legislation

# 17.0 Measurement & Recording Equipment Calibration Maintenance

# **Purpose**

The purpose of this procedure is to describe the process used to calibrate and maintain measuring and recording devices used within the water treatment process.

# Scope

This procedure is applicable to the measuring and recording devices used by the Water Treatment Plant for monitoring of raw, in-process and potable drinking water from wells, through treatment, storage, pumping and distribution.

# **Related Documents**

Drinking Water Quality Management Standard – Element 17 SOP# IFDWQMS-16 Sampling and Monitoring Instrumentation Manuals

# **Procedure**

The procedure that describes activities for the calibration and maintenance of measurement and recording equipment is outlined in SOP# IFDWQMS-17 Calibration and Maintenance

# **18.0 Emergency Management**

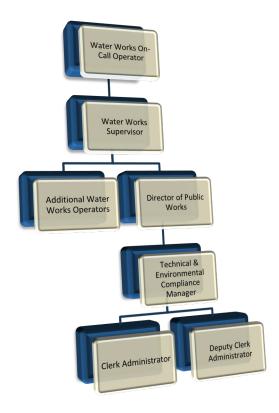
# **Purpose**

The purpose of this procedure is to describe the process to maintain a state of emergency preparedness for the drinking water system.

# Scope

This procedure shall include all potential emergency situations or service interruptions for the water treatment and water distribution system for the Town of Iroquois Falls and the Villages of Monteith and Porquis Junction.

# **Emergency Communications Protocol**



# **Related Documents**

Drinking Water Quality Management Standard – Element 18 SOP# IFDWQMS-18 Emergency Preparedness and Response

# 19.0 Internal Audit

# **Purpose**

The purpose of the Internal Audit procedure is to describe the method used by the Waterworks Department to verify conformance to the Operational Plan and to the Drinking Water Quality Management Standard.

Internal auditing is a tool to be used to be proactive and continually improve the water quality management system.

# Scope

This procedure is applicable to the Town of Iroquois Falls Drinking Water System operations that are described within this Operational Plan.

# **Related Documents**

Drinking Water Quality Management Standard – Element 19 Operational Plan – 21.0 Continual Improvement SOP# IFDWQMS-19 Internal Audit

### **Procedure**

The Internal Audit Procedure is outline in detail in the SOP# IFDWQMS-19 Internal Audit

# **20.0 Management Review**

# **Purpose**

The purpose of this Management Review Procedure is to outline the method used by the Town of Iroquois Falls to evaluate the continuing suitability, adequacy and effectiveness of the Drinking Water Quality Management System.

# Scope

The scope of this procedure includes management activities, water treatment plant operations and water distribution activities identified in the Operational Plan.

# **Responsibilities and Authorities**

The DWQMS Representative is responsible to the CAO of the Town of Iroquois Falls for ensuring that detailed and comprehensive reviews are carried out in accordance with this procedure.

The DWQMS Representative is responsible for ensuring that the necessary documentation and records are maintained and made available for review by Management. The DWQMS Representative is responsible to communicate the results of the Management Review to Top Management and the Owner.

# **Related Documents**

Drinking Water Quality Management Standard – Element 20 Operational Plan – 21.0 Continual Improvement SOP# IFDWQMS-20 Management Review

### **Procedure**

The Management Review procedure is outlined in detail in the SOP# IFDWQMS-20 Management Review

# **21.0 Continual Improvement**

# **Purpose**

The purpose of this procedure is to describe the system used by the Town of Iroquois Falls to continually improve the effectiveness of the DWQMS by tracking and measuring continual improvement of its quality management system.

# Scope

This procedure applies to the correction of actual or potential nonconformities in the drinking water QMS, or other systemic problems affecting the drinking water quality.

### **Related Documents**

Drinking Water Quality Management Standard – Element 21 SOP# IFDWQMS-21 Continual Improvement Corrective Action Request (Form 09-07)

# **Procedure**

The corrective action (Continual Improvement) procedure is outline in detail in the SOP# IFDWQMS-21 Continual Improvement