



# OPERATIONAL PLAN

## For the Mississippi Mills Water System – Distribution System

Owned by the *Corporation of the Municipality of Mississippi Mills*  
Operated by The Roads and Public Works Department

Revision 0, 21 Sept 2009  
Revision 1, 20 Sept 2010  
Revision 2, 14 Dec 2011  
Revision 3, 22 Dec 2011  
Revision 4, 19 Nov 2012  
Revision 5, 19 Dec 2012  
Revision 6, 29 Jan 2013  
Revision 7, 4 Nov 2013  
Revision 8, 17 Dec 2013  
Revision 9, 15 Aug 2014  
Revision 10, 2 Dec 2014  
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Revision 13, 6 Dec 2018  
Revision 14, 11 Dec 2018  
Revision 15, 25 Feb 2021  
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## **DISCLAIMER STATEMENT**

This Operational Plan is designed for the exclusive use of Corporation of the Municipality of Mississippi Mills.

This Operational Plan has been developed with OCWA's assistance.

Any use which a third party makes of this Operational Plan, or any part thereof, or any reliance on or decisions made based on information within it, is the responsibility of such third parties. OCWA and The Municipality of Mississippi Mills accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions taken based on this Operational Plan or any part thereof.

## **OPERATIONAL PLAN REVISION HISTORY**

See Appendix N

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# **1 Corporation of the Municipality of Mississippi Mills' Quality Management System (QMS)**

This Operational Plan defines and documents the Quality Management System (QMS) for the Mississippi Mills Drinking Water System - Distribution System owned by Corporation of the Municipality of Mississippi Mills and operated by Corporation of the Municipality of Mississippi Mills. It sets out Corporation of the Municipality of Mississippi Mills' policies and procedures with respect to quality management in accordance with the requirements of the Province of Ontario's Drinking Water Quality Management Standard (DWQMS).

The QMS for the Corporation of the Municipality of Mississippi Mills covers the transmission and distribution of potable drinking water to the consumers within the Almonte Ward of the Municipality of Mississippi Mills.

The Municipality of Mississippi Mills supplies potable drinking water to the Almonte Ward with the municipal well system.

## 2 Quality Management System (QMS) Policy

The Roads and Public Works Department, its Management and entire staff are committed to the principles and objectives set out in our Quality Management System (QMS) Policy.

The Roads and Public Works Department's Policy is to:

- Meet all regulatory requirements to supply consumers with safe drinking water
- Maintain and continuously improving its quality management system
- Ensure policy is in a form that will be easy to communicate to owner, public and staff
- Is appropriate for the size and type of drinking water system
- A commitment to comply with applicable legislation

Our Management and entire staff will act to ensure the implementation of this Policy and will monitor progress of the Quality Management System (QMS).

### 3 Commitment & Endorsement

This Operational Plan supports the overall goal of the Roads and Public Works Department and the Corporation of the Municipality of Mississippi Mills to provide a reliable and safe drinking water supply. The Roads and Public Works Department will be responsible for developing, implementing, maintaining and continually improving its QMS with respect to the operation and maintenance of the Mississippi Mills Drinking Water System - Distribution System and will do so in a manner that ensures compliance with applicable legislation.

The Roads and Public Works Department will be responsible for operating and maintaining the distribution system.

Through the endorsement of this Operational Plan, the Corporation of the Municipality of Mississippi Mills commits to cooperating in any reasonable request by the Roads and Public Works Department to facilitate this goal.

Top management of the Roads and Public Works Department and the Corporation of the Municipality of Mississippi Mills has approved the QMS for the drinking water system as documented in this Operational Plan.

#### Operating Authority Approval

\_\_\_\_\_  
*Cory Smith*  
*A/Director of Roads and*  
*Public Works*

\_\_\_\_\_  
Date

\_\_\_\_\_  
*Ken Kelly*  
CAO

\_\_\_\_\_  
Date

#### Owner Endorsement & Approval

\_\_\_\_\_  
*Christa Lowry*  
Mayor

\_\_\_\_\_  
Date

\_\_\_\_\_  
*Cynthia Moyle*  
A/Clerk

\_\_\_\_\_  
Date

## 4 Quality Management System Representative

All personnel have a role and associated responsibilities within the Roads and Public Works Department's QMS.

The role of the QMS Representative for the Mississippi Mills Drinking Water System - Distribution System is fulfilled by the Environmental Compliance Coordinator. The Director of Roads and Public Works is the alternate QMS Representative.

The Director of Roads and Public Works is ultimately responsible for activities related to the operation of the drinking water system and for establishing and maintaining processes and procedures required for the overall administration of the facility's QMS.

To assist in fulfilling the specific duties set out for the QMS Representatives, the Environmental Compliance Coordinator is responsible for:

- Reporting on QMS performance and identifying opportunities for improvement,
- Ensuring that current versions of documents related to the QMS are in use

Both the Director of Roads and Public Works and the Environmental Compliance Coordinator are responsible for ensuring personnel are aware of all applicable legislative and regulatory requirements that pertain to their operational duties and promoting awareness of the QMS to all facility personnel.

To assist in fulfilling the specific duties set out for the QMS Representative, the Roads and Public Works Administrative Assistant is responsible for:

- Ensuring all documents are updated and current

## 5 Document and Records Control

Refer to Appendix A for QMS Procedure MMQMS-1 Document and Records Control.

## 6 Drinking-Water Distribution System

### 6.1 Owner/Operating Authority

The Corporation of the Municipality of Mississippi Mills is the Owner of the Mississippi Mills Drinking Water System - Distribution System. The Mississippi Mills Drinking Water System - Distribution System is broken into two separate sub-systems with two separate Operating Authorities.

The Municipality of Mississippi Mills is the Operating Authority for the Distribution System which is subject to the requirements of this Operational Plan (178-401A).

The Ontario Clean Water agency is the Operating Authority for the Well Supply which are subject to a separate Operational Plan (178-401B).

### 6.2 System Description

#### Raw Water Supply, Treatment, and Storage

The Mississippi Mills Drinking Water System (Distribution System) – Distribution System is supplied with raw water from five groundwater wells located throughout the Ward of Almonte. Well





3 is located in the eastern portion of Almonte, approximately 60m north of Ottawa Street and Harold Street. Well 5 is located along Almonte Street (County Road 17) near the southwest of Almonte. Well 6 is located in Gemmill Park in the south end of Town, immediately east of Highway 29. Wells 7 and 8 are located in a single pump house near the northeast edge of Town, along the north side of Paterson Street. Disinfection for raw water is achieved through injection of 12% sodium hypochlorite into the feeder main prior to the treated water being discharged into a chlorine contact chamber on each site. The Ontario Clean Water Agency is the Operating Authority for all raw water supply and water treatment facilities, including a 2.8ML storage tower facility located at the site of wells 7 and 8 on Paterson Street and a 2.5ML storage reservoir located at the site of Well 5 on Almonte Street.

#### Raw Water Characteristics at Intake (based on 2021 data)

Characteristic	Well # 3		Well # 5		Well # 6		Well # 7		Well # 8	
	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
E. Coli (CFU/100mL)	0	0	0	0	0	0	0	0	0	0
Total Coliforms (CFU/100mL)	0	0	0	0	0	20	0	0	0	1

Characteristic	Well # 3	Well # 5	Well # 6	Well # 7	Well # 8
	Range (min-max)	Range (min-max)	Range (min-max)	Range (min-max)	Range (min-max)
Turbidity (NTU)	0.06 – 0.57	0.1 – 0.66	0.03 – 2.83	0.02 – 2.00	0.01 – 2.00

Well # 6 has been determined to not be GUDI.

#### Distribution System

The Distribution System for the Almonte Ward services an estimated population of 6879. The system is comprised of approximately 50km of watermains which have diameters of 450mm or smaller. Water meters are installed at all residential, commercial and industrial premises. Water meters are read every two months and users are charged based on consumption.

### **6.3 Process Flow Chart**

Please refer to Appendix “M” for the Mississippi Mills Drinking Water System - Distribution System - Distribution System Map.

### **6.4 Upstream and Downstream Processes Outside of Our Control**

The water supplied from the Mississippi Mills Drinking Water System - Distribution System – Well Supply has sufficient chlorine to ensure that the regulatory requirements for chlorine residual are met within the distribution system.

The Ontario Clean Water Agency undertakes on behalf of the Municipality of Mississippi Mills all required sampling throughout the distribution system to ensure treated water meets mandatory and recommended drinking water quality standards.

### **6.5 Connections to Other Drinking-Water Systems**

No other drinking water systems are supplied from this system.

## **6.6 Monitoring and Management**

The Municipality of Mississippi Mills requires water metering for all residential, commercial and industrial premises. The Municipality of Mississippi Mills monitors system water loss through in-house staff and outside consultants. The Municipality also monitors water losses through review of leak detection reports produced under the smart meter program.

System pressures range from 45psi to 80psi and water operators confirm this range periodically. The Municipality has two pressure zones with a small section controlled with pressure reducing valves. If the pressure reducing valves were not in operation in this section of The Municipality the water pressure would reach peaks as high as 100psi.

## **6.7 Operational Challenges**

Operational challenges include aging infrastructure as the Municipality has had municipal services for over 100 years and many of these services need to be replaced. The biofilm and tuberculation have not been an issue in the distribution system. The Municipality has undertaken a Lead Sampling program and has not had any volume of exceedances that would trigger the need for a corrosion control plan.

## **7 Risk Assessment**

Refer to Appendix B for QMS Procedure MMQMS-2 Risk Assessment and Risk Assessment Outcomes.

## **8 Risk Assessment Outcome**

Refer to Appendix B for Summary of Risk Assessment Outcomes.

## **9 Organizational Structure, Roles, Responsibilities, and Authorities**

The Director of Roads and Public Works (alternative QMS Representative) will keep the organizational structure, roles, responsibilities, and authorities current and will communicate this information to the Operating Authority's personnel and the Owner. The Director of Roads and Public Works (alternative QMS Representative) and the Chief Administrative Officer are the Top Management for the Mississippi Mills Drinking Water System - Distribution System - Distribution. The Owner of this system is the Corporation of the Municipality of Mississippi Mills.

Refer to Appendix C, QMS Organizational Structure for the Mississippi Mills Drinking Water System - Distribution System - Distribution.

The following table lists the roles (Position Titles), responsibilities of each position, and their respective authorities.

## **Roles, Responsibilities, and Authorities Table**

<b>TITLE</b>	<b>RESPONSIBILITIES</b>	<b>AUTHORITIES</b>
Council	<ul style="list-style-type: none"> <li>• Approving Budgets</li> <li>• Approve policies</li> <li>• Ensure facilities operate in compliance with legislation</li> <li>• Ensure deliver of safe drinking water to the public</li> </ul>	<ul style="list-style-type: none"> <li>• Financial</li> <li>• Staffing/administration of Operating Authority</li> </ul>
CAO – Top Management	<ul style="list-style-type: none"> <li>• Report to owner/attend council meetings</li> <li>• Appoint QMS Representative in the event the position(s) is vacant</li> <li>• Management Review</li> </ul>	<ul style="list-style-type: none"> <li>• As delegated by Council</li> </ul>
Director of Roads and Public Works (alternative QMS rep) – Top Management	<ul style="list-style-type: none"> <li>• Report to the CAO</li> <li>• Report to owner and attend Council meetings</li> <li>• Appoint QMS representatives</li> <li>• Prepare budgets for Council consideration</li> <li>• Develop policies and procedures, contingency/emergency plans</li> <li>• Operational training</li> <li>• Staff administration</li> <li>• Ensuring operation in compliance with legislative requirements</li> <li>• Reports to top management (owner), ministry's (MOL, MOH, MOE)</li> <li>• Responding adverse/non compliance</li> <li>• Responsible for implementation and maintenance of the Operational Plan</li> <li>• Management Review</li> </ul>	<ul style="list-style-type: none"> <li>• As delegated by Council</li> <li>• Training</li> <li>• Allocation of staff</li> <li>• Employee administration – discipline</li> <li>• Authority to direct operation and maintenance of system</li> <li>• Appoint ORO responsibility (primary and back up)</li> <li>• Approves changes to plan and procedures</li> <li>• Financial – purchasing, budgets</li> </ul>
Roads and Public Works Administrative Assistant	<ul style="list-style-type: none"> <li>• Update the Operational Plan as authorized by QMS Representative</li> <li>• Track training of licensed operators</li> </ul>	
Operations Manager	<ul style="list-style-type: none"> <li>• Day to day operation and maintenance – scheduling</li> <li>• Ensure compliance with legislative requirements</li> <li>• Facilitates adverse/non compliance</li> <li>• Reports – legislative, incident</li> <li>• Training staff</li> <li>• Management Review</li> </ul>	<ul style="list-style-type: none"> <li>• As delegated by Council</li> <li>• Training</li> <li>• Allocation of staff</li> <li>• Employee administration – discipline</li> <li>• Approves changes to plan and procedures</li> <li>• Financial – purchasing, budget</li> </ul>

Environmental Compliance Coordinator (QMS Representative)	<ul style="list-style-type: none"> <li>• Report to Director</li> <li>• Drafts policies, procedures and contingency/emergency plans</li> <li>• Prepares quarterly reports</li> <li>• Ensure operations in compliance with legislated requirements</li> <li>• Reports to top management, ministry's (MOL, MOH, MOE)</li> <li>• Responsible for the maintenance of the Operational Plan</li> <li>• Operational Training</li> <li>• Schedules audits</li> <li>• Training Staff – SOP's</li> <li>• Sets Management Review Meeting</li> <li>• Chairs Management Review Meeting</li> </ul>	<ul style="list-style-type: none"> <li>• Training</li> <li>• Provides recommendation for changes to operational plan</li> </ul>
Lead Hand - Water Distribution & Wastewater Collection	<ul style="list-style-type: none"> <li>• Operator in Charge (OIC)</li> <li>• Responsible for implementation and maintenance of the operational plan</li> <li>• Reporting and documentation</li> <li>• Maintenance of system</li> <li>• Ensuring compliance with legislative requirements</li> <li>• Responding adverse/non compliance</li> <li>• Perform day to day operation &amp; maintenance under the direction of the Operations Manager</li> <li>• Maintains annual equipment calibrations</li> <li>• Overall Responsible Operator</li> <li>• Management Review</li> </ul>	<ul style="list-style-type: none"> <li>• Training</li> <li>• Authority to direct operation and maintenance of system</li> <li>• Financial – purchasing, budgets</li> </ul>
Operations Staff	<ul style="list-style-type: none"> <li>• Responsible for implementation and maintenance of the operational plan</li> <li>• Reporting and documentation</li> <li>• Maintenance of system</li> <li>• Ensuring compliance with legislative requirements</li> <li>• Responding adverse/non compliance</li> <li>• Perform day to day operation &amp; maintenance under the direction of the Operations Manager</li> <li>• Operator in Charge (OIC) (minimum class 1 license)</li> </ul>	<ul style="list-style-type: none"> <li>• Operate and maintain systems to ensure safe drinking water</li> <li>• Maintain equipment</li> <li>• </li> </ul>

## 10 Competencies

The following table illustrates the competencies required by personnel whose duties directly affect drinking water quality.

### **COMPETENCY REQUIREMENTS TABLE**

<b>Role</b>	<b>Required Competencies</b>	<b>Desired Competencies</b>
Council (Owner)	Knowledge of DWQMS and QMS	
CAO (Top Management)	Knowledge of DWQMS and QMS	
Director of Roads and Public Works (alternative QMS rep) (Top Management)	<ul style="list-style-type: none"> <li>• Knowledge of water and waste water</li> <li>• P.Eng or CET designation</li> <li>• WHMIS</li> <li>• Management experience</li> <li>• Valid Class G Driver's License</li> <li>• Understanding of DWQMS and QMS</li> </ul>	<ul style="list-style-type: none"> <li>• Operator Certification in good standing</li> <li>• First AID/CPR</li> </ul>
Roads and Public Works Administrative Assistant	<ul style="list-style-type: none"> <li>• Knowledge of DWQMS and QMS</li> </ul>	
Operations Manager	<ul style="list-style-type: none"> <li>• Knowledge of water and waste water</li> <li>• WHMIS</li> <li>• Valid Class G Driver's License</li> <li>• Understanding of DWQMS and QMS</li> </ul>	<ul style="list-style-type: none"> <li>• First AID/CPR</li> <li>• Leadership training or experience</li> <li>• Operator Certification in good standing</li> </ul>
Environmental Compliance Coordinator (QMS rep)	<ul style="list-style-type: none"> <li>• Knowledge of water and waste water</li> <li>• WHMIS</li> <li>• Valid Class G Driver's License</li> <li>• Understanding of DWQMS and QMS</li> <li>• Formal Training - DWQMS Auditing</li> </ul>	<ul style="list-style-type: none"> <li>• First AID/CPR</li> </ul>
Lead Hand - Water Distribution & Wastewater Collection	<ul style="list-style-type: none"> <li>• Operator Certification in good standing</li> <li>• WHMIS</li> <li>• Valid Class G Driver's License</li> <li>• Understanding of DWQMS and QMS</li> </ul>	<ul style="list-style-type: none"> <li>• Confined Space</li> <li>• First Aid/CPR</li> </ul>
Operations Staff	<ul style="list-style-type: none"> <li>• Operator Certification in good standing</li> <li>• Valid Class G Driver's License</li> <li>• Understanding of DWQMS and QMS</li> <li>• WHMIS</li> </ul>	<ul style="list-style-type: none"> <li>• Confined Space</li> <li>• First Aid/CPR</li> </ul>

The competency requirements listed in the Competency Requirements Table are addressed by various means including:

- All employees listed have provided evidence of certification and other “required” competencies. All MOE required certificates or copies thereof are posted at the Public Works offices.

- All new employees undergo training to perform their duties including a review of the Distribution System Operations Manual and the Contingency/Emergency Plans; a review of the QMS Operational Plan; and on the job training.
- All employees receive training which meets or exceeds the requirements of Ontario Regulation 128/04.
- Changes to the Distribution System and/or to the QMS are communicated, as needed, to all Public Works Staff by the Roads and Public Works Director and/or the Environmental Compliance Coordinator (QMS Representative).

All records of training are maintained at the Public Works Administrative Assistants office as proof that the required training has been successfully completed. The Roads and Public Works Director (QMS Representative) and the Operations Manager are responsible for monitoring the completion of all identified training.

## **11 Personnel Coverage**

Refer to Appendix D for QMS Procedure MMQMS-3 Personnel Coverage.

## **12 Communications**

Refer to Appendix E for QMS Procedure MMQMS-4 Communications

## **13 Essential Supplies and Services**

Refer to Appendix F for QMS Procedure MMQMS-5 Essential Supplies and Services.

## **14 Review and Provision of Infrastructure**

Refer to Appendix G for QMS Procedure MMQMS-6 Review and Provision of Infrastructure.

## **15 Infrastructure Maintenance, Rehabilitation and Renewal**

### **Planned Infrastructure Maintenance**

The Director of Roads & Public Works provides a recommendation to the Committee of the Whole for planned infrastructure maintenance based on the budget requirements.

Council authorizes planned maintenance activities through a recommendation from the Committee of the Whole.

Maintenance is planned on priority basis by review of the Director and the Operations Manager.

How is planned maintenance documented – for large projects, tender documents are retained in the public works garage. Smaller projects are documented in the maintenance & repair files.

How is planned maintenance communicated – planned maintenance activities are communicated to the owner and staff through quarterly reports.

Planned maintenance is not reviewed for trends

## **Unplanned Infrastructure Maintenance**

Who authorized unplanned maintenance? – Operation staff has approval to proceed with emergency maintenance.

How do you respond to these needs? – Response depends on the type of unplanned infrastructure

How is unplanned maintenance documented? Maintenance is documented in the maintenance & repair files.

Is unplanned maintenance reviewed for trends? How is this done? The maintenance & repair files are reviewed when the budget is being prepared to help evaluate the priority of work for the budget.

## **Infrastructure Rehabilitation**

Who plans rehabilitation activities & budget. The Director of Roads & Public Works plans the rehabilitation activities in consultation with operation staff and provides a recommendation for Council's consideration.

How is rehabilitation capital authorized – Authorization is provided by Council

Deficiency of the infrastructure, cost and priority are considered when planning rehabilitation activities.

The needs for the infrastructure is determined and communicated through recommendations to Council (Owner) during the annual budget.

Projected growth is considered in rehabilitation planning on a case by case basis.

## **Infrastructure Renewal**

The Director of Roads & Public Works plans the renewal activities in consultation with operation staff and provides a recommendation for Council's consideration.

Renewal of capital is authorized through Council.

Current and future demands on the infrastructure is considered when planning renewal activities.

The needs for the infrastructure are determined by an evaluation of the infrastructure and recommendations are communicated to Council for consideration and approval.

Projected growth is considered in renewal planning.

Maintenance plans are developed according to the manufacturer's instructions, regulatory requirements, and industry standards. Equipment Operation and Maintenance (O&M) manuals are accessible to staff at the locations specified in QMS Procedure MMQMS-1 Appendix A Document and Records Control.

## **16 Sampling, Testing, and Monitoring**

Refer to Appendix H for QMS Procedure MMQMS-7 Sampling, Testing, and Monitoring.



## **17 Measurement and Recording Equipment Calibration and Maintenance**

Refer to Appendix I for QMS Procedure MMQMS-8 Measurement and Recording Equipment Calibration and Maintenance.

## **18 Emergency Management**

Refer to Appendix J for QMS Procedure MMQMS-9 Emergency Management

## **19 Internal Audits**

Refer to Appendix K for QMS Procedure MMQMS-10 Internal Audits

## **20 Management Review**

Refer to Appendix L for QMS Procedure MMQMS011 Management Review

## **21 Continual Improvement**

The Municipality of Mississippi Mills shall strive to continually improve the effectiveness of its QMS through the use of corrective actions from annual audits, staff suggestions, and management reviews.

The Operating Authority shall develop a procedure for tracking and measuring continual improvement of its Quality Management System by:

- a) reviewing and considering applicable best management practices, including any published by the Ministry of the Environment, Conservation and Parks and available on [www.ontario.ca/drinkingwater](http://www.ontario.ca/drinkingwater), at least once every thirty-six months;
- b) documenting a process for identification and management of Quality Management System Corrective Actions that includes:
  - i. investigating the cause(s) of an identified non-conformity,
  - ii. documenting the action(s) that will be taken to correct the non-conformity and prevent the non-conformity from re-occurring, and
  - iii. reviewing the action(s) taken to correct the non-conformity, verifying that they are implemented and are effective in correcting and preventing the re-occurrence of the non-conformity.
- c) Documenting a process for identifying and implementing Preventive Actions to eliminate the occurrence of potential non-conformities in the Quality Management System that include:
  - i. Reviewing potential non-conformities that are identified to determine if preventive actions may be necessary,
  - ii. Documenting the outcome of the review, including the action(s), if any, that will be taken to prevent a non-conformity from occurring, and
  - iii. Reviewing the action(s) taken to prevent a non-conformity, verifying that they are implemented and are effective in preventing the occurrence of the non-conformity.

DO – the Operating Authority shall strive to continually improve the effectiveness of its Quality Management System by implementing and conforming to the procedure.




## Appendix A

### #MMQMS-1 Document and Records Control

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 Municipality of Mississippi Mills	<h1 style="margin: 0;">QMS Procedure</h1>	Proc.: #MMQMS-1 Issued: 21 Sept 2009 Rev.#: 8 Revised: 11 Dec 2018
Reviewed by: C. Hartwick	Approved by: C. Smith	

## DOCUMENT and RECORDS CONTROL

### 1.0 Purpose

The purpose of this procedure is to describe the methods for identification, storage, protection, retrieval, retention time and disposition of records.

### 2.0 Scope

This procedure is applicable to Roads and Public Works department employees who manage or perform work related to the distribution operations. This procedure covers all QMS documents and records identified in Table 1.

### 3.0 Responsibility

The following staff are responsible for documentation and records control:

- Roads and Public Works Administrative Assistant
- Director of Roads and Public Works
- Lead Hand - Water Distribution & Wastewater Collection
- Operations Staff
- Operations Manager
- Environmental Compliance Coordinator

### 4.0 Definitions

*Document* – includes a sound recording, video tape, film, photograph, chart, graph, map, plan, survey, book of account, and information recorded or stored by means of any device

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

*QMS Document* – any document required by the QMS as identified in this procedure

*QMS Record* – any record required by the QMS as identified in this procedure

*Controlled* – managed as per the conditions of this procedure

*Retention Period* – length of time that a document or record must be kept; see chart 5.6 and By-Law 02-77 and subsequent revisions.

### 5.0 Procedure

5.1 Documents and records required by the QMS are listed in Table 1.

5.2 As process and activities change within the Municipality of Mississippi Mills' drinking water system, the operational plan, policies and procedures and are needed to be updated it will be completed as follows:

- The Roads and Public Works Administrative Assistant will be responsible for the changes including maintaining a record of authorization.
- The Director of Roads and Public Works will approve the changes through written correspondence (email, memos, etc.).
- Edits should be completed after an internal audit and management review or when other changes are required.
- Changes will be communicated through memos and/or staff meetings/training as required.

- Handwritten records must be legible and permanently rendered in ink.

- 5.3 Headers including title, document number, revision numbers and issued date will be used to identify internal controlled documents.
- 5.4 Records/documents will be stored in accordance to Table 1 of this procedure. The currency of internal documents is ensured by comparison of the date in the document footer to that of the central computer system or the original or duplicate stored at the Public Works Office. All documents and records are readily available to all operations staff, managers and auditors for viewing.
- 5.5 All electronic files will be user name and password protected on the Roads and Public Works Administrative Assistant's computer. All hard copies will be located in accordance to Table 1, all documents located outside the designated document control location are not considered controlled documents.
- 5.6 Records will be archived in accordance to the applicable regulations.

Record	Retention Time	Legislation
Lab. Test Results Water Bacti.	2 Years	O. Reg. 170/03, Subsection 13.1
On Site Testing for chlorine residuals	2 Years	O. Reg. 170/03, Subsection 13.1
Training Records	5 years	O. Reg. 128/04, Subsections 29(7) and 31(7)
Logs and other record keeping mechanisms	5 years	O. Reg. 128/04, Subsection 27(6)
All written reports by professional engineers or professional hydrogeologists that stipulate if a groundwater supply is GUDI and all written reports prepared after August 1, 2000 by professional engineers or professional hydrogeologists that stipulate if a groundwater supply is non-GUDI	15 years	O. Reg. 170/03, Subsection 13

- 5.7 All documents that have been superseded will be disposed of by the QMS Representative. Paper copies shall be shredded and electronic copies will be deleted.

## 6.0 Related Documents

Municipality's Retention By-Law

## 7.0 Revision History

Date	Revision #	Reason for Revision
21 Sept 2009	0	Procedure issued
22 Dec 2011	1	Section 5.2 Updated per CGSB audit
19 Dec 2012	2	Section 5.2 – 4 <sup>th</sup> Bullet – updated wording
17 Dec 2013	3	Table 1 – Updated form named – Replaced Complaint form with Service Request form
15 Aug 2014	4	Table 1 – Added QMS Internal Audit Checklist to Internal QMS Documents list
2 Dec 2014	5	Table 1 – Removed Masterplan 1984 – added Master Plan Report – Almonte Ward Water and Wastewater Infrastructure 2012 – Located in Directors Office
6 Dec 2018	6	Replaced Water Meter, Distribution and Collection Operator title to Lead Hand – Water Distribution and Wastewater Collection Section 5.4 remove the word inspector and add auditors Table 1, in the Designated Document Control Location Column add Form Master List Binder to the QMS Internal Audit Checklist
11 Dec 2018	7	Table 1 – added Audit Non Conformance form
<b>1</b>	8	Table 1 – updated Hydrant Use Forms (Bulk Water) to Bulk Water Permit - updated location of SOP's

- updated location of Operational Plan
- removed Log Books (personal and master) from Internal QMS Documents as it is in QMS Records
- updated location of Emergency Contact List and Essential Supplies and Service List
- added Water & Sewer Inspection Form to Internal QMS document
- updated the location of Permits
- updated location of DWQMS
- updated Master Plan Report from (2012) to (2018)
- updated location of Regulations and Legislation and Municipality By-Laws
- updated location of Service Requests (complaints)
- updated location of Annual Watermain Flushing Record
- updated title and location of Correspondence with regulators (MECP)
- changed MOE to MECP in MECP Inspection Reports/Responses
- changed the location of the Shift/Vacation Schedules
- updated location of Log Books (personal and master)
- updated location of Sampling and Monitoring Records
- updated location of Lab Analysis

**Table 1:** Designated location for documents and records required by the Operating Authority's QMS

Type of Document	Designated Document Control Location (HC = Hardcopy, EC=Electronic copy)
<b>Internal QMS Documents</b>	
Hydrant Service Information Forms	EC Administrative Assistant Computer HC Administrative Assistant Office Form Master List Binder
Annual Watermain Flushing Forms	EC Administrative Assistant Computer HC Administrative Assistant Office Form Master List Binder
Bulk Water Permit	EC Administrative Assistant Computer HC Administrative Assistant Office Form Master List Binder
On the Job Training Form	EC Administrative Assistant Computer
SOP's	EC Administrative Assistant Computer HC Administrative Assistant Office Water System Operation Manual Reference Binder
Watermain Commissioning Form	EC Administrative Assistant Computer HC Administrative Assistant Office Form Master List Binder
Operational Plan	EC Administrative Assistant Computer HC Administrative Assistant Office Quality Management System & Operational Plan Reference Binder
Municipality of Mississippi Mills Emergency Response Plan	EC Town Clerk HC Town Clerk's office
On-call Schedule	EC Administrative Assistant Computer HC Water & Sewer Bulletin Board
Service Request Form	EC Administrative Assistant Computer HC Administrative Assistant Office Form Master List Binder
Watermain Repair Form	EC Administrative Assistant Computer HC Administrative Assistant Office Form Master List Binder
Union Agreement	EC Administrative Assistant Computer
Emergency Contact List	EC Administrative Assistant Computer HC Administrative Assistant Office Water System Operation Manual Reference Binder & Quality Management System & Operational Plan Reference Binder
Essential Supplies and Service List	EC Administrative Assistant Computer HC Administrative Assistant Office Water System Operation Manual Reference Binder & Quality Management System & Operational Plan Reference Binder
QMS Internal Audit Checklist	EC Administrative Assistant Computer HC Administrative Assistant Office Form Master List Binder
Audit Non Conformance Report	EC Administrative Assistant Computer HC Administrative Assistant Office Form Master List Binder
Water & Sewer Inspection Form	EC Administrative Assistant Computer HC Administrative Assistant Office Form Master List Binder
<b>External QMS Documents</b>	
Permits	HC Water & Sewer Bulletin Board

Type of Document	Designated Document Control Location (HC = Hardcopy, EC=Electronic copy)
Licenses and Certificates	HC Administrative Assistant Office -file
DWQMS	HC Administrative Assistant Office Quality Management System & Operational Plan Reference Binder
Engineers Report	HC Administrative Assistant Office -file
Master Plan Report – Almonte Ward Water and Wastewater Infrastructure (2018)	HC Directors Office -file
Regulations and Legislations and Municipality By-Laws	HC Administrative Assistant Office –Water System Operation Manual Reference Binder or on-line at <a href="http://www.e-laws.gov.on.ca">www.e-laws.gov.on.ca</a>
<b>QMS Records</b>	
Maintenance Records	HC Filing Cabinet in Public Works
Purchasing Records/Invoices	HC Finance Department
Sampling and Monitoring Records	HC Administrative Assistant Office – binder
Internal Audit Reports	HC Administrative Assistant Office – file
QMS/Meetings	HC Administrative Assistant Office – file
Management Review documentations	HC Administrative Assistant Office – file
Service Requests (Complaints)	HC Administrative Assistant Office – Completed Service Request Form Water - Binder
Annual Watermain Flushing Record	HC Water Office - binder
Correspondence with regulators (MECP)	HC Computer – H Drive: Roads and Public Works/Environmental
Third Party Leak Detection	HC Administrative Assistant Office – file
Lab Analysis	HC Administrative Assistant Office-binder
MECP Inspection Reports/Responses	HC Administrative Assistant Office – file
Annual Reports	HC Administrative Assistant Office - file
Pager after hours Reports	HC Administrative Assistant Office- binder
Shift/Vacation Schedules	EC – Administrative Assistant Office
Capital Budget Recommendations	EC Directors Computer
Operator Training Records	EC Administrative Assistant Computer
	HC Administrative Assistant Office binder

<b>Type of Document</b>	<b>Designated Document Control Location</b> (HC = Hardcopy, EC=Electronic copy)
Log Books (personal and master)	Master Log Book Water Office Personal Log Books will be maintained by each operator
Water & Sewer Inspection Records	HC – Administrative Assistant Office - Completed Inspection Reports Binder


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## **Appendix B**

#MMQMS-2 Risk Assessment and Risk Assessment Outcomes

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	<h2 style="margin: 0;">QMS Procedure</h2>	Proc.: #MMQMS-2 Issued: 21 Sept 2009 Rev.#: 8 Revised 15 Oct 2021
Reviewed by: C. Hartwick	Approved by: C. Smith	

## RISK ASSESSMENT and RISK ASSESSMENT OUTCOMES

### 1.0 Purpose

To define the process for conducting a drinking water risk assessment and for documenting and reviewing the results of the assessment at the facility level.

### 2.0 Scope

Applies to the Mississippi Mills Drinking Water System - Distribution System, which is a municipal residential drinking water system and is limited to the assessment of potential drinking water health hazards, documenting their control measures, and the identification of critical control points. Considers potential hazardous events and associated hazards, as identified in the Ministry of the Environment and Climate Change document titled Potential Hazardous Events for Municipal Residential Drinking Water Systems, dated February 2017 as it may be amended.

### 3.0 Responsibility

QMS Implementation Team which consists of the:

- Director of Roads and Public Works
- Lead Hand - Water Distribution & Wastewater Collection
- Operations Manager
- Environmental Compliance Coordinator

### 4.0 Definitions

**Consequence** – the potential impact to public health in the drinking water system if a hazard/hazardous event is not controlled

**Control Measure** – includes any processes, physical steps or other contingencies that have been put in place to prevent or reduce a hazard before it occurs

**Critical Control Limit** – the point at which a Critical Control Point response procedure is initiated

**Critical Control Point (CCP)** – an essential step or point in the subject system 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

**Hazard** – a source of danger or a property that may cause drinking water to be unsafe for human consumption; may be biological, chemical, physical or radiological in nature

**Hazardous Event** – an incident or situation that can lead to the presence of a hazard

**Likelihood** – the probability of a hazard or hazardous event occurring

**Threshold Number** – numerical value assigned by the assessment team to a high risk event. Events ranked at or above this limit require further investigation to determine whether they are critical control points.

## 5.0 Procedure

5.1 The Director of Roads and Public Works, Operations Manager, Environmental Compliance Coordinator and Lead Hand - Water Distribution & Wastewater Collection will conduct the risk assessment.

5.1.a Agenda and minutes to be completed by the Environmental Compliance Coordinator

5.2 Using Tables 1A and 1B, identify hazardous events and associated hazards possible outcomes that could impact the system's ability to deliver safe drinking water in Table 2A.

5.3 For each of the hazardous events, identify the control measures currently in place that control the hazard or prevent it from becoming a threat to public health.

5.4 Taking into consideration existing control measures (including the reliability and redundancy of equipment), assign each hazardous event a value for the likelihood and a value for the consequence of that event based on the criteria in the following tables:

Table 1A

Value	Likelihood of Hazardous Event Occurring
1	<b>LITTLE OR NO POTENTIAL</b> (rare, low risk, has not occurred) – more than every 25 years
2	<b>RARE</b> (infrequent, not likely, rare) – 5 to 25 years
3	<b>INFREQUENT</b> (moderately likely, occasional, possible) – 1 to 5 years
4	<b>FREQUENT</b> (often, highly likely, routinely, occasional) – monthly to 1 year
5	<b>ROUTINE</b> (immediate, extremely likely, frequent) – daily to weekly

Table 1B

Value	Consequence of Hazardous Event Occurring
1	<b>INSIGNIFICANT</b> – Little or no disruption to normal operations, no impact on public health
2	<b>MINOR</b> – Significant modification to normal operations but manageable, no impact to public health
3	<b>MODERATE</b> – Potentially reportable, corrective action required, potential public health impact, disruption to operations is manageable
4	<b>MAJOR</b> – Reportable, system significantly compromised and abnormal operations if at all, high level of monitoring and corrective action required, threat to public health
5	<b>CATASTROPHIC</b> – Complete failure of system, definite threat to public health, water unsuitable for consumption

Multiply the likelihood and consequence values to determine the Threshold Number (risk value) of each hazardous event and record all values in Table 2A. Hazardous events with a ranking of 15 or greater are considered high risk. This Critical Control

Point is based on an incident that has a high likelihood (value of 5) and a moderate consequence on system (value of 3).

5.5 Review the hazardous events and rankings documented in Table 2A and 2B and identify your Critical Control Points. Critical Control Points must meet all the following criteria:

- ✓ The hazardous event has a ranking of 15 or greater
- ✓ The hazardous event can be prevented, eliminated or reduced
- ✓ Can be monitored
- ✓ Able to assign control limits, and
- ✓ Essential to ensure the safety of the drinking-water.

5.6 There was no critical control points that met the criteria listed above.

5.7 The co-QMS Representatives will review this Procedure every Calendar Year and revise as necessary. This Procedure and revisions will be reviewed annually as part of the Management Review process. The risk assessment will be conducted and updated a minimum of once every three years by QMS Team members.

## 6.0 Related Documents

AWWA/Industry Standards

## 7.0 Revision History

Date	Revision #	Reason for Revision
21 Sept 2009	0	Procedure issued
22 Dec 2011	1	Administrative Edits/modified system name CPP Scoring reviewed and updated
19 Nov 2012	2	Joint Risk Management Review changes as per meeting on November 7, 2012
2 Dec 2014	3	Risk Management Review changes as per meeting on November 26, 2014
16 Sept 2015	4	Administrative Edits/adding Environmental Compliance Coordinator
6 Dec 2018	5	Replaced Water Meter, Distribution and Collection Operator title to Lead Hand - Water Distribution & Wastewater Collection Section 5.7 removed word verified and added reviewed Table 2A Risk Assessment Table remove the Distribution Water Break Potential High Pressure and the Chlorine Contact Chamber By-Pass Valve (Well 5 & 6)
11 Dec 2018	6	Section 5.7 - Removed the word "reviewed" and added "conducted" in the last sentence.
25 Feb 2021	7	Section 2.0 added Considers potential hazardous events and associated hazards, as identified in the Ministry of the Environment Climate Change document titled Potential Hazardous Events for Municipal Residential Drinking Water Systems, dated February 2017 as it may be amended. Section 5.7 Replaced on an annual basis with every Calendar Year
15 Oct 2021	8	Table 2A – replaced entire table Added Section 5.1.a to identify who takes care of agenda and minutes for risk assessment Table 2A – identified the name of the SOP's that are being referred

**Table 2A:** Risk Assessment Table

Activity/ Process Step	Description of Hazardous Event	Possible Outcome (Hazards)	Existing Control Measures	Likelihood	Consequence	Risk Value	CCP?
Distribution Water Break	Potential Low Pressure	Contaminants entering the system Fire protection	Maintain positive flow on main Flush main after repair and sample per Watermain Break Repair SOP Chlorinate repair materials	4	3	12	<input type="checkbox"/> Yes – Mandatory CCP <input type="checkbox"/> Yes– Additional CCP identified for facility <input checked="" type="checkbox"/> No
Pressure Reducing Valve	Failure of pressure reducing valve resulting in high pressure	Broken pipes Damage to home owner plumbing	Tied into SCADA system to monitor pressure Maintain/inspect PRVS annually	3	2	6	
Unplanned Fire Hydrant Use	Potential low pressure Draw down	Backflow prevention Complaints/Concerns Pressure drop	OCWA monitoring	3	2	6	
Bulk Water Filling from Hydrants	Potential Contamination to system	Backflow prevention Contaminate system Loss of service	Bulk Water Permit, designated filling locations and mandatory back flow prevention Refer to Bulk Water Permit	2	3	6	
Low Chlorine Residual	Bacteriological growth	Growth of bacteria	Raw groundwater supplies have little/no bacteria Monitor system levels Weekly flushing	1	4	4	
Dead Ends	Low chlorine residual	Growth of bacteria	Flush minimum twice annually	1	4	4	
Sustained Pressure Loss	Inflow infiltration	Contamination	Leak detection Monitoring pressure	1	4	4	
Vandalism	Damage to hydrants	Contamination of the system Unscheduled maintenance of hydrants	Emergency response plans and emergency response training exercises Customer complaints/concerns Annual flushing	2	1	2	
Terrorism	Pumping contaminant into the system	Contamination of the system	Emergency response plans and emergency response training exercises	1	5	5	
Climate Change	Long term impacts, ice storm, tornado, flooding, drought	Potential limited water supply Damage to infrastructure Loss of water	Emergency response plans and emergency response training exercises	2	3	6	

Activity/ Process Step	Description of Hazardous Event	Possible Outcome (Hazards)	Existing Control Measures	Likelihood	Consequence	Risk Value	CCP?
Loss of secondary infection	Low chlorine residual Biological contamination	Contamination of the system	Residual monitoring during flushing	1	2	2	
River Crossing for Watermain	Water break	Isolate the west side of Town from Tower, would need to run wells 5 & 6 to provide water and have pressure relief	Have blow off equipment available Utilize heat trace Check isolation valves annually	2	3	6	<input type="checkbox"/> Yes – Mandatory CCP <input type="checkbox"/> Yes – Additional CCP identified for facility <input checked="" type="checkbox"/> No
Contractors Doing Work on System	Damage to pipe Potential leak	Loss of water Loss of pressure Cross contamination	Require full time supervisor during construction Ensure accurate plans prepared and approved by Ministry and Municipality Ensure standards are followed Pressure test new pipe and chlorinate as per Ministry standards	3	3	9	
Backflow from Private Service	Potential Contamination to system	Contaminate system Loss of service	Pursue conversion of older buildings on a risk priority basis  Owner education	1	3	3	

**Table 2B:** Identified Critical Control Points (CCPs)


CCP	Critical Control Limits	Monitoring Procedures	Response, Reporting and Recording Procedures
No Critical Control Points were identified as we used a 15 as our target point. The highest score was a 12.			

## **Appendix C**

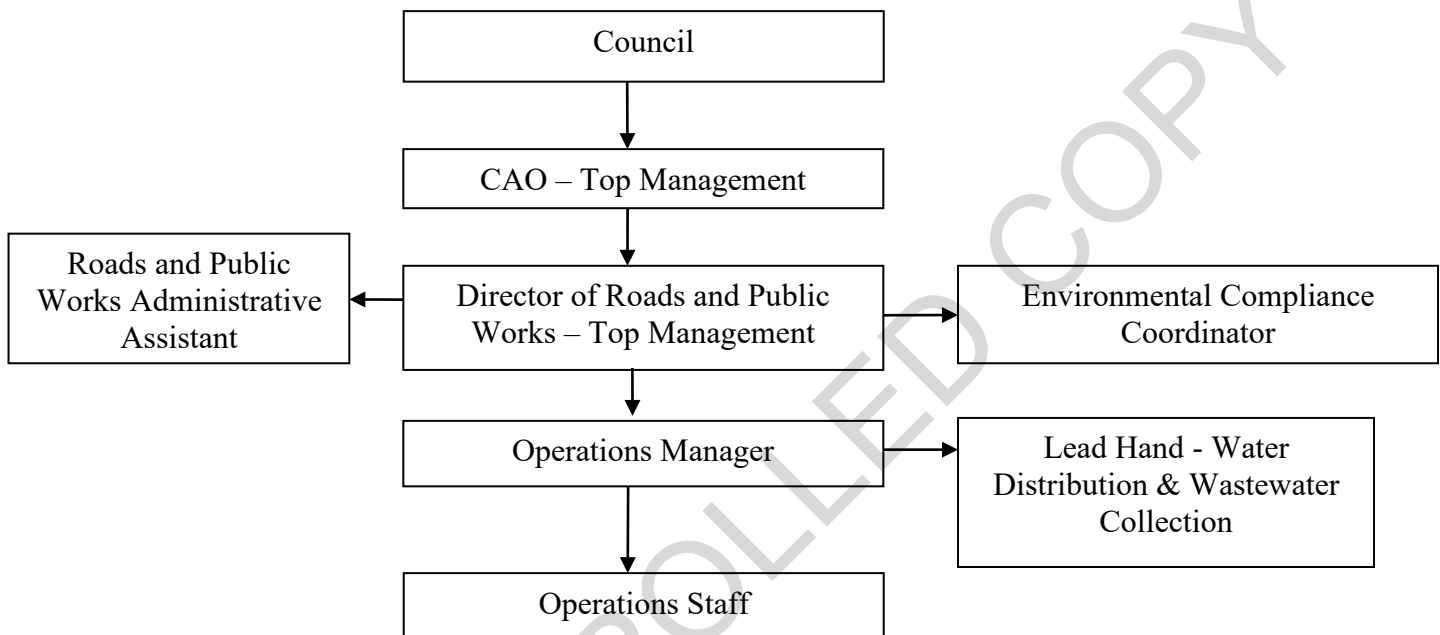
### **QMS Organizational Structure for the Municipality of Mississippi Mills – Mississippi Mills Drinking Water System**

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	<h1 style="margin: 0;">QMS</h1>	Issued: 21 Sept 2009 Rev.#: 4 Revised 15 Oct 2021
Reviewed by: C. Hartwick	Approved by: C. Smith	

## Organizational Chart for the Municipality of Mississippi Mills



The following table lists the roles (Position Titles), responsibilities of each position, and their respective authorities.

### Revision History


Date	Revision #	Reason for Revision
21 Sept 2009	0	Procedure issued
2 Dec 2014	1	Changed title page from Almonte Water Distribution to Mississippi Mills Drinking Water System and removed reference of co-QMS rep from chart as role is clarified elsewhere.
16 Sept 2015	2	Added Environmental Compliance Coordinator to the Organizational Chart
6 Dec 2018	3	Replaced Water Meter, Distribution and Collection Operator title to Lead Hand - Water Distribution & Wastewater Collection
15 Oct 2021	4	Included Top Management on chart

## Appendix D

### # MMQMS-3 Personnel Coverage

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 Municipality of Mississippi Mills	<h2 style="margin: 0;">QMS Procedure</h2>	Proc.: #MMQMS-3 Issued: 21 Sept 2009 Rev.#: 3 Revised 2 Dec 2014
Reviewed by: C. Hartwick	Approved by: T. Dunlop	

## PERSONNEL COVERAGE

### 1.0 Purpose

To describe the procedure for ensuring that sufficient and competent personnel are available for duties that directly affect drinking water quality.

### 2.0 Scope

Applies to operations personnel at the Mississippi Mills Drinking Water System

### 3.0 Responsibility

Owner  
Director of Roads and Public Works  
Operations Manager

### 4.0 Definitions

*Competence* – The combination of observable and measurable knowledge, skills, and abilities which are required for a person to carry out assigned responsibilities.

### 5.0 Procedure

5.1 The Roads and Public Works Director ensures that personnel meeting the competencies identified in the Competency Requirements Table are available for duties that directly affect drinking water quality.

5.2 The Mississippi Mills Drinking Water System is staffed by personnel as follows:

The Public Works department is staffed Monday through Friday, during normal working hours. During periods where staff is not at the facility an on-call operator is available 24 hours a day, 7 days a week.

Municipality of Mississippi Mills personnel are assigned to act as and fulfill the duties of Overall Responsible Operator (ORO) and Operator-in-Charge (OIC) in accordance with SDWA O. Reg. 128/04. The Roads and Public Works Director shall designate the primary and backup ORO through amendment to the applicable Standard Operating Procedure.

5.3 The Operations Manager assigns an on-call operator for the time that the facility is un-staffed (i.e., evenings, weekends and Statutory Holidays). The on-call shift change is end of business day on Thursday. The on-call schedule is maintained by the Roads and Public Works Administrative Assistant and consists of a rotation, is set on a quarterly basis and posted on the Water and Sewer Bulletin Board.

5.4 Operators with a Class 1 or higher license may act as Operator In Charge (OIC) and may perform work independently. Other employees not licensed must have a licensed Operator

present. If required, sub-contractors are approved by the Public Works Department and used at the discretion of a licensed Operator.

5.5 In the effect of a strike, the non-union Roads and Public Works Director and Operations Manager will perform day-to-day operations and maintenance, in the event they are not licensed or available the Ontario Clean Water Agency will be retained to assist.

## 6.0 Related Documents

Facility Logbook  
On-Call Schedule  
Call-In Reports  
Shift/Vacation Schedule  
Agreement with Union

## 7.0 Revision History


Date	Revision #	Reason for Revision
21 Sept 2009	0	Procedure issued
22 Dec 2011	1	Amended 5.2 and 5.4 regarding ORO and OIC
15 Aug 2014	2	Amended 5.3 updated where the On Call list is posted
2 Dec 2014	3	Removed all references to Mississippi Mills Almonte Distribution and replaced with Mississippi Mills Drinking Water System

## Appendix E

#MMQMS-4 Communications

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 Municipality of Mississippi Mills	<h2 style="margin: 0;">QMS Procedure</h2>	Proc.: #MMQMS-4 Issued: 21 Sept 2009 Rev.#: 4 Revised: 6 Dec 2018
Reviewed by: C. Hartwick	Approved by: G. Bourgon	

## Communications

### 1.0 Purpose

To describe the Municipality of Mississippi Mills procedure for QMS-related communications between Top Management and the Owner, Operating Authority personnel, Suppliers and the public.

### 2.0 Scope

Applies to the internal and external communications regarding the Quality Management System (QMS) implemented at the Mississippi Mills Drinking Water System - Distribution System

### 3.0 Responsibility

Roads and Public Works Administrative Assistant  
Director of Roads and Public Works  
Lead Hand - Water Distribution & Wastewater Collection  
Operations Staff  
Operations Manager  
Environmental Compliance Coordinator

### 4.0 Definitions

*Public* – includes subject system consumers and stakeholders

### 5.0 Procedure

- 5.1 The status of the QMS and its effectiveness shall be communicated to the owner through quarterly reports and scheduled owner meetings.
- 5.2 The operating authority will communicate the QMS to all employees as part of the implementation process. New hires will receive QMS awareness training during orientation.
- 5.3 The operational plan and procedures will be made available to operators of the drinking water system.
- 5.4 The QMS policy will be available for public viewing at the municipal garage and at the municipal office.
- 5.5 Where appropriate, information on the QMS requirements will be communicated to suppliers as per Element 13 Essential Supplies and Services procedure.

### 6.0 Related Documents

Logbook  
Essential Supplies and Service Lists

### 7.0 Revision History

Date	Revision #	Reason for Revision
21 Sept 2009	0	Procedure issued
20 Sept 2010	1	Updated procedure to incorporate changes in response to CARS
2 Dec 2014	2	Revised section 5.1 wording



16 Sept 2015	3	Added the Environmental Compliance Coordinator to Section 3.0
6 Dec 2018	4	Replaced Water Meter, Distribution and Collection Operator title to Lead Hand - Water Distribution & Wastewater Collection


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## **Appendix F**

### **#MMQMS-5 Essential Supplies and Service**

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 <p>Municipality of Mississippi Mills</p>	<h2 style="margin: 0;">QMS Procedure</h2>	<p>Proc.: #MMQMS-5                  Issued: 21 Sept 2009                  Rev.#: 6                  Revision: 15 Oct 2021</p>
<p>Reviewed by: C. Hartwick</p>	<p>Approved by: C. Smith</p>	

## ESSENTIAL SUPPLIES AND SERVICES

### 1.0 Purpose

To describe the Municipality of the Municipality of Mississippi Mills procedure for procurement and for ensuring the quality of essential supplies and services.

This procedure identifies the supplies and services deemed essential to the delivery of safe drinking water and how to ensure the quality of essential supplies and services that can affect water quality.

### 2.0 Scope

Applies to essential supplies and services pertaining to the Mississippi Mills Drinking Water System - Distribution System, as identified in this procedure.

### 3.0 Responsibility

Director of Roads and Public Works  
 Operations Manager  
 Lead Hand - Water Distribution & Wastewater Collection  
 Operations Staff  
 Environmental Compliance Coordinator

### 4.0 Definitions

**Supplies and Services** – are goods and people coming in from outside of the drinking-water system that can introduce risks to the quality and safety of your drinking water.

**Supplier** – an organization or person that provides a product or service that affects drinking water quality.

### 5.0 Procedure

- 5.1 Essential supplies and services for the Mississippi Mills Drinking Water System - Distribution System are listed in the Operations Manual located in the Public Works Administrators Office.
- 5.2 Purchasing is conducted in accordance with procurement and administration policies, procedures and guidelines. The facility orders and receives ongoing deliveries to satisfy current short-term needs based on operational needs and storage capacities.
- 5.3 Contractors are selected based on the qualifications and demonstrated competency to complete the work required.
- 5.4 Where applicable, supplies must meet AWWA and ANSI/NSF standards.
- 5.5 All process components/equipment provided by the supplier must meet applicable regulatory requirements and industry standards for use in drinking water systems prior to their installation.

5.6 All third-party drinking water testing services are provided by accredited and licensed laboratories. Sampling is performed by certified operators.

5.7 Calibration services are provided by qualified personnel.

5.8 The supplies and service providers will be communicated to all relevant personnel in the operating authority. Purchasing policies and requirements will be communicated to suppliers and service providers.

5.9 Essential suppliers/service providers are sent a letter that provides an overview of the relevant aspects of the QMS.

## 6.0 Related Documents

QMS Policy

Procurement and Administration policies and procedures

Third Party Leak Detection

## 7.0 Revision History


Date	Revision #	Reason for Revision
21 Sept 2009	0	Procedure issued
20 Sept 2010	1	Updated procedure to incorporate changes in response to CARS
19 Nov 2012	2	Updated Essential Supplies Services Contact List and Emergency Contact List
15 Aug 2014	3	Updated Essential Supplies Services Contact List
16 Sept 2015	4	Added Environmental Compliance Coordinator to Section 3.0 and update Essential Supplies Services Contact List
6 Dec 2018	5	Replaced Water Meter, Distribution and Collection Operator title to Lead Hand - Water Distribution & Wastewater Collection
15 Oct 2021	6	Update Essential Supplies Services Contact List Updated Essential Supplies Services Contact List



## Appendix G

### #MMQMS-6 Review and Provision of Infrastructure

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 Municipality of Mississippi Mills	<h1>QMS Procedure</h1>	Proc.: #MMQMS-6 Issued: 21 Sept 2009 Rev.#: 3 Revision: 25 Feb 2021
Reviewed by: C. Hartwick	Approved by: G. Bourgon	

## Review and Provision of Infrastructure

### 1.0 Purpose

To describe the Municipality of Mississippi Mills procedure for reviewing the adequacy of infrastructure necessary to operate and maintain a drinking water system.

### 2.0 Scope

Applies to review and provision of infrastructure at the Municipality of Mississippi Mills Almonte Water Distribution. Ensures that the adequacy of the infrastructure necessary to operate and maintain the Subject System is reviewed at least once every Calendar Year.

### 3.0 Responsibility

Director of Roads and Public Works  
Operations Manager  
Lead Hand - Water Distribution & Wastewater Collection  
Public Works Operators  
Environmental Compliance Coordinator

### 4.0 Definitions

**Infrastructure** – the set of interconnected structural elements that provide the framework for supporting the operation of the drinking water system, including buildings, workspace, process equipment, hardware and software and supporting services, such as transport or communication.

**Rehabilitation** – the process of repairing or refurbishing an infrastructure element.

**Renewal** – the process of replacing the infrastructure element with new elements.

### 5.0 Procedure

5.1 On an annual basis, the Director conducts a review of the drinking water system's infrastructure to assess its adequacy for the operation and maintenance of the system.

5.2 A summary of maintenance and capital recommendations will be submitted to the owner for review and comment. Upon authorization, timelines and responsibilities for implementation of items identified will be documented and scheduled.

5.3 The Director will include the results of the recommendations and implementation schedule at the Management Review.

### 6.0 Related Documents

Summary of Maintenance & Capital Recommendations  
Minutes of Management Review

### 7.0 Revision History

Date	Revision #	Reason for Revision
21 Sept 2009	0	Procedure issued
16 Sept 2015	1	Added Environmental Compliance Coordinator to Section 3.0

6 Dec 2018	2	Replaced Water Meter, Distribution and Collection Operator title to Lead Hand - Water Distribution & Wastewater Collection
25 Feb 2021	3	Section 2.0 Add – Ensures that the adequacy of the infrastructure necessary to operate and maintain the Subject System is reviewed at least once every Calendar Year.


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## Appendix H

### #MMQMS-7 Sampling, Testing & Monitoring

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	<h2 style="margin: 0;">QMS Procedure</h2>	Proc.: #MMQMS-7 Issued: 21 Sept 2009 Rev.#: 2 Revision: 6 Dec 2018
Reviewed by: C. Hartwick	Approved by: G. Bourgon	

## Sampling, Testing and Monitoring

### 1.0 Purpose

To describe the Municipality of Municipality of Mississippi Mills procedure for sampling, testing and monitoring for process control and finished drinking water quality.

### 2.0 Scope

Applies to sampling, testing and monitoring at the Mississippi Mills Drinking Water System - Distribution System.

### 3.0 Responsibility

Director of Roads and Public Works  
 Operations Manager  
 Lead Hand - Water Distribution & Wastewater Collection  
 Operations Staff

### 4.0 Definitions

None

### 5.0 Procedure

5.1 All sampling, monitoring and testing is conducted at a minimum in accordance with regulatory requirements. Adverse water quality incidents are responded to and reported as per regulations.

5.2 Samples are submitted to an accredited and licensed laboratory for microbiological sampling for new water mains or following water breaks. A hard copy of the results will be kept in a sample results binder in the Public Works Administrator's Office.

Ontario Clean Water Agency is contracted to provide all water quality sampling required to fulfill the minimum requirements of O/ Reg. 170/03 and other regulations.

The Municipality of Mississippi Mills water distribution operators carry out all remaining water quality sampling associated with distribution system repairs. In addition, the Municipality carries out all water sampling for the commissioning of new watermains as part of new construction.

Hardcopy reports are maintained as per MMQMS-1 Appendix A Document and Records Control.

5.3 In-house sampling and flow monitoring activities are conducted annually when flushing hydrants. The results of these tests are recorded in the facility Hydrant Flushing Binder.

5.4 Ontario Clean Water Agency completes any necessary continuous monitoring in system.

5.5 There are no challenging conditions identified in System Description (Element 6).

5.6 Sampling, testing and monitoring of the treated water produced at the Mississippi Mills Drinking Water System - Distribution System well supply is conducted by Ontario Clean Water Agency operators as required by the regulation. The operators ensure that the water supplied to the distribution system meets the Ontario Drinking Water Quality Standards (ODWQS).

The Municipality is notified by the OCWA of any changes in the quality of water supplied to the distribution system which may require operational adjustments.

5.7 Sampling, testing and monitoring results are readily accessible to the owner/Municipality from OCWA.

## 6.0 Related Documents

QMS Policy

Sampling Records

Flushing Records

MMQMS-1 Document and Records Control

## 7.0 Revision History


Date	Revision #	Reason for Revision
21 Sept 2009	0	Procedure issued
19 Dec 2012	1	Amended 5.2 as per recommendation from Internal Audit
6 Dec 2018	2	Replaced Water Meter, Distribution and Collection Operator title to Lead Hand - Water Distribution & Wastewater Collection

## Appendix I

### #MMQMS-8 Equipment Calibration & Maintenance

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	<h2 style="margin: 0;">QMS Procedure</h2>	Proc.: #MMQMS-8 Issued: 21 Sept 2009 Rev.#: 1 Revision: 6 Dec 2018
Reviewed by: C. Hartwick	Approved by: G. Bourgon	

## Measurement and Recording Equipment Calibration and Maintenance

### 1.0 Purpose

To describe the Municipality of Municipality of Mississippi Mills procedure for the calibration and maintenance of measurement and recording equipment.

### 2.0 Scope

Applies to the measurement and recording equipment at the Mississippi Mills Drinking Water System - Distribution System.

### 3.0 Responsibility

Director of Roads and Public Works  
 Operations Manager  
 Lead Hand - Water Distribution & Wastewater Collection  
 Operations Staff

### 4.0 Definitions

None

### 5.0 Procedure

- 5.1 All measurement and recording equipment calibration and maintenance activities must be performed by appropriately trained and qualified personnel or by a qualified third-party calibration service provider.
- 5.2 Lead Hand - Water Distribution & Wastewater Collection establishes and maintains a list of all measurement and recording devices and associated calibration schedules.
  - 5.2.1 Calibration, standardizing and maintenance activities are carried out in accordance with procedures specified in the manufacturer's manual or industry standards.
  - 5.2.2 The only measurement and recording equipment that the Municipality uses currently is a handheld chlorine test kit.
- 5.3 Any measurement device which does not meet its specified performance requirements during calibration must be removed from service (if practical) until repaired or replaced. The failure must be reported to the Director of Roads and Public Works as soon as possible so that immediate measures can be taken to ensure that drinking water quality has not been compromised by the malfunctioning device. Any actions taken as a result of the failure are recorded and any notifications required by applicable legislation are completed and documented within the specified time period.
- 5.4 The maintenance/equipment manuals are kept with the equipment and record of calibration standardizing are kept at the Public Works Garage.



## **6.0 Related Documents**

Calibration/Maintenance Records

Maintenance and Equipment Manuals

## **7.0 Revision History**

<b>Date</b>	<b>Revision #</b>	<b>Reason for Revision</b>
21 Sept 2009	0	Procedure issued
6 Dec 2018	1	Replaced Water Meter, Distribution and Collection Operator title to Lead Hand - Water Distribution & Wastewater Collection


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## Appendix J

### #MMQMS-9 Emergency Management

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 Municipality of Mississippi Mills	<h2 style="margin: 0;">QMS Procedure</h2>	Proc.: #MMQMS-9 Issued: 21 Sept 2009 Rev.#: 7 Revised: 15 Oct 2021
Reviewed by: C. Hartwick	Approved by: C. Smith	

## Emergency Management

### 1.0 Purpose

To describe the Municipality of Mississippi Mills procedure for maintaining a state of emergency preparedness.

### 2.0 Scope

Applies to potential emergency situations or service interruptions identified for the water system operated by Municipality of Mississippi Mills Almonte Water Distribution.

### 3.0 Responsibility

Director of Roads and Public Works  
Operations Manager  
Lead Hand - Water Distribution & Wastewater Collection  
Public Works Operators  
Owner  
Environmental Compliance Coordinator

### 4.0 Definitions

***Municipal Emergency Plan*** – The emergency plan required by the Emergency Management and Civil Protection Act and adopted as a by-law by council, governing the provision of necessary services during an emergency and the procedures under and the manner in which employees of the municipality and other persons will respond to the emergency.

***Emergency*** – a potential situation or service interruption that may result in the loss of the ability to maintain a supply of safe drinking water to consumers.

***Emergency Response*** – the effort to mitigate the impact of an emergency on consumers

### 5.0 Procedure

5.1 The Emergency Plans for the Almonte Water Distribution System are contained within the Municipality of Mississippi Mills Emergency Response Plan.

5.2 A list of Emergency Plans has been developed that relate to potential emergency situations. Each procedure outlines a step-by-step approach to the response and recovery for each situation. These are:

- Sub Plan – Drought Incident
- Sub Plan – Flooding Emergency
- Sub Plan – Hailstorm Incident
- Sub Plan – Water Emergency – Contamination Incident
- Sub Plan – Water Emergency – Municipal System Incident
- Sub Plan – Water Emergency – Well Water Incident
- Sub Plan – Windstorm Incident

5.3 Emergency plans are required to be reviewed every two (2) years and updated as required. One plan must be tested every two (2) years. Reviews and testing will be documented as training.

5.3.a Agenda and minutes to be completed by the Environmental Compliance Coordinator

5.4 Operating Authority and Owner roles and responsibilities for Emergency Management are set out in the Roles and Responsibilities table in Element 9.

5.5 An emergency contact list is maintained as per Element 5. This list will be reviewed and updated at least annually.

5.6 The site specific Emergency plans will outline who is to be contacted as each situation required a different response. Other communications are set out in Element 12 Communications.

## 6.0 Related Documents

SOPs  
Emergency Response Plan  
Emergency Management Plan  
Training Records  
Municipal Emergency Plan

## 7.0 Revision History


Date	Revision #	Reason for Revision
21 Sept 2009	0	Procedure issued
20 Sept 2010	1	Updated procedure to incorporate changes in response to CARS
15 Aug 2014	2	Updated Emergency Contact List
16 Sept 2015	3	Added Environmental Compliance Coordinator to Section 3.0
29 Sept 2016	4	Updated Emergency Contact List
6 Dec 2018	5	Replaced Water Meter, Distribution and Collection Operator title to Lead Hand - Water Distribution & Wastewater Collection
		Updated Emergency Contact List
15 Oct 2021	6	Added 5.3.a regarding agenda and minutes
		Updated Emergency Contact List
1	7	updated emergency plans as per the Municipality of Mississippi Mills Emergency Management Plan

## **Appendix K**

#MMQMS-10 Internal Audits

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 Municipality of Mississippi Mills	<h2 style="margin: 0;">QMS Procedure</h2>	Proc.: #MMQMS-10 Issued: 21 Sept 2009 Rev.#: 3 Revision: 11 Dec 2018
Reviewed by: C. Hartwick	Approved by: G. Bourgon	

## Internal Audits

### 1.0 Purpose

To describe the Municipality of Mississippi Mills procedure for conducting Internal Audits at the facility level that evaluates the conformance to the requirements of the Drinking Water Quality Management Standard (DWQMS).

### 2.0 Scope

This procedure applies to the process of conducting internal audits at the Municipality of Mississippi Mills Almonte Water Distribution

### 3.0 Responsibility

Director of Roads and Public Works  
Operations Manager  
Lead Hand - Water Distribution & Wastewater Collection  
Operations Staff  
Owner  
Auditor  
Environmental Compliance Coordinator

### 4.0 Definitions

**Audit** – A systematic and documented verification process that involves objectively obtaining and evaluating documents and processes to determine whether a quality management system conforms to the requirements of this Standard.

**Non-conformance** – the non-fulfillment of a DWQMS requirement

### 5.0 Procedure

- 5.1 The Environmental Compliance Coordinator maintains the Internal Audit Procedure and schedules the internal QMS audit that addresses all DWQMS elements is conducted for the facility once every calendar year. The Director selects personnel to perform the audit considering adequate skills, training and/or experience.
- 5.2 The Auditor evaluates conformity of the QMS with the requirements of the DWQMS by asking questions which are designed to encompass all of the requirements of the DWQMS.
- 5.3 The Auditor will use a check list, developed from MOE's DWQMS and supporting documentation, to ensure all 21 Elements of the DWQMS are addressed. This step will include interviews with select staff of the Operating Authority, observation of operating practices, and review of documents. The auditor will document the audit findings in a written report to the Operating Authority.

5.4 The auditor reviews the facility's approved policies and procedures, the results of previous internal and external QMS audits, the status of corrective and preventive actions and other QMS-related documentation prior to the audit.

5.5 When nonconformity is identified through the internal audit process, an action plan to rectify the issue is developed by the QMS Representative, specifying responsibility and a target date for resolution. This is done through completion of an Audit Non Conformance Report Form. The QMS Representative monitors progress of the non-conformance report until it is fully resolved.

5.6 The QMS Representative ensures that results of the audit are included as input to the management review process.

## 6.0 Related Documents

Internal Audit Checklist  
Audit Reports  
Management Review

## 7.0 Revision History

Date	Revision #	Reason for Revision
21 Sept 2009	0	Procedure issued
16 Sept 2015	1	Added Environmental Compliance Coordinator to Section 3.0 and Section 5.1.
6 Dec 2018	2	Replaced Water Meter, Distribution and Collection Operator title to Lead Hand - Water Distribution & Wastewater Collection Section 5.1 removed words "on an annual basis" and replaced with "once every calendar year"
11 Dec 2018	3	Updated section 5.5


## Appendix L

### #MMQMS-11 Management Review

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	<h2 style="margin: 0;">QMS Procedure</h2>	Proc.: #MMQMS-11 Issued: 21 Sept 2009 Rev.#: 3 Revision: 6 Dec 2018
Reviewed by: C. Hartwick	Approved by: C, Smith	

## Management Review

### 1.0 Purpose

To describe the Municipality of Mississippi Mills procedure for a Management Review of the Quality Management System (QMS) at the facility level.

### 2.0 Scope

Applies to the review by Top Management of *Municipality of Mississippi Mills Public Works* of the QMS implemented at the Municipality of Mississippi Mills Almonte Distribution.

### 3.0 Responsibility

Top Management (facility level):

- Director
- CAO

Other Management Review Participants:

- Operations Manager
- Environmental Compliance Coordinator
- Lead Internal Auditor(s)
- Lead Hand - Water Distribution & Wastewater Collection

### 4.0 Definitions

**Management Review** – a process where a higher level of managers in the operating authority considers various indicators within the QMS.

### 5.0 Procedure

5.1 The Director determines a suitable frequency for Management Review meetings for the drinking water system. As a minimum, reviews must be conducted at least once every calendar year. The following positions are included (but not restricted to) in the Management review are the Director and the co- QMS Representative.

5.2 The Director maintains the Management Review Procedure, coordinates the Management Review and ensures that the agenda with identified responsibilities is distributed to all participants in advance of the Management Review meeting along with any related reference materials.

5.3 The standing agenda for Management Review meetings is as follows:

- (a) Incidents of regulatory non-compliance (i.e. review MECP inspection reports, annual reports to MECP)
- (b) Incidents of adverse drinking water tests (i.e. review Annual reports and adverse reports to MECP)
- (c) Deviations from critical control limits and response actions (i.e. review adverse reports to MECP, call-in reports, logbook entries)

- (d) The efficiency of the risk assessment process, (i.e. review of Summary of Risk Assessment Outcomes)
- (e) Internal and third-party audit results (i.e. review Audit reports and action plans)
- (f) Results of emergency response testing (i.e. review Facility Emergency Plan, training records, related test documentation)
- (g) Operational performance (i.e. review MECP inspection rating reports)
- (h) Water supply and drinking water quality trends (i.e. review drinking water facility description in Operational Plan, annual reports to MECP, flushing trends, consumer feedback)
- (i) Follow-up on action items from previous Management Reviews (i.e. review minutes and action plans)
- (j) The status of management action items identified between reviews (i.e. review action plans; memos, correspondence to operating authority staff)
- (k) Changes that could affect the QMS
- (l) Consumer feedback (i.e. review community complaints, Logbook)
- (m) The resources needed to maintain the QMS (i.e. review staffing levels)
- (n) The results of the infrastructure review (i.e. review capital works recommendations)
- (o) Operational Plan currency, content and updates (i.e. review the status of the Operational Plan including QMS Procedures)
- (p) Staff suggestions (i.e. review relevant correspondence)

5.4 The Management Review participants review all data presented and make recommendations and/or initiate action plans to address identified deficiencies as appropriate.

5.5 The QMS Representative ensures that minutes of and action plans resulting from the Management Review meeting are prepared and distributed to all participants.

5.6 The QMS Representative monitors the progress and documents the completion of action plans resulting from the Management Review.

## 6.0 Related Documents

Minutes and action plans resulting from the Management Review

Audit Reports

Management Review Records/Documents

## 7.0 Revision History

Date	Revision #	Reason for Revision
21 Sept 2009	0	Procedure issued
16 Sept 2015	1	Administrative Edits/Added Environmental Compliance Coordinator
6 Dec 2018	2	Replaced Water Meter, Distribution and Collection Operator title to Lead Hand - Water Distribution & Wastewater Collection Section 5.1 removed words "every 12 months" replaced with "every calendar year"
<b>1</b>	3	added Lead in front of Internal Auditor(s) Changed MOE to MECP



## Appendix M

### #MMQMS-12 Process Flow Chart

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## Appendix N

### Revision History

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Date	Revision #	Description of Revision
21 Sept 2009	0	Operational Plan issued
20 Sept 2010	1	Various elements updated and reformatted to incorporate changes in response to CARS
14 Dec 2011	2	Changes to the Contact List – Essential Services and Supplies – staff changes and updates
22 Dec 2011	3	<p>Element 5 – Document and Records Control – update missing record listings (per CGSB)</p> <p>Element 6 – Drinking Water System – clarified generator function and updated system name</p> <p>Element 7 – Risk Assessment – reviewed and updated critical control points scoring</p> <p>Element 9 – Responsibilities – CAO responsibilities updated, ORO/OIC updates</p> <p>Element 11 – Personnel Coverage – ORO Responsibilities updated (section 5.2)</p> <p>Updated system name for consistency with issued license</p>
19 Nov 2012	4	<p>Element 7 – Risk Assessment – reviewed and updated critical control points</p> <p>Element 13 – Essential Supplies and Services – reviewed and updated Contact List – Essential Supplies Services &amp; Contact List – Emergencies</p>
19 Dec 2012	5	<p>Element 16 – Amend Appendix H – Section 5.2 changed wording</p> <p>Element 5 – Document and Records Control – Amend Appendix A – Section 5.2 - 4<sup>th</sup> Bullet changed wording</p>
29 Jan 2013	6	Element 6 – Drinking Water System – Amended Section 6.2 to identify the raw water description.
4 Nov 2013	7	<p>Appendix J – updated Emergency Contact List Housekeeping– removed Revision footer off pages</p> <p>Appendix M – updated Water Distribution Map</p>
17 Dec 2013	8	Appendix A – updated form name – replaced Complaint Form with Service Request Form
14 Aug 2014	9	<p>Appendix A –added Internal Audit Checklist Appendix D – item 5.3 updated location on call list is posted</p> <p>Appendix F – updated Essential Supplies and Services list to add Neil Bros to the list of Contractor Services</p> <p>Appendix J – updated Emergency Contact List to update the change of the new fire chief. Included updated OCWA contact list.</p>
2 Dec 2014	10	<p>Element 6 – Drinking Water Distribution - Item 6.2 (page 10) - updated system details to reflect “estimated” population of 5,500 and system length to “approximately 41km”.</p> <p>Item 6.6 (page 11) – Added the following wording to first paragraph under “Monitoring and Management” – <i>“The Town also monitors water</i></p>

		<p><i>losses through review of leak detection reports produced under the smart meter program”.</i></p> <p>Element 9 Organizational Structures - Table on Page 12 under Mayor and Council Owner – deleted reference to “<b>procedures</b>”</p> <p>Element 10 – Competencies – Table on Page 14 – for Operations Manager – move “Operator Certification in good standing” from being a desired competency to a required competency.</p> <p>Element 15 – Infrastructure Maintenance, Rehabilitation and Renewal – removed all references to the Water &amp; Sewer Committee and/or the Roads and Public Works Committee and replaced with Committee of the Whole.</p> <p>Appendix A – Document and Records Control – Page 21 removed Master plan (1984) and referenced “Master Plan Report – Almonte Ward and Wastewater Infrastructure (2012). Location changed to Directors Office.</p> <p>Appendix C – Organizational Structure – Changed title page from Almonte Water Distribution to Mississippi Mills Drinking Water System.</p> <p>Page 29 removed reference to the co-QMS rep from chart as the role is clarified elsewhere.</p> <p>Appendix D – Personnel Coverage – removed all references to Municipality of Mississippi Mills Almonte Distribution and replaced with Mississippi Mills Drinking Water System.</p> <p>Appendix E – Communications – revised section 5.1 to read the following “The status of the QMS and its effectiveness shall be communicated to the owner <i>through quarterly reports and</i> scheduled owner meetings.”</p> <p>Element 7 – Risk Assessment Item 5.1 replaced QMS Implementation Team with The Director of Roads and Public Works and the Water Meter, Distribution and Collection Operator. Item 5.2 removed the “s” of Tables 2A</p> <p>Item 5.7 changed QMS Representative to read co-QMS representatives.</p> <p>Added title Table 2A</p> <p>Table 2A Distribution Water Break – typo – Contaminants fixed.</p> <p>Table 2A Low Chlorine residual – reworded existing control measure to read “Raw groundwater supplies have little/no bacteria.</p>
16 Sept 2015	11	<p>Changed Town of Mississippi Mills to Municipality of Mississippi Mills</p> <p>Changed all references to the Director of Public Works as co-QMS representative to alternate QMS representative.</p> <p>Removed reference to the Water Meter, Distribution and Collection Operator as co-QMS rep throughout the document.</p> <p>Element 4 – Updated section to identify the Environmental Compliance Coordinator as the QMS representative and removed the Water Meter, Distribution and Collection operator from the role.</p>

		<p>Element 4, Section 6.3 Removed the flow map from Appendix M and added new map – Revision 5 – December 2014.</p> <p>Element 9 – The Chief Administrative Officer and The Director of Roads and Public Works be listed as Top Management.</p> <p>Element 9 - Add Environmental Compliance Coordinator to the table.</p> <p>Element 9 - Removed reference to Water Meter, Distribution and Collection Operator to approving changes to plan and procedures and added Maintains annual equipment calibration under responsibilities.</p> <p>Element 10 – added Knowledge of DWQMS and QMS under required competencies for Council and CAO.</p> <p>Element 10 – added Top Management under CAO and Director of Roads and Public Works.</p> <p>Element 10 – added Environmental Compliance Coordinator.</p> <p>Element 10 – bullet 5 – substituted reference to the Water Meter, Distribution and Collection Operator with Environmental Compliance Coordinator.</p> <p>Element 15 – reworded second last sentence under Planned Infrastructure Maintenance</p> <p>Appendix A – Section 3.0 – added Environmental Compliance Coordinator.</p> <p>Appendix B – added Operations Manager and Environmental Compliance Coordinator to the QMS Implementation Team and removed Roads and Public Works Assistant.</p> <p>Appendix B - Item 5.1 – revised wording</p> <p>Appendix B – Table 1A – revised wording after table.</p> <p>Appendix C – added Environmental Compliance Coordinator to chart.</p> <p>Appendix E – added Environmental Compliance Coordinator.</p> <p>Appendix F – Added Environmental Compliance Coordinator to Section 3.0.</p> <p>Appendix F - Updated Essential Supplies and Services List.</p> <p>Appendix J – Added Environmental Compliance Coordinator to Section 3.0.</p> <p>Appendix J – Updated Emergence contact list</p> <p>Appendix K – Added Environmental Compliance Coordinator to Section 3.0</p> <p>Appendix K - Section 5.1 revised to read that the Environmental Compliance Coordination maintains the Internal Audit Procedure.</p>
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		Appendix L – Added Environmental Compliance Coordinator to list of Other Management Review Participants and removed the Water Meter, Distribution and Collection Operator.
29 Sept 2016	12	Appendix J – updated Emergency Contact List
6 Dec 2018	13	<p>Updated Town of Mississippi Mills to Municipality of Mississippi Mills</p> <p>Updated Mayor and Council with Council</p> <p>Updated The Water Meter, Distribution and collection Operator title to Lead Hand - Water Distribution &amp; Wastewater Collection</p> <p>Adjusted revision numbers in appendixes</p> <p>Removed Operational Plan Revision History from pages 3 – 7 Added Appendix N- Revision History Table to the Plan</p> <p>Element 6 updated table with 2017 data</p> <p>Element 6 –section 6.2 changed estimated population to 6009</p> <p>Appendix A – section 5.4 removed word inspector and added auditors</p> <p>Table 1 – Added Form Master List Binder to the QMS Internal Audit Checklist</p> <p>Appendix B – section 5.7 remove word verified and add reviewed</p> <p>Table 2A – removed from the table Distribution Water Break (potential high pressure) and Chlorine Contact Chamber By-Pass Valve (Wells 5&amp;6)</p> <p>Removed Revision History off page 31 it was a duplicate for this Appendix</p> <p>Appendix F – section 5.9 Change QEMS to QMS</p> <p>Updated Essential Supplies and Services List</p> <p>Appendix J – updated Emergency Contact List</p> <p>Appendix K – section 5.1 removed words “on an annual basis” and replaced with “once every calendar year”</p> <p>Appendix L – section 5.1 removed words “every 12 months” and replaced with “every calendar year”</p> <p>Appendix M – updated Map with Revision 8</p>
11 Dec 2018	14	<p>Appendix A – Table 1 added the Non Conformance Report</p> <p>Appendix B – Section 5.7 removed “reviewed” and replaced with “conducted” in the last sentence.</p> <p>Appendix K – Section 5.5 – updated to add “This is done through the completion of an Audit Non Conformance Report Form. Edit to last sentence “The QMS Representative monitors progress of the non-conformance report until it is fully resolved.</p>
25 Feb 2021	15	<p>Element 2 – added to state A commitment to comply with applicable legislation</p> <p>Appendix B: section 2.0 - added - Considers potential hazardous events and associated hazards, as identified in the Ministry of the Environment and Climate Change document titled Potential Hazardous Events for Municipal Residential Drinking Water Systems, dated February 2017 as</p>



		<p>it may be amended.</p> <p>Appendix B – section 5.7 – removed on an annual basis and replaced with every Calendar Year</p> <p>Appendix B – Table 2A – replaced in its entirety</p> <p>Appendix G – section 2.0 – added - Ensures that the adequacy of the infrastructure necessary to operate and maintain the Subject System is reviewed at least once every Calendar Year</p> <p>Element 21 – added - The Operating Authority shall develop a procedure for tracking and measuring continual improvement of its Quality Management System by:</p> <p>a) reviewing and considering applicable best management practices, including any published by the Ministry of the Environment and Climate Change and available on <a href="http://www.ontario.ca/drinkingwater">www.ontario.ca/drinkingwater</a>, at least once every thirty-six months;</p> <p>b) documenting a process for identification and management of Quality Management System Corrective Actions that includes:</p> <ol style="list-style-type: none"> <li>investigating the cause(s) of an identified non-conformity,</li> <li>documenting the action(s) that will be taken to correct the nonconformity and prevent the non-conformity from re-occurring, and</li> <li>reviewing the action(s) taken to correct the non-conformity, verifying that they are implemented and are effective in correcting and preventing the re-occurrence of the nonconformity.</li> </ol> <p>c) documenting a process for identifying and implementing Preventive Actions to eliminate the occurrence of potential non-conformities in the Quality Management System that includes:</p> <ol style="list-style-type: none"> <li>reviewing potential non-conformities that are identified to determine if preventive actions may be necessary,</li> <li>documenting the outcome of the review, including the action(s), if any, that will be taken to prevent a non-conformity from occurring, and</li> <li>reviewing the action(s) taken to prevent a non-conformity, verifying that they are implemented and are effective in preventing the occurrence of the non-conformity.</li> </ol> <p>DO – The Operating Authority shall strive to continually improve the effectiveness of its Quality Management System by implementing and conforming to the procedure.</p>
15 Oct 2021	16	<p>Element 3 –updated with current Council</p> <p>Element 9 – updated responsibilities and authorities for Operations Manager and Environmental Compliance Coordinator. Also identified who Top Management is</p> <p>Element 10 – updated required competencies and desired competencies for the Operations Manager</p> <p>Appendix B – added 5.1.a to identify who is responsible for agenda and minutes for risk assessment</p> <p>Table 2A – identified name of SOP's that are being referred to</p>

		<p>Appendix C – identified who Top Management is</p> <p>Appendix F – reviewed and updated Essential Supplies and Services List</p> <p>Appendix J - added 5.3.a to identify who is responsible for agenda and minutes for emergency plans review and testing.</p> <p>Reviewed and updated Emergency Contact List</p> <p>Appendix M – included Revision 10 – March 2021 Water Distribution System Map</p>
11 May 2022	17	<p>Element 6</p> <ul style="list-style-type: none"> <li>-Updated 6.2                             <ul style="list-style-type: none"> <li>-include the new storage reservoir</li> <li>-Updated Raw Water Characteristic at Intake (based on 2021 data)</li> <li>-updated Distribution System description to include up to date data</li> </ul> </li> <li>-Updated 6.7                             <ul style="list-style-type: none"> <li>-added over in front of 100 years</li> </ul> </li> </ul> <p>Element 21</p> <ul style="list-style-type: none"> <li>- a. updated the Ministry of the Environment name to Ministry of the Environment, Conservation and Parks</li> </ul> <p>Appendix A</p> <p>Table 1</p> <ul style="list-style-type: none"> <li>- updated Hydrant Use Forms (Bulk Water) to Bulk Water Permit</li> <li>- updated location of SOP's</li> <li>- updated location of Operational Plan</li> <li>- removed Log Books (personal and master) from Internal QMS Documents as it is in QMS Records</li> <li>- updated location of Emergency Contact List and Essential Supplies and Service List</li> <li>- added Water &amp; Sewer Inspection Form to Internal QMS document</li> <li>- updated the location of Permits</li> <li>- updated location of DWQMS</li> <li>- updated Master Plan Report from (2012) to (2018)</li> <li>- updated location of Regulations and Legislation and Municipality By-Laws</li> <li>- updated location of Service Requests (complaints)</li> <li>- updated location of Annual Watermain Flushing Record</li> <li>- updated title and location of Correspondence with regulators (MECP)</li> <li>- changed MOE to MECP in MECP Inspection Reports/Responses</li> <li>- changed the location of the Shift/Vacation Schedules</li> <li>- updated location of Log Books (personal and master)</li> <li>- updated location of Sampling and Monitoring Records</li> <li>- updated location of Lab Analysis</li> </ul> <p>Appendix J</p> <ul style="list-style-type: none"> <li>- updated emergency plans as per the Municipality of Mississippi Mills Emergency Management Plan</li> </ul> <p>Appendix L</p> <ul style="list-style-type: none"> <li>- added Lead in front of Internal Auditor(s)</li> <li>- Changed MOE to MECP</li> </ul> <p>Appendix M – included Revision 10 – March 2022 Water Distribution System Map</p>