

Council Report

Report Number:	WWW2021-003
Meeting Date:	December 14, 2021
Title:	Drinking Water Quality Management System Review and Endorsement
Description:	Report to request Council's annual required endorsement of the Water and Wastewater Division Drinking Water Quality Management System
Author and Title:	Julie Henry, Quality Management and Policy Coordinator

Recommendation(s):

That Report WWW2021-003, Drinking Water Quality Management System Review and Endorsement, be received;

That the City of Kawartha Lakes Water and Wastewater Quality Management System be endorsed by Council;

That the City of Kawartha Lakes Water and Wastewater Quality Management System Policy statements be adopted;

That the Ontario Clean Water Agency Quality Management System Policy statements be received and endorsed;

That the external re-accreditation audit report for the Water and Wastewater Division (as the accredited Operating Authority) be received;

That the external re-accreditation audit report for Ontario Clean Water Agency (as the accredited Operating Authority) be received;

That the Water and Wastewater Division Management Review Summary be received, and

That the OCWA Management Review Summary be received.

Department Head: _____

Financial/Legal/HR/Other: _____

Chief Administrative Officer: _____

Background:

The Corporation of the City of Kawartha Lakes owns twenty-one drinking water systems, all of which are licensed under the Ontario Municipal Drinking Water Licensing Program (MDWLP). An Owner cannot legally produce or deliver drinking water without a license. In order to receive a license, the Owner of a municipal drinking water system must have the following:

- An accredited Operating Authority (for the Lindsay, Manilla and Sonya Drinking Water Systems, and all twenty-one distribution systems owned by the City, the accredited Operating Authority is the Water and Wastewater Division of the City of Kawartha Lakes. For the remaining eighteen treatment systems, Ontario Clean Water Agency (OCWA) is the contracted accredited Operating Authority.) **Both OCWA and the Water and Wastewater Division were granted accredited operating authority status for City drinking water systems in 2011 and have since successfully maintained their accreditation and licensed status.**
- A Permit to Take Water
- An Operational Plan (the written version of the Quality Management System)
- A Financial Plan

The Drinking Water Quality Management Standard (DWQMS) provides the foundation for the operation of municipal residential drinking water systems for accredited operating authorities in the province of Ontario. An Owner cannot legally operate a drinking water system without an accredited operating authority in place. In order to remain an accredited operating authority, an established and successful Quality Management System (QMS) that meets the requirements of the Ontario Drinking Water Quality Management Standard, must be maintained. Without Owner endorsement, a Quality Management System is not considered to have met this requirement. Therefore, it is imperative to attain and maintain Owner endorsement and approval for the Water and Wastewater Division Quality Management System. Multiple divisions support the QMS including Engineering, Corporate Assets, Finance and Purchasing.

Council endorses the Water and Wastewater Division's Quality Management System every year by authorizing the Mayor and CAO to sign the Quality Management System Policy through resolution. The policy documents the mission statement, or commitment that an accredited operating authority makes in regards to the delivery of safe drinking water.

The Quality Management System is a system created and managed by the Operating Authority to:

- a) establish policy and objectives, and to achieve those objectives, and
- b) direct and control an organization with regard to quality.

The written version of a QMS is the Operational Plan. The standard states, "The Operational Plan shall contain a written endorsement of its contents by Top Management and the Owner." In response, Council has endorsed the Water and Wastewater Division's Quality Management System annually since the initial accreditation in 2011.

At the Council Meeting of November 17, 2020, Council adopted the following resolution:

10.3.21 CW2020-177

That Report WWW2020-008, **Drinking Water Quality Management System Review and Endorsement**, be received;

That the City of Kawartha Lakes Water and Wastewater Quality Management System be endorsed by Council;

That the City of Kawartha Lakes Water and Wastewater Quality Management System Policy statements be adopted;

That the Ontario Clean Water Agency Quality Management System Policy statements be received and endorsed;

That the external surveillance audit report for the Water and Wastewater Division (as the accredited Operating Authority) be received;

That the external surveillance audit report for Ontario Clean Water Agency (as the accredited Operating Authority) be received; and

That the City of Kawartha Lakes Water and Wastewater Division Management Review Summary be received.

Carried

Rationale:

The Drinking Water Quality Management Standard is mandated through the Safe Drinking Water Act (2002) and the Ministry of Environment, Conservation and Parks. In order for an Operating Authority to remain in good standing, the endorsement and support of the Owner (as represented by Council), is required.

The following section provides an overview of the Standard that the Water and Wastewater Division and OCWA are mandated to follow and the specific activities that were undertaken in the past year to ensure that the Operational Plans and Quality Management Systems Policies of each Operating Authority are endorsed and adopted by Council.

The Drinking Water Quality Management Standard is comprised of twenty-one elements, all of which address a different aspect of producing and delivering safe drinking water.

Element One – Quality Management System

Element Two – Quality Management System Policy

Element Three – Commitment and Endorsement

Element Four – Quality Management System Representative

Element Five – Document Control

Element Six – Drinking Water System

Element Seven – Risk Assessment

Element Eight – Risk Assessment Outcomes

Element Nine – Organizational Structure Roles, Responsibilities and Authorities

Element Ten – Competencies

Element Eleven – Personnel Coverage

Element Twelve – Communications

Element Thirteen – Essential Supplies and Services

Element Fourteen – Review and Provision of Infrastructure

Element Fifteen – Infrastructure Maintenance, Rehabilitation and Renewal

Element Sixteen – Sampling, Testing and Monitoring

Element Seventeen – Measurement and Recording Equipment Calibration and Maintenance

Element Eighteen – Emergency Management

Element Nineteen – Internal Audits.

Element Twenty – Management Review

Element Twenty-One – Continual Improvement

A summary of each element is included in Appendix A in the Drinking Water Quality Management Standard.

External Audit

As part of the accreditation process, it is necessary for every Accredited Operating Authority to undergo an annual third-party external audit. There are two types of audits: surveillance (system) audits, where Quality Management System documents are sent to the auditor for review (there is no onsite verification component), and re-accreditation audits, which are held onsite. During re-accreditation audits, the auditor visits facilities and audits operations as well as reviews all QMS related documentation. Year 1 and 2 of the audit schedule are surveillance audits, with year 3, a full onsite re-accreditation audit that focuses on process and operations. Success in all three years of the audit schedule is required for an Operating Authority to maintain its accredited status.

2021 was Year 3 in the audit schedule and as such, the Water and Wastewater Division and OCWA each underwent an onsite reaccreditation audit.

In addition to the re-accreditation audit, the Water and Wastewater Division underwent a surveillance audit when we became the Operating Authority for the Manilla and Sonya Drinking Water Systems. The treatment facilities for these systems were previously operated by OCWA, however on March 1, 2021, the Water and Wastewater Division of the City of Kawartha Lakes assumed the role of Operating Authority for both systems. As a result, all documentation created (including Standard Operating Procedures, Contingency Plans, Sampling Schedules, Daily Rounds Sheet etc.), were audited by the external auditor in March of 2021. The onsite re-accreditation audit was then held in July 2021.

Audit reports for both operating authorities are included in this report as Appendix D and Appendix E.

Internal Audits

In addition to the external third-party audits, the DWQMS requires each Operating Authority to conduct internal audits on all twenty-one elements of their Quality Management Systems on an annual basis. Assigned auditors meet with staff and ask questions about the Quality Management System (QMS) to ensure the system is operating as per the standard. Internal audits are similar to external audits in that they allow the Operating Authority to identify non-conformances and opportunities for improvement.

The Water and Wastewater Division completed a limited audit in May of 2021 to ensure that the changes made to the QMS to accommodate the change in Operating Authority for the Manilla and Sonya Drinking Water Systems were complete, and that staff were aware of these changes.

The Water and Wastewater Division held a full internal audit on November 16 and 17, 2021. The audit resulted in zero non-conformances and eight Opportunities for Improvement, which will be addressed during an upcoming DWQMS awareness training session.

Top Management Review

One of the requirements of the Drinking Water Quality Management Standard is a Top Management Review that is required at least once per calendar year. During this review, the Quality Management Representative presents a report to the members of the Water and Wastewater Division's Top Management that evaluates the continuing suitability, adequacy and effectiveness of the Water and Wastewater Quality Management System, according to a number of parameters provided by the Ministry of Environment, Conservation and Parks. The members of Top Management are responsible for reviewing the report and providing feedback to the Quality Management Representative. This feedback is used to determine ways in which to improve the Quality Management System.

The members of Top Management for the Water and Wastewater Division are:

Director, Public Works
Manager, Water and Wastewater
Supervisor/ORO Water Treatment
Supervisor/ORO Water Distribution and Wastewater Collection

A copy of the Management Review Meeting Minutes is included in this report as Appendix F.

At the time of the 2020 report, OCWA had not yet held its Management Review for the year. This review was held and the minutes completed in December of 2020. The minutes from this review are included as Appendix G. The Management Review for 2021 will not be completed until December 2021 and as such, the Management Review minutes will be included in next years' council report.

Conclusions and Recommendations:

Currently, the Water and Wastewater Division's Quality Management System is in excellent standing. The City of Kawartha Lakes remains committed to providing safe and reliable drinking water and services to all of our residents, businesses and visitors. We continue to meet and surpass applicable regulations and legislation relating to the provision of safe drinking water.

Our commitment is a crucial component of a successful Quality Management System. Without the authority, direction and support of the Owner, our Quality Management System cannot be maintained. Ultimately, without a successful and approved QMS, we cannot remain an accredited operating authority and the City of Kawartha Lakes cannot legally produce drinking water. It is therefore recommended that Council accept and re-endorse the Quality Management Systems for the Water and Wastewater Division of the City of Kawartha Lakes and for the Ontario Clean Water Agency.

Alternatives Considered:

None.

Alignment to Strategic Priorities

This QMS is consistent with the 2020-2023 Kawartha Lakes strategic plan, especially priorities 1 and 2. "A Healthy Environment" and "An Exceptional Quality of Life" by ensuring the City provides safe drinking water from source to tap. Maintaining an effective and robust Quality Management System ensures that the Water and Wastewater Division of the City of Kawartha Lakes retains its ability to provide clean, reliable drinking water while ensuring dedication and commitment to the health of the environment via source water protection. The protection and enhancement of drinking water quality adds to the quality of life and health of City residents.

Financial/Operation Impacts:

There are no financial considerations related to this report.

Consultations:

Director, Public Works
Manager, Water and Wastewater
Director, Engineering and Corporate Assets
Director, Corporate Services

Attachments:

Appendix A – Drinking Water Quality Standard (2017) V2



DWQMS Standard
February 2017.pdf

Appendix B – Water and Wastewater Division Quality Management System Policy



QMS E2 Policy
Endorsement 2021.pdf

Appendix C – OCWA Quality Management System Policy



OCWA CKL
Commitment and En

Appendix D – Water and Wastewater Division SAI Global Audit Report



AR-1631768-A-0044
8852-REACC-DWQM

Appendix E – OCWA SAI Global Audit Report



OCWA
Reaccreditation Aud

Appendix F – Water and Wastewater Division Management Review Summary



Management
Review Action Items

Appendix G – OCWA Management Review Summary



2020 Management
Review Minutes.pdf

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