

Date:	March 7, 2022
То:	Mayor and Council
Author:	Shaun Martinho
RE:	Water Distribution System Annual Summary Report
Report No.:	IED 2022- 11

RECOMMENDED ACTION

- 1. That the information presented in this report **BE RECEIVED** to satisfy the regulatory requirements in the Safe Drinking Water Act; and,
- 2. The Kingsville Environmental Services Operational Plan, Revision 9, dated March 14, 2022 **BE APPROVED**.

BACKGROUND

This report aims to provide information to stakeholders to satisfy the regulatory requirements of the *Safe Drinking Water Act* (SDWA) and O. Reg. 170/03- Drinking Water Systems Schedule 22. Specifically, that a report is presented to system owners no later than March 31 of each year, providing an overview of activities in the distribution system for the preceding calendar year.

A standard of care applies to all individuals tasked with providing safe and reliable potable water to their community. In the case of a drinking water system owned by a municipality, as decision-makers, members of Council share in this responsibility. As such, an annual report summarizing both regulatory and operational activities within Kingsville's Water Distribution System must be presented to Council each year. In conjunction with the Summary Report submitted by Union Water (Appendix A), a comprehensive overview of Kingsville's potable water system will be presented.

DISCUSSION

Update of Kingsville Operational Plan

To become an accredited drinking water Operating Authority, the municipality must apply for a Municipal Drinking Water License. One of the conditions for approval of the license is that the owner develops and maintains an Operational Plan (OP) that satisfies the requirements of Ontario's Drinking Water Quality Management Standard (DWQMS). Specifically, an Operational Plan must be developed to establish policies, objectives, controls, and methods for delivering safe potable water. As part of the accreditation process, the DWQMS requires that the Operational Plan be updated regularly and endorsed by the system owner (Council). The current OP was updated and approved by Council on Nov. 27, 2019. Since that time, the following changes have occurred, which require re-endorsement of the Operational Plan:

- Rebranding of Municipal Services into Infrastructure and Engineering.
- The Supervisor of Environmental Services position was added and needed to be assigned responsibilities within the OP.
- In 2020, the MECP updated procedures for disinfecting water mains that need to be incorporated into the OP's Standard Operating Procedures.

The updated Operational Plan dated March 14 2022, has been attached as Appendix B for Councils review and endorsement.

Conformance Audits

Conformance audits compare Kingsville's Operational Plan to the requirements of the Ministry's DWQMS. The objective of the audit is to ensure conformance with the standard and promote continuous improvement of the Operational Plan. During the inspection, an auditor may issue a non-conformance. This occurs when a deficiency is discovered between what is required under the DWQMS and what is documented in the Operational Plan. For each non-conformance, root cause analysis is performed to determine the underlying cause of the issue and methods for addressing them within specified completion dates.

External Audit Results

SAI Global conducted a system audit on August 31, 2021. During the inspection, the auditor identified one minor-nonconformity:

• In contradiction to Procedure 7/8:01 Risk Assessment and Risk Assessment Outcomes, evidence substantiating the 2020 risk assessment review was not available.

To address this issue, staff provided documentation substantiating completion of the 2020 Risk Assessment. This effectively resolved the problem, and the auditor determined that Kingsville's Operational Plan is effectively implemented and meets the requirements of the DWQMS.

Internal Audit Results

Internal audits are designed to assess the effectiveness of operations, identify nonconformities, and assist in the continual improvement of Kingsville's Operational Plan. Kingsville's Internal QMS Audit Report was completed on Aug 6, 2021. The auditor identified no instances of nonconformance and determined that Kingsville's quality management processes can consistently produce and distribute drinking water that meets applicable standards.

Management Review

As specified in Kingsville's Operational Plan, administration must complete an annual review of system activities and share the results with the system owner (Council). The Management Review aims to evaluate the ongoing suitability, adequacy, and effectiveness of the Towns Quality Management System. The review includes considerations such as negative drinking water tests, operational performance, drinking water quality trends, and the status of action items between reviews. The Management Review was completed on December 3, 2021. A copy of the meeting minutes and associated action items can be reviewed in Appendix C.

Risk Assessment

The MECP maintains a list of hazardous events that have the potential to impact municipal drinking water systems. Kingsville's Operational Plan establishes methods for identifying and evaluating the significance of these dangerous events and how they may affect drinking water quality or supply. Full risk assessments are conducted every three (3) years, with the last taking place in 2019. However, representatives must verify the currency and validity of the assumptions used in the risk assessment tool once every calendar year. This includes reviewing processes, procedures, sample results, service interruptions, and emergency response procedures. In 2021, there were no deviations from critical control points or hazardous events within the distribution system that posed a threat to the public. As a result, it was determined that Kingsville's risk assessment protocols are up-to-date and effective.

In 2017, the MECP updated the DWQMS and included requirements for municipalities to incorporate risk assessment outcomes into infrastructure capital planning. It is now mandatory to forecast major infrastructure maintenance, rehabilitation, and renewal activities based on the severity and likelihood of the hazardous events identified within the risk assessment tool. This long-term forecast must be reviewed by administration once per calendar year. The Infrastructure and Engineering Department incorporated the risk assessment protocols outlined in Kingsville's Operational Plan into the 5-year capital plan for buried infrastructure. Projects completed in 2021 and those identified for future rehabilitation are as follows:

Year	Projects	Risk Assessment Analysis
2021	Clarke Street Water Main Replacement	 Aging infrastructure Pipeline/water main break
2022	Stonehedge Dr/Coghill Dr Water Main Project	 Aging infrastructure Pipeline/water main break
2022	Lorna St and Edith St Water Main Looping Projects	- Loss of Supply
2023	Woodfern Ave/Queen Blvd/Peach Dr Water Main Replacement Project	 Aging infrastructure Low Pressure
2024	Woodlawn Cr/Summerset Ave/Commissioner Dr/Parkdale Cr	- Aging infrastructure - Low Pressure
2025	Owenwood Dr/James Ave/Katrishe Cr/Heritage Rd (Greenway to Main)	- Aging infrastructure - Low Pressure
2026	Laurel St/Elm St	- Aging infrastructure

MECP Compliance Inspection

The primary purpose of a MECP inspection is to confirm compliance with relevant legislation as well as evaluating conformance with Ministry drinking water polices and guidelines. Inspections include a review of treatment processes, distribution system components, operations, manuals, consumer relations, staff certification, and overall water quality. Provincial officers may, at any reasonable time, enter onto municipal property to conduct these inspections. Traditionally, the MECP conducts them annually, with an unannounced inspection taking place once every three (3) years.

Upon completion of the inspection, each municipality is assigned an Inspection Summary Rating Record (IRR), which provides the Ministry and Local Public Health Units with a summarized quantitative measure of the drinking water systems annual inspection and water quality testing performance. Due to concerns arising from the pandemic, administration participated in a virtual inspection on October 25, 2021. The Kingsville Distribution System received a rating of 100% during the inspection period (Appendix D).

FINANCIAL CONSIDERATIONS

The external audit performed by SAI Global cost \$1921.00. Staff in Infrastructure and Engineering completed all other compliance and conformance activities in 2021.

ENVIRONMENTAL CONSIDERATIONS

None

CONSULTATIONS

Environmental Services Staff SAI Global Ltd. Ontario Clean Water Association Union Water Supply System

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LINK TO STRATEGIC PLAN

To promote a safe community.

To become a leader in sustainable infrastructure renewal and development.

Link to Council 2021-2022 Priorities

- □ COVID-19 and the health and safety of the community
- □ Customer Service: Training, Technology, Staff, Review Standards/Level of service
- □ Housing: Affordability (lot sizes, developer incentives, second dwellings, density, etc.)
- □ Greenhouse: lights & dark sky, odours (site plan compliance, bylaws, other tools)
- □ Programming Increase: Youth and Seniors
- □ A development plan for Downtown Kingsville / Main Street
- □ Financial savings: Schools closings, Migration Hall
- □ Economic Development: strengthen tourism/hospitality
- □ COVID economic recovery

□ Communications: Strategy – Policy (social media), Website refresh and other tools, Public engagement

□ Housing: Migrant Worker Housing – Inspections (Building/Fire), regulate, reduce, or increase

- □ Committees / Boards: Review and Report
- □ Policy Update: Procedural Bylaw
- $\hfill\square$ Economic Development: diversify the economy, create local jobs, industrial, Cottam
- □ Infrastructure (non-Municipal): Union Water expansion & governance
- □ Infrastructure (Municipal): Asset Management Plan update, the infrastructure funding deficit
- \boxtimes No direct link to Council priorities