

Date: March 27, 2023

To: Mayor and Council

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Services

RE: 2022 Drinking Water Summary Report

INFORMATION REPORT

BACKGROUND

The purpose of this report is to inform stakeholders and 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. In conjunction with the Summary Reports submitted by Union Water Supply System (Appendix A), a comprehensive overview of Kingsville's potable water system will be presented.

DISCUSSION

As an accredited operating authority, Kingsville is required to develop and maintain an Operational Plan, which establishes policies, objectives, controls, and methods for delivering safe potable water. To ensure Kingsville is meeting the requirements of the Drinking Water Quality Management Standard (DWQMS) developed by the Ministry of Environment Conservation and Parks (MECP), a third party audit of its Operational Plan must be completed annually. In addition, the distribution system is also subject to a series of other mandatory audits, inspections and reviews. The following will summarize these activities:

Conformance Audits (Annual)

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 Inc. conducted a system audit on September 19, 2022. During the inspection, the auditor identified one minor-nonconformity:

 In contradiction to Procedure 5:01 Documents and Records Control, the Operational Plan is not consistently controlled as evidenced by header dates that do not match and improperly referenced SOP numbers.

To address this issue, staff corrected references and dates in the Operational Plan. 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 non-conformities, and assist in the continual improvement of Kingsville's Operational Plan. Kingsville's Internal QMS Audit Report was completed on July 28, 2022 with assistance from Ontario Clean Water Agency (OCWA). 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 November 30, 2022. A copy of the meeting minutes and associated action items can be reviewed in Appendix B.

Risk Assessments

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. Risk Assessments include reviewing processes, procedures, sample results, service interruptions, and emergency response procedures. A Risk Assessment was completed by management on November 18, 2022 and 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.

The DWQMS also requires municipalities to incorporate Risk Assessment outcomes into infrastructure capital planning. It is 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 2022 and those identified for future rehabilitation are as follows:

Year	Projects	Risk Assessment Analysis
2022	Stonehedge Dr/Coghill Dr/Allen Crt/Long Crt	Aging infrastructurePipeline/water main break
2023	Woodlawn Cr/Summerset Ave/Commissioner Dr/Parkdale Cr	- Aging infrastructure - Low Pressure
2024	Woodfern Ave/Peach Dr/Queen Blvd/Willow Dr	- Aging infrastructure - Low Pressure
2025	Owenwood Dr/James Ave/Katrishe Cr/Heritage Rd (Greenway to Main)	- Aging infrastructure - Low Pressure
2026	Victoria St (Cty Rd 34 to Fox St)	- Aging infrastructure
2027	Cherrywood Ave	- Pipeline/water main break
2028	Palmer Dr/Westlawn Ave/Cameron Dr	- Pipeline/water main break

MECP Compliance Inspection

The primary purpose of an MECP inspection is to confirm compliance with relevant legislation and evaluate conformance with Ministry drinking water policies and guidelines. Inspections include reviewing treatment processes, distribution system components, operations, manuals, consumer relations, staff certification, and overall water quality.

Provincial officers may enter municipal property at any reasonable time to conduct these inspections. Traditionally, the MECP conducts them annually, with an unannounced inspection occurring once every three (3) years.

Upon inspection completion, 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 system's annual inspection and water quality testing performance. Administration participated in an unannounced inspection on October 27, 2022. There were no Non-compliance/Non-conformance items identified, and the Kingsville Distribution System received an IRR of 100% for the inspection period (Appendix C).

FINANCIAL CONSIDERATIONS

The external audit performed by SAI Global cost \$1729.92 and support from OCWA to complete the Internal Audit cost \$760.00.

ENVIRONMENTAL CONSIDERATIONS

None

CONSULTATIONS

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

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