



Date: February 26, 2024

To: Mayor and Council

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RE: 2023 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.

Re-Accreditation Audit Results

Intertek - SAI Global conducted a Re-Accreditation Audit on June 23, 2023. The audit was intended to gather the information necessary for Intertek - SAI Global to assess whether accreditation of the DWQMS can continue. This is conducted on a five (5) year cycle and requires management to gather a multitude of documents.

During the inspection, the auditor identified three (3) Major Non Conformity related to Emergency Management, Document and Records Control, and Management Review. It also identifies three (3) Minor Non Conformities related to Competencies, Essential Supplies and Services, and Infrastructure Maintenance, Rehabilitation and Renewal. To address these issues, staff made improvements to all the relative documents within the 60 days required. This effectively resolved the problems, 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 October 31, 2023 with assistance from the Ontario Clean Water Agency (OCWA). The auditor identified seven (7) Opportunities for Improvement (OFI's). Management will attend to the improvements when time allows. It was 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 was completed on November 23, 2023. A copy of the meeting minutes and associated action items can be reviewed in Appendix B.

To summarize system maintenance activities in 2023, work was done on our assets to help prevent failure, improve efficiency, and extend the life of our infrastructure. This maintenance can generally be performed by our operators while the system is in operation. We have created an Annual Maintenance schedule which tracks Valve Operating, Fire Hydrant Maintenance, and Dead End Flushing.

To conduct Valve Operation and Fire Hydrant Maintenance, we separate all assets into quadrants and attend to every asset over a 4 year period. Dead End Flushing is conducted semi-annually. Performing these preventative maintenance activities helps reduce the corrective maintenance needs required when emergency conditions arise.

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. The annual Risk Assessment review was completed by management on November 23, 2023 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. Public Operations in consultation with the 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 2023 and those identified for future rehabilitation are as follows:

Year	Projects	Risk Assessment Analysis
2023	Woodlawn Cr/Summerset Ave/Commissioner Dr/Parkdale Cr	- Aging infrastructure - Low Pressure
2024	Owenwood Dr/James Ave/Katrishe Cr/Heritage Rd (Greenway to Main)	- Aging infrastructure - Low Pressure
2025	Woodfern Ave/Peach Dr/Queen Blvd/Willow Dr	- 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 announced

inspection on November 30, 2023. There were two (2) Non-compliance items identified related to record keeping. Kingsville Distribution System received an IRR of 96.24% for the inspection period (Appendix C).

FINANCIAL CONSIDERATIONS

The Re-accreditation audit performed by SAI Global/Intertek cost \$4,131.91, and support from OCWA to complete the Internal Audit cost \$760.00.

ENVIRONMENTAL CONSIDERATIONS

None.

CONSULTATIONS

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