



**Subject: Port Colborne Distribution System 2023 Annual Summary Report**

**To: Council**

**From: Public Works Department**

Report Number: 2024-74

Meeting Date: March 26, 2024

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**Recommendation:**

That Public Works Department Report 2024-74 be received.

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**Purpose:**

The Ministry of the Environment, Conservation and Parks (MECP) requires that an annual summary report on the performance of the City's Drinking Water System be prepared and provided to Council in accordance with the regulatory requirements of Schedule 22 and Section 11 of Ontario Regulation (O. Reg.) 170/03 under the Safe Drinking Water Act, 2002 (SDWA). This report also provides Council with a summary of the 2023 Management Review, which is required under Element 20 of the Drinking Water Quality Management Standard (DWQMS) and provides an overview of the results of the 2023 MECP Inspection.

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**Background:**

Ensuring the safety and quality of municipal drinking water is a legal responsibility governed by the SDWA. This legislation mandates that individuals overseeing municipal water systems, including City Council representatives, make informed decisions and act diligently regarding the drinking water system. These decisions directly impact the safety and quality of drinking water provided to the community.

Council's oversight and due diligence is demonstrated through various reports, including the Municipal Drinking Water System Annual Report, the DWQMS Management Review, and the MECP inspection result report. The outcomes of these reports are contained herein.

## **Municipal Drinking Water System Annual Report**

In accordance with the SDWA, the Annual Drinking Water System Summary Report for 2023 (Appendix A) has been completed for the Port Colborne Drinking Water System. This report, as per the requirements outlined in Schedule 22 and Section 11 of O. Reg. 170/03, encompasses crucial information such as legal obligations of the Act and other approvals relating to the system, system descriptions, incidents of non-compliance and adverse test results, corrective actions taken, and water test results. The report must be prepared by February 28 each year and is made publicly accessible via the City's website and physical copies can be obtained from the Engineering and Operations Centre.

### **DWQMS Management Review**

Under the Municipal Drinking Water Licensing Program overseen by the MECP, all municipal water systems must be operated by accredited Operating Authorities. Port Colborne's Operating Authority underwent a full reaccreditation audit in 2022, ensuring conformance with the DWQMS standards as documented in the City's Operational Plan. Part of the requirements of the DWQMS entails conducting an annual Management Review, evaluating the effectiveness and suitability of the Quality Management System.

### **2023 MECP Inspection Report**

The MECP conducts annual inspections of the Port Colborne Distribution System to verify compliance with legislative requirements and municipal licensing. This inspection, which occurred in October 2023, inspected the adherence to the SDWA, the *Ontario Water Resources Act, 1990*, and the City's Municipal Drinking Water Licence. The thorough inspection process is part of the MECP's commitment to ensuring the safety and quality of municipal drinking water. The results of the inspection are provided in Appendix E.

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## **Discussion:**

### **2023 Annual Summary Report**

The Annual Drinking Water Quality Report was prepared on February 26, 2023, and is provided in Appendix A. The Report has been posted to the City website and notification of the report's availability will be published in the next issue of the City Hall News.

Highlights include:

- 839 routine chlorine samples and 2353 non-routine were taken. All sample results were within regulated limits.
- 69 routine turbidity samples and 2353 non-routine were taken. All sample results were within the aesthetic objective.
- Alkalinity, pH, Trihalomethanes, and Haloacetic Acids were also sampled and all well within the regulated standards.
- 416 regulated bacteriological samples were collected with no adverse test results.
- The Port Colborne Water Treatment Plant Annual Summary Report prepared by the Region's Water and Wastewater Services Division provides information related to quantities and flow rates of water within the system. According to the Region's Summary Report, provided in Appendix B, the WTP is operating, on average, at 19% capacity, and has sufficient capacity to meet the City's long-term growth demands. The water distribution system meets present needs but may require upgrades and extensions to satisfy growth demands as they are identified.
- The City is completing an Infrastructure Needs Study (INS) for the Port Colborne Distribution System (PCDS). The information from the INS will feed into the City's Asset Management Plan and into the City's Water Financial Plan. The recommendations within the INS, together with the outcomes from the annual Infrastructure Review, form the basis for future watermain builds and replacements. The City continues to assess conditions of the water system and identify asset replacements.
- The City also tracks maintenance related to its water infrastructure assets through the work order system, City Wide. Water infrastructure assets are maintained in good condition through effective preventative maintenance, optimized infrastructure decision-making, and strategic capital planning (replacement, repair, expansion).

## **2023 Management Review Summary**

The City's DWQMS is documented in the Operating Authority's water system Operational Plan. The Operational Plan reflects a fully implemented DWQMS with a focus on continual improvement and is made available to the public. The Province requires each Operating Authority to conduct an annual Management Review. The purpose of the Management Review is to summarize the activities of the PCDS Operating Authority so that Top Management can ensure the continuing effectiveness of the Quality Management System.

The Management Meeting QMS Summary Report that was provided to all attendees is attached to this report as Appendix C and a copy of the minutes from this meeting are included in Appendix D. The Operational Plan also requires that the outcomes of the

annual Management Review be communicated to the system Owner. The Management Review Summary report covered the period of November 1, 2022, to October 31, 2023. The Management Review summarizes many of the same findings as the Annual Summary Report, but over a different time frame. It expands on DWQMS-related conformance items and general performance of the water system. Other than the items already mentioned above, the Management Review highlighted the following:

- The 2023 Internal Audit was completed on September 28, 2023. 6 opportunities for improvement (OFIs) were identified.
- The external audit occurred on December 11, 2023. At the time of the meeting, the audit had not been completed, but discussed the 2022 audit which identified 2 OFIs and 1 non-conformance, which was addressed.
- There were 21 main breaks reported in 2022 and 7 to date in 2023, at the time of the meeting.
- Water quality complaints totaled 7 in 2022 and 14 so far in 2023. Where the source of the complaint could be determined, activities in the distribution system, such as fire flow testing, were the most common sources.
- Staff are committed to a holistic approach for improving water loss tracking and finding and repairing leaks and other sources of non-revenue water.
- Starting in 2024, a new water balance approach will be used that's in line with American Water Works Association (AWWA) standards. Staff will be completing training on these new standard approaches.

## **2023 MECP Inspection Results**

The 2023 MECP inspection was an unannounced inspection covering the period from December 1, 2023, to October 6, 2023. The requested documents were sent to the Ministry Inspectors and were reviewed remotely. An onsite inspection was conducted as well.

An official Inspection Report, detailing any findings and the City's Inspection Rating was issued on January 4, 2023; a copy of the inspection is provided in Appendix E. Once an inspection is completed, the Inspector generates an Inspection Rating for the drinking water system.

Overall, the inspection indicated the City's drinking water system provides a safe and reliable source of drinking water. The MECP inspection rated the PCDS a score of 100% with no non-compliance findings during this reporting year.

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### **Internal Consultations:**

There are no comments from other departments.

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### **Financial Implications:**

There are no financial implications. Capital works projects discussed in this report have been previously approved in past budgets.

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### **Public Engagement:**

There was no public notification or engagement initiatives as part of this report. The Annual Drinking Water Quality Report will be posted on the City's website and hard copies are available upon request.

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### **Strategic Plan Alignment:**

The initiative contained within this report supports the following pillar(s) of the strategic plan:

- Environment and Climate Change
  - Sustainable and Resilient Infrastructure
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### **Conclusion:**

The 2023 Annual Drinking Water Quality Report demonstrates Public Works' continued commitment of the Port Colborne Drinking Water System to provide a safe and reliable supply of municipal drinking water for its residents and businesses.

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### **Appendices:**

- a. 2023 Port Colborne Distribution System Annual Drinking Water Quality Report
- b. 2023 Port Colborne Water Treatment Plant Annual Summary Report (*Niagara Region*)
- c. Port Colborne Distribution System, Summary QMS Report for the Management Review
- d. Management Review Meeting Minutes
- e. MECP Port Colborne Distribution System Inspection Report

Respectfully submitted,

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**Report Approval:**

All reports reviewed and approved by the Department Director and also the City Treasurer when relevant. Final review and approval by the Chief Administrative Officer.