



Subject: Port Colborne Distribution System - 2021 Annual Summary Report

To: Council

From: Public Works Department

Report Number: 2022-60

Meeting Date: March 22, 2022

Recommendation:

That Public Works Department Report 2022-60, prepared in accordance with the requirements of Ontario Regulation (O. Reg.) 170/03 under the *Safe Drinking Water Act*, 2002, be received for information.

Purpose:

The Ministry of the Environment, Conservation and Parks (MECP) requires that an annual status 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.

This report also provides Council with a summary of the 2021 Management Review, which is required under Element 20 of the Drinking Water Quality Management Standard (DWQMS) and summarizes the results of the 2021 MECP Inspection.

Background:

The Statutory Standard of Care provisions of the *Safe Drinking Water Act*, 2002 (SDWA) make individuals with oversight responsibilities for municipal drinking water systems legally responsible for decisions made regarding the system. The intent of this Standard of Care is to ensure that owner representatives (Council) and various levels of decision makers of the municipal drinking water systems are acting diligently and making informed decisions when required. These decisions can impact the quality and safety of the municipal drinking water provided to all customers.

In part, Section 19(1) requires “every person who oversees the accredited operating authority and every person who exercises decision making authority over the system” to:

- (a) exercise the level of care, diligence and skill... that a reasonably prudent person would be expected to exercise in a similar situation; and
- (b) act honestly, competently and with integrity, with a view to ensuring the protection and safety of the users of the municipal drinking water system

It is important to note that “Failure to comply with section 19 of the SDWA is an offence and could result in the prosecution of an individual, corporation, or both”. This report not only meets the regulated reporting requirements, but also ensures Council is informed and helps meet Standard of Care responsibilities. This Report is the primary method, Senior Management and Council demonstrate due diligence in providing oversight of the municipal drinking water systems and meeting their Standard of Care legal requirement.

In accordance with the *Safe Drinking Water Act*, 2002, the 2021 Annual Summary Report has been prepared for the Port Colborne Distribution System (PCDS). Under Schedule 22 and Section 11 of O. Reg. 170/03, drinking water system owners must prepare reports that provide the following information:

Schedule 22-2(2)

- a) List the requirements of the Act, the regulations, the system’s approval, drinking water works permit, municipal drinking water licence, and any orders applicable to the system that were not met at any time during the period covered by the report; and
- b) for each requirement referred to in clause (a) that was not met, specify the duration of the failure and the measures that were taken to correct the failure

As per section 22-2(3), the report must also include a summary of the amount of water supplied with a comparison to the system’s rated approved capacity.

Section 11 of O. Reg. 170/03 details the information to be included in the annual report, as well as the deadline (February 28) for preparing the report. Additionally, this section details that the public must be notified that the report is ready and available, that the report must be made available free of charge and how the report must be made available. The reports are posted to the City’s website, with copies available at the Engineering and Operations Centre located at 1 Killaly Street West. Notification of report completion is posted to the City’s website and advertised in City Hall News.

Additionally, in conformance with the Management Review Procedure (QMS-SOP20-1) and with the Communications Procedure (QMS-SOP12-1), the results of the Management Review are provided in this report. Ensuring that the Mayor and Council, as the Owners of the Port Colborne Distribution System, are informed of the results of the Management Review is critical to not only fulfilling the requirements of the DWQMS, but

also to support compliance with the Section 19 Statutory Standard of Care requirements of the *Safe Drinking Water Act*, 2002.

Finally, the MECP has a rigorous and comprehensive inspection program for municipal residential drinking water systems. As such, the PCDS is subject to an annual inspection. The 2020-21 inspection was a focused announced inspection. The purpose of the annual inspection is to determine the compliance of the operation and maintenance of the PCDS with the requirements outlined under the *Safe Drinking Water Act*, 2002, associated regulations, and with the City's Municipal Drinking Water Licence and Drinking Water Works Permit. Therefore, providing Council with the inspection results ensures Council is informed and helps meet Standard of Care responsibilities.

Discussion:

2021 Annual Summary Report

The Annual Drinking Water Quality Report was prepared on February 28, 2022, 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.

Results from 2021 sampling, testing and monitoring activities, as detailed in the Annual Drinking Water Quality Report indicate that there were two reportable adverse water quality incidents (AWQIs) in 2021. One of the AWQIs was due to a low free chlorine level (<0.05 mg/L) in the distribution system. For this instance, the watermains were flushed to restore secondary disinfection. The second AWQI was in reference to microbiological adverse samples. Total Coliforms were detected in one sample. Follow up samples indicated that the water was microbiologically safe and the minimum free chlorine residuals were maintained the entire time.

In both instances, the AWQIs were reported as required to MECP and to Public Health, and corrective actions were completed to the satisfaction of all parties. Although there were reportable AWQIs in 2021, at no time was the safety of the drinking water in Port Colborne compromised, nor were any orders issued by MECP against the system.

The City does not measure the quantities and flow rates of water within the distribution system. This information is provided to the City in the Port Colborne Water Treatment Plant Annual Summary Report prepared by the Region's Water and Wastewater Services Division. According to the Region's Summary Report, provided in Appendix B, the WTP is operating, on average, at 18% of capacity, and has sufficient capacity to meet the City's long-term growth demands.

The water distribution system meets present needs but will require upgrades and extensions to satisfy growth demands as they are identified. The City retained a consultant to complete an Infrastructure Needs Study (INS) for the PCDS, with expected completion in mid-2022. The information from the INS will feed into the City's Asset

Management Plan and into the City's Financial Plan. These recommendations within the INS, together with the outcomes from the annual Infrastructure Review, form the basis for future watermain builds and replacements.

2021 Management Review Summary

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 (QMS) at scheduled Management Reviews. Much of the information contained within the Management Review is also reported in the Annual Report. In conformance with the Management Review Procedure (QMS-SOP20-1) and with the Communications Procedure (QMS-SOP12-1), the results of the Management Review are provided in this report.

The management review summary covers the period from January 1, 2020 until August 31, 2021 and therefore some of the summary totals vary from the annual summary report. 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.

Highlights from the Management Review, beyond what's been discussed as part of the Summary Report, are summarized below:

The 2021 Internal Audit occurred in October 2021 and the external audit occurred in November 2021. During the reporting period, there were a total of 23 main breaks. A notable trend was that during the reporting period, the City's water purchases decreased in 2020, falling by 5.6%. As the volume of water sold to the City's customers only experienced a 0.4% decrease in 2020, it is likely that the majority of the decrease in purchases is a direct result of the efforts by the Water Wastewater Division to not only find and repair any watermain breaks in a timely fashion, but also to take a conservative, prudent approach to maintenance flushing activities. Water quality complaints totaled 36 during the reporting period. Where the source of the complaint could be determined, activities in the distribution system (valve turning, hydrant flushing) were the most common sources.

2021 MECP Inspection Results

The 2020-21 MECP inspection was an announced inspection covering the period from November 1, 2020 to October 31, 2021. The requested documents were sent to the Ministry Inspectors and were reviewed remotely. The inspection also had an in-person component and the Inspectors from the Ministry, Niagara District Office met at the Engineering and Operations Center with Darlene Suddard, Manager of Water/Wastewater, Tommy Peazel, Water/Wastewater Supervisor and Cassandra Banting, Environmental Compliance Supervisor on December 7, 2021.

An official Inspection Report, detailing any findings and the City's Inspection Rating was issued on January 4, 2022; a copy of the inspection is provided in Appendix E. The Inspectors did not find any regulatory non-compliances during the inspection period; nor were any recommendations provided.

Once an inspection is completed, the Inspector generates an Inspection Rating for the drinking water system; for the ninth year in a row, the Port Colborne Distribution System was awarded a rating of 100%.

Internal Consultations:

There are no comments from other departments.

Financial Implications:

There are no financial implications. Capital works projects discussed in this report have been previously approved in the 2022 budget.

Public Engagement:

There was no public notification or engagement initiatives as part of this report. The Summary Report will be posted on the City's website and hardcopies available upon request.

Strategic Plan Alignment:

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

- Service and Simplicity - Quality and Innovative Delivery of Customer Services
 - City-Wide Investments in Infrastructure and Recreational/Cultural Spaces
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Conclusion:

The 2021 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.

Appendices:

- a. 2021 Port Colborne Distribution System Annual Drinking Water Quality Report
- b. 2021 Port Colborne Water Treatment Plant Annual Summary Report (Niagara Region)
- c. Port Colborne Distribution System, Summary QMS Report for the Management Review, dated September 28, 2021.
- d. Management Review Meeting Minutes, dated October 5, 2021.
- e. Port Colborne Distribution System Inspection Report, dated January 4, 2022

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.