



**ENGINEERING AND OPERATIONS DEPARTMENT
OPERATIONS DIVISION**

Report Number: 2011-07

Date: March 14, 2011

**SUBJECT: PORT COLBORNE DISTRIBUTION SYSTEM
ANNUAL WATER QUALITY REPORT**

1) PURPOSE:

This report, authorized by Ron Hanson, Director of Engineering and Operations, has been prepared in accordance with Schedule 22 "Summary Reports for Municipalities", of O.Reg. 170/03, under the *Safe Drinking Water Act, 2002 (SDWA)*.

Under the Schedule, it is a requirement that Council be presented with the Annual Report, summarizing the water quality results from the previous calendar year by March 31. Therefore, submission of the report at this time will ensure the City has met this requirement.

2) HISTORY, BACKGROUND, COUNCIL POLICY, PRACTICES

The *Safe Drinking Water Act, 2002* and associated O.Reg. 170/03 (Drinking Water Systems), dictate the City's legislated reporting requirements with respect to the Port Colborne Distribution System. 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 Public Works office and at the Engineering and Operations Department on the 2nd Floor of City Hall. Notification of report completion is posted to the City's website and advertised in InPort News.

The contents of this report to Council are, as indicated above, dictated by Schedule 22 of O.Reg. 170/03. The regulation states:

22-2(2) The report must,

- (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*

22-2(3) *The report must also include the following information for the purpose of enabling the owner of the system to assess the capability of the system to meet existing and planned uses of the system:*

1. *A summary of the quantities and flow rates of the water supplied during the period covered by the report, including monthly average and maximum daily flows*
2. *A comparison of the summary referred to in paragraph 1 to the rated capacity and flow rates approved in the system's approval, drinking water works permit or municipal drinking water licence, or if the system is receiving all of its water from another system under an agreement pursuant to subsection 5(4), to the flow rates specified in the written agreement.*

A list of the Acts and Regulations that apply to the Port Colborne Distribution System have been provided in Appendix A. The regulated report requirements are discussed in section 3) below.

Included in Appendix B is a backgrounder prepared by the Province that discusses Section 19 of the *Safe Drinking Water Act, 2002*. Section 19, Statutory Standard of Care comes into force on January 1, 2013. In part, Section 19(1) will require "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*

When Section 19 comes into effect, it is important to note that, as stated in the backgrounder – "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.

3) STAFF COMMENTS AND DISCUSSIONS

The Annual Drinking Water Quality Report was prepared on February 25, 2011, meeting the February 28th deadline. A copy of the Report has been provided in Appendix C. The Report and a notification of the report being available were posted to the City website on March 1, 2011. Notification was also published in InPort News on February 18, 2011

Results from 2010 sampling, testing and monitoring activities, as detailed in the Annual Drinking Water Quality Report (*Appendix C*), indicate that there were no reportable adverse water quality incidents in 2010. All samples collected and analyzed in 2010 were in compliance with the regulated requirements.

There were three reportable regulatory non-compliances in 2010. The non-compliances are summarized below. Details for each are provided in the Annual Drinking Water Quality Report (*Appendix C*).

- September 9, 2010 – contractor personnel closed a valve on a new section of watermain that was connected to the distribution system without the City’s knowledge and without a licensed Operator present. Under section 12(1) of the *Safe Drinking Water Act, 2002*, only licensed Operators are permitted to perform this function. Staff reported the contractor’s violation to the local Ministry of the Environment (MOE), and in early November 2010, an Investigator from the MOE Investigations and Enforcement Branch interviewed all Staff involved in the incident; as of the beginning of February 2011, the Investigator was in the process of interviewing the contractor personnel.

The City is not being investigated for this incident, as Staff had performed due diligence by providing contractor awareness training to contractor personnel prior to construction starting, specifically informing them that they could not operate the system. In future projects, Staff will ensure that “refresher” contractor awareness training is provided. If the MOE decides to pursue legal action against the contractor, Staff involved will likely be required to testify in court.

- October, 2010 – during the internal investigation into the September 9 valve turning incident, it was determined that Staff who were not licensed Operators were supervising contractor personnel who were connecting to and operating main stops. The operation of a main stop is considered an operating function and thus requires the supervision of a licensed Operator. Further investigation revealed that Staff had been misinterpreting the definition of “service connection” and “service pipe” in section 1 of Ontario Regulation 170/03, and were treating the entire “service” from the main stop (on the watermain) to the plumbing (where it enters a premise), as a service connection – when in truth, the “service connection” is from the curb stop (property line) to the plumbing, and the “service pipe” is from the main stop to the curb stop – the “service pipe” section is considered part of the distribution system, and thus the licensed Operator requirement applies.

This violation of section 11(1)3. of the *Safe Drinking Water Act, 2002* was reported to the MOE on October 5, 2010. The City’s immediate corrective action was to ensure that future connections/main stop operations were only performed by or under the supervision of licensed Operators; long term, the City’s Construction Inspector and backup will work towards becoming licensed Operators. The MOE accepted the corrective action, and required that the City notify them of the progress towards having these positions licensed.

- November, 2010 – it was discovered that the Schedule 15.1 samples (alkalinity and pH) has been overlooked for the summer sampling period (June 15 – October 15). Staff immediately notified the MOE of the oversight and immediately collected the required 4 samples.
The corrective action for this violation of paragraph 15.1-5 (10)(a) of Schedule

15.1 of O.Reg 170/03, was implemented in the 2011 Water Sample Schedule, where the Schedule 15.1 samples were scheduled for a specific date within the twice annual sampling periods. Previously, it was noted on the schedule that the samples were required – but they weren't scheduled for a specific date. Additionally, e-mail reminders for all Operators were scheduled through the WaterTrax program. The MOE has accepted this corrective action and has verified that the samples have been scheduled for 2011.

Although there were reportable non-compliances in 2010, at no time was the safety of the drinking water in Port Colborne compromised, nor were any orders issued by the Ministry of the Environment 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 by the Region 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 D, the WTP is operating, on average, at 21.4% of capacity, and has sufficient capacity to meet the City's long-term growth demands. Note that the Region's report has not yet been approved by Regional Council and is provided here in draft form. If the report is modified, staff will provide an update with changes highlighted.

The water distribution system meets present needs, but will require upgrades and extensions to satisfy growth demands as they are identified. The current Infrastructure Needs Study (INS), conducted in 1996, considered growth demands to recommend new watermain construction and replacements; however, recognizing that this information is dated and not a good reflection of the current status of the distribution system infrastructure, budget to conduct an INS in 2011 has been requested. The information from an up-to-date INS will, together with the outcomes from the annual Infrastructure Review will form the basis for future watermain builds and replacements.

4) OPTIONS AND FINANCIAL CONSIDERATIONS:

a) Do nothing.

Not applicable – report must be submitted to Council to meet regulatory requirements

b) Other Options

None – report is submitted to meet regulatory requirements

5) COMPLIANCE WITH STRATEGIC PLAN INITIATIVES

Not Applicable

6) ATTACHMENTS

Appendix A – Port Colborne Distribution System Applicable Acts and Regulations
Appendix B – Safe Drinking Water Act and Standard of Care
Appendix C – Port Colborne Distribution System Annual Drinking Water Quality Report
Appendix D – Port Colborne Water Treatment Plant Annual Summary Report

7) RECOMMENDATION

That Council accept report 2011-07, Port Colborne Distribution System Annual Summary Report, prepared in accordance with O.Reg. 170/03 for information.

8) SIGNATURES

Prepared on March 2, 2010 by:

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