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## **MEMORANDUM**

**PWC-C 4-2020**

**Subject: Niagara Water Treatment Plant 2019 Summary Reports**

**Date: March 10, 2020**

**To: Public Works Committee**

**From: Jen Croswell, C.Tech., Water Compliance Specialist**

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A Drinking Water Summary Report (Summary Report), required under the Safe Drinking Water Act, 2002, has been prepared for each of Niagara Region's six drinking water treatment plants for January 1, 2019 through December 31, 2019, inclusive. The 2019 Summary Reports have been provided as appendices and include:

- A description of any failure to meet the requirements of any governing Act, Regulation, Order or Approval that the Drinking Water System operates under, along with the actions the Operating Authority undertook to mitigate any such non-compliance;
- A summary of water flow rates including maximum daily flow rates and instantaneous peak flow rates in comparison with the capacity of the water works identified in the drinking water licence and permit. This information is included for the purpose of allowing the owner (Niagara Region) of the system to assess the capability of the system to meet existing and planned uses of the system.

The intent of the Summary Report is to provide full disclosure and acts as an instrument to ensure Council, senior management, regulatory agencies and the public are made aware of any non-compliance issues which occurred during the last inspection period. The inspection period runs annually (April 1 – March 31) and typically includes a review of information from the previous year.

Inspections were completed for all of Niagara Region's water treatment plants. Four water treatment plants (Decew Falls, Niagara Falls, Port Colborne, and Rosehill) obtained a 100% compliance score on the Ministry of Environment, Conservation and Parks Inspection Rating Report. Two water treatment plants, Grimsby and Welland, were found to be in non-compliance with Ministry Regulations and/or System Licences. Inspection and non-compliance details are included in the tables below.

<b>Facility</b>	<b>Grimsby Water Treatment Plant</b>
<b>Inspection Rating</b>	98.34%
<b>Non-Compliance</b>	Niagara Region was found to be in non-compliance with subsection 6-1.1 (1) of Schedule 6 of O. Reg. 170/03 which specifies that weekly samples are to be taken 5 to 10 days apart.
<b>Event Details</b>	Section 4.0 of schedule C of the Municipal Drinking Water Licence requires weekly sampling of treated process waste water for free chlorine residuals prior to discharge to the environment. Sampling was conducted on a weekly basis during the inspection period except between January 9 and January 21, 2019 where the tests were performed 12 days apart.
<b>Corrective Actions</b>	Internal operating procedures will be updated to ensure all sampling requirements are captured. In addition, affected staff are required to complete introductory quality and compliance training within six months of arrival and once every three years thereafter.

<b>Facility</b>	<b>Welland Water Treatment Plant</b>
<b>Inspection Rating</b>	95.88%
<b>Non-Compliance</b>	Niagara Region was found to be in non-compliance with section 16-6 of schedule 16 of O. Reg. 170/03 which requires immediate notification of adverse water quality incidents to the Medical Officer of Health and the Spills Action Centre.
<b>Event Details</b>	On August 3, 2018, following non-invasive maintenance work within the Bemis Elevated Tank, a two-phase tank disinfection process was initiated in accordance with the Drinking Water Works Permit. Upon completion of the first phase of disinfection, the tank was filled with treated water in order to meet water retention requirements for phase two. During the second phase, a watermain break caused a decrease in system pressure

<b>Facility</b>	<b>Welland Water Treatment Plant</b>
	<p>resulting in a release of approximately 0.193 ML of improperly disinfected water to the distribution system.</p> <p>Following the release, sampling results from Niagara Region and the City of Welland were negative for bacteriological parameters, meeting provincial requirements. The event was not reported to the Medical Officer of Health or the Spills Action Centre.</p> <p>Upon internal review, incident details were provided to Public Health and the Ministry of Environment, Conservation and Parks for review. Public Health was satisfied that the drinking water remained safe during and after the incident.</p> <p>On November 29, 2018, Niagara Region reported to the Spills Action Centre that, on August 3, 2018, a release of approximately 0.193 ML of improperly disinfected water occurred at the Bemis Elevated Tank while the Region was performing the disinfection of the tank.</p>
<b>Corrective Actions</b>	<p>Details of the incident, internal procedures, the disinfection requirements of the Drinking Water Works Permit, and reporting requirements from Section 16-4 were reviewed with pertinent staff. In addition, affected staff are required to complete manager quality and compliance training within six months of arrival and once every three years thereafter.</p>

May this memorandum serve as acknowledgment of receipt of the Summary Reports by the system owner, Council.

In addition to the Summary Reports, staff have produced Annual Water Quality Reports (Annual Reports) for each of Niagara Region's six drinking water treatment plants, as required by the Safe Drinking Water Act, 2002. The [Annual Reports](https://www.niagararegion.ca/living/water/Water-Quality-Reports/default.aspx) have been made available to the public via the Niagara Region website (<https://www.niagararegion.ca/living/water/Water-Quality-Reports/default.aspx>). The

publication of these reports will be advertised in the Region's Public Works Green Scene newsletter in spring 2020.

Respectfully submitted and signed by,

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Jen Croswell, C.Tech.  
Water Compliance Specialist

### **Appendices**

Appendix 1 – Decew Falls Water Treatment Plant 2019 Summary Report

Appendix 2 – Niagara Falls Water Treatment Plant 2019 Summary Report

Appendix 3 – Rosehill Water Treatment Plant 2019 Summary Report

Appendix 4 – Port Colborne Water Treatment Plant 2019 Summary Report

Appendix 5 – Grimsby Water Treatment Plant 2019 Summary Report

Appendix 6 – Welland Water Treatment Plant 2019 Summary Report