

**THE CORPORATION OF THE CITY OF SARNIA**  
**People Serving People**

**ENGINEERING DEPARTMENT**

**OPEN SESSION REPORT**

TO: Mayor and Members of Council

FROM: David Jackson, Director of Engineering

DATE: March 23, 2020

SUBJECT: 2019 Drinking Water Distribution System Summary Report

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**Recommendation:**

For Council's Information

**Executive Summary:**

The Safe Drinking Water act requires that an annual report be presented to the owners of a municipal drinking water system. This report provides an overview of the system, information on major projects completed, information on testing, and a summary of audit and inspection findings.

Overall there are no major issues to report. The City received a 98.29% Inspection Summary Rating Record. The one item of non-compliance was related to the operating authority contact information not being updated within ten days after a staffing change. This item was corrected immediately.

**Background:**

Under the Safe Drinking Water Act, O. Reg. 170/03, Schedule 22, City Council must be updated annually on the status of the water system. A summary report is prepared to highlight and expand upon the major points of the Annual Report which is attached, posted on the City of Sarnia's website and is also available in the Public Works office at 651 Devine Street.

**Comments:**

This summary report is prepared for City Council as owners of the "Drinking Water System" in accordance with Schedule 22 of O. Reg. 170/03 and informs City Council that the Sarnia drinking water distribution system:

- a) is owned by the Corporation of the City of Sarnia and is located within the Municipality of the City of Sarnia.

b) obtains drinking water from the Lambton Area Water Supply System supply/treatment/storage works with an additional connection fed through the St. Clair Water Distribution System.

c) is a connected large municipal residential drinking water system as described in Sub Section 5 (I) of O. Reg. 170/03 and does not include water works for the collection, production, treatment, storage or supply of water other than water distribution works or in-distribution storage works whose sole purpose is water demand management.

#### Sampling and Monitoring Programs:

During the four quarters of 2019, 1181 Microbiological test samples, 225 HPC samples, 16 lead samples (outside of the lead program), 4 THM samples, 4 HAA and 2105 chlorine residual samples were taken on a demand of 10.7 million m<sup>3</sup>.

**Table 1 – 2019 Monthly Water Demand**

<b>Month</b>	<b>Volume (cubic meters)</b>
January	763,540
February	710,071
March	793,833
April	772,802
May	859,360
June	928,004
July	1,306,982
August	1,232,482
September	954,642
October	843,767
November	740,144
December	786,066
2019 Year Total	10,961,693
2018 Year Total	10,390,999

#### Ministry of the Environment Conservation and Parks (MECP) – Annual Inspection

The annual MECP inspection took place on September 4<sup>th</sup>, 2019 and was conducted over a two-week period. The City of Sarnia received a 98.29% Inspection Summary Rating Record. The following Non Compliance with Regulatory Requirements were noted:

#### *Non Compliance with Regulatory Requirements:*

All changes to the system registration information were not provided within ten (10) days of the change. The Drinking Water System Profile (DWSP)

information was reviewed with the owner/operating authority and it was determined that the 24/7 and operating authority contact information was not up-to-date.

*Action(s) Required:*

The owner/operating authority of the Sarnia Distribution System is required to update the Drinking Water System Profile Information form and submit it to [waterforms@ontario.ca](mailto:waterforms@ontario.ca) by October 15, 2019.

All Non Compliance actions required of The City of Sarnia were complied with and corrected by the deadline.

Lead Testing

A lead testing program is in progress as per the requirement by O. Reg. 170/03 s. 15.1. Sarnia remains under the relief from sampling requirements whereas distribution system sampling only is required. There were two sample periods in 2019 with a total of 16 sampling points in the distribution system. There were no lead exceedances within the Sarnia distribution system. The City of Sarnia, during reconstruction projects and repair and maintenance operations replaces lead services encountered.

Drinking Water Quality Management Standard (DWQMS)

The Drinking Water Quality Management Standard is the Quality Management Standard approved under s. 21 of the Safe Drinking Water Act, 2002 (SDWA), and complements this legislative and regulatory framework by endorsing a proactive and preventive approach to assuring drinking water quality. This approach includes consideration of elements that are fundamental to ensuring the long-term sustainability of a Drinking Water System.

The DWQMS undergoes a surveillance audit (selected elements of the DWQMS) once every year and a reaccreditation audit (all elements of the DWQMS) once every three years.

The City of Sarnia in the fall of 2019 underwent a full accreditation audit (once every three years) to:

- 1) Bring The City of Sarnia into compliance with v.2.0 of the DWQMS
- 2) To achieve accreditation with v.2.0 of the DWQMS

The accreditation audit was conducted by SAI Global on two separate dates, November 4<sup>th</sup>, 2019 which consisted of a Stage 1 audit (offsite table top document review), and November 19<sup>th</sup>, 2019 On Site Verification Audit.

The results of the audit were that there were no major or minor non conformances and only two Opportunities for Improvement (OFI) were noted:

1. Element # 18 - Consider conducting a local emergency response exercise or procedure review for City of Sarnia water operators.
2. Element # 19 - Consider requesting the 3rd party service provider to make reference to previous internal and external audit results in the Internal Audit Report.

It is suggested that the opportunities for improvement be considered by management to further enhance the Operating Authority's Quality Management System and performance.

Based on the results of this audit it had been determined that the management system is effectively implemented and maintained and meets the requirements of the standard relative to the scope of certification identified v.2.0 of The Drinking Water Quality Management Standard therefore, a recommendation for certification was submitted by the SAI Global review team.

The accreditation certificate was received on December 11<sup>th</sup>, 2019 and is on display at 651 Devine St.

#### Municipal Drinking Water License (MDWL) and Drinking Water Works Permit (DWWP)

The Municipal Drinking Water License and the Drinking Water Works Permit are regulatory requirements under the Safe Drinking Water Act 2002 and are an integral part (documents) of The Drinking Water Quality Management Standard and must be renewed every five years and approved by the Ministry of the Environment and Parks.

On October 17<sup>th</sup>, 2019 the City of Sarnia received its latest versions of the MDWL and the DWWP and is on display at 651 Devine St.

Sarnia continues to receive regulatory relief from Schedule D for reduced Lead Sampling.

#### **Consultation:**

The annual report has been posted on our website to fulfill a requirement of the Safe Drinking Water Act.

#### **Financial Implications:**

There are financial implications related to this report.

Reviewed by:

David Jackson  
Director of Engineering

Approved by:

Chris Carter  
Chief Administrative Officer

This report was prepared by Mark Suknandan, Environmental Compliance Coordinator

Attachment: 2019 Water Distribution Report Annual - City of Sarnia