



2019 ANNUAL REPORT - City of St. Catharines Distribution System

Drinking-Water System Number:	260003279
Drinking-Water System Name:	City of St. Catharines Distribution System
Drinking-Water System Owner:	Corporation of the City of St. Catharines
Drinking-Water System Category:	Large Municipal Residential (pop. 133,000)
Period being reported:	January 1 – December 31, 2019

<p><i><u>Complete if your Category is Large Municipal Residential or Small Municipal Residential</u></i></p> <p>Does your Drinking-Water System serve more than 10,000 people? Yes [X] No []</p> <p>Is your annual report available to the public at no charge on a web site on the Internet? Yes [X] No []</p> <p>Location where Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection.</p> <div style="border: 1px solid black; padding: 5px;"> <p>City Hall - 50 Church Street, St. Catharines, ON L2R 7C2</p> </div>	<p><i><u>Complete for all other Categories.</u></i></p> <p>Number of Designated Facilities served: <input type="text"/></p> <p>Did you provide a copy of your annual report to all Designated Facilities you serve? Yes [] No []</p> <p>Number of Interested Authorities you report to: <input type="text"/></p> <p>Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility? Yes [] No []</p>
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List all Drinking-Water Systems (if any), which receive all of their drinking water from your system:

Drinking Water System Name	Drinking Water System Number
Not Applicable	

Did you provide a copy of your annual report to all Drinking-Water System owners that are connected to you and to whom you provide all of its drinking water?

Yes [] No [] Not Applicable



Indicate how you notified system users that your annual report is available, and is free of charge.

- Public access/notice via the web
- Public access/notice via Government Office
- Public access/notice via a newspaper
- Public access/notice via Public Request
- Public access/notice via a Public Library
- Public access/notice via other method: Reports are available at various Public Education Displays

Describe your Drinking-Water System

The City of St. Catharines owns and operates a Class II stand-alone residential water distribution system. The City receives its drinking water from the Regional Municipality of Niagara's Decew Water Treatment Plant. The source water is surface water from Lake Erie via an intake from the Welland Ship Canal. The distribution system consists of approximately 605 kilometres of watermain, approximately 3,500 hydrants and over 5,600 valves.

Were any significant expenses incurred to?

- Install required equipment
- Repair required equipment
- Replace required equipment

Please provide a brief description and a breakdown of monetary expenses incurred

The 2019 water improvement program budget was \$5,700,000. This budget allowed for the replacement of approximately 3.5 km of existing watermain.

In addition, the total cost of watermain repairs for 2019 was \$324,326.

Provide details on the notices submitted in accordance with subsection 18(1) of the Safe Drinking-Water Act or section 16-4 of Schedule 16 of O.Reg.170/03 and reported to Spills Action Centre

Incident Date	Parameter	Result	Unit of Measure	Corrective Action	Corrective Action Date(s)	Date Resolved
March 25, 2019	Free Chlorine	0.02	mg/L	Flush, resample	March 25, 2019	March 25, 2019
July 18, 2019	Total Coliform	6	cfu/100mL	Flush, resample	July 18-20, 2019	July 21, 2019
July 19, 2019	Total Coliform	12	cfu/100mL	Flush, resample	July 19-20, 2019	July 21, 2019
August 27, 2019	Total Coliform	1	cfu/100mL	Flush, resample	August 28-29, 2019	August 30, 2019
November 20, 2019	Total Coliform	7	cfu/100mL	Flush, resample	November 21-22, 2019	November 23, 2019
December 5, 2019	Free Chlorine	0.02	mg/L	Flush, resample	December 5, 2019	December 5, 2019
December 6, 2019	Free Chlorine	0.01	mg/L	Flush, resample	December 6, 2019	December 6, 2019

Microbiological testing done under the Schedule 10, 11 or 12 of Regulation 170/03, during this reporting period.

	Number of Samples	Range of E.Coli Results (min #)-(max #)	Range of Total Coliform Results (min #)-(max #)	Number of HPC Samples	Range of HPC Results (min #)-(max #)
Distribution	1709	0	0-12	860	0-99

Operational testing done under Schedule 7, 8 or 9 of Regulation 170/03 during the period covered by this Annual Report.

	Number of Grab Samples	Range of Results (min #)-(max #)	Unit of Measure
Chlorine	2574	0.01-1.89	mg/L

Summary of lead testing under Schedule 15.1 during this reporting period

(Applicable to the following drinking water systems; large municipal residential systems, small municipal residential systems, and non-municipal year-round residential systems)

Location Type	Number of Samples	Range of Lead Results (min#) – (max #)	Unit of Measure	Number of Exceedances
Plumbing	70	<0.001-0.043	mg/L	5
Distribution	10	<0.001	mg/L	0

Summary of Organic parameters sampled during this reporting period or the most recent sample results

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
THM (Note: show latest annual average)	Jan.– Dec. 2019	0.041	mg/L	0
HAA (Note: show latest annual average)	Jan.– Dec. 2019	0.014	mg/L	0