



**2017 ANNUAL REPORT - City of St. Catharines Distribution System**

<b>Drinking-Water System Number:</b>	<b>260003279</b>
<b>Drinking-Water System Name:</b>	City of St. Catharines Distribution System
<b>Drinking-Water System Owner:</b>	Corporation of the City of St. Catharines
<b>Drinking-Water System Category:</b>	Large Municipal Residential (pop. 130,000)
<b>Period being reported:</b>	January 1 – December 31, 2017

<p><i>Complete if your Category is Large Municipal Residential or Small Municipal Residential</i></p> <p><b>Does your Drinking-Water System serve more than 10,000 people?</b> Yes [X] No [ ]</p> <p><b>Is your annual report available to the public at no charge on a web site on the Internet?</b> Yes [X] No [ ]</p> <p><b>Location where Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection.</b></p> <div style="border: 1px solid black; padding: 5px;"> <p>City Hall - 50 Church Street, St. Catharines, ON L2R 7C2</p> </div>	<p><i>Complete for all other Categories.</i></p> <p><b>Number of Designated Facilities served:</b> <input type="text"/></p> <p><b>Did you provide a copy of your annual report to all Designated Facilities you serve?</b> Yes [ ] No [ ]</p> <p><b>Number of Interested Authorities you report to:</b> <input type="text"/></p> <p><b>Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility?</b> 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 608 kilometres of watermain, approximately 3,500 hydrants and over 5,700 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 2017 water improvement program budget was \$5,500,000. This budget allowed for the replacement of approximately 5 km of existing watermain.

In addition, the total cost of watermain repairs for 2017 was \$340,500.

**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
Feb. 28, 2017	Total Coliform	1	cfu/100mL	Flush, resample	March 1 & 3	March 4, 2017
March 7, 2017	Total Coliform	8	cfu/100mL	Flush, resample	March 8 & 9	March 10, 2017
May 17, 2017	Free Chlorine	0.01	mg/L	Flush, resample	May 17	May17, 2017
June 7, 2017	Total Coliform	1	cfu/100mL	Flush, resample	June 8 & 9	June 10, 2017
Aug. 29, 2017	Free Chlorine	0.00	mg/L	Flush, resample	Aug. 29 & 30	Aug. 30, 2017
Sept. 18, 2017	Total Coliform	1	cfu/100mL	Flush, resample	Sept. 19 & 20	Sept. 25, 2017
Sept. 19, 2017	Free Chlorine	0.00	mg/L	Flush, resample	Sept. 19	Sept. 19, 2017
Oct. 11, 2017	Total Coliform	2	cfu/100mL	Flush, resample	Oct. 12 & 13	Oct.16, 2017
Oct. 25, 2017	Total Coliform	1	cfu/100mL	Flush, resample	Oct. 27 & 28	Oct. 31, 2017
Nov. 8, 2017	Free Chlorine	0.00	mg/L	Flush, resample	Nov. 9	Nov. 9, 2017
Nov. 29, 2017	Total Coliform	2	cfu/100mL	Flush, resample	Nov. 30 & Dec. 1	Dec. 4, 2017

**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 #)
<b>Distribution</b>	1979	0	0-8	863	0-150

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
<b>Chlorine</b>	3476	0.00-1.85	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
<b>Plumbing</b>	130	<0.001-0.038	mg/L	5
<b>Distribution</b>	20	<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
<b>THM</b> (Note: show latest annual average)	Jan.– Dec. 2017	0.0369	mg/L	0
<b>HAA</b> (Note: show latest annual average)	Jan.– Dec. 2017	0.0138	mg/L	0