



**2021 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. 133,000) |
| <b>Period being reported:</b>          | January 1 – December 31, 2021              |

|  |   |
|--|---|
| <p><i><u>Complete if your Category is Large Municipal Residential or Small Municipal Residential</u></i></p> <p><b>Does your Drinking-Water System serve more than 10,000 people?</b><br/>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><br/>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; margin-top: 10px;"> <p><b>City Hall</b><br/>50 Church Street,<br/>St. Catharines, ON L2R 7C2</p> </div> | <p><i><u>Complete for all other Categories.</u></i></p> <p><b>Number of Designated Facilities served:</b> <input style="width: 50px;" type="text"/></p> <p><b>Did you provide a copy of your annual report to all Designated Facilities you serve?</b><br/>Yes [ ] No [ ]</p> <p><b>Number of Interested Authorities you report to:</b> <input style="width: 50px;" 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><br/>Yes [ ] No [ ]</p> |
|--|---|

**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**

**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**

In 2021, approximately \$7,980,000 was spent on watermain capital projects. This allowed for the installation of approximately 7.93 km of watermain.

In addition, the cost of watermain repairs in 2021 was approximately \$354,000.

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 |
|---------------|---|--------|-----------------|--------------------|---------------------------|---------------|
| Nov. 1, 2021  | Total Coliform                                  | 1      | cfu/100mL       | Flush and resample | Nov. 2 and 4, 2021        | Nov. 5, 2021  |
| Dec. 14, 2021 | No Data Overgrowth with Target Colonies Present | --     | --              | Flush and resample | Dec. 15 and 16, 2021      | Dec. 17, 2021 |

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 | 1376              | 0                                       | 0-1   | 744                   | 0->300                               |

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 | 2302                   | 0.06 – 1.76                      | 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      | 5                 | <0.001                                 | mg/L            | 0                     |
| 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 |
|--|-----------------|--------------|-----------------|------------|
| <b>THM</b><br>(Note: show latest annual average) | Jan.– Dec. 2021 | 0.031        | mg/L            | 0          |
| <b>HAA</b><br>(Note: show latest annual average) | Jan.– Dec. 2021 | 0.0095       | mg/L            | 0          |