OPTIONAL ANNUAL REPORT TEMPLATE

Drinking-Water System Number: Drinking-Water System Name: Drinking-Water System Owner: Drinking-Water System Category: Period being reported:

260003279
City of St. Catharines Distribution System
Corporation of the City of St. Catharines
Large Municipal Residential (pop. 130,000)
January 1, 2013 – December 31, 2013

Complete if your Category is Large Municipal Residential or Small Municipal Residential	Complete for all other Categories.
Does your Drinking-Water System serve more than 10,000 people? Yes [X] No []	Number of Designated Facilities served:
Is your annual report available to the public at no charge on a web site on the Internet? Yes [X] No[]	Did you provide a copy of your annual report to all Designated Facilities you serve? Yes [] No []
Location where Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection.	Number of Interested Authorities you report to:
Lake Street Service Centre 383 Lake Street, St. Catharines, ON L2N 4H5 -and- City Hall 50 Church Street, St. Catharines, ON L2R 7C2	Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility? Yes [] No []

Note: For the following tables below, additional rows or columns may be added or an appendix may be attached to the report

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
n/a	

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 [] N/A

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

- [X] Public access/notice via the web
- [X] Public access/notice via Government Office
- [] Public access/notice via a newspaper
- [X] Public access/notice via Public Request
- [] Public access/notice via a Public Library
- [X] 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 Decew Water Treatment Plant. The source water is surface water from Lake Erie via an intake from the Welland Canal.

List all water treatment chemicals used over this reporting period

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Were any significant expenses incurred to?

- [] Install required equipment
- [] Repair required equipment
- [X] Replace required equipment

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

The 2013 water budget was \$5,500,000. This budget allowed for the replacement or upgrade of 6,475 m of existing watermain and the installation of 310 m of new watermain.

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
Jan. 2, 2013	Total Coliform	1	cfu/100mL	Flush, resample	Jan. 3/4, 2013
June 3, 2013	Total Coliform	6	cfu/100mL	Flush, resample	June 4/5, 2013
June 10, 2013	Free Chlorine	0.03	mg/L	Flush, resample	June 10, 2013
June 25, 2013	Total Coliform	1	cfu/100mL	Flush, resample	June 26/27, 2013
July 13, 2013	Total Coliform	4	cfu/100mL	Flush, resample	July 15/16, 2013
July 15, 2013	Free Chlorine	1	mg/L	Flush, resample	July 15, 2013
Aug. 28, 2013	Total Coliform	>80	cfu/100mL	Flush, resample	Aug. 29/30, 2013
Sept. 14, 2013	Free Chlorine	0.00	mg/L	Flush, resample	Sept. 14, 2013
Sept. 27, 2013	Free Chlorine	0.00	mg/L	Flush, resample	Sept. 27, 2013

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 Or Fecal Results (min #)-(max #)	Range of Total Coliform Results (min #)-(max #)	Number of HPC Samples	Range of HPC Results (min #)-(max #)
Raw					
Treated					
Distribution	1719	0	0->80	796	0->200

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
Turbidity			
Chlorine	3822	0.00-1.70	mg/L
Fluoride (If the DWS provides fluoridation)			

NOTE: For continuous monitors use 8760 as the number of samples.

Summary of additional testing and sampling carried out in accordance with the requirement of an approval, order or other legal instrument.

Date of legal instrument issued	Parameter	Date Sampled	Result	Unit of Measure
n/a				

Summary of Inorganic parameters tested during this reporting period or the most recent sample results

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Antimony				
Arsenic				
Barium				
Boron				
Cadmium				
Chromium				
*Lead				
Mercury				
Selenium				
Sodium				
Uranium				
Fluoride				

Nitrite		
Nitrate		

^{*}only for drinking water systems testing under Schedule 15.2; this includes large municipal non-residential systems, small municipal non-residential systems, non-municipal seasonal residential systems, large non-municipal non-residential systems, and small non-municipal non-residential systems

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 vear-round residential systems)

Location Type	Number of Samples	Range of Lead Results (min#) – (max #)	Unit of Measure	Number of Exceedances
Plumbing	120	< 0.001-0.010	mg/L	0
Distribution	21	< 0.001	mg/L	0

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

Parameter Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Alachlor		Value	Wicasure	
Aldicarb				
Aldrin + Dieldrin				
Atrazine + N-dealkylated metobolites				
Azinphos-methyl				
Bendiocarb				
Benzene				
Benzo(a)pyrene				
Bromoxynil				
Carbaryl				
Carbofuran				
Carbon Tetrachloride				
Chlordane (Total)				
Chlorpyrifos				
Cyanazine				
Diazinon				
Dicamba				
1,2-Dichlorobenzene				
1,4-Dichlorobenzene				
Dichlorodiphenyltrichloroethane				
(DDT) + metabolites				
1,2-Dichloroethane				
1,1-Dichloroethylene				
(vinylidene chloride) Dichloromethane				
2-4 Dichlorophenol				
2,4-Dichlorophenoxy acetic acid (2,4-D)				

Ontario Drinking-Water Systems Regulation O. Reg. 170/03

Dimethoate			1	1	
Dinoseb Diquat Diuron Glyphosate Heptachlor + Heptachlor Epoxide Lindane (Total) Malathion Methoxychlor Metolachlor Metribuzin Monochlorobenzene Paraquat Parathion Pentachlorophenol Phorate Picloram Polychlorinated Biphenyls(PCB) Prometryne Simazine THM (NOTE: show latest annual average) Dimoseb Dimoseb Dimoseb Diquat Dimoseb Diquat Dimoseb Diquat Dimoseb Diquat Dimoseb Dimos	Diclofop-methyl				
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Phorate Picloram Polychlorinated Biphenyls(PCB) Prometryne Simazine THM (NOTE: show latest annual average) January - December December 0.043 mg/L 0	Parathion				
Picloram Polychlorinated Biphenyls(PCB) Prometryne Simazine THM (NOTE: show latest annual average) January – December December 0.043 mg/L 0	Pentachlorophenol				
Polychlorinated Biphenyls(PCB) Prometryne Simazine THM (NOTE: show latest annual average) January – December 0.043 mg/L 0	Phorate				
Prometryne Simazine THM (NOTE: show latest annual average) January – December 0.043 mg/L 0	Picloram				
SimazineJanuary – December0.043mg/L0	Polychlorinated Biphenyls(PCB)				
THM (NOTE: show latest annual average) January – December 0.043 mg/L 0	Prometryne				
(NOTE: show latest annual average) December 0.043 mg/L 0	Simazine				
Temephos		•	0.043	mg/L	0
. •	Temephos				
Terbufos	Terbufos				
Tetrachloroethylene	Tetrachloroethylene				
2,3,4,6-Tetrachlorophenol	2,3,4,6-Tetrachlorophenol				
Triallate	Triallate				
Trichloroethylene	Trichloroethylene				
2,4,6-Trichlorophenol	_				
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)	(2,4,5-T)				
Trifluralin					
Vinyl Chloride	Vinyl Chloride				

List any Inorganic or Organic parameter(s) that exceeded half the standard prescribed in Schedule 2 of Ontario Drinking Water Quality Standards.

Parameter	Result Value	Unit of Measure	Date of Sample