



2016 Annual Report for Niagara-on-the-Lake Drinking Water System

Drinking-Water System Number:	260001380
Drinking-Water System Name:	Niagara-on-the-Lake Distribution System
Drinking-Water System Owner:	Town of Niagara-on-the-Lake
Drinking-Water System Category:	Large Municipal Residential
Period being reported:	January 1 – December 31, 2016

<p><u>Complete if your Category is Large Municipal Residential or Small Municipal Residential</u></p> <p>Does your Drinking-Water System serve more than 10,000 people? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>Is your annual report available to the public at no charge on a web site on the Internet? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></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>Town of Niagara-on-the-Lake Public Works Department 3 Lorraine Street Virgil, Ontario LOS 1T0</p> </div>	<p><u>Complete for all other Categories.</u></p> <p>Number of Designated Facilities served: <div style="border: 1px solid black; padding: 2px; display: inline-block;">N/A</div></p> <p>Did you provide a copy of your annual report to all Designated Facilities you serve? Yes <input type="checkbox"/> No <input type="checkbox"/> NA <input checked="" type="checkbox"/></p> <p>Number of Interested Authorities you report to: <div style="border: 1px solid black; padding: 2px; display: inline-block;">N/A</div></p> <p>Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility? Yes <input type="checkbox"/> No <input type="checkbox"/> NA <input checked="" type="checkbox"/></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
N/A – not applicable	N/A – 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 NA

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 Region of Niagara at its DeCew Falls and Niagara Falls water treatment plants produce water for the Town of Niagara-on-the-Lake. The Treated water is carried by a series of transmission mains and storage facilities to the Town. In turn, water is distributed to approximately 6200 customers in Niagara-on-the-Lake via more than 197 km of Town distribution mains. There are approximately 1322 fire hydrants and 1306 valves in the distribution systems.

List all water treatment chemicals used over this reporting period

N/A – This is a distribution system only. Information on the treatment of water supply would need to be obtained from the Region of Niagara.

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 cost for maintenance, operation, administration and water procurement for all of Niagara-on-the-Lake’s water distribution system, including Bevan Heights, was approximately \$4,300,000 in 2016. Capital costs for the replacement of approximately 1200 m of watermains was approximately \$780,000 in 2016.

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



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	489	0-0	0-0	489	0-135

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	979	0.06 – 1.54	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

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				
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*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 year-round residential systems)

Location Type	Number of Samples	Range of Lead Results (min#) – (max #)	Unit of Measure	Number of Exceedances
Plumbing	0*	N/A	N/A	N/A
Distribution	0*	N/A	N/A	N/A

* This drinking water system met the requirements of subsection 15.1-5(9) of schedule 15.1 of O. Reg. 170/03 and was not required to test for lead in plumbing in 2016.

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

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Alachlor				
Aldicarb				
Aldrin + Dieldrin				
Atrazine + N-dealkylated metabolites				
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)				
Diclofop-methyl				
Dimethoate				
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)	2016	35.6	µg/L	0
Temephos				
Terbufos				
Tetrachloroethylene				
2,3,4,6-Tetrachlorophenol				
Triallate				
Trichloroethylene				
2,4,6-Trichlorophenol				
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)				
Trifluralin				
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