

**Part III Form 2**  
**Section 11. ANNUAL REPORT.**

<b>Drinking-Water System Number:</b>	220007178
<b>Drinking-Water System Name:</b>	Delhi Drinking Water System
<b>Drinking-Water System Owner:</b>	Corporation of Norfolk County
<b>Drinking-Water System Category:</b>	LMR
<b>Period being reported:</b>	January 1, 2016 – December 31, 2016

<p><b><u>Complete if your Category is Large Municipal Residential or Small Municipal Residential</u></b></p> <p>Does your Drinking-Water System serve more than 10,000 people? Yes [ ] No [X]</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>183 Main Street of Delhi, Delhi, ON            50 Colborne St., Simcoe, ON            185 Robinson St., Simcoe, ON            22 Albert St., Langton, ON</p> </div>	<p><b><u>Complete for all other Categories.</u></b></p> <p>Number of Designated Facilities served:  <input style="width: 100px; height: 20px;" 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 style="width: 100px; height: 20px;" 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
None	

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 [X]

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 Information Report to Municipal Council

### Describe your Drinking-Water System

Delhi Drinking Water System is a combination well and surface water supply consisting of two raw water well sources, a surface water filtration plant, and a water standpipe. The Delhi Drinking Water System provides drinking water to the communities of Delhi and Courtland.

### List all water treatment chemicals used over this reporting period

Sodium Hypochlorite, Sodium Silicate, Hydrofluorosilicic Acid, Poly Aluminum Chloride

### 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

General Operations, Maintenance and Repair	\$ 47,000.00
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## General Information

An Annual Report will be posted for each system by the end of February each year on the Norfolk County web site at [www.norfolkcounty.ca](http://www.norfolkcounty.ca). A Summary Report on regulatory compliance is required annually under Schedule 22 of Regulation 170/03 for each municipal drinking water system. This report summarizes any known failures to meet the requirements of the Safe Drinking Water Act, its duration and corrective measures. The reports are presented to Norfolk County Council for acceptance before March 31<sup>st</sup> each year. The reports are made available to the public in April on the Norfolk County web site noted above or by request from the Public Works and Environmental Services Department.

**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
07/05/2016	Delhi Water Treatment Plant  Fluoride residual leaving the plant > 1.5 mg/L	>1.5	mg/L	The Delhi Water Treatment Plant was removed from service and immediately backwashed to bring the distribution water back through the plant and to waste. Operators monitored fluoride residuals at the treatment plant and throughout the distribution system as they flushed hydrants to remove the high concentration of fluoride. The fluoride pump was reprogrammed as a fail-safe and the operators received training on the controls of the pump. No further action was required.	07/05/2016

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 #)
<b>Raw Well 1</b>	52	0 - 0	0 - 1	0	-
<b>Raw Well 2</b>	52	0 - 0	0 - 0	0	-
<b>Raw WTP</b>	52	0 - 230	11 - 9400	0	-
<b>Treated Well 1</b>	49	0 - 0	0 - 0	49	<10 - 20
<b>Treated Well 2</b>	52	0 - 0	0 - 0	52	<10 - 20
<b>Treated WTP</b>	52	0 - 0	0 - 0	52	<10 - 20
<b>Distribution</b>	260	0 - 0	0 - 0	91	<10 - 100

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>Turbidity Well 1 Raw</b>	52	0.06 - 0.27	NTU
<b>Turbidity Well 2</b>	52	0.05 - 0.28	NTU
<b>Turbidity WTP Filter 1</b>	8760	0.078 - 2.000	NTU
<b>Turbidity WTP Filter 2</b>	8760	0.045 - 2.000	NTU
<b>Turbidity WTP Filter 3</b>	8760	0.040 - 2.000	NTU
<b>Chlorine Well 1</b>	8760	0.005 - 5.000	mg/L
<b>Chlorine Well 2</b>	8760	0.042 - 4.999	mg/L
<b>Chlorine WTP</b>	8760	0.018 - 4.999	mg/L
<b>Chlorine Residual Distribution Sys</b>	560	0.16 - 1.75	mg/L
<b>Fluoride Well 1</b>	365	0.17 - 0.83	mg/L
<b>Fluoride Well 2</b>	365	0.16 - 0.82	mg/L
<b>Fluoride WTP</b>	365	0.27 - 2.00	mg/L

*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
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None

**WELL NUMBER 1**

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

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
<b>Antimony</b>	25/05/2016	0.08	ug/L	No
<b>Arsenic</b>	25/05/2016	1.2	ug/L	No
<b>Barium</b>	25/05/2016	130	ug/L	No
<b>Boron</b>	25/05/2016	27	ug/L	No
<b>Cadmium</b>	25/05/2016	0.003<MDL	ug/L	No
<b>Chromium</b>	25/05/2016	0.34	ug/L	No
<b>Lead</b>	Exempt			
<b>Mercury</b>	25/05/2016	0.01<MDL	ug/L	No
<b>Selenium</b>	25/05/2016	0.07	ug/L	No
<b>Sodium</b>	03/06/2015	6.43	mg/L	No
<b>Uranium</b>	25/05/2016	0.623	ug/L	No
<b>Fluoride</b>	Daily			
<b>Nitrite</b>	25/02/2016	<0.003MDL	mg/L	No
	25/05/2016	<0.003MDL	mg/L	No
	24/08/2016	<0.003MDL	mg/L	No
	15/11/2016	<0.003MDL	mg/L	No
<b>Nitrate</b>	25/02/2016	0.793	mg/L	No
	25/05/2016	3.03	mg/L	No
	24/08/2016	0.910	mg/L	No
	15/11/2016	0.966	mg/L	No

### 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	25/05/2016	0.02<MDL	ug/L	No
Atrazine + N-dealkylated metabolites	25/05/2016	0.01<MDL	ug/L	No
Azinphos-methyl	25/05/2016		ug/L	No
Benzene	25/05/2016	0.32<MDL	ug/L	No
Benzo(a)pyrene	25/05/2016	0.004<MDL	ug/L	No
Bromoxynil	25/05/2016	0.33<MDL	ug/L	No
Carbaryl	25/05/2016	0.05<MDL	ug/L	No
Carbofuran	25/05/2016	0.01<MDL	ug/L	No
Carbon Tetrachloride	25/05/2016	0.16<MDL	ug/L	No
Chlorpyrifos	25/05/2016	0.02<MDL	ug/L	No
Diazinon	25/05/2016	0.02<MDL	ug/L	No
Dicamba	25/05/2016	0.20<MDL	ug/L	No
1,2-Dichlorobenzene	25/05/2016	0.41<MDL	ug/L	No
1,4-Dichlorobenzene	25/05/2016	0.36<MDL	ug/L	No
1,2-Dichloroethane	25/05/2016	0.35<MDL	ug/L	No
1,1-Dichloroethylene (vinylidene chloride)	25/05/2016	0.33<MDL	ug/L	No
Dichloromethane	25/05/2016	0.35<MDL	ug/L	No
2-4 Dichlorophenol	25/05/2016	0.15<MDL	ug/L	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	25/05/2016	0.19<MDL	ug/L	No
Diclofop-methyl	25/05/2016	0.40<MDL	ug/L	No
Dimethoate	25/05/2016	0.03<MDL	ug/L	No
Diquat	25/05/2016	1<MDL	ug/L	No
Diuron	25/05/2016	0.03<MDL	ug/L	No
Glyphosate	25/05/2016	1<MDL	ug/L	No
Malathion	25/05/2016	0.02<MDL	ug/L	No
MCPA	25/05/2016	0.00012	mg/L	No
Metolachlor	25/05/2016	0.01<MDL	ug/L	No
Metribuzin	25/05/2016	0.02<MDL	ug/L	No
Monochlorobenzene	25/05/2016	0.3<MDL	ug/L	No
Paraquat	25/05/2016	1<MDL	ug/L	No
Pentachlorophenol	25/05/2016	0.15<MDL	ug/L	No
Phorate	25/05/2016	0.01<MDL	ug/L	No
Picloram	25/05/2016	1<MDL	ug/L	No
Polychlorinated Biphenyls(PCB)	25/05/2016	0.04<MDL	ug/L	No
Prometryne	25/05/2016	0.03<MDL	ug/L	No

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

<b>Simazine</b>	25/05/2016	0.01<MDL	ug/L	No
<b>THM</b>  Annual Average 32.25 ug/L	25/02/2016	36	ug/L	No
	25/05/2016	26	ug/L	No
	24/08/2016	29	ug/L	No
	15/11/2016	38	ug/L	No
<b>Terbufos</b>	25/05/2016	0.01<MDL	ug/L	No
<b>Tetrachloroethylene</b>	25/05/2016	0.35<MDL	ug/L	No
<b>2,3,4,6-Tetrachlorophenol</b>	25/05/2016	0.20<MDL	ug/L	No
<b>Triallate</b>	25/05/2016	0.01<MDL	ug/L	<b>No</b>
<b>Trichloroethylene</b>	25/05/2016	0.44<MDL	ug/L	No
<b>2,4,6-Trichlorophenol</b>	25/05/2016	0.25<MDL	ug/L	No
<b>Trifluralin</b>	25/05/2016	0.02<MDL	ug/L	No
<b>Vinyl Chloride</b>	25/05/2016	0.17<MDL	ug/L	No

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
None			

**WELL NUMBER 2**

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

<b>Parameter</b>	<b>Sample Date</b>	<b>Result Value</b>	<b>Unit of Measure</b>	<b>Exceedance</b>
<b>Antimony</b>	25/05/2016	0.08	ug/L	No
<b>Arsenic</b>	25/05/2016	1.3	ug/L	No
<b>Barium</b>	25/05/2016	163	ug/L	No
<b>Boron</b>	25/05/2016	25	ug/L	No
<b>Cadmium</b>	25/05/2016	0.003<MDL	ug/L	No
<b>Chromium</b>	25/05/2016	0.33	ug/L	No
<b>Lead</b>	Exempt			
<b>Mercury</b>	25/05/2016	0.01<MDL	ug/L	No
<b>Selenium</b>	25/05/2016	0.04<MDL	ug/L	No
<b>Sodium</b>	03/06/2015	5.13	mg/L	No
<b>Uranium</b>	25/05/2016	0.830	ug/L	No
<b>Fluoride</b>	Daily			
<b>Nitrite</b>	25/02/2016	<0.003MDL	mg/L	No
	25/05/2016	<0.003MDL	mg/L	
	24/08/2016	<0.003MDL	mg/L	
	15/11/2016	<0.003MDL	mg/L	
<b>Nitrate</b>	25/02/2016	0.586	mg/L	No
	25/05/2016	0.666	mg/L	
	24/08/2016	0.819	mg/L	
	15/11/2016	0.770	mg/L	



**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	25/05/2016	0.02<MDL	ug/L	No
Atrazine + N-dealkylated metabolites	25/05/2016	0.01<MDL	ug/L	No
Azinphos-methyl	25/05/2016		ug/L	No
Benzene	25/05/2016	0.32<MDL	ug/L	No
Benzo(a)pyrene	25/05/2016	0.004<MDL	ug/L	No
Bromoxynil	25/05/2016	0.33<MDL	ug/L	No
Carbaryl	25/05/2016	0.05<MDL	ug/L	No
Carbofuran	25/05/2016	0.01<MDL	ug/L	No
Carbon Tetrachloride	25/05/2016	0.16<MDL	ug/L	No
Chlorpyrifos	25/05/2016	0.02<MDL	ug/L	No
Diazinon	25/05/2016	0.02<MDL	ug/L	No
Dicamba	25/05/2016	0.20<MDL	ug/L	No
1,2-Dichlorobenzene	25/05/2016	0.41<MDL	ug/L	No
1,4-Dichlorobenzene	25/05/2016	0.36<MDL	ug/L	No
1,2-Dichloroethane	25/05/2016	0.35<MDL	ug/L	No
1,1-Dichloroethylene (vinylidene chloride)	25/05/2016	0.33<MDL	ug/L	No
Dichloromethane	25/05/2016	0.35<MDL	ug/L	No
2-4 Dichlorophenol	25/05/2016	0.15<MDL	ug/L	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	25/05/2016	0.19<MDL	ug/L	No
Diclofop-methyl	25/05/2016	0.40<MDL	ug/L	No
Dimethoate	25/05/2016	0.03<MDL	ug/L	No
Diquat	25/05/2016	1<MDL	ug/L	No
Diuron	25/05/2016	0.03<MDL	ug/L	No
Glyphosate	25/05/2016	1<MDL	ug/L	No
Malathion	25/05/2016	0.02<MDL	ug/L	No
MCPA	25/05/2016	0.00012<MDL	mg/L	No
Metolachlor	25/05/2016	0.01<MDL	ug/L	No
Metribuzin	25/05/2016	0.02<MDL	ug/L	No
Monochlorobenzene	25/05/2016	0.3<MDL	ug/L	No
Paraquat	25/05/2016	1<MDL	ug/L	No
Pentachlorophenol	25/05/2016	0.15<MDL	ug/L	No
Phorate	25/05/2016	0.01<MDL	ug/L	No
Picloram	25/05/2016	1<MDL	ug/L	No

<b>Polychlorinated Biphenyls(PCB)</b>	25/05/2016	0.04<MDL	ug/L	No
<b>Prometryne</b>	25/05/2016	0.03<MDL	ug/L	No
<b>Simazine</b>	25/05/2016	0.01<MDL	ug/L	No
<b>THM</b>  Annual Average 32.25 ug/L	25/02/2016	36	ug/L	No
	25/05/2016	26	ug/L	
	24/08/2016	29	ug/L	
	15/11/2016	38	ug/L	
<b>Terbufos</b>	25/05/2016	0.01<MDL	ug/L	No
<b>Tetrachloroethylene</b>	25/05/2016	0.35<MDL	ug/L	No
<b>2,3,4,6-Tetrachlorophenol</b>	25/05/2016	0.20<MDL	ug/L	No
<b>Triallate</b>	25/05/2016	0.01<MDL	ug/L	No
<b>Trichloroethylene</b>	25/05/2016	0.44<MDL	ug/L	No
<b>2,4,6-Trichlorophenol</b>	25/05/2016	0.25<MDL	ug/L	No
<b>Trifluralin</b>	25/05/2016	0.02<MDL	ug/L	No
<b>Vinyl Chloride</b>	25/05/2016	0.17<MDL	ug/L	No

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
None			

## WATER TREATMENT PLANT

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

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
<b>Antimony</b>	25/05/2016	0.08	ug/L	No
<b>Arsenic</b>	25/05/2016	0.5	ug/L	No
<b>Barium</b>	25/05/2016	65.0	ug/L	No
<b>Boron</b>	25/05/2016	40.0	ug/L	No
<b>Cadmium</b>	25/05/2016	0.003<MDL	ug/L	No
<b>Chromium</b>	25/05/2016	0.32	ug/L	No
<b>Lead</b>	Exempt			No
<b>Mercury</b>	25/05/2016	0.01<MDL	ug/L	No
<b>Selenium</b>	25/05/2016	0.24	ug/L	No
<b>Sodium</b>	03/06/2015	14.2	mg/L	No
<b>Uranium</b>	25/05/2016	1.030	ug/L	No
<b>Fluoride</b>	Daily			
<b>Nitrite</b>	25/02/2016	0.003<MDL	mg/L	No
	25/05/2016	0.003<MDL	mg/L	No
	24/08/2016	0.003<MDL	mg/L	No
	15/11/2016	0.003<MDL	mg/L	No
<b>Nitrate</b>	25/02/2016	3.28	mg/L	No
	25/05/2016	0.943	mg/L	No
	24/08/2016	3.67	mg/L	No
	15/11/2016	3.16	mg/L	No

### 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	25/05/2016	0.02<MDL	ug/L	No
Atrazine + N-dealkylated metabolites	25/05/2016	0.02	ug/L	No
Azinphos-methyl	25/05/2016		ug/L	No
Benzene	25/05/2016	0.32<MDL	ug/L	No
Benzo(a)pyrene	25/05/2016	0.004<MDL	ug/L	No
Bromoxynil	25/05/2016	0.33<MDL	ug/L	No
Carbaryl	25/05/2016	0.05<MDL	ug/L	No
Carbofuran	25/05/2016	0.01<MDL	ug/L	No
Carbon Tetrachloride	25/05/2016	0.16<MDL	ug/L	No
Chlorpyrifos	25/05/2016	0.02<MDL	ug/L	No
Diazinon	25/05/2016	0.02<MDL	ug/L	No
Dicamba	25/05/2016	0.20<MDL	ug/L	No
1,2-Dichlorobenzene	25/05/2016	0.41<MDL	ug/L	No
1,4-Dichlorobenzene	25/05/2016	0.36<MDL	ug/L	No
1,2-Dichloroethane	25/05/2016	0.35<MDL	ug/L	No
1,1-Dichloroethylene (vinylidene chloride)	25/05/2016	0.33<MDL	ug/L	No
Dichloromethane	25/05/2016	0.35<MDL	ug/L	No
2-4 Dichlorophenol	25/05/2016	0.15<MDL	ug/L	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	25/05/2016	0.19<MDL	ug/L	No
Diclofop-methyl	25/05/2016	0.40<MDL	ug/L	No
Dimethoate	25/05/2016	0.03<MDL	ug/L	No
Diquat	25/05/2016	1<MDL	ug/L	No
Diuron	25/05/2016	0.03<MDL	ug/L	No
Glyphosate	25/05/2016	1<MDL	ug/L	No
Malathion	25/05/2016	0.02<MDL	ug/L	No
MCPA	25/05/2016	0.00012	ug/L	No
Metribuzin	25/05/2016	0.01<MDL	ug/L	No
Monochlorobenzene	25/05/2016	0.02<MDL	ug/L	No
Paraquat	25/05/2016	0.3<MDL	ug/L	No
Phorate	25/05/2016	0.15<MDL	ug/L	No
Picloram	25/05/2016	0.01<MDL	ug/L	No
Polychlorinated Biphenyls(PCB)	25/05/2016	1<MDL	ug/L	No
Prometryne	25/05/2016	0.04<MDL	ug/L	No
Simazine	25/05/2016	0.03<MDL	ug/L	No

<b>THM</b> Annual Average 32.25 ug/L	25/02/2016	36	ug/L	No
	25/05/2016	26		
	24/08/2016	29		
	15/11/2016	38		
<b>Terbufos</b>	25/05/2016	0.01<MDL	ug/L	No
<b>Tetrachloroethylene</b>	24/08/2016	0.01<MDL	ug/L	No
<b>2,3,4,6-Tetrachlorophenol</b>	15/11/2016	0.35<MDL	ug/L	No
<b>Triallate</b>	25/05/2016	0.20<MDL	ug/L	No
<b>Trichloroethylene</b>	25/05/2016	0.01<MDL	ug/L	No
<b>2,4,6-Trichlorophenol</b>	25/05/2016	0.44<MDL	ug/L	No
<b>Trifluralin</b>	25/05/2016	0.25<MDL	ug/L	No
<b>Vinyl Chloride</b>	25/05/2016	0.02<MDL	ug/L	No

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
None			

Summary of lead testing under Schedule 15.1 during this reporting period

Location Type	Number of Samples	Range of Lead Results (min#) – (max #)	Number of Exceedances
Plumbing	Exempt		
Distribution	None. Next required sampling is Spring 2018		