

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

Drinking-Water System Number:	220000371
Drinking-Water System Name:	Simcoe Drinking Water System
Drinking-Water System Owner:	Corporation of Norfolk County
Drinking-Water System Category:	LMR
Period being reported:	January 1, 2016 – 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 []</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 []</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><u>Complete for all other Categories.</u></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 []

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

Simcoe Drinking Water System is a well-based supply consisting of nine raw water well sources, an infiltration gallery, an iron and manganese removal plant, two reservoirs and an elevated water storage tank.

List all water treatment chemicals used over this reporting period

Sodium Hypochlorite, Sodium Silicate, Hydrofluorosilicic Acid, Sodium Permanganate, 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	\$ 202,000.00
Well Rehabilitation	\$ 90,000.00

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. 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 31st 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
None					

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 Cedar St 1	52	0-0	0-15	--	--
Raw Cedar St 2	52	0-0	0-0	--	--
Raw Cedar St 3	52	0-0	0-1	--	--
Raw Cedar St 4	33	0-0	0-0	--	--
Raw Cedar St 5	52	0-0	0-1	--	--
Raw Cedar St. Infiltration Gallery	52	0-44	0-45	--	--
Raw Chapel St	52	0-0	0-0	--	--
Raw NW 1	0	0-0	0-0	--	--
Raw NW 2	49	0-0	0-5	--	--
Raw NW 3	50	0-0	0-0	--	--
Cedar Street Reservoir POE	52	0-0	0-0	52	<10-110
Chapel Street Well POE	52	0-0	0-0	52	<10-60
North West Reservoir POE	52	0-0	0-0	52	<10-170
Distribution	398	0-0	0-0	123	<10-30

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 Cedar St Well#1 Raw	52	0.18 – 0.85	NTU
Turbidity Cedar St Well#2 Raw	52	0.06 – 0.41	NTU
Turbidity Cedar St Well#3 Raw	52	0.03 – 0.90	NTU
Turbidity Cedar St Well#4 Raw	52	0.04 – 1.12	NTU
Turbidity Cedar St Well#5 Raw	52	0.04 – 0.20	NTU
Turbidity NW Well #2 Raw	52	0.23 – 2.87	NTU
Turbidity NW Well #3 Raw	52	0.20 – 1.57	NTU
Turbidity Chapel St Raw	52	0.06 – 0.35	NTU
Turbidity NW Filter 1	8760	0.009 – 3.235	NTU
Turbidity NW Filter 2	8760	0.016 – 4.623	NTU
Turbidity NW Filter 3	8760	0.013 – 2.902	NTU
Chlorine Cedar St	8760	0.000 – 5.000	mg/L
Chlorine Chapel St	8760	0.018 – 5.000	mg/L
Chlorine NW Res.	8760	0.520 – 1.999	mg/L
Fluoride Cedar St	365	0.21 – 0.90	mg/L
Fluoride Chapel St	365	0.07 – 0.95	mg/L
Fluoride NW Res.	365	0.15 – 0.85	mg/L
Chlorine Residual Distribution System	642	0.17 – 1.69	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
Simcoe License 70-105 Feb 20/15	Schedule 24 – VOC's (volatile organic compounds) all below the laboratory detection limit	25/02/2016	<MDL	ug/L
		25/05/2016	<MDL	ug/L
		24/08/2016	<MDL	ug/L
		15/11/2016	<MDL	ug/L

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

Simcoe License 70-105 Feb 20/15	Sodium – Cedar Street POE Only	25/02/2016	44.4	mg/L
		25/05/2016	48.0	mg/L
		24/08/2016	46.8	mg/L
		15/11/2016	52.5	mg/L

CEDAR STREET RESERVOIR POE

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	25/05/2016	0.03	ug/L	No
Arsenic	25/05/2016	0.2<MDL	ug/L	No
Barium	25/05/2016	59	ug/L	No
Boron	25/05/2016	42	ug/L	No
Cadmium	25/05/2016	0.003<MDL	ug/L	No
Chromium	25/05/2016	0.45	ug/L	No
Lead	Exempt			
Mercury	25/05/2016	0.01<MDL	ug/L	No
Selenium	25/05/2016	0.26	ug/L	No
Sodium	25/02/2016	44.4	mg/L	Yes
	25/05/2016	48.0	mg/L	
	24/08/2016	46.8	mg/L	
	15/11/2016	52.5	mg/L	
Uranium	25/05/2016	0.655	ug/L	No
Fluoride	Daily			
Nitrite	25/02/2016	0.003<MDL	mg/L	No
	25/05/2016	0.003<MDL	mg/L	
	24/08/2016	0.003<MDL	mg/L	
	15/11/2016	0.003<MDL	mg/L	
Nitrate	25/02/2016	5.43	mg/L	No
	25/05/2016	5.44	mg/L	
	24/08/2016	5.66	mg/L	
	15/11/2016	6.19	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	0.05<MDL	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	ug/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

Simazine	25/05/2016	0.01<MDL	ug/L	No
THM Annual Average 29.0 ug/L	25/02/2016	32	ug/L	No
	25/05/2016	21	ug/L	
	24/08/2016	28	ug/L	
	15/11/2016	35	ug/L	
Terbufos	25/05/2016	0.01<MDL	ug/L	No
Tetrachloroethylene	25/05/2016	0.35<MDL	ug/L	No
2,3,4,6-Tetrachlorophenol	25/05/2016	0.20<MDL	ug/L	No
Triallate	25/05/2016	0.01<MDL	ug/L	No
Trichloroethylene	25/05/2016	0.44<MDL	ug/L	No
2,4,6-Trichlorophenol	25/05/2016	0.25<MDL	ug/L	No
Trifluralin	25/05/2016	0.02<MDL	ug/L	No
Vinyl Chloride	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	Date of Sample	Result Value	Unit of Measure
Nitrate	25/02/2016	5.43	mg/L
	25/05/2016	5.44	mg/L
	24/08/2016	5.66	mg/L
	15/11/2016	6.19	mg/L

CHAPEL STREET WELL POE

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	25/05/2016	0.02<MDL	ug/L	No
Arsenic	25/05/2016	0.2<MDL	ug/L	No
Barium	25/05/2016	68.8	ug/L	No
Boron	25/05/2016	28	ug/L	No
Cadmium	25/05/2016	0.003<MDL	ug/L	No
Chromium	25/05/2016	0.67	ug/L	No
Lead	Exempt			
Mercury	25/05/2016	0.01<MDL	ug/L	No
Selenium	25/05/2016	0.35	ug/L	No
Sodium	03/06/2015	17.9	mg/L	No
Uranium	25/05/2016	0.469	ug/L	No
Fluoride	Daily			
Nitrite	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
Nitrate	25/02/2016	5.40	mg/L	No
	25/05/2016	5.19	mg/L	No
	24/08/2016	5.16	mg/L	No
	15/11/2016	5.23	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	0.05<MDL	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	ug/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
Simazine	25/05/2016	0.01<MDL	ug/L	No

THM Annual Average 29.0 ug/L	25/02/2016	32	ug/L	No
	25/05/2016	21	ug/L	
	24/08/2016	28	ug/L	
	15/11/2016	35	ug/L	
Terbufos	25/05/2016	0.01<MDL	ug/L	No
Tetrachloroethylene	25/05/2016	0.35<MDL	ug/L	No
2,3,4,6-Tetrachlorophenol	25/05/2016	0.20<MDL	ug/L	No
Triallate	25/05/2016	0.01<MDL	ug/L	No
Trichloroethylene	25/05/2016	0.44<MDL	ug/L	No
2,4,6-Trichlorophenol	25/05/2016	0.25<MDL	ug/L	No
Trifluralin	25/05/2016	0.02<MDL	ug/L	No
Vinyl Chloride	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	Date of Sample	Result Value	Unit of Measure
Nitrate	25/02/2016	5.40	mg/L
	25/05/2016	5.19	mg/L
	24/08/2016	5.16	mg/L
	15/11/2016	5.23	mg/L

NORTH WEST RESERVOIR POE

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	25/05/2016	0.05	ug/L	No
Arsenic	25/05/2016	0.2<MDL	ug/L	No
Barium	25/05/2016	71.7	ug/L	No
Boron	25/05/2016	21	ug/L	No
Cadmium	25/05/2016	0.003<MDL	ug/L	No
Chromium	25/05/2016	0.4	ug/L	No
Lead	Exempt			
Mercury	25/05/2016	0.01<MDL	ug/L	No
Selenium	25/05/2016	0.14	ug/L	No
Sodium	03/06/2015	9.13	mg/L	No
Uranium	25/05/2016	0.603	ug/L	No
Fluoride	Daily			
Nitrite	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
Nitrate	25/02/2016	2.17	mg/L	No
	25/05/2016	1.96	mg/L	No
	24/08/2016	1.89	mg/L	No
	15/11/2016	1.75	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	0.01<MDL	ug/L	No
Benzene	25/05/2016	0.01	ug/L	No
Benzo(a)pyrene	25/05/2016	0.05<MDL	ug/L	No
Bromoxynil	25/05/2016	0.01<MDL	ug/L	No
Carbaryl	25/05/2016	0.32<MDL	ug/L	No
Carbofuran	25/05/2016	0.004<MDL	ug/L	No
Carbon Tetrachloride	25/05/2016	0.33<MDL	ug/L	No
Chlorpyrifos	25/05/2016	0.05<MDL	ug/L	No
Diazinon	25/05/2016	0.01<MDL	ug/L	No
Dicamba	25/05/2016	0.16<MDL	ug/L	No
1,2-Dichlorobenzene	25/05/2016	0.01<MDL	ug/L	No
1,4-Dichlorobenzene	25/05/2016	0.02<MDL	ug/L	No
1,2-Dichloroethane	25/05/2016	0.03<MDL	ug/L	No
1,1-Dichloroethylene (vinylidene chloride)	25/05/2016	0.02<MDL	ug/L	No
Dichloromethane	25/05/2016	0.20<MDL	ug/L	No
2-4 Dichlorophenol	25/05/2016	0.41<MDL	ug/L	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	25/05/2016	0.36<MDL	ug/L	No
Diclofop-methyl	25/05/2016	0.01<MDL	ug/L	No
Dimethoate	25/05/2016	0.35<MDL	ug/L	No
Diquat	25/05/2016	0.33<MDL	ug/L	No
Diuron	25/05/2016	0.35<MDL	ug/L	No
Glyphosate	25/05/2016	0.15<MDL	ug/L	No
Malathion	25/05/2016	0.19<MDL	ug/L	No
MCPA	25/05/2016	0.40<MDL	ug/L	No
Metolachlor	25/05/2016	0.03<MDL	ug/L	No
Metribuzin	25/05/2016	0.36<MDL	ug/L	No
Monochlorobenzene	25/05/2016	1<MDL	ug/L	No
Paraquat	25/05/2016	0.03<MDL	ug/L	No
Pentachlorophenol	25/05/2016	1<MDL	ug/L	No
Phorate	25/05/2016	0.01<MDL	ug/L	No
Picloram	25/05/2016	0.01<MDL	ug/L	No
Polychlorinated Biphenyls(PCB)	25/05/2016	0.02<MDL	ug/L	No
Prometryne	25/05/2016	0.01<MDL	ug/L	No
Simazine	25/05/2016	0.01<MDL	ug/L	No

THM Annual Average 29.0 ug/L	25/02/2016	32	ug/L	No
	25/05/2016	21	ug/L	
	24/08/2016	28	ug/L	
	15/11/2016	35	ug/L	
Terbufos	25/05/2016	0.3<MDL	ug/L	No
Tetrachloroethylene	25/05/2016	1<MDL	ug/L	No
2,3,4,6-Tetrachlorophenol	25/05/2016	0.02<MDL	ug/L	No
Triallate	25/05/2016	0.15<MDL	ug/L	No
Trichloroethylene	25/05/2016	0.01<MDL	ug/L	No
2,4,6-Trichlorophenol	25/05/2016	1<MDL	ug/L	No
Trifluralin	25/05/2016	0.04<MDL	ug/L	No
Vinyl Chloride	25/05/2016	0.03<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		