



OPTIONAL ANNUAL REPORT TEMPLATE

Drinking-Water System Number:	260007088
Drinking-Water System Name:	Minto Pines Subdivision Drinking Water System
Drinking-Water System Owner:	Town of Minto
Drinking-Water System Category:	Small Municipal Residential
Period being reported:	January 1, 2016 to 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 [] No [<input checked="" 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 []</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 Minto 5941 Hwy #89 R.R. #1 Harriston, ON NOG 1Z0</p> </div>	<p><u>Complete for all other Categories.</u></p> <p>Number of Designated Facilities served: <input type="text" value="N/A"/></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 type="text" value="N/A"/></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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Note: For the following tables below, additional rows or columns may be added or an appendix may be attached to the report

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 Town of Minto Website
- Public access/notice via Government Office
- Public access/notice via a newspaper Advertisements in Local Newspapers
- Public access/notice via Public Request
- Public access/notice via a Public Library
- Public access/notice via other method Tax Letter

Describe your Drinking-Water System

This Drinking-Water System supplies drinking water to 34 residential estate lots within the Minto Pines Subdivision.

There is one (1) well, equipped with a submersible pump. In the pumphouse, the raw water supply is injected with 12% sodium hypochlorite for disinfection. The treated water leaves the pumphouse and enters an underground contact pipe and is discharged into the distribution system after adequate contact time is achieved. In the event of a power outage, the pumphouse is equipped with automatic back-up power supply.

The well is controlled (*start/stop*) automatically based pressures in the distribution system. The pumphouse is equipped with alarms for chlorination system failure (*and corresponding lockout of well pumps*), low-pressure level and intrusion. The pumphouse has continuous monitoring analyzers for pre and post chlorine disinfection.

A SCADA System provides monitoring and data collection. The SCADA System continuously monitors pre and post contact pipe “free” chlorine residuals and flows. This data is transmitted to the Harriston shop where “off site” information is available for monitoring and data collection purposes.

List all water treatment chemicals used over this reporting period

- 12% Sodium Hypochlorite (*disinfectant*)

Were any significant expenses incurred to?

- Install required equipment
- Repair required equipment
- Replace required equipment



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

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

To meet the requirements of O. Reg. 170/03, upgrades, installations and replacement of various system components have been completed. However, maintaining the system includes repair and replacement of individual components as required.

In 2016 no capital projects were necessary.

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
N/A	N/A	N/A	N/A	N/A	N/A

Microbiological testing done under the Schedule 10, 11 or 12 of Regulation 170/03, during this reporting period.

	Number of Samples	Range of Total Coliform Results (min #)-(max #)	Range of E-Coli Or Fecal Results (min #)-(max #)	Range of HPC Results (min #)-(max #)	Number of HPC Samples
Raw	52	0 - 0	0 - 0	< 10 - > 2000	N/A
Treated	N/A	N/A	N/A	N/A	N/A
Distribution	52	0 - 0	0 - 0	<10 - > 2000	52

Operational testing done under Schedule 7, 8 or 9 of Regulation 170/03 during the period covered by this Annual Report.

Operational Testing		Number of Grab Samples	Range of Results (min #)-(max #)
Turbidity	Raw	83	0.09 - 0.57
	Treated	365	0.98 - 1.66
Chlorine	Distribution	256	0.68 - 1.31
	Fluoride (If the DWS provides fluoridation)	N/A	N/A
NOTE: Record the unit of measure if it is not milligrams per litre.			



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	N/A	N/A	N/A	N/A

Minto Pines Well #1

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

Parameter	Sample Date	Result Value	Unit of Measure	ODWS Criteria
Antimony	23/05/12	<0.6	(ug/L)	6
Arsenic	23/05/12	<1.0	(ug/L)	25
Barium	23/05/12	34	(ug/L)	1000
Boron	23/05/12	<50	(ug/L)	5000
Cadmium	23/05/12	<0.1	(ug/L)	5
Chromium	23/05/12	<1	(ug/L)	50
*Lead			(ug/L)	100
Mercury	23/05/12	<0.1	(ug/L)	1
Selenium	23/05/12	<5	(ug/L)	10
Sodium	23/05/12	9.7	(mg/L)	20
Uranium	23/05/12	<5	(ug/L)	20
Fluoride	23/05/12	<0.1	(mg/L)	1.5
Nitrite	17/02/16	<0.01	(mg/L)	1
	17/05/16	<0.01		
	10/08/16	<0.01		
	07/11/16	<0.01		
Nitrate	17/02/16	1.14	(mg/L)	10
	17/05/16	1.14		
	10/08/16	1.09		
	07/11/16	1.08		

*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 #)	Number of Exceedances
Plumbing	10	<1.0 – < 1.0 ug/L	0
Distribution	2	<1.0 – <1.0 ug/L	N/A

* These results are from samples taken in December 2013 – April 2014 and June - October 2014.
No adverse results were identified.

Minto Pines Well #1

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

Parameter	Sample Date	Result Value	Unit of Measure	ODWS Criteria
Alachlor	23/05/12	<0.1	(ug/L)	5
Aldicarb	23/05/12	<1	(ug/L)	9
Aldrin	23/05/12	<0.02	(ug/L)	
Aldrin + Dieldrin	23/05/12	<0.04	(ug/L)	0.7
alpha-Chlordane	23/05/12	<0.1	(ug/L)	
Aroclor 1242	23/05/12	<0.02	(ug/L)	
Aroclor 1254	23/05/12	<0.02	(ug/L)	
Aroclor 1260	23/05/12	<0.02	(ug/L)	
Atrazine	23/05/12	<0.1	(ug/L)	
Atrazine Desethyl	23/05/12	<0.1	(ug/L)	
Atrazine & Metabolites	23/05/12	<0.2	(ug/L)	5
Azinphos-methyl	23/05/12	<0.10	(ug/L)	20
Bendiocarb	23/05/12	<0.2	(ug/L)	40
Benzene	23/05/12	<0.5	(ug/L)	5
Benzo(a)pyrene	23/05/12	<0.01	(ug/L)	0.01
Bromoxynil	23/05/12	<0.2	(ug/L)	5
Carbaryl	23/05/12	<0.2	(ug/L)	90
Carbofuran	23/05/12	<0.2	(ug/L)	90
Carbon Tetrachloride	23/05/12	<0.5	(ug/L)	5
Chlordane (Total)	23/05/12	<0.3	(ug/L)	7

Parameter	Sample Date	Result Value	Unit of Measure	ODWS Criteria
Chlorpyrifos	23/05/12	<0.10	(ug/L)	90
Cyanazine	23/05/12	<0.10	(ug/L)	10
Diazinon	23/05/12	<0.10	(ug/L)	20
Dicamba	23/05/12	<0.2	(ug/L)	120
1,2-Dichlorobenzene	23/05/12	<0.5	(ug/L)	200
1,4-Dichlorobenzene	23/05/12	<0.5	(ug/L)	5
Dichlorodiphenyltrichloroethane (DDT) + metabolites	23/05/12	<0.4	(ug/L)	30
1,2-Dichloroethane	23/05/12	<0.5	(ug/L)	5
1,1-Dichloroethylene (vinylidene chloride)	23/05/12	<0.5	(ug/L)	14
Dichloromethane	23/05/12	<0.5	(ug/L)	50
2-4 Dichlorophenol	23/05/12	<0.3	(ug/L)	900
2,4-Dichlorophenoxy acetic acid (2,4-D)	23/05/12	<0.2	(ug/L)	100
Diclofop-methyl	23/05/12	<0.2	(ug/L)	9
Dieldrin	23/05/12	<0.02	(ug/L)	
Dimethoate	23/05/12	<0.1	(ug/L)	20
Dinoseb	23/05/12	<0.2	(ug/L)	10
Diquat	23/05/12	<1	(ug/L)	70
Diuron	23/05/12	<1	(ug/L)	150
gamma-Chlordane	23/05/12	<0.1	(ug/L)	
Glyphosate	23/05/12	<5	(ug/L)	280
Heptachlor	23/05/12	<0.1	(ug/L)	
Heptachlor Epoxide	23/05/12	<0.1	(ug/L)	
Heptachlor + Heptachlor Epoxide	23/05/12	<0.2	(ug/L)	3
Lindane	23/05/12	<0.1	(ug/L)	4
Malathion	23/05/12	<0.1	(ug/L)	190
Methoxychlor	23/05/12	<0.1	(ug/L)	900
Metolachlor	23/05/12	<0.1	(ug/L)	50
Metribuzin	23/05/12	<1.0	(ug/L)	80
Monochlorobenzene	23/05/12	<0.5	(ug/L)	80
o,p-DDT	23/05/12	<0.1	(ug/L)	
Oxychlordane	23/05/12	<0.1	(ug/L)	
p,p-DDD	23/05/12	<0.10	(ug/L)	
p,p-DDE	23/05/12	<0.10	(ug/L)	
p,p-DDT	23/05/12	<0.1	(ug/L)	
Paraquat	23/05/12	<1	(ug/L)	10
Parathion	23/05/12	<0.1	(ug/L)	50
Pentachlorophenol	23/05/12	<0.5	(ug/L)	60
Phorate	23/05/12	<0.1	(ug/L)	2



Parameter	Sample Date	Result Value	Unit of Measure	ODWS Criteria
Picloram	23/05/12	<0.2	(ug/L)	190
Polychlorinated Biphenyls (PCB)	23/05/12	<0.035	(ug/L)	3
Prometryne	23/05/12	<0.1	(ug/L)	1
Simazine	23/05/12	<0.1	(ug/L)	10
Temephos	23/05/12	<0.1	(ug/L)	280
Terbufos	23/05/12	<0.2	(ug/L)	1
Tetrachloroethylene	23/05/12	<0.5	(ug/L)	30
2,3,4,6-Tetrachlorophenol	23/05/12	<0.5	(ug/L)	100
Triallate	23/05/12	<0.1	(ug/L)	230
Trichloroethylene	23/05/12	<0.5	(ug/L)	50
2,4,6-Trichlorophenol	23/05/12	<0.5	(ug/L)	5
2,4,5-Trichlorophenoxy acetic acid (2,4,5,-T)	23/05/12	<0.2	(ug/L)	280
Trifluralin	23/05/12	<0.1	(ug/L)	45
Vinyl Chloride	23/05/12	<0.5	(ug/L)	2

Minto Pines Distribution System

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

Parameter	Sample Date	Result Value	Unit of Measure	ODWS Criteria
THM	17/02/16	<4.0	(ug/L)	100
	17/05/16	7.7		
	10/08/16	6.5		
	07/11/16	9.6		

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
N/A	N/A	N/A	N/A

(Only if DWS category is large municipal residential, small municipal residential, large municipal non residential, non municipal year round residential, large non municipal non residential)