



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, 2018 to December 31, 2018

<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:</p> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;">N/A</div> <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:</p> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;">N/A</div> <p>Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility? Yes [<input checked="" type="checkbox"/>] 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

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
Minto Pines Subdivision Drinking Water System	260007088

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 Offices
- 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

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

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

In 2018 \$55,825 was spent on New Tanks and Pumphouse upgrades.

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
2018/03/20	Boil water - result of planned maintenance		N/A	2 sets of micro samples when maintenance was complete	2018/03/28

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	53	0	0	53	< 10 - 120
Treated	N/A	N/A	N/A	N/A	N/A
Distribution	53	0	0	53	< 10 - 10

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	<i>NOTE: For continuous monitors use 8760 as the number of samples.</i>
Turbidity	Raw	146	0.21 - 0.82	NTU	
Chlorine	Treated	367	0.94 - 1.90	mg/L	
	Distribution	258	0.68 - 1.44	mg/L	
Fluoride (If the DWS provides fluoridation)		N/A	N/A	N/A	

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

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

Minto Pines Well #1

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Antimony	09/05/17	<0.6	(ug/L)	6
Arsenic	09/05/17	<1.0	(ug/L)	25
Barium	09/05/17	37	(ug/L)	1000
Boron	09/05/17	<50	(ug/L)	5000
Cadmium	09/05/17	<0.1	(ug/L)	5

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Chromium	09/05/17	<1.0	(ug/L)	50
*Lead			(ug/L)	100
Mercury	09/05/17	<0.1	(ug/L)	1
Selenium	09/05/17	<5.0	(ug/L)	10
Sodium	09/05/17	16.8	(mg/L)	20
Uranium	09/05/17	<5.0	(ug/L)	20
Fluoride	09/05/17	<0.1	(mg/L)	1.5
Nitrite	15/02/18	<0.01	mg/L	1
Nitrite	14/05/18	<0.01	mg/L	1
Nitrite	27/08/18	<0.01	mg/L	1
Nitrite	14/11/18	<0.01	mg/L	1
Nitrate	15/02/18	0.977	mg/L	10
Nitrate	14/05/18	0.987	mg/L	10
Nitrate	27/08/18	0.942	mg/L	10
Nitrate	14/11/18	1.040	mg/L	10

*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	10	<1.0 - < 1.0	ug/L	0
Distribution	2	<1.0 - <1.0	ug/L	0

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

Reduced Sampling

Town of Minto is now exempt from plumbing sampling for lead due to less than 10% of plumbing results exceeded 10 ug/L.

Distribution sampling is still required every “winter” and “summer” period.

- each year for pH and alkalinity
- once every 3 years for lead

	Sample Date	Number of Samples	Max Result	Unit of Measure	Limit
Winter Lead	10/01/17	1	3.2	ug/L	10
Summer Lead	11/07/17	1	< 1.0	ug/L	10
Winter Alkalinity	10/01/17	1	335	mg/L	30-500
Summer Alkalinity	11/07/17	1	254	mg/L	30-500
Winter Alkalinity	17/01/18	1	312	mg/L	30-500
Summer Alkalinity	05/07/18	1	314	mg/L	30-500

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

Minto Pines Well #1

Parameter	Sample Date	Result Value	Unit of Measure	ODWS Criteria
Alachlor	09/05/17	<0.10	(ug/L)	5
alpha-Chlordane	09/05/17	<0.10	(ug/L)	
Aroclor 1242	09/05/17	<0.02	(ug/L)	
Aroclor 1254	09/05/17	<0.02	(ug/L)	
Aroclor 1260	09/05/17	<0.02	(ug/L)	
Atrazine	09/05/17	<0.10	(ug/L)	
Atrazine Desethyl	09/05/17	<0.10	(ug/L)	
Atrazine & Metabolites	09/05/17	<0.20	(ug/L)	5
Azinphos-methyl	09/05/17	<0.10	(ug/L)	20
Benzene	09/05/17	<0.50	(ug/L)	5
Benzo(a)pyrene	09/05/17	<0.01	(ug/L)	0.01
Bromoxynil	09/05/17	<0.20	(ug/L)	5
Carbaryl	09/05/17	<0.20	(ug/L)	90
Carbofuran	09/05/17	<0.20	(ug/L)	90
Carbon Tetrachloride	09/05/17	<0.20	(ug/L)	5
Chlorpyrifos	09/05/17	<0.10	(ug/L)	90
Diazinon	09/05/17	<0.10	(ug/L)	20
Dicamba	09/05/17	<0.2	(ug/L)	120
1,2-Dichlorobenzene	09/05/17	<0.5	(ug/L)	200
1,4-Dichlorobenzene	09/05/17	<0.5	(ug/L)	5
1,2-Dichloroethane	09/05/17	<0.5	(ug/L)	5
1,1-Dichloroethylene (vinylidene chloride)	09/05/17	<0.5	(ug/L)	14
Dichloromethane	09/05/17	<5.0	(ug/L)	50
2-4 Dichlorophenol	09/05/17	<0.30	(ug/L)	900
2,4-Dichlorophenoxy acetic acid (2,4-D)	09/05/17	<0.2	(ug/L)	100
Diclofop-methyl	09/05/17	<0.20	(ug/L)	9
Dimethoate	09/05/17	<0.10	(ug/L)	20
Diquat	09/05/17	<1.0	(ug/L)	70
Diuron	09/05/17	<1.0	(ug/L)	150
gamma-Chlordane	09/05/17	<0.1	(ug/L)	
Glyphosate	09/05/17	<5.0	(ug/L)	280
Malathion	09/05/17	<0.10	(ug/L)	190
MCPA	09/05/17	<0.20	(ug/L)	100
Metolachlor	09/05/17	<0.10	(ug/L)	50
Metribuzin	09/05/17	<0.10	(ug/L)	80
Monochlorobenzene	09/05/17	<0.50	(ug/L)	80
o,p-DDT	09/05/17	<0.10	(ug/L)	
Oxychlordane	09/05/17	<0.10	(ug/L)	
p,p-DDD	09/05/17	<0.10	(ug/L)	

Parameter	Sample Date	Result Value	Unit of Measure	ODWS Criteria
p,p-DDE	09/05/17	<0.10	(ug/L)	
p,p-DDT	09/05/17	<0.1	(ug/L)	
Paraquat	09/05/17	<1.0	(ug/L)	10
Pentachlorophenol	09/05/17	<0.50	(ug/L)	60
Phorate	09/05/17	<0.10	(ug/L)	2
Picloram	09/05/17	<0.60	(ug/L)	190
Polychlorinated Biphenyls (PCB)	09/05/17	<0.035	(ug/L)	3
Prometryne	09/05/17	<0.10	(ug/L)	1
Simazine	09/05/17	<0.10	(ug/L)	10
Terbufos	09/05/17	<0.20	(ug/L)	1
Tetrachloroethylene (perchloroethylene)	09/05/17	<0.50	(ug/L)	30
2,3,4,6-Tetrachlorophenol	09/05/17	<0.50	(ug/L)	100
Triallate	09/05/17	<0.10	(ug/L)	230
Trichloroethylene	09/05/17	<0.50	(ug/L)	50
2,4,6-Trichlorophenol	09/05/17	<0.50	(ug/L)	5
Trifluralin	09/05/17	<0.10	(ug/L)	45
Vinyl Chloride	09/05/17	<0.20	(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 (NOTE: latest quarterly average shown)	15/02/18	5.78	ug/L	100
	14/05/18	5.93		
	27/08/18	7.55		
	14/11/18	7.75		

Parameter	Sample Date	Result Value	Unit of Measure	ODWS Criteria
HAA (NOTE: latest quarterly average shown)	15/02/18	1.83	ug/L	80
	14/05/18	1.83		
	27/08/18	2.53		
	14/11/18	3.93		

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