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, 2020 to December 31, 2020

<u>Complete if your Category is Large Municipal</u> <u>Residential or Small Municipal Residential</u>	Complete for all other Categories.
Does your Drinking-Water System serve more than 10,000 people? Yes [] No [$$]	Number of Designated Facilities served:
Is your annual report available to the public at no charge on a web site on the Internet? Yes $[\sqrt{\ }]$ No $[\]$	Did you provide a copy of your annual report to all Designated Facilities you serve? Yes [] No []
Location where Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection.	Number of Interested Authorities you report to: N/A
Town of Minto 5941 Hwy #89 R.R. #1 Harriston, ON NOG 1ZO	Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility? Yes [√] No[]

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.

- $[\sqrt{}]$ Public access/notice via the web Town of Minto Website
- [] Public access/notice via Government Offices

 $[\sqrt{}]$ Public access/notice via a newspaper

- [] Public access/notice via Public Request
- [] Public access/notice via a Public Library

[$\sqrt{}$] **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.

Advertisements in Local Newspapers

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 free chlorine low and high residuals (and corresponding lockout of well pumps), low-pressure level and intrusion. Corresponding lock out of well pump for high and low residuals was disabled with an onsite audible alarm installed on August 26, 2020 per MECP recommendations with Directors Notification. The pumphouse has continuous monitoring analyzers for chlorine disinfection.

A SCADA System provides monitoring and data collection. The SCADA System continuously monitors pre contact pipe and POE "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
- $[\sqrt{}]$ Repair required equipment
- $[\sqrt{}]$ 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 2020 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
2020/07/15	Total Coliform/E.Coli	NDOGN	cfu/100mL	Resample	2020/07/15
2020/07/17	Total Coliform	16	cfu/100mL	Resample and inspect sample tap	2020/07/17
2020/07/20	Total Coliform	1	cfu/100mL	Resample and replace sample tap	2020/07/22

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 #)	Number of HPC Samples	Range of HPC Results (min #)-(max #)
Raw	57	0 - 0	0 - 0	57	< 10 - 230
Treated	5	0 - 0	0 - 0	1	< 10 - < 10
Distribution	64	0 – NDOGN	0 – NDOGN	54	< 10 - 310

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

	ī	Number of Grab Samples	Range of Results (min #)-(max #)	Unit of Measure	<i>NOTE:</i> For continuous monitors use 8760
Turbidity	Raw	161	0.10 - 0.87	NTU	as the number of
Chlorine	Treated	370	0.93 - 1.72	mg/L	v
Chlorine	Distribution	257	0.72 - 1.70	mg/L	samples.
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

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
Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
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
Chromium	09/05/17	<1.0	(ug/L)	50
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	18/02/20	< 0.003	mg/L	1
Nitrite	25/05/20	< 0.003	mg/L	1
Nitrite	04/08/20	< 0.003	mg/L	1
Nitrite	23/11/20	< 0.003	mg/L	1
Nitrate	18/02/20	1.09	mg/L	10
Nitrate	25/05/20	1.05	mg/L	10
Nitrate	04/08/20	1.05	mg/L	10
Nitrate	23/11/20	1.08	mg/L	10

Minto Pines Well #1

*only for drinking water systems testing under Schedule 15.2; this includes large municipal nonresidential 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	Date	Number of Samples	Range of Lead Results (min#) – (max #)	Unit of Measure	Limit
Plumbing	Dec. 2013 – Apr. 2014	10	<1.0 - < 1.0	ug/L	10
Distribution	Winter Dec. 15 – Apr. 15, 2020	1	0.69	ug/L	10
Distribution	Summer Jun. 15 – Oct. 15, 2020	1	1.75	Ug/L	10

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 Alkalinity	23/01/20	1	319	mg/L	30-500
Winter pH	23/01/20	1	8.02		
Summer Alkalinity	06/12/20	1	315	mg/L	30-500
Summer pH	06/12/20	1	7.69		

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

Minto Pines Well #1

	Sample	Result	Unit of	ODWS
Parameter	Date	Value	Measure	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
МСРА	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

Parameter	Sample Date	Result Value	Unit of Measure	ODWS Criteria
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)	
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 Cloride	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 RAA	Unit of Measure	ODWS Criteria
THM (NOTE: latest quarterly average shown)	18/02/20	7.60	ug/L	100
	19/05/20	8.20		
	04/08/20	7.95		
	23/11/20	8.23		

Parameter	Sample Date	Result Value RAA	Unit of Measure	ODWS Criteria
	18/02/20	4.53		
НАА	19/05/20	5.30	ug/L	80
(NOTE: latest quarterly average shown)	04/08/20	5.30		
	23/11/20	5.30		

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	