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

OPTIONAL ANNUAL REPORT TEMPLATE

Drinking-Water System Number:	220001888
Drinking-Water System Name:	Minto Water Treatment Plant
Drinking-Water System Owner:	District Municipality of Muskoka
Drinking-Water System Category:	Large Municipal Residential
Period being reported:	January 01 to December 31, 2024

Complete if your Category is Large Municipal Residential or Small Municipal Residential

Does your Drinking-Water System serve more than 10,000 people? Yes [ ] No [X]

Is your annual report available to the public at no charge on a web site on the Internet? Yes [X] No [ ]

Location where Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection.

District Municipality of Muskoka
70 Pine Street
Bracebridge, Ontario
P1L 1N3
(705) 645-6764
www.muskoka.on.ca

Complete for all other Categories.

Number of Designated Facilities served:

N/A

Did you provide a copy of your annual report to all Designated Facilities you serve?
Yes [ ] No [x]

Number of Interested Authorities you report to: N/A

Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility?
Yes [ ] No [x]

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
N/A	

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.

[X] Public access/notice via the web
[X] Public access/notice via Government Office
[ ] Public access/notice via a newspaper
[X] Public access/notice via Public Request
[ ] Public access/notice via a Public Library
[ ] Public access/notice via other method _____

Describe your Drinking-Water System

The water treatment plant serving the community of Bala was constructed in 1994. The treatment process consists of chemically assisted coagulation-flocculation, sedimentation and filtration using multi-media filters with a combination of gravel, sand and anthracite coal. Disinfection in a post-treatment chlorine contact chamber is followed by final pH adjustment and fluoridation before the treated water is pumped to our customers. Our waterworks currently serves a population of approximately 1000 persons. The rated water production capacity of the plant is 1942 cubic meters per day. Our raw water source is Lake Muskoka and the intake is located two meters above the lakebed at a depth of 18 meters and about 500 meters from shore.

List all water treatment chemicals used over this reporting period

Sodium Hypochlorite, Polyaluminum Chloride, Sodium Hydroxide, Carbon Dioxide, Hydrated Lime, Potassium Permanganate, Fluoride.

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
N/A

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					

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 – NDOGT*	0 - NDOGT	N.A.	N.A.
Treated	53	0 - 0	0 - 0	53	0 - 3
Distribution	172	0 - 0	0 - 0	119	0-2

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 #)	Geometric Mean Average
Turbidity	8760	0.03 - 0.11 NTU	0.06 NTU
Chlorine	8760	1.60 – 2.20 mg/l	1.88 mg/l
Fluoride (If the DWS provides fluoridation)	8760	0.01 - 0.08 mg/l	0.03 mg/l

__NOTE__: For continuous monitors use 8760 as the number of samples.

__NOTE__: Record the unit of measure if it is __not__ milligrams per litre.
MDL = Method Detection Limit

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				

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	May 06/2024	0.6	µg/L	No
Arsenic	May 06/2024	0.2	µg/L	No
Barium	May 06/2024	9.41	µg/L	No
Boron	May 06/2024	5	µg/L	No
Cadmium	May 06/2024	0.008	µg/L	No
Chromium	May 06/2024	0.21	µg/L	No
***Lead**		See below	µg/L	No
Mercury	May 06/2024	0.01	µg/L	No
Selenium	May 06/2024	0.04	µg/L	No
Sodium	May 06/2024	11.2	mg/L	No
Uranium	May 06/2024	0.003	µg/L	No
Fluoride	May 06/2024	0.06	mg/L	No
Nitrite	Feb 05/2024	0.003	mg/L	No
Nitrate	Feb 05/2024	0.178	mg/L	No
Nitrite	May 06/2024	0.003	mg/L	No

Nitrate	May 06/2024	0.178	mg/L	No
Nitrite	Aug 06/2024	0.003	mg/L	No
Nitrate	Aug 06/2024	0.150	mg/L	No
Nitrite	Nov 04/2024	0.003	mg/L	No
Nitrate	Nov 04/2024	0.073	mg/L	No

*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 #)	Geometric Mean Average	Unit of Measure	Number of Exceedances
Plumbing	N/A	N/A	N/A	N/A	N/A
Distribution	4	0.01-0.02	0.014	µg/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	May 06/2024	0.02	µg/L	No
Atrazine+N-dealkylated Metabolites	May 06/2024	0.01	µg/L	No
Azinphos-methyl	May 06/2024	0.05	µg/L	No
Benzene	May 06/2024	0.32	µg/L	No
Benzo(a)pyrene	May 06/2024	0.004	µg/L	No
Bromoxynil	May 06/2024	0.33	µg/L	No
Carbaryl	May 06/2024	0.05	µg/L	No
Carbofuran	May 06/2024	0.01	µg/L	No
Carbon Tetrachloride	May 06/2024	0.17	µg/L	No
Chorpyrifos	May 06/2024	0.02	µg/L	No
Diazinon	May 06/2024	0.02	µg/L	No
Dicamba	May 06/2024	0.2	µg/L	No
1,2 Dichlorobenzene	May 06/2024	0.41	µg/L	No
1,4 Dichlorobenzene	May 06/2024	0.36	µg/L	No
1,2 Dichloroethane	May 06/2024	0.35	µg/L	No
1,1 Dichloroethylene	May 06/2024	0.33	µg/L	No
Dichloromethane	May 06/2024	0.35	µg/L	No
2,4 Dichlorophenol	May 06/2024	0.15	µg/L	No
2,4-D	May 06/2024	0.19	µg/L	No
Diclofop-Methyl	May 06/2024	0.4	µg/L	No
Dimethoate	May 06/2024	0.06	µg/L	No
Diquat	May 06/2024	1	µg/L	No
Diuron	May 06/2024	0.03	µg/L	No
Glyphosate	May 06/2024	1	µg/L	No
Malathion	May 06/2024	0.02	µg/L	No

MCPA	May 06/2024	0.00012	µg/L	No
Metolachor	May 06/2024	0.01	µg/L	No
Metribuzin	May 06/2024	0.02	µg/L	No
Monochlorobenzene	May 06/2024	0.3	µg/L	No
Paraquat	May 06/2024	1	µg/L	No
Pentachlorophenol	May 06/2024	0.15	µg/L	No
Phorate	May 06/2024	0.01	µg/L	No
Picloram	May 06/2024	1	µg/L	No
PCB	May 06/2024	0.04	µg/L	No
Prometryne	May 06/2024	0.03	µg/L	No
Simazine	May 06/2024	0.01	µg/L	No
THM (NOTE: Annual average of 4 samples – Distribution system)	Feb 05/2024-Nov 04/2024	764	µg/L	No
HAA (NOTE: Annual average of 4 samples – Distribution system)	Feb 05/2024-Nov 04/2024	53.8	µg/L	No
Terbufos	May 06/2024	0.01	µg/L	No
Tetrachloroethylene	May 06/2024	0.35	µg/L	No
2,3,4,6 - Tetrachlorophenol	May 06/2024	0.20	µg/L	No
Triallate	May 06/2024	0.01	µg/L	No
Trichloroethylene	May 06/2024	0.44	µg/L	No
2,4,6,- Trichlorophenol	May 06/2024	0.25	µg/L	No
Trifluralin	May 06/2024	0.02	µg/L	No
Vinyl Chloride	May 06/2024	0.17	µg/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
THM	54	µg/L	Feb 04/2024
THM	58	µg/L	May 06/2024
THM	73	µg/L	Aug 06/2024
THM	69	µg/L	Nov 04/2024
HAA	43.2	µg/L	Feb 04/2024
HAA	67	µg/L	May 06/2024
HAA	43.4	µg/L	Aug 06/2024
HAA	61.6	µg/L	Nov 04/2024