

OPTIONAL ANNUAL REPORT TEMPLATE

Drinking-Water System Number:
Drinking-Water System Name:
Drinking-Water System Owner:
Drinking-Water System Category:
Period being reported:

220007276
Kirby's Beach Water Treatment Plant
District Municipality of Muskoka
Large Municipal Residential
January 01 to December 31, 2025

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

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

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	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.

☒ **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** _____

Describe your Drinking-Water System

The Water Treatment Plant serving the community of Bracebridge was commissioned in 1995 and provides treated drinking water to approximately 11,000 residents, with a rated production capacity of 10,000 cubic meters per day. The facility utilizes conventional treatment consisting of chemically assisted coagulation and flocculation, sedimentation, and dual-media filtration using sand and anthracite coal, followed by disinfection in a chlorine contact chamber, fluoridation, and final pH adjustment prior to distribution. The raw water source is Lake Muskoka, with an intake located approximately 500 meters offshore at a depth of 18 meters and positioned two meters above the lakebed.

List all water treatment chemicals used over this reporting period

Carbon Dioxide, Aluminum Sulphate, Hydrated Lime, Sodium Hypochlorite, Hydrofluosilicic Acid, and Sodium Hydroxide.

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:

Several improvements and maintenance activities were completed to enhance monitoring, reliability, and operational resilience at the facility. A post-coagulated pH analyzer and a dissolved oxygen analyzer were installed to improve process monitoring and control. Repairs were completed to the Water Treatment Plant (WTP) generator heat exchanger to restore full standby power reliability. Installation of the Hamblin Reservoir hypochlorite panel and new chemical feed pumps were completed to replace aging equipment. A contractor conducted ROV inspections of all WTP reservoirs to assess internal conditions and confirm asset integrity. In addition, cellular communication was installed at the Ecclestone Reservoir to improve remote monitoring and alarm continuity.

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	52	0 - 11	0 - 55	0	NA
Treated	52	0 - 0	0 - 0	52	0 - 1
Distribution	296	0 - 0	0 - 0	149	0 - 420

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 #)	Geomean	NOTE: For continuous monitors use 8760 as the number of samples.
Turbidity	8760	0.02 – 0.21	0.07	
Chlorine	8760	1.40 – 2.06	1.70	
Fluoride (If the DWS provides fluoridation)	8760	0.20 – 0.90	0.42	

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 12	0.6<MDL	µg/L	No
Arsenic	May 12	0.2<MDL	µg/L	No
Barium	May 12	9.61	µg/L	No
Boron	May 12	4	µg/L	No



Cadmium	May 12	0.010	µg/L	No
Chromium	May 12	0.19	µg/L	No
*Lead	May 12	Summary below		
Mercury	May 12	0.01<MDL	µg/L	No
Selenium	May 12	0.04<MDL	µg/L	No
Sodium	May 12	17.4	mg/L	No
Uranium	May 12	0.002	µg/L	No
Fluoride	May 12	0.06<MDL	mg/L	No
Nitrite	May 12	0.003<MDL	mg/L	No
Nitrate	May 12	0.196	mg/L	No
Nitrite	Feb 25	0.003<MDL	mg/L	No
Nitrate	Feb 25	0.189	mg/L	No
Nitrite	Aug 06	0.003<MDL	mg/L	No
Nitrate	Aug 06	0.215	mg/L	No
Nitrite	Nov 04	0.003<MDL	mg/L	No
Nitrate	Nov 04	0.115	mg/L	No

*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	Number of Samples	Range of Lead Results (min#) – (max #)	Unit of Measure	Number of Exceedances
Plumbing	N/A	N/A	N/A	N/A
Distribution	8	0.01 – 0.14	µg/L	0

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 12	0.02<MDL	µg/L	No
Atrazine + Ndealkylated metabolites	May 12	0.01<MDL	µg/L	No
Azinphos-methyl	May 12	0.05<MDL	µg/L	No
Benzene	May 12	0.32<MDL	µg/L	No
Benzo(a)pyrene	May 12	0.004<MDL	µg/L	No
Bromoxynil	May 12	0.33<MDL	µg/L	No



Carbaryl	May 12	0.05<MDL	µg/L	No
Carbofuran	May 12	0.01<MDL	µg/L	No
Carbon Tetrachloride	May 12	0.17<MDL	µg/L	No
Chlorpyrifos	May 12	0.02<MDL	µg/L	No
Diazinon	May 12	0.02<MDL	µg/L	No
Dicamba	May 12	0.20<MDL	µg/L	No
1,2-Dichlorobenzene	May 12	0.41<MDL	µg/L	No
1,4-Dichlorobenzene	May 12	0.36<MDL	µg/L	No
1,2-Dichloroethane	May 12	0.35<MDL	µg/L	No
1,1-Dichloroethylene (vinylidene chloride)	May 12	0.33<MDL	µg/L	No
Dichloromethane	May 12	0.35<MDL	µg/L	No
2-4 Dichlorophenol	May 12	0.15<MDL	µg/L	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	May 12	0.19<MDL	µg/L	No
Diclofop-methyl	May 12	0.40<MDL	µg/L	No
Dimethoate	May 12	0.06<MDL	µg/L	No
Diquat	May 12	1<MDL	µg/L	No
Diuron	May 12	0.03<MDL	µg/L	No
Glyphosate	May 12	1<MDL	µg/L	No
Malathion	May 12	0.02<MDL	µg/L	No
MCPA	May 12	0.00012<MDL	µg/L	No
Metolachlor	May 12	0.01<MDL	µg/L	No
Metribuzin	May 12	0.02<MDL	µg/L	No
Monochlorobenzene	May 12	0.30<MDL	µg/L	No
Paraquat	May 12	1<MDL	µg/L	No
Pentachlorophenol	May 12	0.15<MDL	µg/L	No
Phorate	May 12	0.01<MDL	µg/L	No
Picloram	May 12	1<MDL	µg/L	No
Polychlorinated Biphenyls(PCB)	May 12	0.04<MDL	µg/L	No
Prometryne	May 12	0.03<MDL	µg/L	No
Simazine	May 12	0.01<MDL	µg/L	No
THM – Treated (4 Samples)	Feb 25, May 12, Aug 06, Nov 04	32.5	µg/L	No
THM – Distribution RAA (16 Samples)	Feb 25, May 12, Aug 06, Nov 04	54.0	ug/L	No



Terbufos	May 12	0.01<MDL	µg/L	No
Tetrachloroethylene	May 12	0.35<MDL	µg/L	No
2,3,4,6-Tetrachlorophenol	May 12	0.20<MDL	µg/L	No
Triallate	May 12	0.01<MDL	µg/L	No
Trichloroethylene	May 12	0.44<MDL	µg/L	No
2,4,6-Trichlorophenol	May 12	0.25<MDL	µg/L	No
Trifluralin	May 12	0.02<MDL	µg/L	No
Vinyl Chloride	May 12	0.17<MDL	µg/L	No
HAA5 – Treated RAA (4 Samples)	Feb 25 May 12 Aug 06 Nov 04	19.7	µg/L	No
HAA5 – Distribution RAA (16 Samples)	Feb 25 May 12 Aug 06 Nov 04	38.9	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
Distribution THM RAA (16 Samples)	54.0	ug/L	Feb 25, May 12, Aug 06, Nov 04