

COLBORNE DRINKING WATER SYSTEM 2023 ANNUAL REPORT

Drinking Water System Number:	220000790
Drinking Water System Name:	Colborne Drinking Water System
Drinking Water System Owner:	Corporation of the Township of Cramahe
Drinking Water System Category:	Large Municipal Residential
Period being reported:	January 1, 2023 to December 31, 2023

<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 [x]</p> <p>Is your annual report available to the public at no charge on a web site on the Internet? Yes [x] 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>Lakefront Utility Services Inc. Office 207 Division Street, Cobourg, Ontario</p> <p>https://www.lakefrontutilities.com/regulatory-water/</p> </div>	<p><u>Complete for all other Categories</u></p> <p>Number of Designated Facilities served: <input type="text"/></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"/></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

List all Drinking Water Systems (if any), which receive all 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 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
- 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 Colborne Well Supply delivers water to approximately 2000 residents. Water is taken from 2 wells located at the water plant on Purdy Road. The water is disinfected with sodium hypochlorite, and sodium silicate is added to sequester iron. After meeting the required contact time, the treated water reaches the distribution system, satisfying consumer demand and refilling the water tower located at the top end of the system north of Hwy. 401. A pressure sensor at the water tower determines the tower's water level and turns the well pumps on and off as required.

List all water treatment chemicals used over this reporting period

Sodium Hypochlorite
Sodium Silicate

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

PROJECT	ESTIMATED COST
Residential Meter Replacement	\$12,000
Spool Piece Installation and Valve at WTP	\$8,800
Cat Hollow Subdivision	\$300,000
Hydrant Replacement – William Street	\$7,000
SCADA Tunnel Cybersecurity Upgrade	\$7,000

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
11-Apr-23	Observation of Improperly disinfected water directed to water users	Watermain break. Boil Water Advisory issued	N/A	Watermain break was repaired. System was flushed and sampled for Total Coliform and E. Coli. All samples were negative	April 11 and 12, 2023

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 Results (min #)-(max #)	Range of Total Coliform Results (min #)-(max #)	Number of HPC Samples	Range of HPC Results (min #)-(max #)
Raw Well 1A	53	0-0	0-0	-	-
Raw Well 2	48	0-0	0-0	-	-
Treated	54	0-0	0-0	54	0 - 1
Distribution	62	0-0	0-0	129	0 - 1

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
Turbidity Well 1A (Raw)	11	0.10-0.69	NTU
Turbidity Well 2 (Raw)	12	0.10-1.16	NTU
Turbidity (Treated)	12	0.10-0.55	NTU
Chlorine	8760	0.0-5.0	mg/L
Fluoride (If the DWS provides fluoridation)	NA		

NOTE: For continuous monitors use 8760 as the number of samples

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
No additional testing or sampling is required				

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	07-Mar-2023	ND	ug/L	No
Arsenic	07-Mar-2023	ND	ug/L	No
Barium	07-Mar-2023	130	ug/L	No
Boron	07-Mar-2023	ND	ug/L	No
Cadmium	07-Mar-2023	ND	ug/L	No

Chromium	07-Mar-2023	ND	ug/L	No
Mercury	07-Mar-2023	ND	ug/L	No
Selenium	07-Mar-2023	ND	ug/L	No
Sodium	07-Mar-2023	5.9	mg/L	No
Uranium	07-Mar-2023	3.4	ug/L	No
Fluoride	16-Sep-2019	0.21	mg/L	No
Nitrite	30-Oct-2023	0.003 < MDL	mg/L	No
Nitrate	30-Oct-2023	2.44	mg/L	No

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	Not required, plumbing exemption and only pH and Alkalinity required in distribution samples			
Distribution	5	NA – pH (7.27-7.99), Alkalinity (183-190 mg/L)		

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	21-Mar-2023	ND	ug/L	No
Atrazine + N-dealkylated metabolites	21-Mar-2023	ND	ug/L	No
Azinphos-methyl	07-Mar-2023	ND	ug/L	No
Benzene	07-Mar-2023	ND	ug/L	No
Benzo(a)pyrene	21-Mar-2023	ND	ug/L	No
Bromoxynil	21-Mar-2023	ND	ug/L	No
Carbaryl	21-Mar-2023	ND	ug/L	No
Carbofuran	21-Mar-2023	ND	ug/L	No
Carbon tetrachloride	07-Mar-2023	ND	ug/L	No
Chlorpyrifos	21-Mar-2023	ND	ug/L	No
Diazinon	21-Mar-2023	ND	ug/L	No
Dicamba	21-Mar-2023	ND	ug/L	No
1,2-Dichlorobenzene	07-Mar-2023	ND	ug/L	No
1,4-Dichlorobenzene	07-Mar-2023	ND	ug/L	No
1,2-Dichloroethane	07-Mar-2023	ND	ug/L	No
1,1-Dichloroethylene (vinylidene chloride)	07-Mar-2023	ND	ug/L	No
Dichloromethane	07-Mar-2023	ND	ug/L	No
2,4-dichlorophenol	21-Mar-2023	ND	ug/L	No
2,4-dichlorophenoxyacetic acid (2,4-D)	21-Mar-2023	ND	ug/L	No
Diclofop-methyl	21-Mar-2023	ND	ug/L	No

Dimethoate	21-Mar-2023	ND	ug/L	No
Diquat	07-Mar-2023	ND	ug/L	No
Diuron	07-Mar-2023	ND	ug/L	No
Glyphosate	07-Mar-2023	ND	ug/L	No
Malathion	21-Mar-2023	ND	ug/L	No
MCPA	21-Mar-2023	ND	mg/L	No
Metolachlor	21-Mar-2023	ND	ug/L	No
Metribuzin	21-Mar-2023	ND	ug/L	No
Monochlorobenzene	07-Mar-2023	ND	ug/L	No
Paraquat	07-Mar-2023	ND	ug/L	No
Pentachlorophenol	21-Mar-2023	ND	ug/L	No
Phorate	21-Mar-2023	ND	ug/L	No
Picloram	21-Mar-2023	ND	ug/L	No
Polychlorinated Biphenyls (PCBs) Total	07-Mar-2023	ND	ug/L	No
Prometryne	21-Mar-2023	ND	ug/L	No
Simazine	21-Mar-2023	ND	ug/L	No
Terbufos	21-Mar-2023	ND	ug/L	No
Tetrachloroethylene (perchloroethylene)	07-Mar-2023	ND	ug/L	No
2,3,4,6-tetrachlorophenol	21-Mar-2023	ND	ug/L	No
Triallate	21-Mar-2023	ND	ug/L	No
Trichloroethylene	07-Mar-2023	ND	ug/L	No
2,4,6-trichlorophenol	21-Mar-2023	ND	ug/L	No
Trifluralin	21-Mar-2023	ND	ug/L	No
Vinyl Chloride	07-Mar-2023	ND	ug/L	No
HAAs (show latest running annual average)	1-Dec-2022	5.3<MDL	ug/L	No
THMs (show latest running annual average)	1-Dec-2022	3.4	ug/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
No parameters exceeded half the standard			