The 2023 Annual Drinking Water Quality Report:

Campbellville Drinking Water System

February 2024

Halton REGION

Introduction

Halton is committed to providing safe drinking water to all of our customers. As mandated by the *Safe Drinking Water Act, 2002*, this annual Water Quality Report includes:

- a description of the water treatment process and chemicals used;
- any major expenses to install, repair or upgrade equipment in the system; and,
- the results of our water tests and how they compare to provincial regulatory standards.

All provincial regulatory monitoring requirements and actions applicable to Halton's operation of this system were met or surpassed in the current reporting year.

Campbellville Drinking Water System

Drinking Water System Number: 220012162

The Campbellville Drinking Water System is located in the Town of Milton and serves a residential section of the Village of Campbellville (approximately 145 residents). Water from two wells is disinfected with ultraviolet (UV) light and chlorine. Four pressure tanks provide treated water storage and maintain pressure in the distribution system. The Campbellville Drinking Water System is controlled through a Supervisory Control and Data Acquisition (SCADA) system that is monitored twenty- four hours per day, seven days per week.

The following chemical was used in the treatment process:

- Sodium hypochlorite (liquid chlorine - disinfection)

What Improvements Are We Making?

No major capital expenses were incurred in the current reporting year for the Campbellville Drinking Water System. Halton continued to support the production of quality drinking water through increased sampling for groundwater monitoring, the implementation of the source protection plan (including capture zone and groundwater vulnerability assessments), upgrades to the SCADA monitoring and infrastructure management systems and water efficiency programs. Work also continued on the Drinking Water Quality Management System, a provincial requirement to support the licensing of municipal drinking water systems which came into effect for Halton in January 2009.

Water Quality Testing

A large number of water quality tests are performed each day, in accordance with the *Safe Drinking Water Act, 2002* and regulations. The following sections provide a summary of the test results.

Terms

CFU/100 mL	Colony-forming units per 100 millilitres of water
µg/L	micrograms per litre
mg/L	milligrams per litre
Standard	Ontario Drinking Water Quality Standard, O.Reg. 169/03

Microbiological Testing

	Number of Samples	*E. coli* Results (min - max)	Total Coliform Results (min - max)	Number of HPC Samples	HPC Results (min - max)
Raw	206	0 – 0	0 – 0	N/A	N/A
Treated	103	not detected	not detected	52	0 - 6
Distribution	207	not detected	not detected	155	0 - 6

Microbiological standards for treated and distributed water:

E.coli not detected
Total Coliforms not detected
HPC Heterotrophic Plate Counts are conducted on some treated and distribution system samples. The HPC test is used as a tool to monitor overall quality, but the results are not indicators of water safety. There is no Drinking Water Quality Standard for HPC.

Operational Testing

In the Campbellville Drinking Water System, continuous analyzers measure and record the results of chlorine residual and turbidity in treated water. All of the readings are validated by an operator and are also reviewed by the Ministry of the Environment, Conservation and Parks (MECP) Inspector. As well, Halton operators measure the chlorine in the distributed water. 'Adverse' test results must be reported if the free chlorine residual at the end of the treatment process was not sufficient to achieve primary inactivation (disinfection) or if a free chlorine residual in the distribution system is <0.05 mg/L. In the current reporting year, all of the validated readings and test results for these parameters were within the ranges required by regulation.

Chemical Testing

Inorganic Parameters

Parameter	Sample Date	Result Value	Unit of Measure	Standard	Exceedance of Standard
Antimony	04/17/23	<0.0005	mg/L	0.006	No
Arsenic	04/17/23	<0.001	mg/L	0.01	No
Barium	04/17/23	0.062	mg/L	1.0	No
Boron	04/17/23	0.036	mg/L	5.0	No
Cadmium	04/17/23	<0.0005	mg/L	0.005	No
Chromium	04/17/23	0.003	mg/L	0.05	No
Mercury	04/17/23	<0.00005	mg/L	0.001	No
Selenium	04/17/23	<0.001	mg/L	0.05	No
Sodium	11/20/23	147	mg/L	20	Yes – Reported February 2022
Uranium	04/17/23	<0.001	mg/L	0.02	No
Fluoride	11/20/23	0.08	mg/L	1.5	No
Nitrite	11/13/23	<0.01	mg/L	1.0	No
Nitrate	11/13/23	1.00	mg/L	10.0	No

Organic Parameters

Parameter	Sample Date	Result Value	Unit of Measure	Standard	Exceedance of Standard
Alachlor	04/17/23	<0.50	µg/L	5	No
Atrazine + N-dealkylated metobolites	04/17/23	<1.0	µg/L	5	No
Azinphos-methyl	04/17/23	<2.0	µg/L	20	No
Benzene	04/17/23	<0.10	µg/L	1	No
Benzo(a)pyrene	04/17/23	<0.0050	µg/L	0.01	No
Bromoxynil	04/17/23	<0.50	µg/L	5	No
Carbaryl	04/17/23	<5.0	µg/L	90	No
Carbofuran	04/17/23	<5.0	µg/L	90	No
Carbon Tetrachloride	04/17/23	<0.10	µg/L	2	No
Chlorpyrifos	04/17/23	<1.0	µg/L	90	No
Diazinon	04/17/23	<1.0	µg/L	20	No
Dicamba	04/17/23	<1.0	µg/L	120	No
1,2-Dichlorobenzene	04/17/23	<0.20	µg/L	200	No
1,4-Dichlorobenzene	04/17/23	<0.20	µg/L	5	No
1,2-Dichloroethane	04/17/23	<0.20	µg/L	5	No
1,1-Dichloroethylene (vinylidene chloride)	04/17/23	<0.10	µg/L	14	No
Dichloromethane	04/17/23	<0.50	µg/L	50	No
2-4 Dichlorophenol	04/17/23	<0.25	µg/L	900	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	04/17/23	<1.0	µg/L	100	No
Diclofop-methyl	04/17/23	<0.90	µg/L	9	No
Dimethoate	04/17/23	<2.5	µg/L	20	No
Diquat	04/17/23	<7.0	µg/L	70	No
Diuron	04/17/23	<10	µg/L	150	No
Glyphosate	04/17/23	<10	µg/L	280	No
HAA (latest running annual average)	11/13/23	7.0	µg/L	80 (running annual average)	No
2-Methyl-4-chlorophenoxyacetic acid	04/17/23	<10	µg/L	100	No
Malathion	04/17/23	<5.0	µg/L	190	No
Metolachlor	04/17/23	<0.50	µg/L	50	No
Metribuzin	04/17/23	<5.0	µg/L	80	No
Monochlorobenzene	04/17/23	<0.10	µg/L	80	No
Paraquat	04/17/23	<1.0	µg/L	10	No
Pentachlorophenol	04/17/23	<0.50	µg/L	60	No
Phorate	04/17/23	<0.50	µg/L	2	No
Picloram	04/17/23	<5.0	µg/L	190	No
Polychlorinated Biphenyls(PCB)	04/17/23	<0.05	µg/L	3	No
Prometryne	04/17/23	<0.25	µg/L	1	No
Simazine	04/17/23	<1.0	µg/L	10	No
THM (latest running annual average)	11/13/23	13.8	µg/L	100 (running annual average)	No
Terbufos	04/17/23	<0.50	µg/L	1	No

Parameter	Sample Date	Result Value	Unit of Measure	Standard	Exceedance of Standard
Tetrachloroethylene	04/17/23	<0.10	µg/L	10	No
2,3,4,6-Tetrachlorophenol	04/17/23	<0.50	µg/L	100	No
Triallate	04/17/23	<1.0	µg/L	230	No
Trichloroethylene	04/17/23	<0.10	µg/L	5	No
2,4,6-Trichlorophenol	04/17/23	<0.50	µg/L	5	No
Trifluralin	04/17/23	<1.0	µg/L	45	No
Vinyl Chloride	04/17/23	<0.20	µg/L	1	No

No additional testing was required by a Municipal Drinking Water License, order or other legal instrument.

'Adverse' Results Notifications

Notices of 'adverse' water quality results are submitted in accordance with the *Safe Drinking Water Act, 2002* to the MECP and the Medical Officer of Health. In the current reporting year, there were no adverse water reports for the Campbellville Drinking Water System.

Community-Wide Lead Sampling Program Results

Under the Community-Wide Lead Sampling Program, samples were collected from two sampling points in the current reporting year. None of the samples contained concentrations of lead above the standard of 10 µg/L.

More Information or Questions

The related annual Drinking Water Systems Flow Summary Report is presented to Municipal Council members on or before March 31 of each year and is posted on halton.ca.

For alternate formats or questions relating to these documents, email accesshalton@halton.ca or call 311.

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