2025

Halton Region Drinking Water Quality Report: Georgetown Treatment and Distribution Subsystem

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Introduction

Halton Region is committed to providing safe drinking water to all of our customers. As mandated by the *Safe Drinking Water Act, 2002*, this Annual Drinking Water Quality Report summarizes system performance for the period January 1 to December 31 of the reporting year and includes:

- A description of the drinking water treatment process and chemicals used;
- A summary of any major expenses related to the installation, repair or upgrade of system equipment; and
- The results of drinking water quality testing and how they compare to provincial regulatory standards.
- Any adverse test results or other issues, along with the corrective actions taken.

All provincial regulatory monitoring requirements and operational actions applicable to Halton Region's drinking water system were met or surpassed during the current reporting year.

System Description

Drinking Water System Number: 220001655

As of November 5th, 2024 a section of Georgetown was connected to the Halton Region Distribution Subsystem (lake-based) where treated surface water (Lake Ontario) is pumped to the Ashgrove Reservoir and Booster Station. Under normal operating conditions, lake water and groundwater do not mix in Georgetown's distribution system. Refer to the Halton Region Distribution Subsystem report for more information.

The remainder of the system is serviced by groundwater. The groundwater system consists of three well fields. There are four wells in the Cedarvale well field, three wells in the Princess Anne well field and two wells in the Lindsay Court well field.

The Georgetown Water Treatment Plant (WTP) treats water from the four Cedarvale Wells with greensand filtration, ultraviolet light for primary disinfection, hydrofluosilicic acid (fluoridation), and chlorine (chlorination) for secondary disinfection.

Water from the Princess Anne and Lindsay Court Wells is chlorinated for disinfection and then fluoridated. Together, these three sources pump water into the distribution system that includes 22 Side Road Reservoir, Moore Park Booster Station, Todd Road Tower, and the Norval Standpipe under a water distribution Class III Certificate (# 566). The system is controlled through a computerized Supervisory Control and Data Acquisition (SCADA) system that is monitored twenty-four hours per day, seven days a week.

What Improvements Are We Making?

During the current reporting year, approximately $251,065 was invested in capital upgrades at the Georgetown Water Treatment Plant, as well as at outlying distribution system facilities, including the Moore Park Booster Station. In addition, approximately $3,981,550 was invested in watermain projects within the Georgetown Distribution Subsystem.

Halton continues to support the production of quality drinking water through increased sampling for groundwater monitoring, the implementation of the source protection plans (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 was enacted for Halton Region in January 2009.

Partnership for Safe Water Program

Halton Region is an active participant in the American Water Works Association's Partnership for Safe Water, an alliance of leading drinking water organizations commited to improving the quality of drinking water delivered to customers. Through thisPartnership's comprehensive programs, Halton Region isprovidedwith the tools and framework needed to continuously improve system performance beyond regulatory requirements.

Water Quality Testing

A comprehensive program of water quality testing is performed daily in accordance with the *Safe Drinking Water Act, 2002* and its associated regulations. The following sections summarize the results of this testing and demonstrate complinace with applicable provincial drinking water quality standards.

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	849	0 - 0	0 - 1	N/A	N/A
Treated	308	0 - Absent	0 - Absent	156	0 - 423
Distribution	631	Absent	Absent	503	0 - 371

Microbiological standards for treated and distributed water:

E. coli — not detected

Total Coliforms — not detected

HPC — Heterotrophic Plate Counts are conducted on some 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 Georgetown Treatment and Distribution Subsystem, continuous analyzers measure and record the results of chlorine residual, turbidity and fluoride residual 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 is not sufficient to achieve primary inactivation (disinfection) if a free chlorine residual in the distribution system is <0.05 mg/L or if the fluoride residual is >1.5 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

Inorgranic Parameters

Parameter	Sample Date	Result Value	Unit of Measure	Standard	Exceedance of Standard
Antimony	04/14/25	<0.0005	mg/L	0.006	No
Arsenic	04/14/25	<0.0005	mg/L	0.01	No
Barium	04/14/25	0.229	mg/L	1.0	No

Boron	04/14/25	0.048	mg/L	5.0	No
Cadmium	04/14/25	<0.0005	mg/L	0.005	No
Chromium	04/14/25	<0.0005	mg/L	0.05	No
Mercury	04/14/25	<0.00006	mg/L	0.001	No
Selenium	04/14/25	<0.0005	mg/L	0.05	No
Sodium	11/03/25	97.6	mg/L	20	Yes – Reported February 2022
Uranium	04/14/25	0.0020	mg/L	0.02	No
Fluoride	12/15/25	0.71	mg/L	1.5	No
Nitrite	11/10/25	<0.01	mg/L	1.0	No
Nitrate	11/10/25	3.67	mg/L	10.0	No

Organic Parameters

Parameter	Sample Date	Result Value	Unit of Measure	Standard	Exceedance of Standard
Alachlor	04/14/25	<0.50	µg/L	5	No
Atrazine + N-dealkylated metabolites	04/14/25	<1.0	µg/L	5	No
Azinphos-methyl	04/14/25	<2.0	µg/L	20	No
Benzene	04/14/25	<0.10	µg/L	1	No
Benzo(a)pyrene	04/14/25	<0.0050	µg/L	0.01	No
Bromoxynil	04/14/25	<0.50	µg/L	5	No
Carbaryl	04/14/25	<5.0	µg/L	90	No
Carbofuran	04/14/25	<5.0	µg/L	90	No
Carbon Tetrachloride	04/14/25	<0.10	µg/L	2	No
Chlorpyrifos	04/14/25	<1.0	µg/L	90	No
Diazinon	04/14/25	<1.0	µg/L	20	No
Dicamba	04/14/25	<1.0	µg/L	120	No
1,2-Dichlorobenzene	04/14/25	<0.20	µg/L	200	No
1,4-Dichlorobenzene	04/14/25	<0.20	µg/L	5	No

1,2-Dichloroethane	04/14/25	<0.20	µg/L	5	No
1,1-Dichloroethylene (vinylidene chloride)	04/14/25	<0.10	µg/L	14	No
Dichloromethane	04/14/25	<0.50	µg/L	50	No
2-4 Dichlorophenol	04/14/25	<0.25	µg/L	900	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	04/14/25	<1.0	µg/L	100	No
Diclofop-methyl	04/14/25	<0.90	µg/L	9	No
Dimethoate	04/14/25	<2.5	µg/L	20	No
Diquat	04/14/25	<7.0	µg/L	70	No
Diuron	04/14/25	<10	µg/L	150	No
Glyphosate	04/14/25	<10	µg/L	280	No
HAA (latest running annual average)	11/10/25	5.2	µg/L	80 (running annual average)	No
2-Methyl-4-chlorophenoxyacetic acid	04/14/25	<10	µg/L	100	No
Malathion	04/14/25	<5.0	µg/L	190	No
Metolachlor	04/14/25	<0.50	µg/L	50	No
Metribuzin	04/14/25	<5.0	µg/L	80	No
Monochlorobenzene	04/14/25	<0.10	µg/L	80	No
Paraquat	04/14/25	<1.0	µg/L	10	No
Pentachlorophenol	04/14/25	<0.50	µg/L	60	No
Phorate	04/14/25	<0.50	µg/L	2	No
Picloram	04/14/25	<5.0	µg/L	190	No
Polychlorinated Biphenyls(PCB)	04/14/25	<0.05	µg/L	3	No
Prometryne	04/14/25	<0.25	µg/L	1	No
Simazine	04/14/25	<1.0	µg/L	10	No
THM (latest running annual average)	11/10/25	22.8	µg/L	100 (running annual average)	No
Terbufos	04/14/25	<0.50	µg/L	1	No

Tetrachloroethylene	04/14/25	0.10	µg/L	10	No
2,3,4,6-Tetrachlorophenol	04/14/25	<0.50	µg/L	100	No
Triallate	04/14/25	<1.0	µg/L	230	No
Trichloroethylene	04/14/25	<0.10	µg/L	5	No
2,4,6-Trichlorophenol	04/14/25	<0.50	µg/L	5	No
Trifluralin	04/14/25	<1.0	µg/L	45	No
Vinyl Chloride	04/14/25	<0.20	µg/L	1	No

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

‘Adverse’ Results Notifications

Notices of ‘adverse’ water quality results are submitted to the MECP and the Medical Officer of Health in accordance with the *Safe Drinking Water Act, 2002*. During the current reporting year, no adverse water quality reports were reported for the Georgetown Treatment and Distribution Subsystem.

Community-Wide Lead Sampling Program Results

As part of the Community-Wide Lead Sampling Program, water samples were collected from eight locations throughout the Georgetown Treatment and Distribution Subsystem during the current reporting year. None of the samples exceeded the provincial lead standard of 10 µg/L.

Per - and Polyfluoroalkyl Substances (PFAS)

In August 2024, Health Canada introduced a new drinking water objective of 30 ng/L for the sum concentration of 25 PFAS compounds. In 2025, Halton Region proactively tested raw and treated water at all of its water treatment facilities to assess PFAS levels Region-wide. All results were below the federal objective. Halton Region has also established an annual monitoring program to ensure PFAS levels remain low and to continue protecting the safety of the drinking water supply. The Region keeps current on the changing regulatory environment for this emerging contaminant and will be prepared should adjustments to the monitoring strategy or treatment operations be required.

More Information or Questions

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

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

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