



DRINKING WATER SYSTEM 2024 SUMMARY REPORT

Prepared by the Environmental Service
M. Perron, B.Sc, Superintendent / N. Beks, QMS Rep.
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Introduction

The Corporation of the Town of Hawkesbury is the Owner and Operating Authority of the Hawkesbury Drinking Water System. Its system is classified as a “*Large municipal residential system*” under the O. Reg. 170/03 Drinking Water Systems Regulation of the *Safe Drinking Water Act, 2002* as it serves more than 100 private residences.

Schedule 22 of the Ontario Regulation 170/03 requires owners of large municipal residential systems to prepare a summary report of the preceding calendar year.

The report must include:

- (a) A list of the requirements of the Act, the regulations, the system’s approval, drinking water works permit, municipal drinking water licence, and any orders applicable to the system that were not met at any time during the period covered by the report, and**
- (b) For each requirement referred to in clause (a) that was not met, specify the duration of the failure and the measures that were taken to correct the failure, and**
- (c) A summary of the quantities and flow rates of the water supplied during the period covered by the report, including monthly average and maximum daily flows, and**
- (d) A comparison of the summary referred to in (c) to the rated capacity and flow rates approved in the system’s approval, drinking water works permit or municipal drinking water licence.**

The report must be given no later than March 31 of the following year to:

- a) The members of the municipal council, and**
- b) To the municipalities under the terms of a contract, being supplied in drinking water.**

The purpose of this report is to give the Corporation of the Town of Hawkesbury Drinking Water System Owners, the Mayor, Councillors and Chief Administrative Officer, an understanding of the system's current state for the reporting period from January 1, 2024, to December 31, 2024. All efforts have been made to ensure the information presented is accurate.

Drinking Water System Profile

The Hawkesbury Drinking Water System is categorized as a Large Municipal Residential System. It provides drinking water to the citizens of the Town of Hawkesbury and to three stand-alone systems owned by the Township of Champlain.

The Hawkesbury Water Treatment Plant is designated a Class 3 Water Treatment Subsystem and the Hawkesbury Water Distribution is designated a Class 3 Water Distribution Subsystem. They are both associated with the Hawkesbury Drinking Water System Number 220002832.

The key elements of the Hawkesbury Drinking Water System are a raw water pumping station that draws water from the Ottawa River, a drinking water treatment plant and, a drinking water distribution system that includes a remote water storage standpipe with a booster pumping system.

Legislative Requirements

The Safe Drinking Water Act (SDWA) is the principal provincial legislation that regulates the treatment and distribution of drinking water in Ontario. The act and its regulations have several components that have been established to protect drinking water consumers.

The regulations under this act which the Corporation of the Town of Hawkesbury operates the Hawkesbury Drinking Water System are:

- **Ontario Regulation 170/03 of the Act**
 - Overall legislative framework to operate Drinking Water System
- **Ontario Regulation 169/03 of the Act**
 - Water sampling parameters according to the Ontario Drinking Water Quality Standards
- **Ontario Regulation 128/04 of the Act**
 - Certification of the Drinking Water System Operators
- **Ontario Regulation 188/07 of the Act**
 - Licensing requirements for Municipal Drinking Water Systems
- **Ontario Regulation 205/18 of the Act**
 - Municipal Residential Drinking Water Systems in source protection areas

Ontario Regulation 170/03 - Drinking Water System

This regulation establishes eight (8) categories of Drinking Water Systems. The Hawkesbury Drinking Water System is classified as a Large Municipal Residential System because it serves more than 100 private residences.

This regulation contains Schedules that address several requirements for a drinking water system. The following Schedules are applicable to the Town's Drinking Water System:

- Schedule 6: Operational Checks, Sampling and Testing - general
- Schedule 7: Operational Checks
- Schedule 10: Microbiological Sampling and Testing
- Schedule 13: Chemical Sampling and Testing
- Schedule 15.1: Lead
- Schedule 16: Reporting Adverse Test Results and Other Problems
- Schedule 17: Corrective Action
- Schedule 22: Summary Reports for Municipality

Ontario Regulation 169/03 - Ontario Drinking Water Quality Standards

This regulation specifies drinking water quality standards and maximum allowable concentrations with the following standards:

- Schedule 1: Microbiological Standards
- Schedule 2: Chemical Standards
- Schedule 3: Radiological Standards

Results outside of these regulatory standards are considered adverse and require reporting as well as corrective actions based on the type of adverse.

Ontario Regulation 128/04 - Certification of Drinking Water System Operators and Water Quality Analysts

This regulation establishes the training and certification requirements that must be satisfied by certified drinking water operators.

The Hawkesbury Drinking Water System operators are required to complete a total of 120 training hours within the three-year operator certificate renewal period. Operator training consists of 42 hours of Director Approved Continuing Education Units (CEU) and 78 hours of on-the-job practical training.

Ontario Regulation 188/07- Licensing of Municipal Drinking Water Systems

The Municipal Drinking Water Licensing Program under the SDWA is the approvals framework for municipal residential drinking water systems. To be issued a Municipal Drinking Water Licence (MDWL) by the Ministry, the owner of the drinking water system must have the following:

- A Drinking Water Works Permit (DWWP) which describes the drinking water system components and allows to complete and/or approve certain alterations to the system without requiring additional approval from the Ministry.
- A Permit to Take Water (PTTW) specifying the authorized rates and amounts of source water taking and any potential monitoring or reporting conditions.
- An accepted operational plan which defines and documents the quality management system of the drinking water system in accordance with the requirements of the Drinking Water Quality Management Standard (DWQMS).
- An operating authority accreditation given by a third-party accreditation body recognized by the Ministry.
- A financial plan that outlines the long-term strategy to ensure the financial sustainability of the drinking water system.

The Hawkesbury Drinking Water System MDWL 177-101 and the DWWP 177-201 were renewed on February 4, 2021 and are valid until February 4, 2026. The licence and permit renewal will be completed before its expiry date.

The Hawkesbury PTTW is # 1862-D3HQRQ. It was issued on April 3, 2024, in accordance with Section 34 of the Ontario Water Resources Act and is valid until March 31, 2034.

The Hawkesbury Drinking Water System has demonstrated through the assessment of a third-party accredited body that its Drinking Water Quality Management System meets the requirements of Ontario's DWQMS. The most recent certificate of registration was issued on November 9, 2022, for Entire Full Scope Accreditation and is valid until January 14, 2026. The re-accreditation audit has been schedule for Fall 2025.

Ontario Regulation 205/18 - Municipal Residential Drinking Water Systems in source protection areas

This regulation requires that an owner of an existing or planned municipal drinking water system to notify the Source Protection Area in which the water system is located when they propose to make an application under the Safe Drinking Water Act to alter or replace a system or establish a new system.

The Town of Hawkesbury Drinking Water System falls under the South Nation Source Protection Area, part of the Raisin-South Nation Source Protection Region.

Statement of Compliance

Adverse Test Results and other observations

During this reporting period, zero (0) drinking water tests exceeded provincial water quality standards.

One (1) on-site observation was made during a watermain break repair. Regulatory notifications and corrective actions to rectify the situation were performed. This observation had no indications of unsafe drinking water being directed to residents.

Ministry's Orders

During this reporting period, there were zero (0) Ministry's order.

MECP Drinking Water Inspection

The annual Ministry of the Environment, Conservation and Parks (MECP) inspection for this reporting period took place in January 2025. There were zero (0) non-compliance findings and the Inspection Report Rating was 100% for the Hawkesbury Drinking Water System. No best practice recommendations were noted as well.

Notifications to MECP regarding operational issues

During this reporting period, there were zero (0) notifications.

Drinking Water Quality Management System Audits

The internal audit was conducted by Acclaims Environmental Inc. in October 2024. During the audit, zero (0) non-conformities were identified and seven (7) OFI's were noted. These findings are communicated in the 2024 Management Review Report.

The 3rd party surveillance audit was conducted by NSF International Strategic Registrations in November 2024. During the audit zero (0) non-conformities were identified and zero (0) OFI's were noted.

Both audits confirmed that the quality management system established is effective in conforming with the requirements of the Drinking Water Quality Management Standard (DWQMS) requirements.

Water Flow Assessment

Permit to Take Water

Under the Permit to Take Water no. 1862-D3HQRQ, the rate of taking for the Corporation of the Town of Hawkesbury is as follows:

- **Maximum flow rate taking per minute (litres) = 25,000**
- **Maximum flow rate taking per day (litres) = 20,000,000**

Based on the 2024 Raw Water Flow Data, the maximum flow rate taking per minute was on April 13, 2024, at 14,710 L/min for approximately 2 minutes, which did not exceed the permit allowable limit of 25,000 L/min.

Based on the 2024 Raw Water Flow Data, the maximum flow rate taking per day was on October 24, 2024, at 9,246,101 L/d, which did not exceed the permit allowable limit of 20,000,000 L/d.

Municipal Drinking Water License

Under Schedule C, section 1 of the Municipal Drinking Water License #177-101, the rated capacity at the Hawkesbury Drinking Water Plant is as follows:

- **Maximum Daily Volume of Treated water = 27,275 m³/day**

Based on the 2024 Total Water Production Data, the maximum daily water production was on June 2, 2024, at 8,216 m³/day, which did not exceed the MDWL allowable limit of 27,275 m³/day.

Availability of Report

This report is available to the public at no charge at the following places:

1. *Environmental Service*

Corporation of the Town of Hawkesbury
815 Main East
Hawkesbury (Ontario) K6A 1B5
(613) 678-9269

2. *Hawkesbury Public Library*

550 Higginson Street
Hawkesbury, Ontario
K6A 1H1

3. *Town's website* www.hawkesbury.ca

Additionally, this report is provided to the Township of Champlain and the Ministry of the Environment, Conservation and Parks.

If the format of this document is inadequate, the Clerk's office can be contacted at 613-632-0106 and the municipality can provide, to the best of its abilities, the required assistance.

Appendix A – 2024 Raw Water Flow Data Summary Table

Regulated by Permit to Take Water (PTTW) #1862-D3HQRQ

Month	Average Flow (m ³ /d)	Maximum Flow (m ³ /d)	Total Flow (m ³)	Maximum Flow (L/d)	PTTW Max. Flow (L/d)	Maximum Flow Rate (L/min)	PTTW Max. Flow Rate (L/min)
January	6,403	8,637	198,492	8,637,268	20,000,000	10,111	25,000
February	6,378	6,857	184,955	6,857,488	20,000,000	10,393	25,000
March	6,285	7,764	194,829	7,764,430	20,000,000	10,431	25,000
April	6,413	7,126	192,379	7,125,778	20,000,000	14,710	25,000
May	6,813	7,563	211,215	7,562,543	20,000,000	10,154	25,000
June	7,101	8,478	213,026	8,477,893	20,000,000	10,226	25,000
July	6,914	7,625	214,347	7,625,404	20,000,000	10,287	25,000
August	6,842	7,606	212,100	7,606,479	20,000,000	10,038	25,000
September	6,900	8,118	207,007	8,118,379	20,000,000	9,877	25,000
October	6,477	9,246	200,781	9,246,101	20,000,000	11,034	25,000
November	6,289	6,664	188,662	6,664,487	20,000,000	9,842	25,000
December	6,222	6,632	192,895	6,631,747	20,000,000	9,981	25,000
Annual	6,586	9,246	2,410,690	9,246,101	20,000,000	14,710	25,000

Appendix B – 2024 Treated Water Flow Data Summary Table

Regulated by Municipal Drinking Water License (MDWL) #177-101

Month	Total Flow (m³)	Average Flow (m³/d)	Maximum Flow (m³/d)	MDWL Capacity (m³/d)
January	190,818	6,155	7,771	27,275
February	178,271	6,147	7,101	27,275
March	184,713	5,958	6,521	27,275
April	184,213	6,140	6,737	27,275
May	198,870	6,415	7,110	27,275
June	201,778	6,726	8,216	27,275
July	203,122	6,552	7,429	27,275
August	201,604	6,503	7,118	27,275
September	196,452	6,548	7,585	27,275
October	187,178	6,038	6,539	27,275
November	177,756	5,925	6,233	27,275
December	182,852	5,898	6,287	27,275
Annual	2,287,628	6,251	8,216	27,275

Appendix C – Historical Maximum Flow Data Summary Table

Year	Maximum Raw Flow (m³/d)	Max. Daily % of PTTW Flow (20,000 m³/d)	Maximum Treated Flow (m³/d)	Max. Daily % of MDWL Capacity (27,275 m³/d)
2024	9,246	46.2%	8,216	30.1%
2023	10,021	50.1%	9,326	34.2%
2022	9,210	46.1%	8,281	30.4%
2021	9,106	45.5%	8,516	31.2%
2020	8,765	43.8%	8,471	31.1%
2019	7,717	38.6%	7,468	27.4%