

Drinking Water Systems Regulation O. Reg. 170/03

ANNUAL REPORT 2022

Drinking Water System Number:	260091650
Drinking Water System Name:	Hensall Distribution System
Drinking Water System Owner:	Corporation of the Municipality of Bluewater
Drinking Water System Category:	Large Municipal Residential
Period being reported:	January 1, 2022 – December 31, 2022

<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: Municipality of Bluewater 14 Mill Ave. Zurich, Ontario N0M 2T0</p>	<p><u>Complete for all other Categories</u></p> <p>Number of Designated Facilities served: n/a</p> <p>Did you provide a copy of your annual report to all Designated Facilities you serve? n/a</p> <p>Number of Interested Authorities you report to: n/a</p> <p>Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility? n/a</p>
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List all Drinking Water Systems (if any), which receive all their drinking water from your system:

Drinking Water System Name	Drinking Water System Number
Not applicable	

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?

Not applicable

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 _____

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Describe your Drinking Water System

Treated water is delivered to the Hensall Distribution System by a trunk watermain from the Lake Huron Primary Water Supply System. The watermain runs east from Grand Bend along Huron Rd. towards Exeter (600 mm) and north along Airport Line (400 mm) to Hensall. The Hensall Distribution System serves a population of approximately 1,024. The distribution system is constructed of a combination of cast iron, ductile and PVC piping. The Hensall Distribution System has the following components:

- York Street Pumping Station and Reservoir, which has a capacity of 300 m³
- Meter and valve chamber located at the intersection of Hwy 84 and Airport Rd consists of an in-ground manhole structure with a flow meter and pressure reducing valve
- Elevated tower with a capacity of 455m³ that maintains system pressure in addition to providing some reserve storage.
- SCADA system for remote monitoring of the system

List all water treatment chemicals used over this reporting period

Not applicable

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

System repairs & replacements included:

- Parts Inventory
- Watermain Repairs – Water Service Repairs

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
No issues applicable to this reporting period					

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 #)
Distribution	157	0 – 0	0 – 0	55	< 10 – 490

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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
Chlorine: Distribution	364	0.30 – 1.21	mg/L

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
Not applicable				

Summary of Inorganic parameters tested during this reporting period or the most recent sample results

Not applicable

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
Distribution	4	0.09 – 2.42	ug/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
HAAs (Note: show latest running annual average)	Jan. – Dec. 2022	15.3	ug/L	No
THMs (Note: show latest running annual average)	Jan. – Dec. 2022	40.3	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
Not applicable			

The Annual Report for the Lake Huron Primary Water Supply System can be found at: [LHPWSS Consumer Reports](#)



Ontario Clean Water Agency
Agence Ontarienne Des Eaux

2022 Summary Report
Hensall Distribution System

Prepared for the Municipality of Bluewater

By the Ontario Clean Water Agency

Section Number	CONTENTS	Page Number
1	Overview	1
2	Compliance with Regulations Schedule 22-2 (2)(a) List 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	1
3	Corrective Actions Schedule 22-2 (2)(b) For each requirement referred to in section 2 that was not met, specify the duration of the failure and the measures that were taken to correct the failure.	1
4	Flow Summary Schedule 22-2 (3) 1. 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. 2. A comparison of the summary referred to in paragraph 1 to the rated capacity and flow rates approved in the system’s approval, drinking water works permit or municipal drinking water licence, or if the system is receiving all of its water from another system under an agreement pursuant to subsection 5 (4), to the flow rates specified in the written agreement	1
APPENDICES Appendix A: Flows January 1, 2022 to December 31, 2022		

SECTION 1 - Overview

This report is a summary of water quantity and quality information for the Hensall Distribution System and published in accordance with Schedule 22 of Ontario's Safe Drinking Water Act, Ontario Regulation 170/03 for the reporting period of January 1, 2022 to December 31, 2022. The Hensall Distribution System is categorized as a Large Municipal Residential Drinking Water System.

SECTION 2 – Compliance with Regulations

The Hensall Distribution System was operated and maintained in such a manner that the water supplied to the consumers serviced by the system satisfied all the requirements in the Safe Drinking Water Act, the Regulations, the Drinking Water Works Permit Number: 045-201, Issue Number: 03 and the Municipal Drinking Water License Number: 045-101, Issue Number 4.

Two Ministry of Environment, Conservation and Parks (MECP) inspections occurred in 2022.

A MECP inspection occurred on February 23, 2022 for the MECP reporting year 2021-2022; no compliance issues were identified in the inspection report received on March 02, 2022. The routine MECP Inspections have an Inspection Rating Record, which evaluates the system to provide information for the owner/operator on areas that need to be improved. The particular areas that were evaluated for the Hensall Distribution System were: Treatment Process, Operations Manuals, Logbooks, Certification and Training, Water Quality Monitoring, Reporting and Corrective Actions and Treatment Process Monitoring. This system received 0 out of 367 non-compliance ratings and as such received 100% for the Final Inspection Rating.

The second MECP inspection occurred on October 06, 2022 for the MECP reporting year 2022-2023. No compliance issues were identified in the inspection report received on December 07, 2022; Inspection Rating Record has not been received to date.

SECTION 3 – Corrective Action

There were no non-compliance issues identified in the Ministry of Environment, Conservation and Parks (MECP) inspections.

There were no adverse water quality or non-compliance issues identified in 2022.

SECTION 4 – Flow Summary

The total flow into the Hensall Distribution System for 2022 was 122,132 m³. The average monthly flow for 2022 was 10,178 m³. This is a 5% decrease from 2021 flows. The maximum monthly flow for the reporting period of 12,570 m³ which was recorded for April 2022. Refer to Appendix A for a summary of flow supplied to the Hensall Distribution System.

The Hensall Distribution System, Municipal Drinking Water License (License Number: 045-101) does not identify a system rated capacity. The agreement between the Municipality of Bluewater and the Lake Huron Primary Water Supply Board of Management does not specify a maximum volume for water taking.

Appendix A

Hensall Distribution System - 2022 Water Flows from LHPWSS

Month	Total Volume (m³)
January	10,192
February	10,060
March	11,319
April	12,570
May	10,556
June	9,478
July	9,395
August	9,664
September	9,917
October	9,295
November	10,651
December	9,035
Average	10,178
Total	122,132