



Ontario Clean Water Agency
Agence Ontarienne Des Eaux

2020 Annual and Summary Reports

Hensall Distribution System

Prepared for the Municipality of Bluewater

By the Ontario Clean Water Agency

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SECTION 1 - Statement of Compliance

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, 2020 to December 31, 2020. The Hensall Distribution System is categorized as a Large Municipal Residential Drinking Water System.

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: 02 and the Municipal Drinking Water Licence Number: 045-101, Issue Number 3.

A Ministry of Environment, Conservation & Parks inspection occurred on December 12th 2019' this inspection report was received March 2nd 2020. Zero non-compliance issues were identified in MECP Inspection report 1-L5D8K

The last Ministry of Environment, Conservation & Parks inspection occurred on December 21st 2020; this inspection report was received January 22nd 2021. One non-compliance issue was identified in MECP Inspection report 1-O0IHE.

Water quality data is presented in the Section 11 Annual Report found in Appendix A.

SECTION 2 - Details of the non-compliance issues as well as how and when any non-compliance issues were corrected

There were no non-compliance issues identified during the December 12th, 2019 MECP Inspection. MECP Inspection Report No. 1-L5D8K was received March 2nd 2020 with an inspection rating of 100%.

There was one non-compliance issue identified during the December 21st, 2020 MECP Inspection. MECP Inspection Report No. 1-O0IHE was received January 22nd, 2021 with an inspection rating of 94.72 %.

Non Compliance:

The operations and maintenance manuals did not contain plans, drawings and process descriptions sufficient for the safe and efficient operation of the system.

Action Required By 2021/03/08

We would request the Municipality work with their Engineer and Operating Authority to provide a response to this office within 45 days of the issuance of this report;

- Outlining the anticipated timelines for approving, tendering and construction a replacement tower, and

- Confirming the development of a set of contingencies to be enacted in the event the tower fails before a replacement tower is constructed.

Resolution:

The Municipality of Bluewater Chief Administrative Officer and the Manager Public Works brought the 2020 MECP Hensall Distribution System Inspection report non-compliance issue to the council's attention on February 1, 2021. OWCA is working with the Engineers to ensure a set of contingencies are developed and a response is sent to the MECP no later than March 8, 2021.

SECTION 3 - Summary and discussion of quantity of water supplied

In accordance with Schedule 22-2 (3) "the report must also include the following information for the purpose of enabling the owner of the system to assess the capability of the system to meet existing and planned uses of the system."

1. A summary of the quantities and totalized volume of water supplied during the period covered by this report include monthly averages and the annual total flow with respect to DWS 260091650

The Municipal Drinking Water License (License Number: 045 -101 Issue No. 3) for the Hensall Distribution System does not identify a system rated capacity. The total flow into the Hensall Distribution System for 2020 was 112,446 m³. The average monthly flow for 2020 was 9,372.17 m³. The maximum monthly flow for the reporting period of 12,069 m³ was recorded for July 2020. Refer to the table below for a summary of flow supplied to the Hensall Distribution System.

2. A comparison of the summary of flows to the rated capacity and flow rates approved in the system system's MDWL, DWWP or written agreement.

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.

Hensall Distribution System - 2020 Water Flows From LHPWSS

Month	Total Cubic Meters
January	8,111
February	8,910
March	8,646
April	8,714
May	9,921
June	10,056
July	12,069
August	10,143
September	9,101
October	9,189
November	7,921
December	9,685
Average	9,372.17
Total	112,446

Appendix A
Section 11 Annual Report

SECTION 11 ANNUAL REPORT: 2020

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, 2020 – December 31, 2020

<p>Does your Drinking-Water System serve more than 10,000 people? No</p> <p>Is your annual report available to the public at no charge on a web site on the Internet? Yes</p> <p>Location where Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection.</p> <p>Municipality of Bluewater 14 Mill Ave. Zurich, Ontario N0M 2T0</p>	<p align="center"><u>Complete for all other Categories.</u></p> <p>Number of Designated Facilities served: Not applicable</p> <p>Did you provide a copy of your annual report to all Designated Facilities you serve? Not applicable</p> <p>Number of Interested Authorities you report to: Not applicable</p> <p>Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility? Not applicable</p>
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List all Drinking-Water Systems (if any), which receive all of their drinking water from your system: 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 of its 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-Water Department Office
- Public access/notice via Public Request

Describe your Drinking-Water System

Treated water is delivered to the Hensall Distribution System by a trunk main fed from the Lake Huron Primary Water Supply System. The main 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 2,400.

The Hensall Pump house consists of:

- 300 m³ underground reservoir with a submersible pump

The meter and valve chamber located at the intersection of Hwy 84 and Airport Rd consists of an in-ground manhole structure with:

- Magnetic flow meter
- Valved by-pass
- Remote telemetry
- Pressure reducing valve

The distribution system is constructed of a combination of cast iron, ductile and PVC piping. There is an elevated tower that maintains system pressure in addition to providing some reserve storage.

List all water treatment chemicals used over this reporting period:

Not applicable

Please provide a brief description and a breakdown of monetary expenses incurred

System repairs & replacements included:

- Reservoir and Tower inspections
- Reservoir building door replacement
- 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
AWQI # 151018 July 30, 2020	Total Coliform	2	cfu/100mL	Resample: The July 28, 2020 sample from 176 Richmond St. W Hensall showed presence of Total Coliform (2 cfu/100 mL); required PHI & MECP notifications were made. Re-sampled on July 30th and 31st, 2020; re-sample reports were good. No further action required.	August 04, 2020

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 or Fecal Results (min -max) cfu/100ml	Range of Total Coliform Results (min – max) cfu/100ml	Number of HPC Samples	Range of HPC Results (min –max) cfu/1mL spread plate
Distribution	169	0 – 0	0 – 2	58	< 10 – 140

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	368	0.22 – 1.15	mg/L

Summary of additional testing and sampling carried out in accordance with the requirement of an approval, order or other legal instrument.

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

Location Type	Date Sampled	Number of Samples	pH Range	Range of Alkalinity (min – max) mg/L	Range of Lead Results (min – max) ug/L	Number of Exceedances
Distribution	Mar 30, 2020	2	7.03 - 7.10	86 - 88	0.03 - 0.12	0
Distribution	Aug 13, 2020	2	7.81 - 8.13	81 - 86	0.02 - 0.08	0

Summary of Organic parameters sampled during this reporting period or the most recent sample results

Parameter	Annual Running Average	Result Value	MAC ug/L	Exceedance
Trihalomethane: Total (ug/L)	Jan - Dec. 2020	41.75	100.00	No
Haloacetic Acids: Total (ug/L)	Jan - Dec. 2020	15.45	80.00	No

List any Inorganic or Organic parameter(s) that exceeded half the standard prescribed in Schedule 2 of Ontario Drinking Water Quality Standards. Not applicable

The Annual Report for the Lake Huron Primary Water Supply System can be found at:

<https://huronelginwater.ca/consumer-resources/consumer-reports/>