



Ontario Clean Water Agency
Agence Ontarienne Des Eaux

Annual Summary Report

Hensall Distribution System

2019

Prepared for the Municipality of Bluewater

By the Ontario Clean Water Agency

Hensall Distribution System - Annual Summary Report 2019

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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, 2019 to December 31, 2019. The Hensall Distribution System is categorized as a Large Municipal Residential Drinking Water System.

This report was prepared by the Ontario Clean Water Agency on behalf of the Municipality of Bluewater.

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 February 21st 2019; this inspection report was received March 26th 2019. One (1) non-compliance issue was identified in MECP Inspection report 1-ICT9F.

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SECTION 2

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

There was one (1) non-compliance issue identified during the February 21st, 2019 MECP Inspection The MECP Inspection Report No. 1-ICT9F was received March 26th 2019 with an inspection rating of 97.66%.

Non Compliance:

The owner/ operating authority was not in compliance with the requirement to prepared Form 2 documents as required by their Drinking Water Works Permit during the inspection period. Form 2 documents must be prepared for any works falling within the scope of sections 4.1, 4.2 and 4.3 of the DWWP. A review if logs and inspection of works on the ground revealed that the following changes were made during the inspection period.

- A. installation of VFD controller system for the submersible high-lift pump; commissioned June 21, 2018
- B. Installation of a pressure tank on the pressure switch line: commissioned June 21, 2018. Form 2 documents were not prepared for these two modifications to the drinking water system. The current DWWP required Form 2 documents to be prepared prior to the modified or replaced components being placed into service.

Action Required By 2019/04/30

- i. Prepare Form 2 Record of Minor Modifications or Replacements to the Drinking Water System document for the above noted minor modifications.
- ii. Ensure that the operating authority's procedure entitled: Minor Modifications to the Drinking Water System Rev. 2 issued Nov. 30 2017 is reviewed with operators responsible for operation and maintenance of the drinking water system to ensure that the form 2 requirements are completed consistent with Condition 4.6 under Schedule B of the DWWP, including ensuring the Form 2 documents are prepared prior to the added, modified or replaced components being placed into service
- iii. Report to the issuing officer on action taken to comply with actions in items i) and ii)

Resolution:

VFD unit was installed on the high lift pump; a small pressure tank had to be installed following VFD installation to resolve nuisance false alarms. The applicable Form 2 was prepared. Scheduled and completed a review of the SOPs Minor Modifications to the Drinking Water System and a review of Form 1, 2 & 3 requirements with all operational staff.

Details of adverse water quality or potential issues reported as well as how and when any adverse water quality issues were corrected

There were no incidents of adverse water quality / potential for adverse water quality reported in 2019.

There was zero (0) Spill Incidents reported in 2019.

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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 including monthly averages, maximum daily 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 for the Hensall Distribution System for this reporting period was 109,843 m³/ yr. The average monthly flow for 2019 was 9,153.58 m³. The maximum monthly flow for the reporting period was 10,809 m³ recorded in August 2019; the Hensall Reservoir maximum daily flow of 122 m³ was recorded on October 15th 2019. Refer to the table below for a summary of flow supplied to the Hensall Distribution System.

Hensall Distribution System

2019 Water Flows From LHPWSS - Cubic Meters

Month	Total Cubic Meters
January	8,860
February	8,899
March	9,976
April	8,416
May	8,730
June	9,486
July	10,112
August	10,809
September	7,950
October	8,840
November	8,163
December	9,602
Average	9,153.6
TOTAL (m³)	109,843



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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, 2019 – December 31, 2019

<p>Does your Drinking-Water System serve more than 10,000 people? No</p>	<p><u>Complete for all other Categories.</u></p>
<p>Is your annual report available to the public at no charge on a web site on the Internet? Yes</p>	<p>Number of Designated Facilities served: Not applicable</p>
<p>Location where Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection.</p>	<p>Did you provide a copy of your annual report to all Designated Facilities you serve? Not applicable</p>
<p>Municipality of Bluewater 14 Mill Ave., Zurich, Ontario N0M 2T0</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>

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 a newspaper
- Public access/notice via Public Request
- Public access/notice via a Public Library
- Public access/notice via other method _____



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 1200.

The Hensall Pump house consists of:

- 300 m³ underground reservoir
- 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

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

The following system related parts were purchased and repairs made in 2019:

- SCADA Upgrades
- Parts Inventory re-stock
- 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 Reportable Issues					

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	159	0 – 0	0 – 0	53	<10 – 80

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	378	0.19 – 1.39	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	Range of Lead Results (min – max) ug/l	Range of Alkalinity (min – max) mg/l	pH Range	Number of Exceedances
Distribution	25-Mar-19	2	0.09 – 0.21	87 – 88	7.12 – 7.27	0
Distribution	12-Sept-19	2	0.07 – 0.10	77 – 78	7.06 – 7.08	0

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

Parameter	Annual Running Average	Result Value	Unit of Measure	Exceedance
THM (NOTE: show latest annual average)	Jan.- Dec. 2019	55.0	ug/l	no
HAA (NOTE: show latest annual average)	Jan.- Dec. 2019	17.6	ug/l	NA

List any Inorganic or Organic parameter(s) that exceeded half the standard prescribed in Schedule 2 of Ontario Drinking Water Quality Standards.

Not applicable