

ANNUAL REPORT

Drinking Water System Number:	260040170
Drinking Water System Name:	Alvinston Distribution System
Drinking Water System Owner:	The Corporation of the Municipality of Brooke-Alvinston
Drinking Water System Category:	Large Municipal Residential System
Period being reported:	January 1st to December 31st, 2023

<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.</p> <div style="border: 1px solid black; padding: 5px;"> <p>The Municipality of Brooke-Alvinston Municipal Office 3236 River St. Alvinston, ON N0N 1A0</p> </div>	<p><u>Complete for all other Categories</u></p> <p>Number of Designated Facilities served: <input type="text" value="n/a"/></p> <p>Did you provide a copy of your annual report to all Designated Facilities you serve? Yes [] No []</p> <p>Number of Interested Authorities you report to: <input type="text" value="n/a"/></p> <p>Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility? Yes [] No []</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
n/a	n/a

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? Yes [] No []

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 _____

Describe your Drinking Water System

The Alvinston Drinking Water System is supplied with potable water via a 250mm diameter PVC watermain from the Lambton Area Water Supply System (LAWSS). The supply meter chamber is located on the southeast corner of Old Walnut Rd. and Churchill Line. The Old Walnut meter chamber is equipped with a flowmeter. From here, water continues through the Distribution System through the Alvinston Rechlorination Station located at 3188 Church St. The station provides level control to the standpipe through a PRV and CAV, and maintenance of secondary disinfection (as required). The secondary disinfection system at the pumping station consists of two chemical feed pumps (one duty and one standby), a chemical feed line upstream of the PRV and continuous feed chlorine analyzers upstream and downstream of the PRV. The distribution system also includes a 1,544 m³ standpipe equipped with a continuous online free chlorine analyze, 11 air valve chambers, approximately 70 hydrants and 110 shut off valves, two water service meter chambers and piping of various sizes.

Standby power is available in the event of a power failure/outage.

List all water treatment chemicals used over this reporting period

Sodium Hypochlorite 12%

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

Watermain Repair
 Service line repairs and installation
 Tower Inspection and Repairs
 Hydrant 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
n/a	n/a	n/a	n/a	n/a	n/a

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	53	<10-840

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	364	0.43-1.75	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
n/a	n/a	n/a	n/a	n/a

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

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
n/a	n/a	n/a	n/a	n/a

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 Results		MAC (ug/L)	Number of Exceedances
		Minimum	Maximum		
Distribution - Lead Results (ug/L)	4	0.09	0.47	10	No
Distribution - Alkalinity (mg/L)	4	75	78	n/a	n/a
Distribution - pH	4	7.09	7.58	n/a	n/a

**reduced lead sampling taken every three years*

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

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
HAA5 (Note: show latest running annual average)	2023	22.05	ug/L	no
THMs (Note: show latest running annual average)	2023	49	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
n/a	n/a	n/a	n/a