



Drinking-Water System Number: 260002798
Drinking-Water System Name: St. Jacobs/Elmira Distribution System
Drinking-Water System Owner: Township of Woolwich
Drinking-Water System Category: Large Municipal Residential
Period being reported: January 1, 2017 – December 31, 2017

For Large Municipal Residential Systems:

Does your Drinking-Water System serve more than 10,000 people?

- Yes
- No

Is your annual report available to the public at no charge on a website on the internet?

- Yes
- No

Location where Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection:

- Available by calling Engineering & Planning Services at 519-669-6041
- www.woolwich.ca

Are there any Designated Facilities serviced by your system, and is a copy of your annual report provided to all Facilities?

Yes, there are 16 Designated Facilities and they are all provided a copy of the annual report.

1. List all Drinking-Water Systems (if any), which receive all of their drinking water from your system:

Drinking Water System Name	Drinking Water System Number
None	N/A

2. 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?

- Yes
- No

3. 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



4. Describe your Drinking-Water System

The Township of Woolwich owns and operates the St. Jacobs – Elmira distribution system, including pipes, valves and residential meters.

The St. Jacobs distribution system services a population of approximately 1,728 people with about 576 residential service connections, with approximately 83 hydrants.

The Elmira distribution system serves a population of approximately 10,152 people with about 3,384 residential service connections, there are approximately 396 hydrants.

The Township of Woolwich does not own or operate the water storage facilities servicing these systems. The St. Jacobs and Elmira distribution systems receive water from the Waterloo Well Supply, which is part of the Urban Integrated System. The Urban Integrated System is owned and operated by the Regional Municipality of Waterloo.

The Township of Woolwich's distribution system does not provide treatment to the water; therefore, there is no chlorine boosting, ultraviolet (UV) irradiation, secondary disinfection, and pressure boosting or pressure control within the control of the water distribution system.

5. List all water treatment chemicals used over this reporting period

Water treatment is the responsibility of the Region of Waterloo. The Region of Waterloo reports all the treatment chemicals used via their annual Water Quality Reports for the Integrated Urban System. The Township of Woolwich disinfects all parts, material and pipe during new installation and repair.

6. Were any significant expenses incurred to?

- Install required equipment
- Repair required equipment
- Replace required equipment

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

The water mains on Snyder Ave. N. and Green Warbler Cres, both in Elmira were replaced during road reconstruction projects to update aging infrastructure.



8. 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
2017/06/20	Total Coliform Present	T – 0.92 F – 0.12 C – 0.80	Mg/L	Initiated flushing and re-sampling of mains	2017/06/20
2017/06/21	Total Coliform Present	T – 0.05 F – 0.57 C – 0.62	Mg/L	Initiated flushing and re-sampling of mains	2017/06/22
2017/07/07	Boil Water – Self Directed in Construction Zone			Incident which resulted in Boil Water was corrected. Area was cleaned, capped, flushed and sampled. Sample came back within required specifications	2017/07/10
2017/07/20	Total Coliforms	T – 0.90 F – 0.73 C – 0.17	Mg/L	Initiated flushing and re-sampling of mains	2017/07/20
2017/08/24	Adverse Action – Region Derived			Region directed after event at Elmira Tower. Township notified and flushing and sampling was performed as a preventative measure. All samples came back within specifications	2017/08/24
2017/12/22	Total Coliforms	T – 0.99 F – 0.04 C – 0.95	Mg/L	Initiated flushing and re-sampling of mains	2017/12/22

9. Microbiological testing done under the Schedule 10, 11 or 12 of Regulation 170/03, during this reporting period.

Sample Source	Number of Samples	Range of E.Coli Or Fecal Results (min) - (max)	Range of Total Coliform Results (min) - (max)	Number of HPC Samples	Range of HPC Results (min) - (max)
Distribution	264	A	A-P	110	0 – 500 (CFU/mL)

10. 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
Township Chlorine Combined	735	0.33 – 1.38	mg/L



11. 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				

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

Parameter	Number of Samples	Result Value Range (min-max)	Unit of Measure	Exceedance
Alkalinity	5	<0.2 - 250	mg/L	0
pH	5	6.5 – 7.1	pH	0

13. Summary of lead testing under Schedule 15.1 during this reporting period:

Location Type	Number of Samples	Range of Lead Results (min) – (max)	Unit of Measure	Number of Exceedances
Plumbing	6	0.509-3.56	ug/L	0
Distribution	0	0	0	0

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

Parameter	Number of Samples	Result Value	Unit of Measure	Number of Exceedances
Haloacetic Acids (HAA) (NOTE: annual average)	4	24.76	ug/L	None
THM (NOTE: annual average)	4	11.47	ug/L	None

15. 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