Drinking-Water System Number: Drinking-Water System Name: Drinking-Water System Owner: Drinking-Water System Category:

**Period being reported:** 

260002187
St Thomas Water Distribution System
Corporation of the City of St Thomas
WD Large Municipal Residential
January 1 2018 – December 31 2018

Complete if your Category is Large Municipal Residential or Small Municipal Residential

Does your Drinking-Water System serve more than 10,000 people? Yes [X] No[]

Is your annual report available to the public at no charge on a web site on the Internet? Yes [X] No[]

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

City of St Thomas Environmental Services 545 Talbot Street St Thomas, Ontario N5P 3V7 Complete for all other Categories.

**Number of Designated Facilities served:** 

N/A

Did you provide a copy of your annual report to all Designated Facilities you serve?

Yes [ ] No [ ]

Number of Interested Authorities you report to:  $\begin{tabular}{c|c} N/A \end{tabular}$ 

Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility? Yes [ ] No [ ]

Note: For the following tables below, additional rows or columns may be added or an appendix may be attached to the report

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

<b>Drinking Water System Name</b>	<b>Drinking Water System Number</b>
Municipality of Central Elgin	260004761
Township of Southwold (Lynhurst	210001362
Subdivision)	

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 [X ] No [ ]

Indicate how you notified system users that your annual report is available, and is free of charge.

[ X] Pub	lic access/notice via the web
[ X] Pub	lic access/notice via Government Office
[ ] Public	c access/notice via a newspaper
[ X] Pub	lic access/notice via Public Request
[ ] Public	c access/notice via a Public Library
[ ] Public	c access/notice via other method

## **Describe your Drinking-Water System**

The St. Thomas Water Distribution System services over 14,500 customers including 862 customers within the Municipality of Central Elgin and 53 customers within the Township of Southwold (Lynhurst Subdivision). The system purchases its water from the Elgin Area Primary Water Supply System, which extends from Lake Erie to the City of London. The St. Thomas Distribution System consists of approximately 226,000 metres of water main ranging in size from 50 mm to 450 mm in diameter with the oldest installation in 1909. Material types include Asbestos Cement, Cast Iron, Concrete Ductile, Iron Polyethylene, and PVC.

List all water treatment chemicals used over this reporting period

	 01	
Sodium Hypochlorite 12% (Disinfection/repairs)		

## Were any significant expenses incurred to?

- [X] Install required equipment
- [X] Repair required equipment
- [X] Replace required equipment

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

Residential Meter Replacements	\$90,000
West Pearl Reconstruction	\$39,500
Talbot Reconstruction	\$413,300
St George Reconstruction	\$400,500
Flora Reconstruction	\$290,500
Center Reconstruction	\$20,000

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	Parameter	Result	Unit of	<b>Corrective Action</b>	Corrective
Date			Measure		Action Date
May 03	TC	1	Count/100ml	Flushed re-	May 05
2018				sample	2018

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 #)	Range of Total Coliform Results (min #)-(max #)	Number of HPC Samples	Range of HPC Results (min #)-(max #)
Raw	N/A	N/A	N/A	N/A	N/A
Treated	N/A	N/A	N/A	N/A	N/A
Distribution	700	(0)-(0)	(0)-(1)	693	(<10) – (>2000)
St Thomas	622	(0)-(0)	(0)-(1)	616	(<10) – (>2000)
Central Elgin	65	(0)- $(0)$	(0)- $(0)$	64	(<10) – (<10)
Southwold	13	(0)- $(0)$	(0)- $(0)$	13	(<10) - (180)

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
Turbidity	N/A	N/A	N/A
Chlorine	N/A	N/A	N/A
Chlorine on-line	8760	(0.00)-(2.00)	mg/L
Sample Collection	700	(0.16)-(1.73)	mg/L
Grab Cl2	231	(0.10)-(1.43)	mg/L
Fluoride (If the DWS provides fluoridation)	N/A	N/A	N/A

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	Parameter	Date Sampled	Result	Unit of Measure
issued				
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

<sup>\*</sup>only for drinking water systems testing under Schedule 15.2; this includes large municipal non-residential systems, small municipal non-residential systems, non-municipal seasonal residential systems, large non-municipal non-residential systems, and small non-municipal non-residential systems

## 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
Plumbing	N/A	N/A	N/A	N/A
Distribution	24	(.06)-(.58)	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
(HAA5) (NOTE: show latest annual average)	Feb 23 2018 May 09 2018 Aug 09 2018 Oct 31 2018	<7.7	ug/L	no
THM (NOTE: show latest annual average)	Feb 14 2018 May 09 2018 Aug 09 2018 Oct 31 2018	17.8	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
NA			