### **OPTIONAL ANNUAL REPORT TEMPLATE**

Drinking-Water System Number: 260002187		
Drinking-Water System Name:	St Thomas Water Distribution System	
Drinking-Water System Owner:	Corporation of the City of St Thomas	
Drinking-Water System Category:	WD Large Municipal Residential	
Period being reported:	January 1 2017 – December 31 2017	

Complete if your Category is Large Municipal Residential or Small Municipal Residential	Complete for all other Categories.
Does your Drinking-Water System serve more than 10,000 people? Yes [X] No []	Number of Designated Facilities served:
Is your annual report available to the public at no charge on a web site on the Internet? Yes [ X ] No [ ]	Did you provide a copy of your annual report to all Designated Facilities you serve? Yes [ ] No [ ]
Location where Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection.	Number of Interested Authorities you report to: N/A
City of St Thomas Environmental Services 545 Talbot Street St Thomas, Ontario N5P 3V7	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:

Drinking Water System Name	Drinking Water System Number
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] Public access/notice via the web
- [X] Public access/notice via Government Office
- [ ] Public access/notice via a newspaper
- [X] 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 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

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

Industrial Meter Replacements	\$37,500
WM Lining	<b>\$699,000</b>
Churchill, Ermatinger Reconstruction	\$299,500
First Ave Reconstruction	\$428,500
Gladstone St Reconstruction	\$265,000
Queen St Reconstruction	\$41,000
Stanley Reconstruction	\$238,500
Balaclava St Looping	\$42,000

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
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 Or Fecal Results (min #)-(max #)	Range of Total Coliform Results (min #)-(max #)	Number of HPC Samples	Range of HPC Results (min #)-(max #)
Raw					
Treated					
Distribution	665	(0)-(0)	(0)-(0)	663	(<10) - (>2000)
St Thomas	587	(0)-(0)	(0)-(0)	585	(<10) - (>2000)
Central Elgin	65	(0)-(0)	(0)-(0)	65	(<10) – (50)
Southwold	13	(0)-(0)	(0)-(0)	13	(<10) – (<10)

## Operational testing done under Schedule 7, 8 or 9 of Regulation 170/03 during the period covered by this Annual Report.

period covered by	ins minua	I ICPUI II		
	Number of	Range of Results	Unit of Measure	NOTE: For
	Grab	(min #)-(max #)		continuous
	Samples			<i>monitors use 8760</i>
Turbidity	NA			as the number of
Chlorine				samples.
Chlorine on-line	8760	(0.00)-(2.00)	mg/L	sumples.
Sample Collection	668	(0.14)-(1.80)	mg/L	
Grab Cl2	1845	(0.17)-(1.70)	mg/L	
Fluoride (If the	NA			
DWS provides				
fluoridation)				

## 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
NA				

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

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
NA				

\*only for drinking water systems testing under Schedule 15.2; this includes large municipal nonresidential 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	NA			
Distribution	NA			

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

Parameter	Sample	Result	Unit of	Exceedance
	Date	Value	Measure	
(HAA5) (NOTE: show latest annual average)	Feb 07 2017 May 10 2017 Aug 14 2017 Nov 08 2017	<6.2	ug/L	no
THM (NOTE: show latest annual average)	Feb 07 2017 May 10 2017 Aug14 2017 Nov 08 2017	20.25	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			