



OPTIONAL ANNUAL REPORT TEMPLATE

Drinking-Water System Number:	260002798
Drinking-Water System Name:	ELMIRA/ST. JACOBS DISTRIBUTION SYSTEM
Drinking-Water System Owner:	TOWNSHIP OF WOOLWICH
Drinking-Water System Category:	DISTRIBUTION
Period being reported:	JANUARY 1, 2010 TO DECEMBER 31, 2010

<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 <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>Is your annual report available to the public at no charge on a web site on the Internet? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></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>TOWNSHIP OF WOOLWICH ENGINEERING & PLANNING SERVICES 24 CHURCH STREET WEST ELMIRA, ONTARIO N3B 2Z6</p> </div>	<p><u>Complete for all other Categories.</u></p> <p>Number of Designated Facilities served: <input style="width: 100px;" type="text" value="13"/></p> <p>Did you provide a copy of your annual report to all Designated Facilities you serve? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>Number of Interested Authorities you report to: <input style="width: 100px;" type="text"/></p> <p>Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility? Yes <input type="checkbox"/> No <input type="checkbox"/></p>
---	--

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

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



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 Township of Woolwich owns and operates the St. Jacobs and Elmira Distribution Systems including pipes, valves and residential meters. The St. Jacobs distribution system serves a population of approximately 1983 people with about 560 service connections. The Elmira distribution system serves a population of approximately 10,945 people with about 3147 service connections. There are approximately 370 hydrants on the Elmira system and approximately 75 hydrants on the St. Jacobs system. The Township of Woolwich does not own or operate the water storage facilities serving 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.

List all water treatment chemicals used over this reporting period

See Region of Waterloo

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

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
January 13, 2010	Lead	16.7	mg/L	Initiated flushing of mains Resample	January 18, 2010
February 10, 2010	Lead	13.4	mg/L	Initiated flushing of mains Resample	February 17, 2010
February 11, 2010	Lead	67	mg/L	Initiated flushing of mains Resample	February 18, 2010

February 11, 2010	Lead	13.1	mg/L	Initiated flushing of mains Resample	February 18, 2010
May 26, 2010	Total Coliforms	P	ml	Initiated flushing of mains Resample	May 27, 2010
August 5, 2010	Total Coliforms	P	ml	Initiated flushing of mains Resample	August 6, 2010

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		SEE REGION OF WATERLOO			
Treated		SEE REGION OF WATERLOO			
Distribution	317	A	A	132	0 - 160

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 #)
Turbidity	See Region Of Waterloo	
Region Chlorine Combined	622	0.05 – 1.49
Township Chlorine Combined	1030	0.28 – 1.57
Fluoride (If the DWS provides fluoridation)	See Region of Waterloo	

NOTE: For continuous monitors use 8760 as the number of samples.

NOTE: Record the unit of measure if it is not milligrams per litre.

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
Snyder Avenue Reconstruction				
Certificate of Approval 0387-85BSMT May 11, 2010	Chlorine	32 Snyder Avenue South	T- 0.66 F- 0.26	mg/l
	Background		Background – 0	CFU/100 ml
	Coliforms		P/A - A	
	Chlorine	47 Church Blow off	T- 0.39 F- 0.13	mg/l
	Background		Background – 0	CFU/100 ml
	Coliforms		P/A - A	
	Chlorine	1 Snyder Blow off	T- 0.47 F- 0.17	mg/l
	Background		Background – 0	CFU/100 ml
	Coliforms		P/A - A	
	Chlorine	16 Snyder	T- 0.38 F- 0.11	mg/l
	Background		Background – 0	CFU/100 ml
	Coliforms		P/A - A	
	Chlorine	Park at Snyder	T- 0.46 F- 0.10	mg/l
	Background		Background – 2	CFU/100 ml
	Coliforms		P/A - A	
	Chlorine	26 Park Ave W	T- 0.45 F- 0.06	mg/l
	Background		Background – 0	CFU/100 ml
	Coliforms		P/A - A	
	Chlorine	28 South St W	T- 0.61 F- 0.38	mg/l
	Background		Background – 0	CFU/100 ml
	Coliforms		P/A - A	
	Chlorine	19 Snyder S	T- 0.75 F- 0.11	mg/l
	Background		Background – 1	CFU/100 ml
	Coliforms		P/A - A	



	Chlorine	20 Snyder S	T- 0.74 F- 0.10	mg/l
	Background		Background – 2	CFU/100 ml
	Coliforms		P/A - A	
	Chlorine	6 Snyder S	T- 0.95 F- 0.10	mg/l
	Background		Background – 61	CFU/100 ml
	Coliforms		P/A - A	
	Chlorine	Second at Snyder	T- 0.53 F- 0.08	mg/l
	Background		Background – 53	CFU/100 ml
	Coliforms		P/A - A	
	Chlorine	38 Snyder	T- 0.49 F- 0.21	mg/l
	Background		Background – 0	CFU/100 ml
	Coliforms		P/A - A	
	Chlorine	Brubacher and Snyder	T- 1.01 F- 0.26	mg/l
	Background		Background – 0	CFU/100 ml
	Coliforms		P/A - A	
	Chlorine	Ernst and Snyder	T- 1.08 F- 0.34	mg/l
	Background		Background – 0	CFU/100 ml
	Coliforms		P/A - A	
	Chlorine	Snyder and South	T- 1.20 F- 0.40	mg/l
	Background		Background – 0	CFU/100 ml
	Coliforms		P/A - A	
Samuel Street and Area Reconstruction				
Certificate of Approval 0514-83PQ6B March 23, 2010	Chlorine	Herbert and Samuel STA 4 + 135	T- 0.42 F- 0.14	mg/l
	Background		Background – 0	CFU/100 ml
	Coliforms		P/A - A	



	Chlorine	66 William	T- 0.41 F- 0.10	mg/l
	Background		Background – 13	CFU/100 ml
	Coliforms		P/A - A	
	Chlorine	35 Ann	T- 0.43 F- 0.12	mg/l
	Background		Background – 0	CFU/100 ml
	Coliforms		P/A - A	
	Chlorine	70 Ann	T- 0.40 F- 0.12	mg/l
	Background		Background – 0	CFU/100 ml
	Coliforms		P/A - A	
	Chlorine	28 Ann	T- 0.36 F- 0.15	mg/l
	Background		Background – 0	CFU/100 ml
	Coliforms		P/A - A	
	Chlorine	42 Ann	T- 0.42 F- 0.13	mg/l
	Background		Background – 1	CFU/100 ml
	Coliforms		P/A - A	
	Chlorine	70 Riverside	T- 0.37 F- 0.15	mg/l
	Background		Background – 4	CFU/100 ml
	Coliforms		P/A - A	
	Chlorine	Herbert at Riverside	T- 0.44 F- 0.12	mg/l
	Background		Background – 6	CFU/100 ml
	Coliforms		P/A - A	
	Chlorine	Riverside at Snyder	T- 0.63 F- 0.13	mg/l
	Background		Background – 0	CFU/100 ml
	Coliforms		P/A - A	
	Chlorine	19 Snyder	T- 0.55 F- 0.09	mg/l
	Background		Background – 0	CFU/100 ml
	Coliforms		P/A - A	



	Chlorine	11 Herbert	T- 0.48 F- 0.13	mg/l
	Background		Background – 28	CFU/100 ml
	Coliforms		P/A - A	
	Chlorine	8 Samuel	T- 0.47 F- 0.14	mg/l
	Background		Background – 27	CFU/100 ml
	Coliforms		P/A - A	
	Chlorine	58 Riverside W	T- 0.42 F- 0.17	mg/l
	Background		Background – 18	CFU/100 ml
	Coliforms		P/A - A	
	Chlorine	63 Riverside W	T- 0.44 F- 0.18	mg/l
	Background		Background – 26	CFU/100 ml
	Coliforms		P/A - 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
Antimony		Source Water Tests		
Arsenic		See Region of Waterloo		
Barium				
Boron				
Cadmium				
Chromium				
*Lead				
Mercury				
Selenium				
Sodium				
Uranium				
Fluoride				
Nitrite				
Nitrate				

*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 #)	Number of Exceedances
Plumbing	270	<1.0 – 51.5	3
Distribution	40	<1.0 - 67	4

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

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Alachlor		Source Water Tests		
Aldicarb		See Region of Waterloo		
Aldrin + Dieldrin				
Atrazine + N-dealkylated metabolites				
Azinphos-methyl				
Bendiocarb				
Benzene				
Benzo(a)pyrene				
Bromoxynil				
Carbaryl				
Carbofuran				
Carbon Tetrachloride				
Chlordane (Total)				
Chlorpyrifos				
Cyanazine				
Diazinon				
Dicamba				
1,2-Dichlorobenzene				
1,4-Dichlorobenzene				
Dichlorodiphenyltrichloroethane (DDT) + metabolites				
1,2-Dichloroethane				
1,1-Dichloroethylene (vinylidene chloride)				
Dichloromethane				
2-4 Dichlorophenol				
2,4-Dichlorophenoxy acetic acid (2,4-D)				
Diclofop-methyl				
Dimethoate				
Dinoseb				
Diquat				
Diuron				



Glyphosate		Source Water Tests		
Heptachlor + Heptachlor Epoxide		See Region of Waterloo		
Lindane (Total)				
Malathion				
Methoxychlor				
Metolachlor				
Metribuzin				
Monochlorobenzene				
Paraquat				
Parathion				
Pentachlorophenol				
Phorate				
Picloram				
Polychlorinated Biphenyls(PCB)				
Prometryne				
Simazine				
THM (NOTE: show latest annual average)	11/04	26.5	ug/L	None
Temephos		Source Water Tests		
Terbufos		See Region of Waterloo		
Tetrachloroethylene				
2,3,4,6-Tetrachlorophenol				
Triallate				
Trichloroethylene				
2,4,6-Trichlorophenol				
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)				
Trifluralin				
Vinyl Chloride				

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