



**OPTIONAL ANNUAL REPORT TEMPLATE**

<b>Drinking-Water System Number:</b>	260002551
<b>Drinking-Water System Name:</b>	Bothwell Distribution System
<b>Drinking-Water System Owner:</b>	Municipality of Chatham-Kent
<b>Drinking-Water System Category:</b>	Large Municipal Residential
<b>Period being reported:</b>	January 1 - December 31, 2009

<p><b><u>Complete if your Category is Large Municipal Residential or Small Municipal Residential</u></b></p> <p><b>Does your Drinking-Water System serve more than 10,000 people? Yes [ ] No [ X ]</b></p> <p><b>Is your annual report available to the public at no charge on a web site on the Internet? Yes [ X ] No [ ]</b></p> <p><b>Location where Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection.</b></p> <table border="1" style="width: 100%;"> <tr> <td>Chatham-Kent P.U.C. Office 325 Grand Ave., East P.O. Box 1191 Chatham, Ontario N7M 5L8</td> </tr> </table>	Chatham-Kent P.U.C. Office 325 Grand Ave., East P.O. Box 1191 Chatham, Ontario N7M 5L8	<p><b><u>Complete for all other Categories.</u></b></p> <p><b>Number of Designated Facilities served:</b></p> <table border="1" style="width: 100%;"> <tr> <td>N/A</td> </tr> </table> <p><b>Did you provide a copy of your annual report to all Designated Facilities you serve? Yes [ ] No [ ]</b></p> <p><b>Number of Interested Authorities you report to:</b></p> <table border="1" style="width: 100%;"> <tr> <td>N/A</td> </tr> </table> <p><b>Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility? Yes [ ] No [ ]</b></p>	N/A	N/A
Chatham-Kent P.U.C. Office 325 Grand Ave., East P.O. Box 1191 Chatham, Ontario N7M 5L8				
N/A				
N/A				

**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
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 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 Bothwell distribution system receives treated water via the West Lorne Water System. The source of the raw water for the West Lorne System is Lake Erie. This water supply system consists of the West Elgin Water Treatment Plant, which is located south of the settlement of Eagle along the Lake Erie shoreline in the Municipality of West Elgin. Water is transported from West Lorne to Newbury, Glencoe, Bothwell, Melbourne and rural areas by use of the Glencoe pipeline. A pumping station at the Glencoe reservoir pumps directly to Mosa Township, Newbury and the Bothwell elevated tower. Water is stored in the Bothwell elevated tower to supply the needs of Bothwell's distribution system.

**List all water treatment chemicals used over this reporting period**

Sodium HypoChlorite

**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**

\$42,000 SCADA equipment upgrades  
 \$1,132 Sodium Hypochlorite storage tank replacement

**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					



**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 #)
Tower Inlet	51	0 - 0	0 - 0	51	9 - 60
Distribution	259	0 - 0	0 - 0	259	9 - 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	8760	0.019 – 1.249
Chlorine	8760	0.870 – 2.049
Fluoride (If the DWS provides fluoridation)	N/A	

*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
N/A				
N/A				

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

Parameter	Sample Date Jan. 14/09	Sample Date Apr. 22/09	Sample Date July 14/09	Sample Date Oct. 21/09
Antimony	N/A	N/A	N/A	N/A
Arsenic	N/A	N/A	N/A	N/A
Barium	N/A	N/A	N/A	N/A
Boron	N/A	N/A	N/A	N/A
Cadmium	N/A	N/A	N/A	N/A
Chromium	N/A	N/A	N/A	N/A
*Lead	N/A	N/A	N/A	N/A
Mercury	N/A	N/A	N/A	N/A
Selenium - ug/L	<2	<2	N/A	N/A
Sodium - ug/L	11000	10000	N/A	N/A
Total Ammonia - mg/L	<0.05	<0.05	<0.05	<0.05
Dissolved Organic Carbon – mg/L	1.4	1.5	2.2	4.7



Turbidity - NTU	0.6	0.3	0.5	<0.1
Uranium	N/A	N/A	N/A	N/A
Fluoride mg/L	<0.1	<0.1	N/A	N/A
Nitrite mg/L	<0.01	<0.01	<0.01	<0.01
Nitrate - mg/L	<0.1	0.4	0.2	0.2

\*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 ug/L (min#) - (max #)	Number of Exceedances / Adverses
Residential	24	<0.50 - 13.00	1
Non-Residential	4	<0.50 - 1.20	0
Distribution	9	<0.50 - <0.50	0

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

Parameter	Sample Date Jan. 14/09	Sample Date Apr. 22/09	Sample Date July 14/09	Sample Date Oct. 21/09
Alachlor	N/A	N/A	N/A	N/A
Aldicarb	N/A	N/A	N/A	N/A
Aldrin + Dieldrin	N/A	N/A	N/A	N/A
Atrazine + N-dealkylated metabolites	N/A	N/A	N/A	N/A
Azinphos-methyl	N/A	N/A	N/A	N/A
Bendiocarb	N/A	N/A	N/A	N/A
Benzene	N/A	N/A	N/A	N/A
Benzo(a)pyrene	N/A	N/A	N/A	N/A
Bromoxynil	N/A	N/A	N/A	N/A
Carbaryl	N/A	N/A	N/A	N/A
Carbofuran	N/A	N/A	N/A	N/A
Carbon Tetrachloride	N/A	N/A	N/A	N/A
Chlordane (Total)	N/A	N/A	N/A	N/A
Chlorpyrifos	N/A	N/A	N/A	N/A
Cyanazine	N/A	N/A	N/A	N/A
Diazinon	N/A	N/A	N/A	N/A
Dicamba	N/A	N/A	N/A	N/A
1,2-Dichlorobenzene	N/A	N/A	N/A	N/A
1,4-Dichlorobenzene	N/A	N/A	N/A	N/A
Dichlorodiphenyltrichloroethane (DDT) + metabolites	N/A	N/A	N/A	N/A



1,2-Dichloroethane	N/A	N/A	N/A	N/A
1,1-Dichloroethylene (vinylidene chloride)	N/A	N/A	N/A	N/A
Dichloromethane	N/A	N/A	N/A	N/A
2,4-Dichlorophenol	N/A	N/A	N/A	N/A
2,4-Dichlorophenoxy acetic acid (2,4-D)	N/A	N/A	N/A	N/A
Diclofop-methyl	N/A	N/A	N/A	N/A
Dimethoate	N/A	N/A	N/A	N/A
Dinoseb	N/A	N/A	N/A	N/A
Diquat	N/A	N/A	N/A	N/A
Diuron	N/A	N/A	N/A	N/A
Glyphosate	N/A	N/A	N/A	N/A
Heptachlor + Heptachlor Epoxide	N/A	N/A	N/A	N/A
Lindane (Total)	N/A	N/A	N/A	N/A
Malathion	N/A	N/A	N/A	N/A
Methoxychlor	N/A	N/A	N/A	N/A
Metolachlor	N/A	N/A	N/A	N/A
Metribuzin	N/A	N/A	N/A	N/A
Monochlorobenzene	N/A	N/A	N/A	N/A
Paraquat	N/A	N/A	N/A	N/A
Parathion	N/A	N/A	N/A	N/A
Pentachlorophenol	N/A	N/A	N/A	N/A
Phorate	N/A	N/A	N/A	N/A
Picloram	N/A	N/A	N/A	N/A
Polychlorinated Biphenyls(PCB)	N/A	N/A	N/A	N/A
Prometryne	N/A	N/A	N/A	N/A
Simazine	N/A	N/A	N/A	N/A
THM – Jan., April, July, Oct. – ug/L	43.6	48.5	63.5	96.6
THM Annual Average – ug/L				63.05
Temephos	N/A	N/A	N/A	N/A
Terbufos	N/A	N/A	N/A	N/A
Tetrachloroethylene	N/A	N/A	N/A	N/A
2,3,4,6-Tetrachlorophenol	N/A	N/A	N/A	N/A
Triallate	N/A	N/A	N/A	N/A
Trichloroethylene	N/A	N/A	N/A	N/A
2,4,6-Trichlorophenol	N/A	N/A	N/A	N/A
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)	N/A	N/A	N/A	N/A
Trifluralin	N/A	N/A	N/A	N/A
Vinyl Chloride	N/A	N/A	N/A	N/A



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
Sodium	11,000	ug/L	Jan. 14/09
THM's	63.5	ug/L	July 14/09
THM's	96.6	ug/L	Oct. 21/09