



**OPTIONAL ANNUAL REPORT TEMPLATE**

<b>Drinking-Water System Number:</b>	220003369
<b>Drinking-Water System Name:</b>	Ridgetown Drinking Water 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 - December 2015

<p><b><u>Complete if your Category is Large Municipal Residential or Small Municipal Residential</u></b></p> <p>Does your Drinking-Water System serve more than 10,000 people? Yes [ ] No [X]</p> <p>Is your annual report available to the public at no charge on a web site on the Internet? Yes [X] No [ ]</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>Chatham-Kent PUC Office 325 Grand Ave E Box 1191 Chatham, ON N7M 5L8</p> </div>	<p><b><u>Complete for all other Categories.</u></b></p> <p>Number of Designated Facilities served: <input style="width: 100px; height: 20px;" type="text"/></p> <p>Did you provide a copy of your annual report to all Designated Facilities you serve? Yes [ ] No [ ]</p> <p>Number of Interested Authorities you report to: <input style="width: 100px; height: 20px;" 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 [ ] No [ ]</p>
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**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
None	

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**

Ground water for the Ridgetown Drinking Water System is obtained through eight deep wells. The drinking water system is comprised of two treatment facilities, one located on Erie Street South and the other located on Scane Road.

The four wells, Well #1A, Well #2 – Hitch, Well #3 – Harris, and Well #3A – Harris, supply raw water from submersible well pumps through a common pipe to the treatment system at the Erie Street site. Water from these wells is disinfected with sodium hypochlorite and then passed through a cascade aerator for methane gas reduction before being discharged into reservoirs on site. Treated water from the North and South reservoirs is subsequently discharged to the distribution system by high lift pumps.

The remaining four wells, Well #4 – Scane, Well #5 - Scane, Well #6 – Scane, and Well #7 – Scane, supply raw water from submersible well pumps through a common pipe to the treatment system at the Scane Road site. Water from these wells is disinfected with sodium hypochlorite and then passed through a cascade aerator for methane gas reduction before being discharged into the reservoir on site. Treated water from the reservoir is subsequently discharged to the distribution system by high lift pumps.

The distribution system for the Ridgetown Drinking Water System also includes an elevated tank for the storage and supply of water to the system.

Fluoride is naturally occurring in the source water in concentrations greater than the 1.5 mg/L Ontario Drinking Water Quality Standard. Sodium is also naturally occurring in the source water in concentrations greater than the 20 mg/L aesthetic objective.

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

1. 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**

Reservoir Inspections .....	\$8,000.00
Fibre Optic Installation .....	\$34,000.00
Portable Generator.....	\$5,500.00

**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 Erie	Result Scane	Unit of Measure	Corrective Action	Corrective Action Date
Jan 16, 2015	Treated POE - Sodium	70	71	mg/L	Resample/Re-test	Jan 16, 2015
Feb 25, 2015	Loss of distribution system pressure due to a water main break	Boil Water Advisory			Pressure restored Disinfection increased Flushing Sampling/Testing	Feb 26 & 27, 2015

**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 #)
<b>Raw</b>	332	(0) – (0)	(0) – (48)	NA	NA
<b>Treated</b>	104	(0) – (0)	(0) – (0)	104	(<10) – (50)
<b>Distribution</b>	156	(0) – (0)	(0) – (0)	52	(<10) – (130)

\* NDOGN – No Data Overgrown With Non Target Organisms

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

	<b>Number of Grab Samples</b>	<b>Range of Results (min #)-(max #)</b>
<b>Turbidity</b>	289	(0.080) – (2.330) NTU
<b>Chlorine</b>	8760	(0.29) – (3.24) mg/L
<b>Fluoride</b> (If the DWS provides fluoridation)	Fluoride Naturally Occurring	

*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.**

<b>Date of legal instrument issued</b>	<b>Parameter</b>	<b>Date Sampled 2015</b>	<b>Result Erie</b>	<b>Result Scane</b>	<b>Unit of Measure</b>
June 26, 2003 letter from C-K Health Unit	Point of Entry - Fluoride	Jan 12, 2015	1.9	1.9	mg/L

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

<b>Parameter</b>	<b>Sample Date</b>	<b>Result Value Erie</b>	<b>Result Value Scane</b>	<b>Unit of Measure</b>	<b>Exceedance</b>
<b>Antimony</b>	Jan 7, 2013	<0.50	<0.50	ug/L	No
<b>Arsenic</b>	Jan 7, 2013	<1.0	<1.0	ug/L	No
<b>Barium</b>	Jan 7, 2013	110	180	ug/L	No
<b>Boron</b>	Jan 7, 2013	920	880	ug/L	No
<b>Cadmium</b>	Jan 7, 2013	<0.10	<0.10	ug/L	No
<b>Chromium</b>	Jan 7, 2013	<5.0	<5.0	ug/L	No
<b>*Lead</b>	See Schedule 15.1 Summary				
<b>Mercury</b>	Jan 7, 2013	<0.10	<0.10	ug/L	No
<b>Selenium</b>	Jan 7, 2013	<2.0	<2.0	ug/L	No
<b>Sodium</b>	Jan 12, 2015	70	71	mg/L	Yes - Reported Jan 16, 2015 AWQI # 122310
<b>Uranium</b>	Jan 7, 2013	<0.10	<0.10	ug/L	No
<b>Fluoride</b>	Jan 12, 2015	1.9	1.9	mg/L	Yes - Reported Aug 20, 2013 AWQI # 113497
<b>Nitrite</b>	Oct 5, 2015	<0.010	<0.010	mg/L	No
<b>Nitrate</b>	Oct 5, 2015	<0.10	<0.10	mg/L	No

\*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	NA		
Non-Residential	NA		
Distribution	0		

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

Parameter	Sample Date	Result Value Erie	Result Value Scane	Unit of Measure	Exceedance
Alachlor	Jan 7, 2013	<0.5	<0.5	ug/L	No
Aldicarb	Jan 7, 2013	<5	<5	ug/L	No
Aldrin + Dieldrin	Jan 7, 2013	<0.01	<0.01	ug/L	No
Atrazine + N-dealkylated metabolites	Jan 7, 2013	<1	<1	ug/L	No
Azinphos-methyl	Jan 7, 2013	<2	<2	ug/L	No
Bendiocarb	Jan 7, 2013	<2	<2	ug/L	No
Benzene	Jan 7, 2013	<0.10	<0.10	ug/L	No
Benzo(a)pyrene	Jan 7, 2013	<0.009	<0.009	ug/L	No
Bromoxynil	Jan 7, 2013	<0.5	<0.5	ug/L	No
Carbaryl	Jan 7, 2013	<5	<5	ug/L	No
Carbofuran	Jan 7, 2013	<5	<5	ug/L	No
Carbon Tetrachloride	Jan 7, 2013	<0.10	<0.10	ug/L	No
Chlordane (Total)	Jan 7, 2013	<0.01	<0.01	ug/L	No
Chlorpyrifos	Jan 7, 2013	<1	<1	ug/L	No
Cyanazine	Jan 7, 2013	<1	<1	ug/L	No
Diazinon	Jan 7, 2013	<1	<1	ug/L	No
Dicamba	Jan 7, 2013	<1	<1	ug/L	No
1,2-Dichlorobenzene	Jan 7, 2013	<0.20	<0.20	ug/L	No
1,4-Dichlorobenzene	Jan 7, 2013	<0.20	<0.20	ug/L	No
Dichlorodiphenyltrichloroethane (DDT) + metabolites	Jan 7, 2013	<0.02	<0.02	ug/L	No
1,2-Dichloroethane	Jan 7, 2013	<0.20	<0.20	ug/L	No
1,1-Dichloroethylene (vinylidene chloride)	Jan 7, 2013	<0.10	<0.10	ug/L	No
Dichloromethane	Jan 7, 2013	<0.50	<0.50	ug/L	No
2,4 Dichlorophenol	Jan 7, 2013	<0.5	<0.5	ug/L	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	Jan 7, 2013	<1	<1	ug/L	No
Diclofop-methyl	Jan 7, 2013	<0.9	<0.9	ug/L	No
Dimethoate	Jan 7, 2013	<3	<3	ug/L	No
Dinoseb	Jan 7, 2013	<1	<1	ug/L	No



<b>Diquat</b>	Jan 7, 2013	<7	<7	ug/L	No
<b>Diuron</b>	Jan 7, 2013	<10	<10	ug/L	No
<b>Glyphosate</b>	Jan 7, 2013	<10	<10	ug/L	No
<b>Heptachlor + Heptachlor Epoxide</b>	Jan 7, 2013	<0.01	<0.01	ug/L	No
<b>Lindane (Total)</b>	Jan 7, 2013	<0.006	<0.006	ug/L	No
<b>Malathion</b>	Jan 7, 2013	<5	<5	ug/L	No
<b>Methoxychlor</b>	Jan 7, 2013	<0.02	<0.02	ug/L	No
<b>Metolachlor</b>	Jan 7, 2013	<0.5	<0.5	ug/L	No
<b>Metribuzin</b>	Jan 7, 2013	<5	<5	ug/L	No
<b>Monochlorobenzene</b>	Jan 7, 2013	<0.10	<0.10	ug/L	No
<b>Paraquat</b>	Jan 7, 2013	<1	<1	ug/L	No
<b>Parathion</b>	Jan 7, 2013	<1	<1	ug/L	No
<b>Pentachlorophenol</b>	Jan 7, 2013	<0.5	<0.5	ug/L	No
<b>Phorate</b>	Jan 7, 2013	<0.5	<0.5	ug/L	No
<b>Picloram</b>	Jan 7, 2013	<5	<5	ug/L	No
<b>Polychlorinated Biphenyls(PCB)</b>	Jan 7, 2013	<0.05	<0.05	ug/L	No
<b>Prometryne</b>	Jan 7, 2013	<0.3	<0.3	ug/L	No
<b>Simazine</b>	Jan 7, 2013	<1	<1	ug/L	No
<b>THM</b> (NOTE: show latest annual average)  2013 POE ERIE: JAN 7 – 24.8 ug/L 2013 POE SCANE: JAN 7 – 18.5 ug/L	Jan 12, 2015 Apr 13, 2015 Jul 13, 2015 Oct 5, 2015  2015 Avg	30.3 36.8 35.2 41.3  34.0		ug/L	No
<b>Temephos</b>	Jan 7, 2013	<10	<10	ug/L	No
<b>Terbufos</b>	Jan 7, 2013	<0.5	<0.5	ug/L	No
<b>Tetrachloroethylene</b>	Jan 7, 2013	<0.10	<0.10	ug/L	No
<b>2,3,4,6-Tetrachlorophenol</b>	Jan 7, 2013	<0.5	<0.5	ug/L	No
<b>Triallate</b>	Jan 7, 2013	<1	<1	ug/L	No
<b>Trichloroethylene</b>	Jan 7, 2013	<0.10	<0.10	ug/L	No
<b>2,4,6-Trichlorophenol</b>	Jan 7, 2013	<0.5	<0.5	ug/L	No
<b>2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)</b>	Jan 7, 2013	<1	<1	ug/L	No
<b>Trifluralin</b>	Jan 7, 2013	<1	<1	ug/L	No
<b>Vinyl Chloride</b>	Jan 7, 2013	<0.20	<0.20	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 Erie	Result Value Scane	Unit of Measure	Date of Sample
Fluoride – POE	1.9	1.9	mg/L	Jan 12, 2015



**Summary of additional voluntary sampling and testing during this reporting period.**

Parameter	Result Value								Unit of Measure	Date of Sample
	Well # 1A	Hitch Well # 2	Harris Well # 3	Harris Well # 3A	Scane Well # 4	Scane Well #5	Scane Well #6	Scane Well # 7		
Nitrite - Raw		<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	mg/L	Jan 12, 2015
Nitrate - Raw		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20		Jan 12, 2015
Nitrite - Raw		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010		Apr 13, 2015
Nitrate - Raw		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		Apr 13, 2015
Nitrite - Raw		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010		Jul 13, 2015
Nitrate - Raw		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		Jul 13, 2015
Nitrite - Raw		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010		Oct. 5, 2015
Nitrate - Raw		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		Oct. 5, 2015