



ANNUAL REPORT

<b>Drinking-Water System Number:</b>	260087048
<b>Drinking-Water System Name:</b>	Leamington (Wheatley) Drinking Water System
<b>Drinking-Water System Owner:</b>	Leamington
<b>Drinking-Water System Category:</b>	Large Municipal Year Round Residential
<b>Period being reported:</b>	January 1 – December 31, 2019

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

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.

Chatham-Kent P.U.C. 325 Grand Ave. East P.O. Box 1191 Chatham, ON N7M 5L8
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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**

The Leamington (Wheatley) DWS forms part of a stand-alone water distribution system owned by the Municipality of Leamington. The other subsystem which forms part of it is the Leamington (Union) Distribution System. They are both connected to each other at several inter-connections valves which are closed at all times except in emergency situations. This distribution system does not contain storage, pumping or re-chlorination facilities. There are 181 residential and commercial service connections served by the Leamington (Wheatley) Distribution System. It therefore falls into the ‘large municipal residential’ category under O. Regulation 170/03. Treated drinking water is supplied by the Wheatley Drinking Water System which is owned and operated by the Chatham-Kent Public Utilities Commission which takes its source of raw water from Lake Erie. Pressure in the distribution system is maintained by the Wheatley tower which the Chatham-Kent PUC governs by controlling tower levels. A water supply agreement between Chatham-Kent PUC and Municipality of Leamington was renewed 2016 January 1. This agreement authorises Chatham-Kent PUC to conduct testing and monitoring services of the Leamington (Wheatley) DS in accordance with the provisions of O. Reg. 170/03 s. 5 (4) on Leamington's behalf. Leamington's Water Services is responsible for all other aspects of the operation, including maintenance and repairs of the water distribution infrastructure.

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

None

**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**

None



**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
None					

**Microbiological testing done under the Schedule 10 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>					
<b>Point of Entry (Treated)</b>					
<b>Distribution</b>	159	0 - 0	0 - 0	159	<10 - 1210

**Operational testing done under Schedule 7 of Regulation 170/03 during the period covered by this Annual Report. Chlorine residuals are from weekly distribution samples (4 & 3) and from microbiological distribution sample chlorine residuals under Section 7-2.(4)1.&2.**

	Number of Grab Samples	Range of Results (min #)-(max #)
<b>Turbidity</b>		
<b>Chlorine</b>	211	0.37 – 1.79 mg/L
<b>Fluoride</b>	Not Provided	

*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 issued	Parameter	Date Sampled	Result	Unit of Measure
None				

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

The following parameters are sampled by the donor system.	Sample Date	Result Value	Unit of Measure	Exceedance
Antimony	Aug 19	<0.50	ug/L	No
Arsenic	Aug 19	<1.0	ug/L	No
Barium	Aug 19	20	ug/L	No
Boron	Aug 19	20	ug/L	No
Cadmium	Aug 19	<0.10	ug/L	No
Chromium	Aug 19	<5.0	ug/L	No
*Lead	See Schedule 15.1 Summary			
Mercury	Aug 19	<0.0001	ug/L	No
Selenium	Aug 19	<2.0	ug/L	No
Sodium	Aug 19	8.9	mg/L	No
Uranium	Aug 19	<0.10	ug/L	No
Fluoride	Aug 19	0.12	mg/L	No
Nitrite	Nov 18	<0.010	mg/L	No
Nitrate	Nov 18	<0.10	mg/L	No
Nitrite + Nitrate	Nov 18	<0.10	mg/L	No

**Summary of lead testing under Schedule 15.1 during this reporting period**

Location Type	Number of Samples	Range of Lead Results (ug/L) (min#) – (max #)	Number of Exceedances
Residential	0		
Non Residential	0		
Distribution	2	< 0.50 – < 0.50	None

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

The following parameters are sampled by the donor system.	Sample Date	Result Value	MAC Limits	Unit of Measure	Exceedance
Alachlor	Aug 19	<0.50	5	ug/L	No
Atrazine + N-dealkylated metabolites	Aug 19	<1.0	5	ug/L	No
Azinphos-methyl	Aug 19	<2.0	20	ug/L	No
Benzene	Aug 19	<0.10	1	ug/L	No
Benzo(a)pyrene	Aug 19	<0.0050	0.01	ug/L	No
Bromoxynil	Aug 19	<0.50	5	ug/L	No
Carbaryl	Aug 19	<5.0	90	ug/L	No
Carbofuran	Aug 19	<5.0	90	ug/L	No
Carbon Tetrachloride	Aug 19	<0.10	2	ug/L	No



Chlorpyrifos (Dursban)	Aug 19	<1.0	90	ug/L	No
Diazinon	Aug 19	<1.0	20	ug/L	No
Dicamba	Aug 19	<1.0	120	ug/L	No
1,2-Dichlorobenzene	Aug 19	<0.20	200	ug/L	No
1,4-Dichlorobenzene	Aug 19	<0.20	5	ug/L	No
1,2-Dichloroethane	Aug 19	<0.20	5	ug/L	No
1,1-Dichloroethylene (vinylidene chloride)	Aug 19	<0.10	14	ug/L	No
Dichloromethane	Aug 19	<0.50	50	ug/L	No
2-4 Dichlorophenol	Aug 19	<0.25	900	ug/L	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	Aug 19	<1.0	100	ug/L	No
Diclofop-methyl	Aug 19	<0.90	9	ug/L	No
Dimethoate	Aug 19	<2.5	20	ug/L	No
Diquat	Aug 19	<7.0	70	ug/L	No
Diuron	Aug 19	<10	150	ug/L	No
Ethylbenzene	Aug 19	<0.10	140	ug/L	No
Glyphosate	Aug 19	<10	280	ug/L	No
Haloacetic Acids (HAA)	Feb 11 May 6 Aug 20 Aug 20 dup Nov 18	22 29 23 20 26	-	ug/L	No
<b>Running Annual Average: 24.6</b>					
Malathion	Aug 19	<5.0	190	ug/L	No
2 Methyl-4-chlorophenoxyacetic acid (MCPA)	Aug 19	<10	100	ug/L	No
Metolachlor	Aug 19	<0.50	190	ug/L	No
Metribuzin (Sencor)	Aug 19	<5.0	80	ug/L	No
Monochlorobenzene	Aug 19	<0.10	80	ug/L	No
Paraquat	Aug 19	<1.0	10	ug/L	No
Pentachlorophenol	Aug 19	<0.50	60	ug/L	No
Phorate	Aug 19	<0.50	2	ug/L	No
Picloram	Aug 19	<5.0	190	ug/L	No
Polychlorinated Biphenyls(PCB)	Aug 19	<0.05	3	ug/L	No
Prometryne	Aug 19	<0.25	1	ug/L	No
Simazine	Aug 19	<1.0	10	ug/L	No
Terbufos	Aug 19	<0.50	1	ug/L	No
Tetrachloroethylene	Aug 19	<0.10	10	ug/L	No
2,3,4,6-Tetrachlorophenol	Aug 19	<0.50	100	ug/L	No
Trihalomethanes (THM)	Feb 11 May 6 Aug 19 Nov 18	30.1 38.6 50.2 35.6	100	ug/L	No
<b>Running Annual Average: 38.6</b>					
Toluene	Aug 19	<0.20	60	ug/L	No
Triallate	Aug 19	<1.0	230	ug/L	No
Trichloroethylene	Aug 19	<0.10	5	ug/L	No
2,4,6-Trichlorophenol	Aug 19	<0.50	5	ug/L	No
Trifluralin	Aug 19	<1.0	45	ug/L	No
Vinyl Chloride	Aug 19	<0.20	1	ug/L	No
Xylenes	Aug 19	<0.10	90	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.**

<b>Parameter</b>	<b>Result Value</b>	<b>Unit of Measure</b>	<b>Date of Sample</b>
None			

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

<b>Parameter</b>	<b>Sample Date</b>	<b>Result: Raw – Before Treatment</b>	<b>Result: Point of Entry</b>	<b>Result: Distribution</b>	<b>Unit of Measure</b>
None					