



ANNUAL REPORT

Drinking-Water System Number:	260087048
Drinking-Water System Name:	Leamington (Wheatley) Drinking Water System
Drinking-Water System Owner:	Leamington
Drinking-Water System Category:	Large Municipal Year Round Residential
Period being reported:	January 1 – December 31, 2023

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

List all Drinking-Water Systems (if any), which receive all 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 always closed 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 authorizes 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

Due to a fire at the Wheatley Water Treatment Plant on September 13th, interconnect valves were opened from the South Chatham-Kent Drinking Water System and the Leamington (Union) Distribution system to feed the Wheatley and Leamington portions system. Due to uncertainty of system pressure maintenance immediately after the fire, a precautionary boil water advisory was placed into effect. Large water users were asked to restrict water use to a minimum required volume, and residents were asked to conserve water. After it was determined that system demands could be met by utilizing the South Chatham-Kent and Leamington interconnects, the boil water advisory was lifted.

Incident Date & AWQI No.	Parameter	Result	Unit of Measure	Corrective Action	Corrective Action Date
June 28 AWQI # 162333	Total Coliforms	13	cfu/100mL	Flush, resample and test	June 28
July 06 AWQI # 162448	Total Coliforms	3	cfu/100mL	Flush, resample and test	July 06

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 #)
Raw					
Point of Entry (Treated)					
Distribution	159	0-0	0-13	150	<10-50

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 #)
Turbidity		
Chlorine	217	0.79 - 1.89 mg/L

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



Fluoride	Not applicable	
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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	MAC Limit	Unit of Measure	Exceedance
Antimony	August 14	<0.50	6	ug/L	No
Arsenic	August 14	<1.0	10	ug/L	No
Barium	August 14	22	1000	ug/L	No
Boron	August 14	18	5000	ug/L	No
Cadmium	August 14	<0.090	5	ug/L	No
Chromium	August 14	<5.0	50	ug/L	No
*Lead	See Schedule 15.1 Summary				
Mercury	August 14	<0.00010	0.001	mg/L	No
Selenium	August 14	<2.0	50	ug/L	No
Sodium	August 14	8500	20	mg/L	No
Uranium	August 14	<0.10	20	ug/L	No
Fluoride	August 14	<0.10	6	ug/L	No
Nitrite	August 14	<0.010	10	ug/L	No
Nitrate	August 14	0.18	1000	ug/L	No
Nitrite + Nitrate	August 14	0.18	5000	ug/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 #)	MAC Limit ug/L	Number of Exceedances / Adverses
Residential	0			
Non-Residential	0			
Distribution	2	<0.50 – <0.50	10	0

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	August 14	<0.50	5	ug/L	No
Atrazine + N-dealkylated metabolites	August 14	<1.0	5	ug/L	No
Azinphos-methyl	August 14	<2.0	20	ug/L	No
Benzene	August 14	<0.10	1	ug/L	No
Benzo(a)pyrene	August 14	<0.0050	0.01	ug/L	No
Bromoxynil	August 14	<0.50	5	ug/L	No
Carbaryl	August 14	<5.0	90	ug/L	No
Carbofuran	August 14	<5.0	90	ug/L	No
Carbon Tetrachloride	August 14	<0.10	2	ug/L	No
Chlorpyrifos (Dursban)	August 14	<1.0	90	ug/L	No
Diazinon	August 14	<1.0	20	ug/L	No
Dicamba	August 14	<1.0	120	ug/L	No
1,2-Dichlorobenzene	August 14	<0.20	200	ug/L	No
1,4-Dichlorobenzene	August 14	<0.20	5	ug/L	No
1,2-Dichloroethane	August 14	<0.20	5	ug/L	No
1,1-Dichloroethylene (vinylidene chloride)	August 14	<0.10	14	ug/L	No
Dichloromethane	August 14	<0.50	50	ug/L	No
2,4-Dichlorophenol	August 14	<0.25	900	ug/L	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	August 14	<1.0	100	ug/L	No
Diclofop-methyl	August 14	<0.90	9	ug/L	No
Dimethoate	August 14	<2.5	20	ug/L	No
Diquat	August 14	<7.0	70	ug/L	No
Diuron	August 14	<10	150	ug/L	No
Ethylbenzene	August 14	<0.10	140	ug/L	No
Glyphosate	August 14	<10	280	ug/L	No
Haloacetic Acids (HAA)	Feb 13 May 16 Aug 14 Nov 14	16 19 14 34	80	ug/L	No
Running Annual Average:		20.8			
Malathion	August 14	<5.0	190	ug/L	No
2 Methyl-4-chlorophenoxyacetic acid (MCPA)	August 14	<10	100	ug/L	No
Metolachlor	August 14	<0.50	190	ug/L	No
Metribuzin (Sencor)	August 14	<5.0	80	ug/L	No
Monochlorobenzene	August 14	<0.10	80	ug/L	No
Paraquat	August 14	<1.0	10	ug/L	No
Pentachlorophenol	August 14	<0.50	60	ug/L	No
Phorate	August 14	<0.50	2	ug/L	No
Picloram	August 14	<5.0	190	ug/L	No
Polychlorinated Biphenyls (PCB)	August 14	<0.05	3	ug/L	No
Prometryne	August 14	<0.25	1	ug/L	No
Simazine	August 14	<1.0	10	ug/L	No
Terbufos	August 14	<0.50	1	ug/L	No
Tetrachloroethylene	August 14	<0.10	10	ug/L	No



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2,3,4,6-Tetrachlorophenol	August 14	<0.50	100	ug/L	No
Trihalomethanes (THM)	Feb 13	24.4	100	ug/L	No
	May 16	31.4			
	Aug 14	46.7			
	Nov 14	37.8			
Running Annual Average:		35.1			
Toluene	August 14	<0.20	60	ug/L	No
Triallate	August 14	<1.0	230	ug/L	No
Trichloroethylene	August 14	<0.10	5	ug/L	No
2,4,6-Trichlorophenol	August 14	<0.50	5	ug/L	No
Trifluralin	August 14	<1.0	45	ug/L	No
Vinyl Chloride	August 14	<0.20	1	ug/L	No
Xylenes	August 14	<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.

Parameter	Result Value	Unit of Measure	Date of Sample
None			

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

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