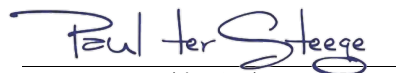




Leamington Distribution System (Wheatley Ds)

## Inspection Report

**Ministry ID Number:** 260087048  
**Inspection Start Date:** 09/03/2024  
**Inspection End Date:** 09/19/2024  
**Inspection By:** Paul TerSteege

  
(signature)

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## Inspection Background

**Name:** Leamington Distribution System (Wheatley Ds)  
**ID Number:** 260087048  
**Entity Inspected:** Chatham-Kent Public Utilities Commission  
**Local Ministry Office:** Windsor  
**Local Supervisor:** Marc Bechard  
**Date Inspected:** 9/3/2024  
**Review Period:** May 1, 2023 to August 31, 2024

## Facility Description

The Leamington (Wheatley) Distribution System is one of two stand-alone water distribution systems owned by the Municipality of Leamington. While the two systems are equipped with several interconnections, the valves between them are normally only opened during emergencies.

The system supplies approximately 185 residential and commercial service connections in the Municipality's southeastern extremity. As such, it is categorized as a 'large municipal residential system' within Ontario Regulation 170/03.

The system does not contain any storage, pumping, or disinfection facilities. It normally relies on Chatham-Kent's Wheatley Drinking Water System to supply treated lake water, and to regulate its distribution pressure by governing the water level in the Wheatley tower.

Leamington renewed its water agreement with Chatham-Kent on January 1, 2016. This agreement indicates Chatham-Kent will conduct monitoring on behalf of Leamington in accordance with section 5 (4) of Ontario Regulation 170/03. Leamington's Water Services retains responsible for all other aspects of the distribution system's operation, including infrastructure maintenance and repairs.

## Inspection Observations

### Introduction

- **The primary focus of this inspection is to confirm compliance with Ministry of the Environment, Conservation and Parks (MECP) legislation as well as evaluating conformance with ministry drinking water policies and guidelines during the inspection period. The ministry utilizes a comprehensive, multi-barrier approach in the inspection of water systems that focuses on the source, treatment, and distribution components as well as management practices. This drinking water system is subject to the legislative requirements of the Safe Drinking Water Act, 2002 (SDWA) and regulations made therein, including Ontario Regulation 170/03, "Drinking Water Systems" (O. Reg. 170/03). This inspection has been conducted pursuant to Section 81 of the SDWA. This inspection report does not suggest that all applicable legislation and regulations were evaluated. It remains the responsibility of the owner to ensure compliance with all applicable legislative and regulatory requirements.**

The Officer's reviews typically focus on operational records since the previous inspection, along with a select set of older records, e.g., Ministry approvals, historical laboratory results, etc. The system does not include any treatment, storage, and/or pumping facilities.

The Officer initiated his inspection with a document request on September 3, 2024. The following day he received documents from the Municipality. The day after, he received monitoring and other documents from the donor system ["the PUC"].

On September 11, 2024, the Officer met with Leamington's Manager of Environmental Services and with supervisor of Water Services to conclude his inspection. Further, an operator took to locations in the distribution system where samples could be collected.

### Treatment Processes

- **The owner ensured that equipment was installed as required.**

This system does not contain any treatment, storage, or pumping stations. On June 27, 2024, the Ministry revoked and replaced both the Drinking Water Works Permit and Municipal Drinking Water License. The update stemmed from the standard licence renewal process versus an alteration. The Municipality confirmed, "No changes to the Leamington (Wheatley DS) since the last inspection."

## Treatment Processes

- **All parts of the drinking water system were disinfected as required.**

While the logbook contains references to various repairs, the logbook is used to document work in both their larger and this smaller distribution system. The Municipality confirmed all but one of those repairs were confined to the larger system. (Further, they confirmed they did not undertake any alterations during the review period requiring disinfection per Schedule B of the Permit.)

Details in the corresponding "Watermain Break Report Form" indicate the minor "Category 1" break was repaired with a clamp. Further, operators recorded various steps during the repair including,

- Maintaining flow until an air gap was created.
- Maintaining an air gap during the repair.
- Applying a chlorine solution during the repair.
- Conducting post-repair flushing.
- Testing the chlorine residual both before and after the repair.

Note: The Municipality has three Standard Operating Procedures (SOPs) addressing main breaks (e.g., General Repairs; Repairs to Dewatered Mains; Repairs to Potentially Contaminated Watermains). Further, they have SOPs related to the replacement of hydrants and valves, and to work on leaking water services.

- **The owner had evidence indicating that chemicals and materials that came in contact with water within the drinking water system met the applicable standards.**

This system does not provide any disinfection; however, operators may use disinfectant during repairs. As indicated on the product labelling at the Water Services building, the jugs of disinfectant available for operators' use met the applicable standards.

- **Records confirmed that the water treatment equipment which provides chlorination or chloramination for secondary disinfection was operated as required.**

Regardless of whether owners provide secondary disinfection themselves, Section 1-5 in Ontario Regulation 170/03 requires them to ensure the provision of treatment capable of providing a free chlorine residual of 0.2 mg/L at all locations within the distribution system. Further, Section 1-2 requires the free chlorine residual to be  $\geq 0.05$  mg/L.

Amongst the results of tests conducted by the PUC's operators while conducting weekly sampling, only four results were below 1.0 mg/L. The lowest (0.82 mg/L) was recorded August 6, 2024. Amongst the results of tests conducted by the Municipality's operators during flushing hydrants and blow-offs, the lowest (0.80 mg/L) was recorded August 4, 2023.

Field tests performed during the inspection were comparable to results obtained by the PUC during their routine checks.

## Treatment Processes

- **Secondary disinfectant residual was tested as required.**

To satisfy Section 7-2 in Schedule 7 of Ontario Regulation 170/03, this system is monitored as an extension of the system supplying it per an agreement that satisfies Subsection 5 (4). In addition to monitoring in the donor system, the chlorine residual in this distribution system is checked at three locations weekly in conjunction with microbiological sampling.

- **Samples for chlorine residual analysis were tested using an acceptable portable device.**

The drinking water system does include any disinfection facilities; however, the colorimeters used by operators for testing the chlorine residual in the distribution system comply with Section 6-7 (1) of Ontario Regulation 170/03. Instead of inspecting each unit, the Municipality identified nine Hach instruments used by their operators via copies of certificates for calibrations performed by an outside contractor on May 27, 2024.

## Distribution System

- **Records confirmed that disinfectant residuals were routinely checked at the extremities and dead ends of the distribution system.**

To ensure an adequate disinfectant residual is being maintained throughout the distribution system, the Ministry recommends disinfectant residuals are routinely checked at the extremities and dead ends of the distribution system.

Regulatory monitoring conducted by the PUC routinely samples from the following stations (that are depicted on the map appended to this report):

Sample Station #1 - 2136 Mersea Road 2

Sample Station #2 - 222 Lakeshore Drive [SIC, i.e., Cotterie Park Road]

Sample Station #3 - 320 Milo Road

In addition, the Municipality conducts testing several times at year at various blow-offs and hydrants as part of their flushing program.

- **The owner had up-to-date documents describing the distribution components.**

To ensure operators have ready access to current information regarding the distribution system, in particular the location of mains, valves and hydrants, the Ministry requires the reference material is updated within 12 months of an addition or alteration. Updates to the maps referenced in Schedule A of the Drinking Water Works Permit commonly serve this purpose. That document was updated approximately half a year ago.

To assist with the inspection, copies of two overview maps were provided (a copy of one is appended to this report).

## Distribution System

- **There was a backflow prevention program, policy and/or bylaw in place.**

As recommended by the Ministry, the Municipality has a by-law (281-01) in place that addresses the subject of cross connections to high hazard facilities – a copy of which is available from their website. Further, the Municipality Water Services is developing a program to examine connections served by both municipal and private well supplies (e.g., some greenhouses) where an improper or inadequately maintained connection could pose a hazard to the municipal water system.

- **The owner had implemented a program for the flushing of water mains.**

The Ministry recommends a flushing program to remove sediment and biofilm from the distribution system. (Where water flow is insufficient to remove sediment and biofilm, swabbing may be an alternate option.)

Beyond the two locations where the Municipality has installed auto-flushers, various locations are flushed manually. The Municipality provided a record of flushing 14 locations in 2023 during the months of March, June, August, October, and December. Further, they provided a record of flushing 14 locations in the months of March and June of 2024. (The lowest recorded residual of 0.80 mg/L was recorded in August 2023 for Hydrant R-139 at end of Beach Boulevard.)

- **There was a program in place for inspecting and exercising valves.**

To ensure valves function when required to isolate a section of the distribution system, the Ministry recommends implementing a program for inspecting and exercising the valves. While some records were out with operators performing work, the available records indicated operators continue to target 100% of their valves annually.

Note: To better track maintenance on these (and other assets), the Municipality is working towards replacing existing paper forms with electronic work orders.

- **There was a program in place for inspecting and operating hydrants.**

To ensure hydrants and/or blow-offs function when required, the Ministry recommends implementing a program their regular inspection. The available records indicated operators continue to target 100% of their hydrants annually. (In the future, this work is also expected to be encompassed within electronic work orders.)

Beyond the annual inspection, the Municipality uses several hydrants (and blow-offs) while flushing.



## Distribution System

- **There was a bylaw or policy in place limiting access to hydrants.**

To protect their distribution systems, and infrastructure, the Ministry recommends implementing a by-law and/or policy to limit access to hydrants.

Leamington does not have a by-law regulating the operation of municipal fire hydrants; however, they have a policy that limits the routine operation of fire hydrants to municipal staff and firefighters.

Bulk water consumption is limited to parties requiring water for site-specific construction purposes. The Municipality expects these parties obtain formal approval, and for a temporary meter to be installed before consumption starts.

- **The agreement in place satisfied the requirements.**

The donor has a valid “Section 5 Agreement” with Leamington that encompasses,

- Ensuring they receive adequate secondary disinfection,
- Sampling and testing of the distribution system as if it were part of donor’s system, and
- Complying with the applicable lead sampling and testing provisions.

## Operations Manuals

- **Operators and maintenance personnel had ready access to operations and maintenance manuals.**

Pursuant to Section 28 of Ontario Regulation 128/04, operators have ready access to print and/or electronic documents to guide their operations and maintenance activities. The Municipality provided an electronic copy of their Operational Plan and SOPs, and they advised operators have access to electronic files on a computer in their office.

- **The operations and maintenance manuals contained plans, drawings, and process descriptions sufficient for the safe and efficient operation of the system.**

In addition to being readily available, Section 28 of Ontario Regulation 128/04 manuals to be sufficient for the safe and efficient operation of the system. With respect to distribution systems, the Ministry expects the availability of drawings that illustrate the location of mains, valves, hydrants, and other significant appurtenances. Documents available to operators appear to satisfy this requirement.

## Operations Manuals

- **The operations and maintenance manual(s) met the requirements of the Municipal Drinking Water Licence.**

Ontario Regulation 128/04 focuses on the provision of plans, drawings, and process descriptions, whereas Municipal Drinking Water Licences impose requirements related to the provision of procedures. Below is a list of the Municipality's Standard Operating Procedures:

01. Fire Hydrant – Flushing
02. Fire Hydrant – Replacement
03. Low Pressure
04. Chlorine Residuals
05. Water Service Leaks
06. Watermain – Blow-off Flushing Maintenance
07. New Watermain Installation
08. Valve Maintenance
09. Valve Repair
10. Watermain Break – Repairs to Dewatered Mains
11. Watermain Break – General Repairs
12. Watermain Break – Repairs to Potentially Contaminated Watermains
13. Emergency Interconnect
14. Adverse Water (Emergencies)
15. Bacteriological Sampling
16. Auto Flusher Weekly\* Maintenance Inspections

\* The Municipality clarified that the weekly maintenance was largely limited to adding tablets to dechlorinate the discharge. Given the present water consumption required to maintain a good chlorine residual, they anticipated scaling back visits to once every two weeks.

## Logbooks

- **Records or other record keeping mechanisms confirmed that operational testing not performed by continuous monitoring equipment was done by a certified operator, water quality analyst, or person who met the requirements of Schedule 7-5 of O. Reg. 170/03.**

Pursuant to Section 7-5 in Schedule 7 of Ontario Regulation 170/03, only qualified personnel (e.g., certified operators or water quality analysts) appear to be performing operational tests.

- **For every required operational test and sample, a record was made as required.**

As required by Section 6-10 (1) of Ontario Regulation 170/03, operators are recording the date and time the sample was taken, the location where the sample was taken, and the name of the person who took the sample.

## Logbooks

- **Logbooks were properly maintained and contained the required information.**

Pursuant to Subsection 27 (1) of Ontario Regulation 128/04, logs and other record-keeping mechanisms are available for use by operators to document the operation of the subsystem. Further, pursuant to Subsection 27 (5), operators appear to be documenting information regarding the system's operation including the date and time of their entries, the names of the operators on duty, and details regarding incidents and activities within the system.

A common logbook is used by Municipal operators to document activities in both the Union and the Wheatley distribution systems. Given most entries are related to the Union system, they indicated they could add "Wheatley" to the list of labels that operators could apply to their log entries, i.e., to identify work performed on this system.

- **Logs or other record keeping mechanisms were available for at least five (5) years.**

Pursuant to Subsection 27 (6) of Ontario Regulation 128/04, a commitment has been made to retain logs and related records for a minimum of five years. The Municipality advised, "Records are retained electronically and/or hard copy per Element 5" (i.e., of the Drinking Water Quality Management Standard) at their offices.

## Security

- **The owner provided security measures to protect components of the drinking water system.**

The Ministry recommends owners secure components of their drinking water system from intruders and potential sources of contamination. In this case, the system does not include any treatment, storage, and/or pumping facilities. However, the Manager of Environmental Services confirmed operators continue their practice of keeping their auto-flushers and sampling stations locked when not attended, and that no security concerns had been identified.

## Consumer Relations

- **The owner and/or operating authority undertook efforts to promote water conservation and reduce water losses in their system.**

The Ministry encourages water conservation – particularly if a system encounters any capacity issues. A wide range of measures may be considered including periodic calculations of water losses; periodic leak detection programs; encouraging the use of water efficient fixtures and practices; and imposing water usage restrictions (bylaws).

The Municipality has enacted By-law 426-03 which address the subject of water restrictions (a copy of which is available from their website). Further, the Municipality noted that with the adoption of smart meters they can identify atypical flows (e.g., 24 hours of continuous flow). Once alerted, they will start by making courtesy calls to consumers, followed by leak investigations and/or letters as documented in the logbook.

## Certification and Training

- **An overall responsible operator was designated for all subsystem.**

Ontario Regulation 128/04 prescribes systems for classifying water systems, and for certifying personnel who operate them. Subsection 23 requires an operator, who holds the appropriate type and level of certification, to be designated as the Overall Responsible Operator (ORO).

As they operate largely independently of one another, both Chatham-Kent PUC and Leamington have designated an ORO. With regards to the Municipality's operators, the Manager of Environmental Services confirmed their Supervisor of Water Services has been designated as their ORO, and has been authorized to designate another operator if he is on vacation or unavailable.

- **A properly certified operator was designated to act in place of the overall responsible operator.**

While the Municipality has no shortage of appropriately certified operators to address Subsection 23 (4) of Ontario Regulation 128/04, the logbook indicates the official ORO commonly served as both the ORO and OIC. There were only 9 days during which three other Class 2 operators had turns serving as the ORO and OIC.

- **Operators-in-charge were designated for all subsystems.**

The Officer had no concerns with respect to the appointment of personnel to serve as operator-in-charge per Subsection 25 (1) of Ontario Regulation 128/04. As previously noted, the official ORO commonly served as both the ORO and OIC. In addition to dates when he was unavailable to serve as ORO, the Officer noted a total of 15 days when five Class 2 operators, and one Class 1 operator, had turns serving as the OIC.

## Certification and Training

- All operators were certified as required.**

The Leamington (Wheatley) Distribution System was classified as a "Water Distribution Subsystem Class 1" per certificate 8006 issued August 31, 2009. (Certificates for both of Leamington's water systems are posted in the Water Services building.)

Each operator holds an appropriate drinking water certificate as required by Section 22 of Ontario Regulation 128/04. However, most of the Municipality's operators hold a higher certificate as the larger of their two water systems is classified as a Class 2 system.

Operator	Type	Class	Certificate	Expiration	Role
90009307	WS	II	10743	2026-Mar-31	Supervisor/ORO
90010224	WS	II	12093	2027-May-31	
90016315	WS	II	14286	2025-May-31	
90050328	WD	II	52204	2024-Oct-31	
90069549	WD	II	96784	2025-Apr-30	
90070489	WD	II	96825	2025-Apr-30	
90081180	WD	II	109145	2025-Feb-28	
90084062	WD	II	101975	2026-Sep-30	
90084063	WD	II	101974	2026-Sep-30	
90091488	WD	I	119670	2025-Oct-31	

Note: The logbook lists water service personnel on duty including the Water Systems Analyst. While this position requires a familiarity with water distribution operations and legislative requirements, the role is administrative in nature and does not require operator certification. "Under the direction of the Supervisor of Water Services and the Manager of Environmental Services, the Water Systems Analyst [is] responsible for managing the collection and analysis of all data associated with the Leamington water distribution system."

Occasional references were also made to the Manager of Environmental Services in conjunction with meetings, etc. The Officer understands the Manager is a professional engineer, and while she holds a valid Class IV Wastewater Treatment Certificate, she noted that she does not have the time which would allow her to satisfy the hours required by Ontario Regulation 128/04 to maintain water certification.

## Water Quality Monitoring

- Distribution microbiological sampling requirements were met.**

Reported laboratory results indicate distributed water samples were collected monthly for microbiological testing per Section 10-2 of Ontario Regulation 170/03.

## Water Quality Monitoring

- **Records confirmed that chlorine residual tests were conducted as required.**

Sample submission forms indicate that during the collection of samples for microbiological testing, operators tested the chlorine residual as required by Section 6-3 of Ontario Regulation 170/03.

- **Haloacetic acid sampling requirements were met.**

Under a "Section 5 agreement" satisfying Subsection 5 (4) of Ontario Regulation 170/03, the "donor" (Chatham-Kent PUC) samples as though this distribution system was an extension of their own system.

- **Trihalomethane sampling requirements were met.**

Under an O.Reg. 170/03 section 5(4) agreement, the "donor" (Chatham-Kent PUC) samples as though this distribution system was an extension of their own system.

Note: Operators of the donor system have collected some sample from their distribution system. However, operators have collected some samples from another receiving system which represents the furthest extremity of the overall distribution network – which is appropriate for this parameter. Consequently, relevant test results are reported under more than one drinking water system number.

- **Water samples were taken at the prescribed location.**

The reported sample location satisfy Section 6-2 in Schedule 6 of Ontario Regulation 170/03. Unsurprisingly, all samples collected from this standalone distribution system were reported as "distributed water" samples.

- **Lead sampling requirements were met.**

The requirements in Schedule 15.1 of Ontario Regulation 170/03 are prescribed based on a drinking water system's service population and sampling history. Many systems which have not encountered problems with elevated lead results have been able to scale back their programs to the collection of a few distributed water samples for lead testing every third 12-month period.

While it appears they are eligible for reduced sampling, operators appear to continue a precautionary approach whereby they continue to collect 1 sample each summer and winter.

- **The required records were kept for the prescribed periods.**

To satisfy the record retention requirements in Section 13 of Ontario Regulation 170/03, the Manager of Environmental Services advised, records are retained electronically and/or as a hard copy as detailed in Element 5 of the Operational Plan prepared as part of their Drinking Water Quality Management System.

## Water Quality Assessment

- **Records showed that not all water sample results met the Ontario Drinking Water Quality Standards.**

While the results for most parameters met the applicable water quality standards (in Ontario Regulation 169/03), Total Coliform was detected in two microbiological results.

## Reporting & Corrective Actions

- **Immediate verbal notification requirements for adverse water quality incidents were met.**

Paperwork submitted by operators indicated the verbal notifications were made to the local Health Unit and to the Ministry's Spills Action Centre as required by Section 16-6 in Schedule 16 of Ontario Regulation 170/03.

- **Written notice requirements for adverse water quality incidents were met.**

Paperwork submitted by operators indicates written incident notification was provided as required by Section 16-7 in Schedule 16 of Ontario Regulation 170/03. While one notification was not attached in the Ministry's database, copies of both the initial notification and the notice of resolution were provided for both AWQI 162333 and 162448 (as was some correspondence regarding the two incidents in the Wheatley Drinking Water System).

- **Requirements for written notices of issue resolution for adverse water quality incidents were met.**

Paperwork submitted by operators indicates written notice of issue resolution was provided as required by Subsection 16-9 (1) in Schedule 16 of Ontario Regulation 170/03.

- **Corrective actions were taken to address adverse conditions.**

Paperwork submitted by operators indicated corrective action was taken as required by Schedule 17 of Ontario Regulation 170/03.

- **The annual report requirements were met.**

Pursuant to Section 11 (3) and (6), the most recent annual report was prepared by the end of February of the following year which included,

- a brief description of the drinking water system;
- a description of major equipment expenses;
- a summary of test results for required sample parameters; and
- a summary of adverse water quality incidents.

- **The donor provided an annual report to the owner of the receiver drinking water system.**

In addition to annual reports circulated pursuant to Subsection 11 (2.1) of Ontario Regulation 170/03, both Chatham-Kent and Leamington have posted copies of the annual reports for donor system on their respective websites.

## Reporting & Corrective Actions

- **The summary report requirements were met.**

The Donor completed and distributed a summary report as required by Section 22-2 in Schedule 22 of Ontario Regulation 170/03.

Note: Subsection 5 (4) of Ontario Regulation 170/03 exempts owners of receiving systems operating under Section 5 agreements from various requirements including the preparation of summary reports. However, given the potential relevance to municipal infrastructure planning, we would not discount the value of pausing annually to consider the system's flows and compliance history.

- **Changes to the system registration information were provided as required.**

Section 10.1 (3) of Ontario Regulation 170/03 requires notification of any change of information from that previously submitted in a System Profile and/or Laboratory Services form.

During the inspection it was noted that the number of service connections had been mistakenly recorded as the service population. The Municipality indicated they do not have a census of all the residents supplied by this small system; however, they advised of a minor change whereby the number of service connections had grown from 181 to 185. Further, it was noted that the system lacks any treatment and/or pumping equipment, to which a "Rated Capacity" might apply, i.e., as part of the Licence and Permit for this municipal drinking water system.

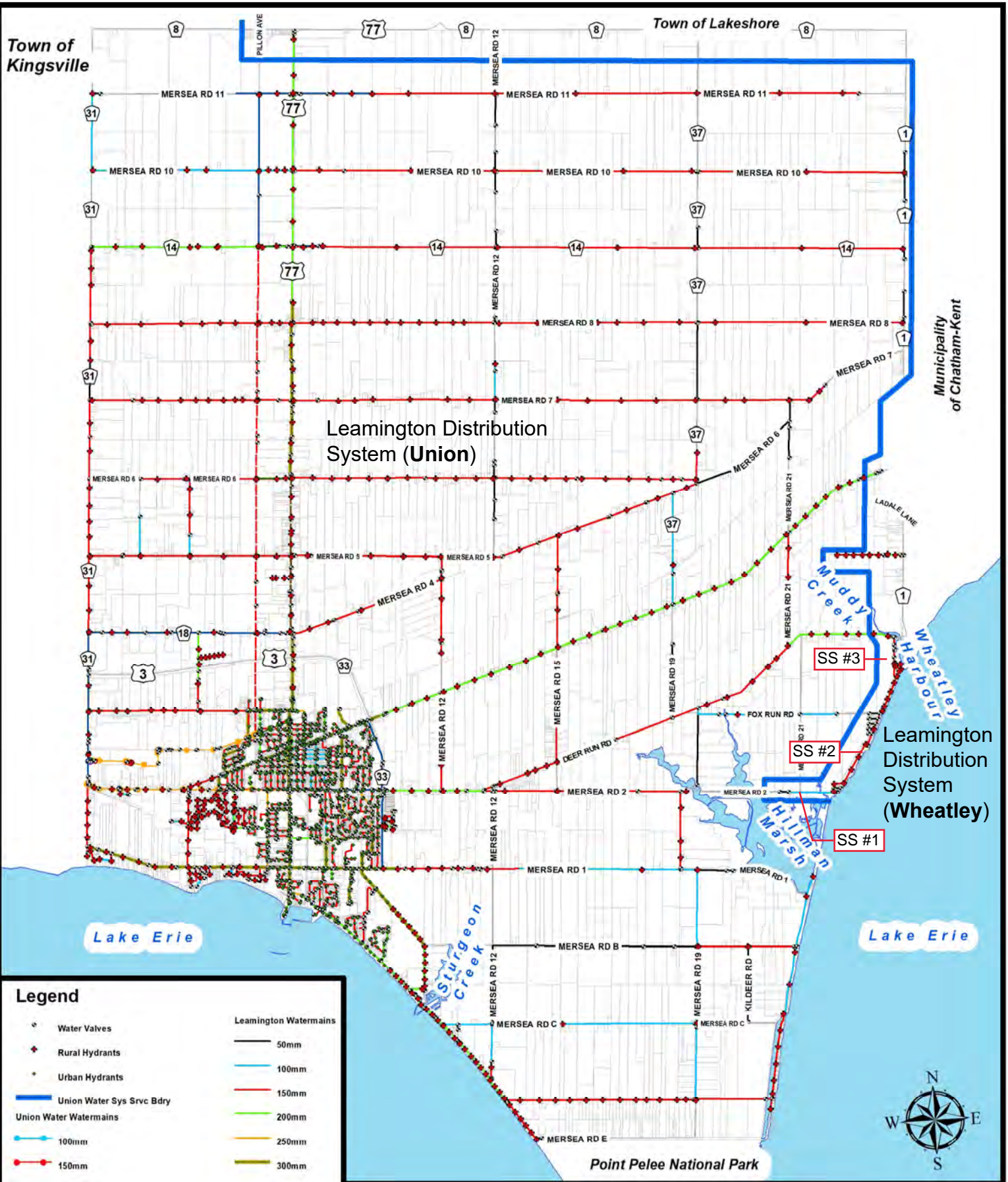
Following the inspection, the Officer emailed the Ministry's registration team and asked them to add the current number of service connections to the profile, and to remove entries in the service population and rated capacity fields.

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## Appendix 1

### **Leamington Watermain Map**



**Legend**

- Water Valves
- Rural Hydrants
- Urban Hydrants
- Union Water Sys Srvc Bdry
- Union Water Watermains
  - 100mm
  - 150mm
  - 200mm
  - 300mm
  - 400mm
  - 600mm
  - 750mm
  - 900mm

**Leamington Watermains**

- 50mm
- 100mm
- 150mm
- 200mm
- 250mm
- 300mm
- 350mm
- 400mm
- 600mm
- 750mm

**TITLE** MUNICIPALITY OF LEAMINGTON - 2023 WATERMAIN MAP

**SCALE** 1:90,000

**COPYRIGHT**

This is not a legal plan of survey and the user of this map assumes all risks associated with it. All efforts have been made to ensure accuracy and completeness, however no guarantees can be made.

Municipality of Leamington  
live | play | work

## Appendix 2

### **Summary of Reported Laboratory Results**

## Summaries of Report Laboratory Testing and Results

<b>Name</b>	Leamington Distribution System - Wheatley Ds
<b>Municipality</b>	Leamington
<b>Health Unit</b>	Windsor-Essex County Health Unit
<b>Ministry office</b>	Windsor

<b>ID number</b>	260087048
<b>Regulation</b>	O.REG 170/03
<b>Category</b>	LMRS

### Microbiological Summaries

<b>Number of Microbiological Results Reported</b> Grouped by Location and Month Collected between Jan 1, 2023 and Aug 31, 2024
--

Location			
Distribution:Leamington Distribution System - Wheatley Ds			
Month	Escherichia Coli	Total Coliform	Heterotrophic Plate Count
2023-01	15	15	15
2023-02	12	12	12
2023-03	12	12	12
2023-04	12	12	12
2023-05	15	15	15
2023-06	14	14	12
2023-07	16	16	15
2023-08	12	12	12
2023-09	15	15	12
2023-10	18	18	15
2023-11	12	12	12
2023-12	12	12	9
2024-01	13	13	13
2024-02	11	11	11
2024-03	12	12	12
2024-04	15	15	15
2024-05	14	14	12
2024-06	12	12	12
2024-07	15	15	15
2024-08	9	9	9

### List of Microbiological Results that Exceeded the Limit

Sorted by Day and Sample Location  
Collected between Jan 1, 2017 and Aug 31, 2024

Sampled	Result	Qualifier	Location
Oct 02, 2017	13	CFU/100mL	Distribution:Leamington Distribution System - Wheatley Ds
Jun 15, 2020	1	CFU/100mL	Distribution:Leamington Distribution System - Wheatley Ds
Jun 14, 2021	12	CFU/100mL	Distribution:Leamington Distribution System - Wheatley Ds
Jun 26, 2023	13	CFU/100mL	Distribution:Leamington Distribution System - Wheatley Ds
Jul 04, 2023	3	CFU/100mL	Distribution:Leamington Distribution System - Wheatley Ds

### Chemical Summaries

### Lead Summaries

#### Lead and Alkalinity Results

Grouped by Regulatory Sampling Period and Sample Type  
Collected between Jan 1, 2017 and Aug 31, 2024

Sampling Period		Distribution - Lead Results			Distribution - Alk. Results			Plumbing - Lead results		
Start	End	No. of Tests	Avg (ug/L)	Max (ug/L)	No. of Tests	Avg (mg/L as CaCO3)	Max	No. of Tests	Avg (ug/L)	Max (ug/L)
15-Jun-17	15-Oct-17	1	0.50	0.50	1	71.00	71.00			
15-Dec-17	15-Apr-18	1	0.50	0.50	1	72.00	72.00			
15-Jun-18	15-Oct-18	1	0.50	0.50	1	81.00	81.00			
15-Dec-18	15-Apr-19	1	0.50	0.50	1	83.00	83.00			
15-Jun-19	15-Oct-19	1	0.50	0.50	1	86.00	86.00			
15-Dec-19	15-Apr-20	1	0.50	0.50	1	74.00	74.00			
15-Jun-20	15-Oct-20	1	0.50	0.50	1	79.00	79.00			
15-Dec-20	15-Apr-21	1	0.50	0.50	1	76.00	76.00			
15-Jun-21	15-Oct-21	1	0.50	0.50	1	74.00	74.00			
15-Dec-21	15-Apr-22	1	0.50	0.50	1	81.00	81.00			
15-Jun-22	15-Oct-22	1	0.50	0.50	1	75.00	75.00			
15-Dec-22	15-Apr-23	1	0.50	0.50	1	77.00	77.00			
15-Jun-23	15-Oct-23	1	0.50	0.50	1	79.00	79.00			
15-Dec-23	15-Apr-24	1	0.50	0.50	1	84.00	84.00			

## Laboratory Testing

### Licensed Laboratories Providing Testing Services - Summarized by Parameter Group

Grouped by Laboratory and Parameter Group  
Collected between Jan 1, 2017 and Aug 31, 2024

Licence and Laboratory Name		
2276 - Caduceon Environmental Laboratories - Windsor		
Parameter Group	First Sample	Last Sample
Microbiological	Oct 05, 2020	Aug 19, 2024
Licence and Laboratory Name		
2312 - Bureau Veritas Laboratories - Mississauga		
Parameter Group	First Sample	Last Sample
Lead	Jun 20, 2017	Jun 17, 2024
Licence and Laboratory Name		
2317 - Ontario Water Testing Centre Incorporated		
Parameter Group	First Sample	Last Sample
Microbiological	Jan 03, 2017	Sep 28, 2020

## Appendix 3

### **Drinking Water System Dossier - Excerpts**

# 021 - Drinking Water System Dossier for 260087048

as of 28-AUG-2024

## Drinking Water System Profile Information

**DWS #** 260087048  
**Registration Date (yyyy/mm/dd)** 2008/02/11  
**DWS Status** Active DWS  
**DWS Expiry Date (yyyy/mm/dd)**  
**MOE Assigned Name** Leamington Distribution System - Wheatley Ds  
**Category** LMRS  
**Regulation Short Name** O.REG 170/03  
**DWS Type** Distribution System  
**Source Type** Distribution  
**Address** Leamington, Ontario  
**Region** Southwestern Region  
**District** Windsor Area Office  
**Municipality** Leamington  
**Public Health Unit** Windsor-Essex County Health Unit

## DWS OPERATIONAL INFORMATION

**Concession Plan Number**  
**Lot**  
**Geographic Township**  
**Population:** ~~181~~  
**Number of Private Residences:**  
**Number of Service Connections:** 185  
**Rated Daily Capacity (L/S)** ~~180~~

**LSN Compliance Status:** Complete LSN  
**Date of Last Sample (as per DWIS)** 19 August, 2024  
**24/7 Contact** Nelson Carvalho, Supervisor Of Water Services  
**24/7 Contact Info** p: (519)3265761 x3501, f: (519)3265987, e: ncarvalho@leamington.ca, c: (519)8184338, pg: -

## DWS OWNER INFORMATION

**Owner Legal Name** Leamington, The Corporation Of The Municipality Of  
**Owner Business Name** Leamington, The Corporation Of The Municipality Of  
**Owner Address** 111 Erie St ,Leamington,ON,N8H 2Z9  
**Owner Contact** Nelson Carvhalo, Supervisor Of Water Services  
**Owner Contact Info** p: (519)3265761 x3501, f: (519)3265987, e: ncarvalho@leamington.ca  
**Owner Alternate Contact** Shannon Belleau, Manager Of Environmental Services  
**Owner Alternate Contact Info** p: (519)3265761 x1650, f: (519)3262481, e: sbelleau@leamington.ca

## DWS OPERATING AUTHORITY INFORMATION

**Op. Authority Legal Name** Chatham-Kent Puc  
**Op. Authority Business Name** Chatham-Kent Puc  
**Op. Authority Address** 325 Grand Ave,Post Office Box Delivery ,1191,Chatham,ON,N7M 5L8  
**Op. Authority Contact** Darren Galbraith, General Manager  
**Op. Authority Contact Info** p: (226)3122023 x4350, f: (519)3523432, e: darrenga@chatham-kent.ca  
**Op. Authority Alternate Contact** Scott Sparling, Manager Of Compliance & Quality Standards  
**Op. Authority Alternate Contact Info** p: (226)3122023 x4360, f: (519)3523432, e: scottsp@chatham-kent.ca



# 021 - Drinking Water System Dossier for 260087048

as of 28-AUG-2024

## DWS RELATIONSHIP INFORMATION

Does S5 or S6 Relationship Exist? YES

### O. Reg 170 DWS that SUPPLY Water to THIS DWS

Supplying DWS #	Supplying DWS Name	Supplying DWS Category	How is Water Supplied?
220003332	Wheatley Water Treatment Plant	LMRS	Continuously

### O. Reg 170 DWS that RECEIVE Water from THIS DWS

Receiving DWS #	Receiving DWS Name	Receiving DWS Category	How is Water Received?
220003332	Wheatley Water Treatment Plant And Distribution Subsystem	LMRS	Intermittently

### DWIS Components

#### ***Distribution System***

DWIS Component Name	GUDI Flag	Seasonal Flag	Treatment Process	Primary Treatment Flag	Secondary Treatment Flag
Distribution:Leamington Distribution System - Wheatley Ds					

#### ***Plumbing***

DWIS Component Name	GUDI Flag	Seasonal Flag	Treatment Process	Primary Treatment Flag	Secondary Treatment Flag
Plumbing:Leamington Distribution System - Wheatley Ds					

Ministry of the Environment, Conservation and Parks - Inspection Summary Rating Record (Reporting Year - 2024-25)

<b>DWS Name:</b>	LEAMINGTON DISTRIBUTION SYSTEM (WHEATLEY DS)
<b>DWS Number:</b>	260087048
<b>DWS Owner:</b>	CHATHAM-KENT PUBLIC UTILITIES COMMISSION
<b>Municipal Location:</b>	CHATHAM-KENT
<b>Regulation:</b>	O.REG. 170/03
<b>DWS Category:</b>	DW Municipal Residential
<b>Type of Inspection:</b>	Detailed
<b>Compliance Assessment Start Date:</b>	Sep-3-2024
<b>Ministry Office:</b>	Windsor Area Office

Maximum Risk Rating: 338

Inspection Module	Non Compliance Risk (X out of Y)
Certification and Training	0/35
Distribution System	0/4
Logbooks	0/26
Operations Manuals	0/42
Reporting & Corrective Actions	0/67
Treatment Processes	0/93
Water Quality Monitoring	0/71
<b>Overall - Calculated</b>	<b>0/338</b>

Inspection Risk Rating: 0.00%

Final Inspection Rating: 100.00%

Ministry of the Environment, Conservation and Parks - Detailed Inspection Rating Record (Reporting Year - 2024-25)

<b>DWS Name:</b>	LEAMINGTON DISTRIBUTION SYSTEM (WHEATLEY DS)
<b>DWS Number:</b>	260087048
<b>DWS Owner Name:</b>	CHATHAM-KENT PUBLIC UTILITIES COMMISSION
<b>Municipal Location:</b>	CHATHAM-KENT
<b>Regulation:</b>	O.REG. 170/03
<b>DWS Category:</b>	DW Municipal Residential
<b>Type of Inspection:</b>	Detailed
<b>Compliance Assessment Start Date:</b>	Sep-3-2024
<b>Ministry Office:</b>	Windsor Area Office

*All legislative requirements were met. No detailed rating scores.*

Maximum Question Rating: 338

Inspection Risk Rating:	0.00%
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<b>FINAL INSPECTION RATING:</b>	<b>100.00%</b>
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