Joint Board of Management Agenda
Aylmer Area Secondary Water Supply System & Port Burwell Area Secondary Water Supply System
December 17, 2025 – 1:00p.m.

Malahide Council Chambers
51221 Ron McNeil Line, Springfield

The Joint Board of Management met at the Springfield & Area Community Services Building, at 51221 Ron McNeil Line, Springfield, at 1:00p.m. The following were present:

(1) Call to Order

_____ is appointed Chair and the meeting is called to order at _____p.m.

(2) Disclosure of Pecuniary Interest

(3) Adoption of Minutes of Previous Meeting(s)

Recommended Motion:

THAT the minutes of the Aylmer Area Secondary Water Supply System Joint Board of Management meeting held on September 17, 2025 be approved as presented**.**

Recommended Motion:

THAT the minutes of the Port Burwell Area Secondary Water Supply System Joint Board of Management meeting held on September 17, 2025 be approved as presented.

(4) Reports

- AASWSS-25-11 - 2025 AASWSS MECP Inspection Report

Recommended Motion:

THAT Report No. AASWSS-25-11 entitled “2025 AASWSS MECP Inspection Report” be received.

- PBASWSS-25-11 - 2025 MECP Inspection Report

Recommended Motion:

THAT Report No. PBASWSS-25-11 entitled “PBASWSS 2025 MECP Inspection Report” be received.

- AASWSS-25-12 OCWA Third Quarter Operations

Recommended Motion:

THAT Report No. AASWSS-25-12 entitled “OCWA Third Quarter Operations” be received.

- PBASWSS-25-12 OCWA Third Quarter Operations Report

Recommended Motion:

THAT Report No. PBASWSS-25-12 entitled “OCWA Third Quarter Operations Report” be received.

(5) Correspondence

1. Elgin Area Primary Water Supply System - Yarmouth Yards Industrial Development (PowerCo et. al.), St. Thomas ONT
2. Town of Aylmer - Support for the “Yarmouth Yards” Industrial Development – St. Thomas, Ontario
3. Township of Malahide - Comments regarding the Elgin Area Primary Water Supply System Master Plan on behalf of Aylmer Area Secondary Water Supply System & Port Burwell Area Secondary Water Supply System

(6) New Business

- 2026 Meeting Dates – March 18, 2026, June 17, 2026, September 16, 2026 and December 16, 2026

Recommended Motion:

BE IT RESOLVED THAT the 2026 meeting dates for the Aylmer Area Secondary Water Supply System Joint Board of Management be scheduled for as March 18, June 17, September 16, and December 16, 2026.

Recommended Motion:

BE IT RESOLVED THAT the 2026 meeting dates for the Port Burwell Secondary Water Supply System Joint Board of Management be scheduled as March 18, June 17, September 16, and December 16, 2026.

(7) Adjournment

Recommended Motion:

THAT the Aylmer Area Secondary Water Supply System Joint Board of Management adjourn at _____ p.m. to meet again on March 18, 2026 at 1:00 p.m.

Recommended Motion:

THAT the Port Burwell Secondary Water Supply System Joint Board of Management adjourn at _____ p.m. to meet again on March 18, 2026 at 1:00 p.m.

Joint Board of Management Minutes
Aylmer Area Secondary Water Supply System &
Port Burwell Area Secondary Water Supply System
September 17, 2025 – 1:00p.m.

Malahide Council Chambers
51221 Ron McNeil Line, Springfield

The Joint Board of Management met at the Springfield & Area Community Services Building, at 51221 Ron McNeil Line, Springfield, at 1:00p.m. The following were present:

Board Members:
Municipality of Central Elgin – Norman Watson
Town of Aylmer – Pete Barbour
Township of Malahide – Chester Glinski

Absent:
Municipality of Bayham - Tim Emerson

Staff:
Township of Malahide – Sam Gustavson, Jason Godby, Adam Boylan, and Allison Adams
Municipality of Bayham – Thomas Thayer and Ed Roloson
Municipality of Central Elgin – Alex Piggott

(1) Call to Order

Pete Barbour is appointed chair and the meeting is called to order at 1:01p.m.

(2) Disclosure of Pecuniary Interest

None.

(3) Adoption of Minutes of Previous Meeting(s)

Moved by: Norman Watson
Seconded by: Chester Glinski

THAT the minutes of the Aylmer Area Secondary Water Supply System Joint Board of Management meeting held on June 18, 2025 be approved as presented**.**

Carried

Moved by: Chester Glinski
Seconded by: Norman Watson

THAT the minutes of the Port Burwell Area Secondary Water Supply System Joint Board of Management meeting held on June 18, 2025 and July 30,2025 be approved as presented.

Carried

(4) Reports

- AASWSS-25-09 First and Second Quarter Operations Report

Moved by: Chester Glinski
Seconded by: Norman Watson

THAT Report No. AASWSS-25-09 entitled “First and Second Quarter 2025 Operations Report” be received.

Carried

- PBASWSS-25-09 First and Second Quarter Operations Report

Moved by: Norman Watson
Seconded by: Chester Glinski

THAT Report No. PBASWSS-25-09 entitled “First and Second Quarter 2025 Operations Report” be received.

Carried

- AASWSS-25-10 Review and Provision of Infrastructure report

Moved by: Norman Watson
Seconded by: Chester Glinski

THAT Report No. AASWSS-25-10 entitled “Aylmer Area Secondary Water Supply System – 2025 Review and Provision of Infrastructure Report” be received.

Carried

- PBASWSS-25-07 Review and Provision of Infrastructure Report

Moved by: Chester Glinski
Seconded by: Norman Watson

THAT Report No. PBASWSS-25-07 entitled “Port Burwell Area Secondary Water Supply System – 2025 Review and Provision of Infrastructure Report” be received.

Carried

- AASWSS-25-08 2026 Draft Budget & Financial Plan

Water/Waste Water Manager Gustavson advised that the report requires an amendment, noting the cost of the Chlorinator System upgrade replacement should be corrected to $40,000 due to an error in price allocation. Member Watson inquired how this would be funded. Director Boylan confirmed the cost difference would be funded through reserves. Members supported the revised cost of this item.

Moved by: Chester Glinski
Seconded by: Norman Watson

THAT Report No. AASWSS-25-08, being the 2026 Draft Budget, be received;

AND THAT the 2026 Budget be approved as presented;

AND THAT the 2026 water rate, in the amount of 1.544 per cubic metre, be approved;

AND THAT the Township’s 2026 to 2031 Water Financial Plan be approved as presented;

AND THAT staff be authorized to carry out the administrative acts necessary to implement the 2026 Draft Budget including the submission of the 2026-2031 Water Financial Plan to the Ministry of Municipal Affairs and Housing for water drinking licence renewal.

Carried

- PBASWSS-25-08 2026 Draft Budget & Financial Plan

Moved by: Norman Watson
Seconded by: Chester Glinski

THAT Report No. PBASWSS-25-08, being the Draft 2026 Budget, be received;

AND THAT the 2026 Budget be approved as presented;

AND THAT the 2026 water rate, in the amount of 3.91 per cubic metre, be approved;

AND THAT the Township’s 2026 to 2031 Water Financial Plan be approved as presented;

AND THAT staff be authorized to carry out the administrative acts necessary to implement the 2026 Draft Budget including the submission of the 2026-2031 Water Financial Plan to the Ministry of Municipal Affairs and Housing for water drinking licence renewal.

Carried

(5) Correspondence

Moved by: Chester Glinski
Seconded by: Norman Watson

That the correspondence items be noted and filed.

1. Municipality of Central Elgin – Letter of Support for - Municipal Housing Infrastructure Program (MHIP) - Health and Safety Water Stream (HSWS) Infrastructure Fund Application - Port Burwell Area Secondary System

Carried

(6) Adjournment

Moved by: Chester Glinski
Seconded by: Norman Watson

THAT the Aylmer Area Secondary Water Supply System Joint Board of Management adjourn at 1:53p.m. to meet again on December 17, 2025 at 1:00p.m.

Carried

Moved by: Chester Glinski
Seconded by: Norman Watson

THAT the Port Burwell Secondary Water Supply System Joint Board of Management adjourn at 1:53p.m. to meet again on December 17, 2025 at 1:00p.m.

Carried

_____
Board Chair – P. Barbour

_____
Clerk – A. Adams

REPORT NO. **AASWSS-25-11**

TO: Aylmer Area Secondary Water Supply System- Joint Board of Management
DEPARTMENT: Public Works
MEETING DATE: December 17, 2025
SUBJECT: **2025 AASWSS MECP INSPECTION REPORT**

RECOMMENDATION:

THAT Report No. AASWSS-25-11 entitled “2025 AASWSS MECP Inspection Report” be received.

PURPOSE & BACKGROUND:

On September 25, 2025, the Ministry of Environment, Conservation and Parks (MECP) conducted the required annual inspection of the Aylmer Area Secondary Water Supply System. This year was an unannounced inspection where notification was received the day before inspection occurred. The primary focus of this inspection is to confirm compliance with applicable legislation, as well as evaluating conformance with Ministry drinking water policies and guidelines during the inspection period.

The inspection process conducted by the Provincial Officer Angela Stroyberg consisted of a variety of elements, including but not limited to:

- Physical inspection of the EMPS was conducted on September 25, 2025.
- Document and records review of Aylmer Area Secondary Water Supply System Joint Board of Management, Drinking Water Works Permit (DWWP), and Municipal Drinking Water License (MDWL)
- Review of operational documents maintained by the owner/operating authority for the period of September 1, 2024 to August 31, 2025 for the Aylmer Area Secondary Water Supply System
- Operational documents/ logbooks and Microbiological and chemical sample test results
- Online Continuous Monitoring Data
- Compliance and operating practices in relation to O. Reg. 170/03, Water Quality Standard O. Reg. 169/03, Ontario Water Resources Act 1990, Safe Drinking Water Act 2002, O. Reg. 128/04 regarding certification of System Operators and Water Quality Analysts, Environmental Protection Act 1990

COMMENTS & ANALYSIS:

The MECP has a rigorous scoring system for municipal water systems in Ontario. The scoring is based on a risk rating methodology. The primary goal of the scoring system is to encourage municipalities across Ontario to improve their systems and to establish a way to measure their improvements based on previous inspection scoring. An average inspection rating would not necessarily indicate the municipality is operating an unsafe drinking water system. However, it identifies that a municipality has room for improvement of the system.

For this inspection period, the Aylmer Area Secondary Water Supply System received a mark of 100%. There were no non-compliances with regulatory requirements identified during this inspection period. This inspection report was positive. As such, the Board (as the "Owner") and the Operating Authority (OCWA) will continue to strive toward continual improvements on how the water system is operated and maintained.

FINANCIAL IMPLICATIONS:

N/A

SUMMARY:

This inspection report was positive. As such, the Owner and Operating Authority will continue to strive toward continual improvements on how the water system is operated and maintained.

ATTACHMENTS:

1. Aylmer Area Secondary Water Supply System- 2025 MECP Inspection Report

Prepared by: S. Gustavson, Water/Waste Water Operations Manager

Reviewed by: J. Godby, Director of Public Works

Approved by: N. Dias, Chief Administrative Officer

Ministry of the Environment, Conservation and Parks

Drinking Water and Environmental Compliance Division

733 Exeter Rd
London ON N6E 1L3

Tel (519) 873-5000
Fax (519) 873-5020

Ministère de l'Environnement, de la Protection de la nature et des Parcs

Division de la conformité en matière d'eau potable et d'environnement

733, rue Exeter
London ON N6E 1L3

Tel (519) 873-5000
Fax (519) 873-5020

Ontario

November 13, 2025

The Corporation of the Township of Malahide
87 John Street
Aylmer, Ontario
N5H 2C3

Attention: **Sam Gustavson**, Water / Wastewater Operations Manager
Regarding: **AASWSS (WW# 260004722)** Final Inspection Report
Physical Inspection was conducted on September 25, 2025

The enclosed Drinking Water Inspection Report outlines non-compliances, if any, with Ministry legislation, and policies for the above noted water system. Violations noted in this report, if any, have been evaluated based on community risk. These violations will be monitored for compliance with the minimum standards for drinking water in Ontario as set forth under the *Safe Drinking Water Act* and the associated regulations. Where risk is deemed to be high and/or compliance is an ongoing concern, violations will be forwarded to this Ministry's Environmental Investigation and Enforcement Branch.

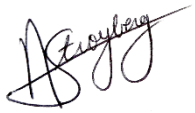
Section 19 of the *Safe Drinking Water Act* (Standard of Care) creates a number of obligations for individuals who exercise decision-making authority over municipal drinking water systems. Please be aware that the Ministry has encouraged such individuals, particularly municipal councillors, to take steps to be better informed about the drinking water systems over which they have decision-making authority. These steps could include asking for a copy of this inspection report and a review of its findings. Further information about Section 19 can be found in "*Taking Care of Your Drinking Water: A guide for members of municipal council*" found under "Drinking Water" on the Drinking Water Ontario website at https://www.ontario.ca/environment-and-energy/taking-care-your-drinking-water-guide-members-municipal-councils

The Inspection summary Rating Record (IRR) provides the Ministry, the system owner, and the local Public Health Units with a summarized quantitative measure of the drinking water system's

annual inspection and regulated water quality testing performance. Attached to the report is the IRR methodology guidance describing how the risk rating model has improved to better reflect the health related and administrative non-compliance found in an inspection report. IRR ratings are published (for the previous inspection year) in the Ministry's Chief Drinking Water Inspector's Annual Report.

Should you have any questions regarding the report, please feel free to contact me at (519) 317-8084.

Sincerely,



Angela Stroyberg
Provincial Officer
Water Compliance Officer
London District Office
Angela.Stroyberg@Ontario.ca

cc. Southwestern Public Health Unit
Catfish Conservation Authority
Kettle Creek Conservation Authority
London District File

Ontario

AYLMER AREA SECONDARY WATER SUPPLY SYSTEM
Physical Address: 87 JOHN ST S, AYLMER, ON N5H 2C3

INSPECTION REPORT

System Number:	260004722
Entity:	AYLMER AREA SECONDARY WATER SUPPLY SYSTEM JOINT BOARD OF MANAGEMENT ONTARIO CLEAN WATER AGENCY
Inspection Start Date:	September 25, 2025
Site Inspection Date:	September 25, 2025
Inspection End Date:	October 29, 2025
Inspected By:	Angela Stroyberg
Badge #:	1695

_____
(signature)

INTRODUCTION

Purpose

This unannounced, focused inspection of the Aylmer Area Secondary Water Supply System (DWS #2600004722) was conducted on September 25, 2025 by Provincial Officer Angela Stroyberg to confirm compliance with Ministry of the Environment, Conservation and Parks' (MECP) legislation and conformance with ministry drinking water policies and guidelines.

Scope

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 and the operation of the system.

The inspection of the drinking water system included both the physical inspection of the component parts of the system listed in section 4 "Systems Components" of the report and the review of data and documents associated with the operation of the drinking water system during the review period.

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.

Facility Contacts and Dates

The Aylmer Area Secondary Water Supply System (AASWSS) is owned by the Aylmer Secondary Water Supply System Joint Board of Management which includes the Town of Aylmer, Municipality of Central Elgin, and the Township of Malahide. The system is managed by the Township of Malahide, which act as the administering municipality on behalf of the Joint Board.
Operational duties and maintenance activities are provided by the Ontario Clean Water Agency (OCWA). The Southwest Hub is responsible for the operations and maintenance of the Aylmer

Secondary Water Distribution System and the Huron Elgin Hub is responsible for the operations and maintenance for the Aylmer Pumping Station which is located in the Elgin Middlesex Pumping Station Building. The Aylmer Pumping Station is monitored and operated from the Elgin Area Primary Water Supply System Facility which is a 24 hour manned facility.
The system serves an estimated population of approximately 800, however this system supplies water to the Central Elgin Distribution System (DWS #260004761), the Malahide Distribution System (DWS# 260004774) and the Town of Aylmer Distribution System DWS (#260002136). These systems are inspected separately on an annual basis. This system is categorized as a Large Municipal Residential System. Documentation reviewed for this inspection covered the time period of September 1, 2024 to August 31, 2025.

Systems/Components

The Aylmer Area Secondary Water Supply System (WW#260004722) only provides secondary disinfection and distribution of water. Primary disinfection is undertaken by another regulated drinking water system which provides treated water to this drinking water system.

Treated water is received from the Elgin Area Primary Water Supply System (EAPWSS) (DWS# 210000871) and Aylmer Area Secondary Water Supply System provides secondary disinfection and pressure boosting for the drinking water system. The Elgin Area Primary Water Supply System (EAPWSS) (DWS #210000871) is inspected separately from this drinking water system. The Aylmer Pumping Station is located within the Elgin Middlesex Pumping Station (EMPS) located at 490 South Edgeware Road.

The following sites were visited as part of the inspection of the drinking water system:

Aylmer Pumping Station
- Two (2) centrifugal pumps each rated at 130 L/s
- Three (3) (2 Duty and 1 Standby) 22.75 kg/d chlorinators (shared assets)
- One (1) free chlorine analyzer
- One (1) flow meter
- One (1) pressure transmitter
- One (1) 600 kW standby diesel generator with one (1) above ground double walled fuel storage tank (shared assets)

Permissions/Approvals

This drinking water system was subject to specific conditions contained within the following permissions and/or approvals (please note this list is not exhaustive) at the time of the inspection in addition to the requirements of the SDWA and its regulations:

1) Drinking Water Works Permit # 302-201- Issue Number 3, dated May 7, 2021.
2) Municipal Drinking Water Licence # 302-101- Issue Number 4, dated May 7, 2021.

NON-COMPLIANCE

This should not be construed as a confirmation of full compliance with all potential applicable legal requirements. These inspection findings are limited to the components and/or activities that were assessed, and the legislative framework(s) that were applied. It remains the responsibility of the owner to ensure compliance with all applicable legislative and regulatory requirements.

If you have any questions related to this inspection, please contact the signed Provincial Officer.

RECOMMENDATIONS

This should not be construed as a confirmation of full conformance with all potential applicable BMPs. These inspection findings are limited to the components and/or activities that were assessed, and the legislative framework(s) that were applied. It remains the responsibility of the owner to ensure compliance with all applicable legislative and regulatory requirements.

If you have any questions related to this inspection, please contact the signed Provincial Officer.

INSPECTION DETAILS

This section includes all questions that were assessed during the inspection.

Ministry Program: DRINKING WATER | **Regulated Activity:** DW Municipal Residential

Question ID	DWMR1018001	**Question Type**	Legislative
Legislative Requirement(s): SDWA | 31 | (1);			
Question: Did the owner ensure that equipment was installed in accordance with Schedule A and Schedule C of the Drinking Water Works Permit?			
Compliance Response(s)/Corrective Action(s)/Observation(s): The owner ensured that equipment was installed as required. Observations made at the time of the inspection indicated that the equipment and components that are described under Schedule A and Schedule C of the Drinking Water Works Permit #302-201 – Issue #3 were installed for the Aylmer Area Secondary Water Supply System.			

Question ID	DWMR1021001	**Question Type**	Legislative
Legislative Requirement(s): SDWA | 31 | (1);			
Question: Were Form 2 documents prepared as required?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Form 2 documents were prepared as required. The Owner/Operating Authority provided one (1) Form 2 Document pertaining to the replacement of two chlorine gas regulators located at the Elgin Middlesex pumping station.			

Question ID	DWMR1024001	**Question Type**	Legislative
Legislative Requirement(s): SDWA | O. Reg. 170/03 | 1-2 | (2);			
Question: Did records confirm that the water treatment equipment which provides chlorination or			

chloramination for secondary disinfection was operated as required?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Records confirmed that the water treatment equipment which provides chlorination or chloramination for secondary disinfection was operated as required.

Question ID	DWMR1033001	Question Type	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 7-2 | (3); SDWA | O. Reg. 170/03 | 7-2 | (4);

Question:
Was secondary disinfectant residual tested as required for the large municipal residential distribution system?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Secondary disinfectant residual was tested as required.

Free chlorine residuals are required to be sampled from the distribution system twice per week and must be taken at least 48 hours after and during the same week as one of the other samples that was collected and tested for free chlorine or at least one sample is taken on each day of the week as per Schedule 7-2 of O. Reg 170/03.

According to documentation, the Owner/Operating Authority collects a minimum of four (4) grab samples and another three (3) at least 48 hours after the first set of samples. In addition to the above legislative requirement, the system also utilizes a process chlorine analyzer located at the Elgin Middlesex Pumping Station (EMPS), downstream of the chlorine injection point to continuously monitor the free chlorine residual within the distribution system. Based on the aforementioned, the Owner/Operating Authority has complied with the legislative requirement.

Question ID	DWMR1099001	Question Type	Information

Legislative Requirement(s):
Not Applicable

Question:
Do records show that water provided by the drinking water system met the Ontario Drinking Water Quality Standards?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Records showed that all water sample results met the Ontario Drinking Water Quality Standards.

Question ID	DWMR1081001	Question Type	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 10-2 | (1); SDWA | O. Reg. 170/03 | 10-2 | (2); SDWA | O. Reg. 170/03 | 10-2 | (3);

Question:
Were distribution microbiological sampling requirements prescribed by Schedule 10-2 of O. Reg. 170/03 for large municipal residential systems met?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Distribution microbiological sampling requirements were met.

Ontario Regulation 170/03, Schedule 10-2 stipulates that distribution water samples are required to be collected and tested for E.coli, Total Coliforms and that at least 25 percent of the samples are tested for general bacterial population expressed as colony counts on a heterotrophic plate count with the prescribed frequency stipulated in Schedule 6-1.1(1) of O. Reg 170/03.

During the inspection period, the Owner/Operating Authority consistently collected weekly microbiological samples from the distribution system. In accordance with regulatory requirements, a minimum of 8 samples per month must be collected based on the population served. A review of sampling records indicated that between 12 and 15 samples were collected each month. Based on the aforementioned, the Owner/Operating Authority is in compliance with the applicable legislative requirements.

Question ID	DWMR1096001	Question Type	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 6-3 | (1);

Question:
Did records confirm that chlorine residual tests were conducted at the same time and location as microbiological samples?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Records confirmed that chlorine residual tests were conducted as required.

Question ID	DWMR1086001	Question Type	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 13-6.1 | (1); SDWA | O. Reg. 170/03 | 13-6.1 | (2); SDWA | O. Reg. 170/03 | 13-6.1 | (3); SDWA | O. Reg. 170/03 | 13-6.1 | (4); SDWA | O. Reg. 170/03 | 13-6.1 | (5); SDWA | O. Reg. 170/03 | 13-6.1 | (6);

Question:
Were haloacetic acid sampling requirements prescribed by Schedule 13-6 of O. Reg. 170/03 met?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Haloacetic acid sampling requirements were met.

Haloacetic Acid (HAA) samples are required to be collected and tested from the distribution system each calendar quarter, in accordance with Schedule 13-6.1 of Ontario Regulation 170/03, and at the prescribed frequency outlined in Schedule 6-1.1(4). Based on the documentation reviewed, the following samples were collected:

Aylmer Area Secondary Water Supply System

Distribution Sample Station 80
1) July 7, 2025 = 6.5 ug/L
2) April 7, 2025 = <5.3 ug/L
3) January 6, 2025 = 6.9 ug/L
4) October 1, 2024 = 7.8 ug/L

EMPS Aylmer Pipeline
1) July 2, 2025 = 6.2 ug/L
2) April 1, 2025 = <5.3 ug/L
3) January 7, 2025 = <5.3 ug/L
4) October 1, 2024 = 8.3 ug/L

RAA = 6.45 ug/L

Based on the aforementioned the Owner/Operating Authority is in compliance with the requirements for collecting Haloacetic Acid (HAA) samples in accordance with Schedule 13-6.1 of Ontario Regulation 170/03.

Question ID	DWMR1087001	Question Type	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 13-6 | (1); SDWA | O. Reg. 170/03 | 13-6 | (2); SDWA | O. Reg.

170/03 | 13-6 | (3); SDWA | O. Reg. 170/03 | 13-6 | (4); SDWA | O. Reg. 170/03 | 13-6 | (5); SDWA | O. Reg. 170/03 | 13-6 | (6);
Question: Were trihalomethane sampling requirements prescribed by Schedule 13-6 of O. Reg. 170/03 met?
Compliance Response(s)/Corrective Action(s)/Observation(s): Trihalomethane sampling requirements were met. Trihalomethane (THM) samples are required to be collected and tested from the distribution system every calendar quarter, in accordance with Schedule 13-6 of Ontario Regulation 170/03, and at the prescribed frequency outlined in Schedule 6-1.1(4). Based on the documentation reviewed, the following samples were collected Aylmer Area Secondary Water Supply System Distribution Sample Station 86 1) July 7, 2025 = 25 ug/L 2) April 7, 2025 = 17 ug/L 3) January 6, 2025 = 17 ug/L 4) October 1, 2024 = 30 ug/L EMPS Aylmer Pipeline 1) July 2, 2025 = 21 ug/L 2) April 1, 2025 = 12 ug/L 3) January 7, 2025 = 15 ug/L 4) October 1, 2024 = 29 ug/L RAA = 20.625 ug/L Based on the aforementioned, the Owner/Operating Authority is in compliance with the requirements for collecting trihalomethane (THM) samples in accordance with Schedule 13-6 of Ontario Regulation 170/03.

Question ID	DWMR1113001	**Question Type**	Legislative
Legislative Requirement(s): SDWA | O. Reg. 170/03 | 10.1 | (3);			
Question: Were changes to the system registration information provided to the ministry within ten (10) days of the change?			

Compliance Response(s)/Corrective Action(s)/Observation(s):
Changes to the system registration information were provided as required.

Question ID	DWMR1114001	Question Type	Legislative

Legislative Requirement(s):
SDWA | 31 | (1);

Question:
Did the owner have evidence that, when required, all legal owners associated with the drinking water system were notified of the requirements of the Municipal Drinking Water Licence and Drinking Water Works Permit?

Compliance Response(s)/Corrective Action(s)/Observation(s):
The owner had evidence that the required notifications were made.

Question ID	DWMR1060001	Question Type	Legislative

Legislative Requirement(s):
SDWA | 31 | (1);

Question:
Did the operations and maintenance manual(s) meet the requirements of the Municipal Drinking Water Licence?

Compliance Response(s)/Corrective Action(s)/Observation(s):
The operations and maintenance manual(s) met the requirements of the Municipal Drinking Water Licence.

Municipal Drinking Water Licence #302-101– Issue #4, Section 16 of Schedule B outline the minimum requirements for the Operations and Maintenance Manuals. Two (2) Operations and Maintenance Manuals were provided for review to the ministry. One was submitted by the OCWA Southwest Hub for the portion of the Secondary System under their operational responsibility, and the other by the OCWA Huron Elgin Hub for the Elgin Middlesex Reservoir and Pumping Station, which includes the Aylmer Booster Station.

A review of the Operations and Maintenance Manuals indicated that they contained the aforementioned requirements as stated in the MDWL including but not limited to; contingency plans, procedures to deal with emergencies, procedures for dealing with complaints associated with the drinking water system and copies of the current permit and licence. The manual also includes other information pertinent to the operations of the drinking water system.

Question ID	DWMR1062001	Question Type	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 7-5;

Question:
Did records or other record keeping mechanisms confirm 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?

Compliance Response(s)/Corrective Action(s)/Observation(s):
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.

Question ID	DWMR1071001	Question Type	BMP

Legislative Requirement(s):
Not Applicable

Question:
Did the owner provide security measures to protect components of the drinking water system?

Compliance Response(s)/Corrective Action(s)/Observation(s):
The owner provided security measures to protect components of the drinking water system.

The Elgin Middlesex Pumping Station is equipped with door alarms and motion detectors which are transmitted through SCADA to the Elgin Area Primary Water Supply which is monitored 24 hours a day by the Ontario Clean Water Agency Huron Elgin Hub. The Elgin Middlesex Pumping Station is also enclosed with security fencing and visited regularly by operators.

Question ID	DWMR1073001	Question Type	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 128/04 | 23 | (1);

Question:
Was an overall responsible operator designated for all subsystems which comprise the drinking water system?

Compliance Response(s)/Corrective Action(s)/Observation(s):
An overall responsible operator was designated for all subsystem.

Ontario Regulation 128/04 S.23(1) states that the owner or operating authority of a municipal residential subsystem shall designate as overall responsible operator of the subsystem an operator who holds a certificate for that type of subsystem and that is of the same class as or higher than the class of that subsystem. (For example, the overall responsible operator of a Class III water treatment subsystem must be an operator who holds a Class III or Class IV water treatment subsystem operator's certificate.)

The Owner/Operating Authority currently employ several certified operators qualified to act as the Overall Responsible Operator (ORO) for the drinking water system to ensure sufficient coverage in the event of an absence.

Question ID	DWMR1074001	**Question Type**	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 128/04 | 25 | (1);

Question:
Were operators-in-charge designated for all subsystems which comprise the drinking water system?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Operators-in-charge were designated for all subsystems.

Ontario Regulation 128/04 S. 25(1) states that the Owner or Operating Authority of a subsystem or a person authorized by the Owner or Operating Authority shall designate one or more operators as operators-in-charge of the subsystem. The Owner/Operating Authority currently employ several certified operators who are designated as Operator-In-Charges for the system.

Question ID	DWMR1075001	**Question Type**	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 128/04 | 22;

Question:
Were all operators certified as required?

Compliance Response(s)/Corrective Action(s)/Observation(s):
All operators were certified as required.

Question ID	DWMR1076001	Question Type	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 1-2 | (2);

Question:
Were adjustments to the treatment equipment only made by certified operators?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Adjustments to the treatment equipment were only made by certified operators.

Ontario

Stakeholder Appendix

Key Reference and Guidance Material for Municipal Residential Drinking Water Systems

Many useful materials are available to help you operate your drinking water system. Below is a list of key materials owners and operators of municipal residential drinking water systems frequently use.

To access these materials online click on their titles below or use your web browser to search for their titles. Contact the Ministry if you need assistance or have questions at 1-866-793-2588 or waterforms@ontario.ca.
For more information on Ontario's drinking water visit www.ontario.ca/page/drinking-water

Click on the publication below to access it

- Drinking Water System Profile Information Form - 012-2149E
- Laboratory Services Notification Form – 012-2148E
- Adverse Test Result Notification Form – 012-4444E
- Taking Care of Your Drinking Water: A Guide for Members of Municipal Councils
- Procedure for Disinfection of Drinking Water in Ontario
- Strategies for Minimizing the Disinfection Products Trihalomethanes and Haloacetic Acids
- Filtration Processes Technical Bulletin
- Ultraviolet Disinfection Technical Bulletin
- Guide for Applying for Drinking Water Works Permit Amendments, & License Amendments
- Certification Guide for Operators and Water Quality Analysts
- Training Requirements for Drinking Water Operator
- Community Sampling and Testing for Lead: Standard and Reduced Sampling and Eligibility for Exemption
- Drinking Water System Contact List – 7128E01
- Ontario's Drinking Water Quality Management Standard - Pocket Guide
- 2020 Watermain Disinfection Procedure
- List of Licensed Laboratories

Inspection Risk Rating and Inspection Risk Methodology

APPLICATION OF THE RISK METHODOLOGY USED FOR MEASURING MUNICIPAL RESIDENTIAL DRINKING WATER SYSTEM INSPECTION RESULTS

The Ministry of the Environment (MOE) has a rigorous and comprehensive inspection program for municipal residential drinking water systems (MRDWS). Its objective is to determine the compliance of MRDWS with requirements under the Safe Drinking Water Act and associated regulations. It is the responsibility of the municipal residential drinking water system owner to ensure their drinking water systems are in compliance with all applicable legal requirements.

This document describes the risk rating methodology, which has been applied to the findings of the Ministry's MRDWS inspection results since fiscal year 2008-09. The primary goals of this assessment are to encourage ongoing improvement of these systems and to establish a way to measure this progress.

MOE reviews the risk rating methodology every three years.

The Ministry's Municipal Residential Drinking Water Inspection Protocol contains 15 inspection modules consisting of approximately 100 regulatory questions. Those protocol questions are also linked to definitive guidance that ministry inspectors use when conducting MRDWS inspections.

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The questions address a wide range of regulatory issues, from administrative procedures to drinking water quality monitoring. The inspection protocol also contains a number of non-regulatory questions.

A team of drinking water specialists in the ministry assessed each of the inspection protocol regulatory questions to determine the risk (not complying with the regulation) to the delivery of safe drinking water. This assessment was based on established provincial risk assessment principles, with each question receiving a risk rating referred to as the Question Risk Rating. Based on the number of areas where a system is deemed to be non-compliant during the inspection, and the significance of these areas to administrative, environmental, and health consequences, a risk-based inspection rating is calculated by the ministry for each drinking water system.

It is important to be aware that an inspection rating less than 100 per cent does not mean the drinking water from the system is unsafe. It shows areas where a system's operation can improve. The ministry works with owners and operators of systems to make sure they know what they need to do to achieve full compliance.

The inspection rating reflects the inspection results of the specific drinking water system for the reporting year. Since the methodology is applied consistently over a period of years, it serves as a comparative measure both provincially and in relation to the individual system. Both the drinking water system and the public are able to track the performance over time, which encourages continuous improvement and allows systems to identify specific areas requiring attention.

The ministry's annual inspection program is an important aspect of our drinking water safety net. The ministry and its partners share a common commitment to excellence and we continue to work toward the goal of 100 per cent regulatory compliance.

Determining Potential to Compromise the Delivery of Safe Water

The risk management approach used for MRDWS is aligned with the Government of Ontario's Risk Management Framework. Risk management is a systematic approach to identifying potential hazards, understanding the likelihood and consequences of the hazards, and taking steps to reduce their risk if necessary and as appropriate.

The Risk Management Framework provides a formula to be used in the determination of risk:

RISK = LIKELIHOOD × CONSEQUENCE
(of the consequence)

Every regulatory question in the inspection protocol possesses a likelihood value (L) for an assigned consequence value (C) as described in **Table 1** and **Table 2**.

TABLE 1:

Likelihood of Consequence Occurring	Likelihood Value
0% - 0.99% (Possible but Highly Unlikely)	L = 0
1 – 10% (Unlikely)	L = 1
11 – 49% (Possible)	L = 2
50 – 89% (Likely)	L = 3
90 – 100% (Almost Certain)	L = 4

TABLE 2:

Consequence	Consequence Value
Medium Administrative Consequence	C = 1
Major Administrative Consequence	C = 2
Minor Environmental Consequence	C = 3
Minor Health Consequence	C = 4
Medium Environmental Consequence	C = 5
Major Environmental Consequence	C = 6
Medium Health Consequence	C = 7
Major Health Consequence	C = 8

The consequence values (0 through 8) are selected to align with other risk-based programs and projects currently under development or in use within the ministry as outlined in **Table 2**.

The Question Risk Rating for each regulatory inspection question is derived from an evaluation of every identified consequence and its corresponding likelihood of occurrence:

- All levels of consequence are evaluated for their potential to occur
- Greatest of all the combinations is selected.

The Question Risk Rating quantifies the risk of non-compliance of each question relative to the others. Questions with higher values are those with a potentially more significant impact on drinking water safety and a higher likelihood of occurrence. The highest possible value would be 32 (4×8) and the lowest would be 0 (0×1).

Table 3 presents a sample question showing the risk rating determination process.

TABLE 3:

Does the Operator in Charge ensure that the equipment and processes are monitored, inspected and evaluated?							
Risk = Likelihood × Consequence							
C=1	C=2	C=3	C=4	C=5	C=6	C=7	C=8
Medium Administrative Consequence	**Major** Administrative Consequence	**Minor** Environmental Consequence	**Minor** Health Consequence	**Medium** Environmental Consequence	**Major** Environmental Consequence	**Medium** Health Consequence	**Major** Health Consequence
L=4 (Almost Certain)	L=1 (Unlikely	L=2 (Possible)	L=3 (Likely)	L=3 (Likely)	L=1 (Unlikely	L=3 (Likely)	L=2 (Possible)
R=4	**R=2**	**R=6**	**R=12**	**R=15**	**R=6**	**R=21**	**R=16**

Application of the Methodology to Inspection Results

Based on the results of a MRDWS inspection, an overall inspection risk rating is calculated. During an inspection, inspectors answer the questions related to regulatory compliance and input their "yes", "no" or "not applicable" responses into the Ministry's Laboratory and Waterworks Inspection System (LWIS) database. A "no" response indicates non-compliance. The maximum number of regulatory questions asked by an inspector varies by: system (i.e., distribution, stand-alone); type of inspection (i.e., focused, detailed); and source type (i.e., groundwater, surface water).

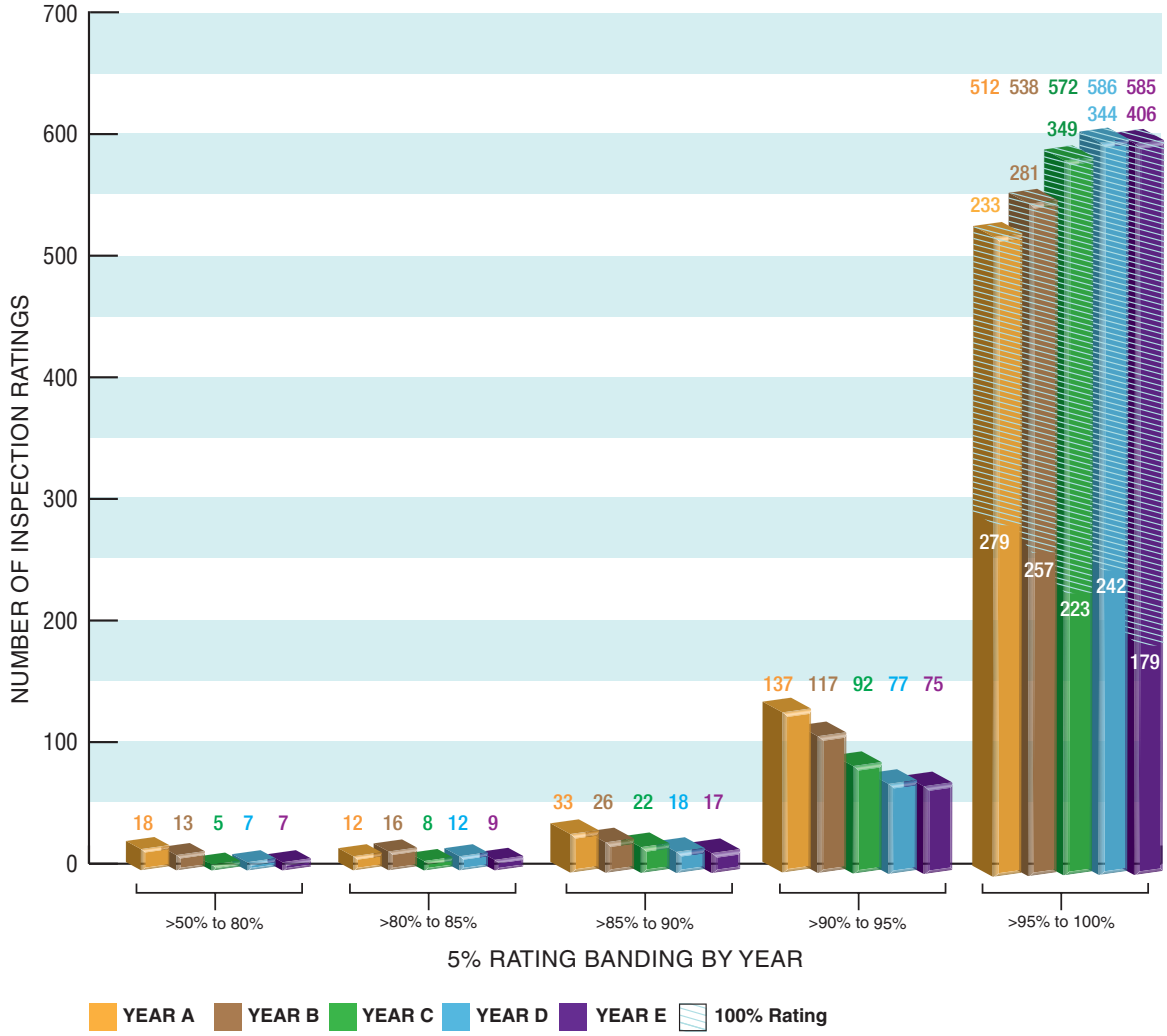
The risk ratings of all non-compliant answers are summed and divided by the sum of the risk ratings of all questions asked (maximum question rating). The resulting inspection risk rating (as a percentage) is subtracted from 100 per cent to arrive at the final inspection rating.

Application of the Methodology for Public Reporting

The individual MRDWS Total Inspection Ratings are published with the ministry's Chief Drinking Water Inspector's Annual Report.

Figure 1 presents the distribution of MRDWS ratings for a sample of annual inspections. Individual drinking water systems can compare against all the other inspected facilities over a period of inspection years.

Figure 1: Year Over Year Distribution of MRDWS Ratings



Reporting Results to MRDWS Owners/Operators

A summary of inspection findings for each system is generated in the form of an Inspection Rating Record (IRR). The findings are grouped into the 15 possible modules of the inspection protocol, which would provide the system owner/operator with information on the areas where they need to improve. The 15 modules are:

1. Source
2. Permit to Take Water
3. Capacity Assessment
4. Treatment Processes
5. Treatment Process Monitoring
6. Process Wastewater
7. Distribution System
8. Operations Manuals
9. Logbooks
10. Contingency and Emergency Planning
11. Consumer Relations
12. Certification and Training
13. Water Quality Monitoring
14. Reporting, Notification and Corrective Actions
15. Other Inspection Findings

For further information, please visit **www.ontario.ca/drinkingwater**

Ministry of the Environment, Conservation and Parks - Inspection Summary Rating Record (Reporting Year - 2025-26)

DWS Name:	AYLMER AREA SECONDARY WATER SUPPLY SYSTEM
DWS Number:	260004722
DWS Owner:	AYLMER AREA SECONDARY WATER SUPPLY SYSTEM JOINT BOARD OF MANAGEMENT
Municipal Location:	AYLMER
Regulation:	O.REG. 170/03
DWS Category:	DW Municipal Residential
Type of Inspection:	Focused
Compliance Assessment Start Date:	Sep-25-2025
Ministry Office:	London District Office

Maximum Risk Rating: 189

Inspection Module	Non Compliance Risk (X out of Y)
Certification and Training	0/42
Logbooks	0/14
Operations Manuals	0/14
Reporting & Corrective Actions	0/8
Treatment Processes	0/60
Water Quality Monitoring	0/51
Overall - Calculated	**0/189**

Inspection Risk Rating:	**0.00%**

Final Inspection Rating:	**100.00%**

Ministry of the Environment, Conservation and Parks - Detailed Inspection Rating Record (Reporting Year - 2025-26)

DWS Name:	AYLMER AREA SECONDARY WATER SUPPLY SYSTEM
DWS Number:	260004722
DWS Owner Name:	AYLMER AREA SECONDARY WATER SUPPLY SYSTEM JOINT BOARD OF MANAGEMENT
Municipal Location:	AYLMER
Regulation:	O.REG. 170/03
DWS Category:	DW Municipal Residential
Type of Inspection:	Focused
Compliance Assessment Start Date:	Sep-25-2025
Ministry Office:	London District Office

All legislative requirements were met. No detailed rating scores.

Maximum Question Rating: 189

Inspection Risk Rating:	**0.00%**

FINAL INSPECTION RATING:	**100.00%**

REPORT NO. **PBASWSS-25-11**

TO: Port Burwell Area Secondary Water Supply System- Joint Board of Management
DEPARTMENT: Public Works
MEETING DATE: December 17, 2025
SUBJECT: **PBASWSS 2025 MECP INSPECTION REPORT**

RECOMMENDATION:

THAT Report No. PBASWSS-25-11 entitled “PBASWSS 2025 MECP Inspection Report” be received.

PURPOSE & BACKGROUND:

On September 10, 2025, the Ministry of Environment, Conservation and Parks (MECP) conducted the required annual inspection of the Port Burwell Area Secondary Water Supply System. The primary focus of this inspection is to confirm compliance with applicable legislation, as well as evaluating conformance with ministry drinking water policies and guidelines during the inspection period.

The inspection process conducted by the Provincial Officer Jim Miller consisted of a variety of elements, including but not limited to:

- Unannounced physical inspection of the Port Burwell Area Secondary Water Supply System on Sept. 10, 2025.
- Document and records review of Port Burwell Area Secondary Water Supply System Joint Board of Management, Drinking Water Works Permit (DWWP), and Municipal Drinking Water License (MDWL).
- Review of operational documents maintained by the owner/operating authority for the period of July 1, 2024, through August 31, 2025, for the Port Burwell Area Secondary Water Supply System
- Operational documents/ logbooks and Microbiological and chemical sample test results
- Online Continuous Monitoring Data
- Compliance and operating practices in relation to O. Reg. 170/03, Water Quality Standard O. Reg. 169/03, Safe Drinking Water Act 2002, Ontario Water Resources Act 1990, O. Reg. 128/04 regarding certification of System Operators and Water Quality Analysts.

COMMENTS & ANALYSIS:

The MECP has a rigorous scoring system for municipal water systems in Ontario. The scoring is based on a risk rating methodology. The primary goal of the scoring system is to encourage municipalities across Ontario to improve their systems and to establish a way to measure their improvements based on previous inspection scoring. An average inspection rating would not necessarily indicate the municipality is operating an unsafe drinking water system. However, it identifies that a municipality has room for improvement of the system.

For this inspection period, the Port Burwell Area Secondary Water Supply System received a mark of 100%. There were no non-compliances with regulatory requirements identified during this inspection period. This inspection report was positive. As such, the Board (as the "Owner") and the Operating Authority (OCWA) will continue to strive toward continual improvements on how the water system is operated and maintained.

SUMMARY:

This inspection report was positive. As such, the Owner and Operating Authority will continue to strive toward continual improvements on how the water system is operated and maintained.

ATTACHMENTS:

1. Port Burwell Area Secondary Water Supply System- 2025 MECP Inspection Report

Prepared by: S. Gustavson, Water/Waste Water Operations Manager

Reviewed by: J. Godby, Director of Public Works

Approved by: N. Dias, Chief Administrative Officer

Ministry of the Environment, Conservation and Parks

Drinking Water and Environmental Compliance Division

733 Exeter Rd
London ON N6E 1L3
Tel (519) 873-5000
Fax (519) 873-5020

Ministère de l'Environnement, de la Protection de la nature et des Parcs

Division de la conformité en matière d'eau potable et d'environnement

733, rue Exeter
London ON N6E 1L3
Tel (519) 873-5000
Fax (519) 873-5020

File No. EL-MA-DX-540 WW# 260004735

October 23, 2025

The Corporation of the Township of Malahide
87 John Street South
Aylmer, Ontario N5H 2C3

Attention: Nathan Dias (Chief Administrative Officer)

Re: Port Burwell Area Secondary Water Supply System (Water Works #260004735)
Inspection conducted on September 10, 2025

The enclosed Drinking Water Inspection Report outlines non-compliance, if any, with Ministry legislation, and policies for the above noted water system. Violations noted in this report, if any, have been evaluated based on community risk. These violations will be monitored for compliance with the minimum standards for drinking water in Ontario as set forth under the *Safe Drinking Water Act* and associated regulations. Where risk is deemed to be high and/or compliance is an ongoing concern, violations will be forwarded to this Ministry's Investigation and Enforcement Branch.

Section 19 of the Safe Drinking Water Act (Standard of Care) creates a number of obligations for individuals who exercise decision-making authority over municipal drinking water systems. Please be aware that the Ministry has encouraged such individuals, particularly municipal councillors, to take steps to be better informed about the drinking water systems over which they have decision-making authority. These steps could include asking for a copy of this inspection report and a review of its findings. Further information about Section 19 can be found in *"Taking Care of Your Drinking Water: A guide for members of municipal council"* found under "Resources" on the Drinking Water Ontario website at: https://www.ontario.ca/environment-and-energy/taking-care-your-drinking-water-guide-members-municipal-councils

The IRR is a summarized quantitative measure of the drinking water system's annual inspection and is published in the Ministry's Chief Drinking Water Inspector's Annual Report. The Risk Methodology document describes the risk rating methodology which has been applied to the findings of the Ministry's municipal residential drinking water system inspection results.

If you have any questions or concerns regarding the rating, please contact Mark Smith, Water Compliance Supervisor, at mark.smith@ontario.ca or (519) 317-8116.

Yours truly,

Jim Miller
Provincial Officer
London District Office
jim.w.miller@ontario.ca

cc. Mr. Sam Sianas OCWA
Mr. Matthew Belding OCWA
Mr. Sam Gustavson, Malahide
Southwestern Public Health
Catfish Creek Conservation Authority
London District File

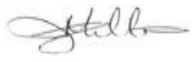
Ministry of the Environment, Conservation and Parks
Ministère de l'Environnement, de la Protection de la nature et des Parcs
Ontario

Ontario

PORT BURWELL AREA SECONDARY WATER SUPPLY SYSTEM
Physical Address: , , ,

INSPECTION REPORT

System Number:	260004735
Entity:	ONTARIO CLEAN WATER AGENCY PORT BURWELL AREA SECONDARY WATER SUPPLY SYSTEM JOINT BOARD OF MANAGEMENT
Inspection Start Date:	September 10, 2025
Site Inspection Date:	September 10, 2025
Inspection End Date:	October 03, 2025
Inspected By:	Jim Miller
Badge #:	1102



_____
(signature)

INTRODUCTION

Purpose

This unannounced focused inspection was conducted to confirm compliance with Ministry of the Environment, Conservation and Parks' (MECP) legislation and conformance with ministry drinking water policies and guidelines.

Scope

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 and the operation of the system.

The inspection of the drinking water system included both the physical inspection of the component parts of the system listed in section 4 "Systems Components" of the report and the review of data and documents associated with the operation of the drinking water system during the review period.

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.

Facility Contacts and Dates

The drinking water system is owned by the Port Burwell Area Secondary Water Supply Joint Board of Management and operated by the Ontario Clean Water Agency (OCWA).

The Port Burwell Area Secondary Water Supply System receives treated water from the Elgin Area Water Treatment Plant.

The Port Burwell Area Secondary Water Supply System supplies water to the Bayham Distribution System, Central Elgin Distribution System, and the Malahide Distribution System.

Provincial Officer Jim Miller conducted an unannounced physical inspection of the Port Burwell Area Secondary Water Supply System, Drinking Water System Works # 260004735 on September 10, 2025.

Additional operational documents maintained by the owner/operating authority for the period from July 1, 2024 through August 31, 2025 were also reviewed in conjunction with the compliance evaluation.

Systems/Components

All locations associated with secondary disinfection were visited as part of this inspection of the drinking water system re-chlorination facilities located within the distribution system:

1/ Dexter Re-chlorination Facility

2/ Lakeview Re-chlorination Facility

3/ Port Burwell Tower and Re-chlorination Facility

Permissions/Approvals

This drinking water system was subject to specific conditions contained within the following permissions and/or approvals (please note this list is not exhaustive) at the time of the inspection in addition to the requirements of the SDWA and its regulations:

1. Ministry of the Environment Port Burwell Area Secondary Water Supply System Joint Board of Management, Drinking Water Works Permit (DWWP) Number 303-201, Issue Number 4.

2. Ministry of the Environment Port Burwell Area Secondary Water Supply System Joint Board of Management, Municipal Drinking Water Licence (MDWL) Number 303-101, Issue Number 3.

NON-COMPLIANCE

This should not be construed as a confirmation of full compliance with all potential applicable legal requirements. These inspection findings are limited to the components and/or activities that were assessed, and the legislative framework(s) that were applied. It remains the responsibility of the owner to ensure compliance with all applicable legislative and regulatory requirements.

If you have any questions related to this inspection, please contact the signed Provincial Officer.

RECOMMENDATIONS

This should not be construed as a confirmation of full conformance with all potential applicable BMPs. These inspection findings are limited to the components and/or activities that were assessed, and the legislative framework(s) that were applied. It remains the responsibility of the owner to ensure compliance with all applicable legislative and regulatory requirements.

If you have any questions related to this inspection, please contact the signed Provincial Officer.

INSPECTION DETAILS

This section includes all questions that were assessed during the inspection.

Ministry Program: DRINKING WATER | **Regulated Activity:** DW Municipal Residential

Question ID	DWMR1018001	**Question Type**	Legislative

Legislative Requirement(s):
SDWA | 31 | (1);

Question:
Did the owner ensure that equipment was installed in accordance with Schedule A and Schedule C of the Drinking Water Works Permit?

Compliance Response(s)/Corrective Action(s)/Observation(s):
The owner ensured that equipment was installed as required.

During the onsite inspection, the equipment located at the Re- Chlorination Facilities were reviewed against the description in the DWWP, Number 303-201, Issue Number 4;
The equipment at the Dexter Re-Chlorination Facility, Port Burwell Tower Re- chlorination Facility and the Lakeview Road Re-Chlorination Facility was observed to be comparatively consistent with the descriptions in the DWWP issued April 16, 2021.

Question ID	DWMR1021001	**Question Type**	Legislative

Legislative Requirement(s):
SDWA | 31 | (1);

Question:
Were Form 2 documents prepared as required?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Form 2 documents were prepared as required.

Question ID	DWMR1025001	**Question Type**	Legislative

Legislative Requirement(s):
SDWA | 31 | (1);

Question:
Were all parts of the drinking water system that came in contact with drinking water disinfected in accordance with a procedure listed in Schedule B of the Drinking Water Works Permit?

Compliance Response(s)/Corrective Action(s)/Observation(s):
All parts of the drinking water system were disinfected as required.

The Owner and Operating Authority indicated that they follow AWWA procedures for the disinfection of water system components.

Drinking Water Works Permit # Number 303-201, Issue Number 4 Section 2.3 of Schedule B stipulates that all parts of the drinking water system in contact with drinking water which are added, modified, replaced, extended; or taken out of service for inspection, repair or other activities that may lead to contamination, shall be disinfected before being put into service in accordance with a procedure approved by the Director or in accordance with the applicable provisions of the following documents:

a) Until April 18, 2021, the ministry's Watermain Disinfection Procedure, dated November 2015. As of April 19, 2021, the ministry's Watermain Disinfection Procedure, dated August 1, 2020;
b) Subject to condition 2.3.2, any updated version of the ministry's Watermain Disinfection Procedure;
c) AWWA C652 – Standard for Disinfection of Water-Storage Facilities;
d) AWWA C653 – Standard for Disinfection of Water Treatment Plants; and
e) AWWA C654 – Standard for Disinfection of Wells.

Question ID	DWMR1024001	**Question Type**	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 1-2 | (2);

Question:
Did records confirm that the water treatment equipment which provides chlorination or chloramination for secondary disinfection was operated as required?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Records confirmed that the water treatment equipment which provides chlorination or chloramination for secondary disinfection was operated as required.

At the time of inspection, all equipment including online continuous analyzers; data loggers; duty and stand-by metering pumps were operational and connected to the system.

Documentation reviewed for the inspection period, indicate that the free chlorine residual for the distribution system was within acceptable limits during the course of this inspection period.

Question ID	DWMR1033001	**Question Type**	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 7-2 | (3); SDWA | O. Reg. 170/03 | 7-2 | (4);

Question:
Was secondary disinfectant residual tested as required for the large municipal residential distribution system?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Secondary disinfectant residual was tested as required.

All distribution free available chlorine (FAC) residual measurements provided by the Owner/Operating Authority, during the inspection review were appropriately documented including the time, date, FAC residual and the person who analyzed the sample. The operator typically sampled seven (7) times each week from multiple locations in the distribution system on a 4 and 3 rotation with minimum 48 hours apart each week.

Question ID	DWMR1099001	Question Type	Information

Legislative Requirement(s):
Not Applicable

Question:
Do records show that water provided by the drinking water system met the Ontario Drinking Water Quality Standards?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Records showed that all water sample results met the Ontario Drinking Water Quality Standards.

Question ID	DWMR1081001	Question Type	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 10-2 | (1); SDWA | O. Reg. 170/03 | 10-2 | (2); SDWA | O. Reg. 170/03 | 10-2 | (3);

Question:
Were distribution microbiological sampling requirements prescribed by Schedule 10-2 of O. Reg. 170/03 for large municipal residential systems met?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Distribution microbiological sampling requirements were met.

A review of the statement of analytical results for the inspection period confirmed that a minimum of three (3) distribution samples were taken each week and analyzed for E. coli, total coliform and HPC.

In accordance with O. Reg. 170/03, Schedule 10-2, and based on the population served of less than 1000 persons, the Owner/Operating Authority is required to take a minimum of eight (8) distribution system samples each month, ensuring that at least one sample is taken in each week of the month. Each of the distribution samples are to be analyzed for E. coli, total coliform and 25% of the samples must be analyzed for background colony counts based on a heterotrophic plate count (HPC).

Question ID	DWMR1096001	Question Type	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 6-3 | (1);

Question:
Did records confirm that chlorine residual tests were conducted at the same time and location as microbiological samples?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Records confirmed that chlorine residual tests were conducted as required.

During the documentation review, records reviewed verify that chlorine residuals are being collected at the same time and location as microbiological samples from the water distribution system.

The Owner/Operator has fulfilled the requirements prescribed by O. Reg. 170/03 6-3(1) which requires a water sample be taken and tested for a microbiological parameter, the owner of the drinking water system and the operating authority for the system shall ensure that another sample is taken at the same time from the same location and is tested immediately for,
(a) free chlorine residual, if the system provides chlorination and does not provide chloramination; or
(b) combined chlorine residual, if the system provides chloramination.

Question ID	DWMR1086001	Question Type	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 13-6.1 | (1); SDWA | O. Reg. 170/03 | 13-6.1 | (2); SDWA | O. Reg. 170/03 | 13-6.1 | (3); SDWA | O. Reg. 170/03 | 13-6.1 | (4); SDWA | O. Reg. 170/03 | 13-6.1 | (5); SDWA | O. Reg. 170/03 | 13-6.1 | (6);

Question:
Were haloacetic acid sampling requirements prescribed by Schedule 13-6 of O. Reg. 170/03 met?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Haloacetic acid sampling requirements were met.

In accordance with Ontario Regulation 170/03 Schedule 13-6.1, the owner and operating authority shall ensure that at least one distribution water sample that is likely to have an elevated potential for the formation of Haloacetic acids (HAAs) is collected and tested for Haloacetic acids each calendar quarter.

Haloacetic Acid monitoring was completed on the following dates during the inspection period: July 7, 2025 (27.5 ug/L) April 8, 2025 (16.6 ug/L) January 6, 2025 (18.6 ug/L) October 1, 2024 (11.4 ug/L) July 2, 2024 (21.8 ug/L) and April 2, 2024 (9.2 ug/L).

The samples were collected at the sample Lakeview Re-chlorination Station.
O. Reg. 169/03 standard (80 ug/L) and the O. Reg. 170/03 reporting requirements for HAAs

came into effect on January 1, 2020, Owners/Operating authorities must perform the following calculations to determine compliance with the standard.
As per O. Reg 170/03 Schedule13-6.1 (3)
"(3) For the purposes of Schedule 2 to the Ontario Drinking Water Quality Standards, the running annual average of quarterly results with respect to haloacetic acids shall be calculated for each calendar quarter by using the following formula:
[A + B + C + D] ÷ 4
in which,
"A" is the average of all the results from the samples tested under subsection (2) in that calendar quarter,
"B" is the average of all the results from the samples tested under subsection (2) in the most recent calendar quarter preceding the calendar quarter referred to in "A" in which testing was carried out,
"C" is the average of all the results from the samples tested under subsection (2) in the most recent calendar quarter preceding the calendar quarter referred to in "B" in which testing was carried out, and
"D" is the average of all the results from the samples tested under subsection (2) in the most recent calendar quarter preceding the calendar quarter referred to in "C" in which testing was carried out."
A running annual average for each quarter must be calculated and recorded to ensure compliance has been met after each quarter.
All sample results for this inspection period show that the distribution water is within acceptable limits for Haloacetic acids as listed in Ontario Regulation 169/03.

Question ID	DWMR1087001	**Question Type**	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 13-6 | (1); SDWA | O. Reg. 170/03 | 13-6 | (2); SDWA | O. Reg. 170/03 | 13-6 | (3); SDWA | O. Reg. 170/03 | 13-6 | (4); SDWA | O. Reg. 170/03 | 13-6 | (5); SDWA | O. Reg. 170/03 | 13-6 | (6);

Question:
Were trihalomethane sampling requirements prescribed by Schedule 13-6 of O. Reg. 170/03 met?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Trihalomethane sampling requirements were met.

In accordance with Ontario Regulation 170/03 Schedule 13-6, the owner and operating authority shall ensure that at least one distribution water sample that is likely to have an elevated potential for the formation of Trihalomethanes is collected and tested for Trihalomethanes each calendar quarter.

Trihalomethane monitoring was completed on the following dates during the inspection period: July 7, 2025 (29.0 ug/L) April 8, 2025 (25.0 ug/L) January 6, 2025 (34.0 ug/L) October 1, 2024 (47.0 ug/L) July 2, 2024 (32.0 ug/L) and April 2, 2024 (28.0 ug/L).

The samples were collected at station #94.

All sample results for this inspection period show that the distribution water is within acceptable limits for Trihalomethanes as listed in Ontario Regulation 169/03.

Question ID	DWMR1060001	Question Type	Legislative

Legislative Requirement(s):
SDWA | 31 | (1);

Question:
Did the operations and maintenance manual(s) meet the requirements of the Municipal Drinking Water Licence?

Compliance Response(s)/Corrective Action(s)/Observation(s):
The operations and maintenance manual(s) met the requirements of the Municipal Drinking Water Licence.

The Operations Manual contains the following sections: Overview, System Description, Flow Chart of the Port Burwell Secondary Distribution System, Sample Locations, Chamber Locations. The Appendix Section contains the following:
Municipal Drinking Water Licence, Drinking Water Works Permit, Standard Operating Procedures, SCADA Manual, Manufacturer Equipment Manuals, MECP Watermain Disinfection, AWWA Standards, and Review and Revision History. Version Rev. 4, April 11, 2025.

Question ID	DWMR1062001	Question Type	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 7-5;

Question:
Did records or other record keeping mechanisms confirm 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?

Compliance Response(s)/Corrective Action(s)/Observation(s):
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.

All log records regarding O. Reg. 170/03 7-5 reviewed during the inspection period, identified the names of all operators of the facility and their respective signatures and/or initials. It should be noted that any entries in the log must be identified by the person making the entry in the logs. An example of this is if multiple operators make entries in the log. If this occurs, those persons must clearly identify who made the entry (i.e. by signature or initial).

A cursory review of Chain of Custody forms and log records related to regulated water samples indicate that the appropriate information is being recorded by operators.

Question ID	DWMR1071001	Question Type	BMP

Legislative Requirement(s):
Not Applicable

Question:
Did the owner provide security measures to protect components of the drinking water system?

Compliance Response(s)/Corrective Action(s)/Observation(s):
The owner provided security measures to protect components of the drinking water system.

At the time of inspection, the PBASWSS facilities were securely locked. Operators typically visit the remote facilities multiple times during the week in order to ensure that the system integrity has not been compromised.

The Owner shall continue to ensure that all chemical storage tanks, tower/reservoir ventilation systems and overflows at the PBASWSS have protective, vermin proof screens installed on all ventilation and overflow accesses. To reduce and prevent the entry of insects, rodents and windblown contaminates.

Question ID	DWMR1073001	Question Type	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 128/04 | 23 | (1);

Question:
Was an overall responsible operator designated for all subsystems which comprise the drinking water system?

Compliance Response(s)/Corrective Action(s)/Observation(s):
An overall responsible operator was designated for all subsystem.

At the time of inspection, the Overall Responsible Operator (ORO) designated for the PBASWSS Transmission Main was identified and possesses certification equal to or greater than the classification levels of the system (Water Distribution and Supply Sub-System 2).

Question ID	DWMR1074001	Question Type	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 128/04 | 25 | (1);

Question:
Were operators-in-charge designated for all subsystems which comprise the drinking water system?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Operators-in-charge were designated for all subsystems.

During the inspection period, it was found that the Operators responsible for the operations of the PBASWSS recorded the names of the operator-in-charge (OIC) in the facility log records.

The Owner must ensure that one or more operators are designated as operator-in-charge (OIC) for each day that the facility is in operation. An OIC can be any operator with an applicable certificate to the type of operated subsystem.

An operator-in-training (OIT) cannot be designated as an OIC; any log entries made by the OIT must be approved by the OIC and clearly documented in the log at the time of entry.

In accordance with O. Reg. 128/04 s. 25 (1) The owner or operating authority of a subsystem or a person authorized by the owner or operating authority shall designate one or more operators as operators-in-charge of the subsystem. O. Reg. 128/04, s. 25 (1).

The Owner/Operator must be aware that the Safe Drinking Water Act (SDWA) Section 11(1)5 requires the owner and/or the operating authority to ensure that the personnel at the drinking-water system are under the supervision of persons having the prescribed qualifications.
The Owner/Operator should reference Ministry web site at the following link:

https://www.ontario.ca/page/certification-guide-operators-and-water-quality-analysts

"Certification Guide for Operators and Water Quality Analysts of Drinking Water Systems" section 5.1 "Certification of Operators" identifies functions that must be performed by a certified operator. The Certification Guide identifies that certain duties must be performed by a certified operator, or at least have a certified operator (or P. Eng. Designated as OIC) physically present and monitoring the work being performed. It also identifies duties that can be undertaken by uncertified personnel without the direct physical supervision of the person with prescribed qualifications.

It is recommended that the guide be provided to the system operational staff for informational purposes to heighten operator's awareness to help them fully understand their legal responsibilities and certification compliance requirements.

Question ID	DWMR1075001	**Question Type**	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 128/04 | 22;

Question:
Were all operators certified as required?

Compliance Response(s)/Corrective Action(s)/Observation(s):
All operators were certified as required.

A review of the operational staff certificates at the PBASWSS indicates that during the inspection period, all operators of the drinking water system/subsystems had adequate certification.

Question ID	DWMR1076001	Question Type	Legislative

Legislative Requirement(s):
SDWA | O. Reg. 170/03 | 1-2 | (2);

Question:
Were adjustments to the treatment equipment only made by certified operators?

Compliance Response(s)/Corrective Action(s)/Observation(s):
Adjustments to the treatment equipment were only made by certified operators.

Documentation provided at the time of inspection (logbooks and other record keeping mechanisms) indicated that only certified operational staff made adjustments to treatment processes.

Stakeholder References

Key Reference and Guidance Material for Municipal Residential Drinking Water Systems

Many useful materials are available to help you operate your drinking water system. Below is a list of key materials owners and operators of municipal residential drinking water systems frequently use.

To access these materials online click on their titles below or use your web browser to search for their titles. Contact the Ministry if you need assistance or have questions at 1-866-793-2588 or waterforms@ontario.ca.
For more information on Ontario's drinking water visit www.ontario.ca/page/drinking-water

Click on the publication below to access it

- Drinking Water System Profile Information Form - 012-2149E
- Laboratory Services Notification Form – 012-2148E
- Adverse Test Result Notification Form – 012-4444E
- Taking Care of Your Drinking Water: A Guide for Members of Municipal Councils
- Procedure for Disinfection of Drinking Water in Ontario
- Strategies for Minimizing the Disinfection Products Trihalomethanes and Haloacetic Acids
- Filtration Processes Technical Bulletin
- Ultraviolet Disinfection Technical Bulletin
- Guide for Applying for Drinking Water Works Permit Amendments, & License Amendments
- Certification Guide for Operators and Water Quality Analysts
- Training Requirements for Drinking Water Operator
- Community Sampling and Testing for Lead: Standard and Reduced Sampling and Eligibility for Exemption
- Drinking Water System Contact List – 7128E01
- Ontario's Drinking Water Quality Management Standard - Pocket Guide
- 2020 Watermain Disinfection Procedure
- List of Licensed Laboratories

Inspection Rating Record and Inspection Risk Methodology

APPLICATION OF THE RISK METHODOLOGY USED FOR MEASURING MUNICIPAL RESIDENTIAL DRINKING WATER SYSTEM INSPECTION RESULTS

The Ministry of the Environment (MOE) has a rigorous and comprehensive inspection program for municipal residential drinking water systems (MRDWS). Its objective is to determine the compliance of MRDWS with requirements under the Safe Drinking Water Act and associated regulations. It is the responsibility of the municipal residential drinking water system owner to ensure their drinking water systems are in compliance with all applicable legal requirements.

This document describes the risk rating methodology, which has been applied to the findings of the Ministry's MRDWS inspection results since fiscal year 2008-09. The primary goals of this assessment are to encourage ongoing improvement of these systems and to establish a way to measure this progress.

MOE reviews the risk rating methodology every three years.

The Ministry's Municipal Residential Drinking Water Inspection Protocol contains up to 14 inspection modules and consists of approximately 120 regulatory questions. Those protocol questions are also linked to definitive guidance that ministry inspectors use when conducting MRDWS inspections.

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Ontario

The questions address a wide range of regulatory issues, from administrative procedures to drinking water quality monitoring. The inspection protocol also contains a number of non-regulatory questions.

A team of drinking water specialists in the ministry assessed each of the inspection protocol regulatory questions to determine the risk (not complying with the regulation) to the delivery of safe drinking water. This assessment was based on established provincial risk assessment principles, with each question receiving a risk rating referred to as the Question Risk Rating. Based on the number of areas where a system is deemed to be non-compliant during the inspection, and the significance of these areas to administrative, environmental, and health consequences, a risk-based inspection rating is calculated by the ministry for each drinking water system.

It is important to be aware that an inspection rating less than 100 per cent does not mean the drinking water from the system is unsafe. It shows areas where a system's operation can improve. The ministry works with owners and operators of systems to make sure they know what they need to do to achieve full compliance.

The inspection rating reflects the inspection results of the specific drinking water system for the reporting year. Since the methodology is applied consistently over a period of years, it serves as a comparative measure both provincially and in relation to the individual system. Both the drinking water system and the public are able to track the performance over time, which encourages continuous improvement and allows systems to identify specific areas requiring attention.

The ministry's annual inspection program is an important aspect of our drinking water safety net. The ministry and its partners share a common commitment to excellence and we continue to work toward the goal of 100 per cent regulatory compliance.

Determining Potential to Compromise the Delivery of Safe Water

The risk management approach used for MRDWS is aligned with the Government of Ontario's Risk Management Framework. Risk management is a systematic approach to identifying potential hazards, understanding the likelihood and consequences of the hazards, and taking steps to reduce their risk if necessary and as appropriate.

The Risk Management Framework provides a formula to be used in the determination of risk:

RISK = LIKELIHOOD × CONSEQUENCE
(of the consequence)

Every regulatory question in the inspection protocol possesses a likelihood value (L) for an assigned consequence value (C) as described in **Table 1** and **Table 2**.

TABLE 1:

Likelihood of Consequence Occurring	Likelihood Value
0% - 0.99% (Possible but Highly Unlikely)	L = 0
1 – 10% (Unlikely)	L = 1
11 – 49% (Possible)	L = 2
50 – 89% (Likely)	L = 3
90 – 100% (Almost Certain)	L = 4

TABLE 2:

Consequence	Consequence Value
Medium Administrative Consequence	C = 1
Major Administrative Consequence	C = 2
Minor Environmental Consequence	C = 3
Minor Health Consequence	C = 4
Medium Environmental Consequence	C = 5
Major Environmental Consequence	C = 6
Medium Health Consequence	C = 7
Major Health Consequence	C = 8

The consequence values (0 through 8) are selected to align with other risk-based programs and projects currently under development or in use within the ministry as outlined in **Table 2**.

The Question Risk Rating for each regulatory inspection question is derived from an evaluation of every identified consequence and its corresponding likelihood of occurrence:

- All levels of consequence are evaluated for their potential to occur
- Greatest of all the combinations is selected.

The Question Risk Rating quantifies the risk of non-compliance of each question relative to the others. Questions with higher values are those with a potentially more significant impact on drinking water safety and a higher likelihood of occurrence. The highest possible value would be 32 (4×8) and the lowest would be 0 (0×1).

Table 3 presents a sample question showing the risk rating determination process.

TABLE 3:

Does the Operator in Charge ensure that the equipment and processes are monitored, inspected and evaluated?							
Risk = Likelihood × Consequence							
C=1	C=2	C=3	C=4	C=5	C=6	C=7	C=8
Medium Administrative Consequence	**Major** Administrative Consequence	**Minor** Environmental Consequence	**Minor** Health Consequence	**Medium** Environmental Consequence	**Major** Environmental Consequence	**Medium** Health Consequence	**Major** Health Consequence
L=4 (Almost Certain)	L=1 (Unlikely	L=2 (Possible)	L=3 (Likely)	L=3 (Likely)	L=1 (Unlikely	L=3 (Likely)	L=2 (Possible)
R=4	**R=2**	**R=6**	**R=12**	**R=15**	**R=6**	**R=21**	**R=16**

Application of the Methodology to Inspection Results

Based on the results of a MRDWS inspection, an overall inspection risk rating is calculated. During an inspection, inspectors answer the questions related to regulatory compliance and input their "yes", "no" or "not applicable" responses into the Ministry's Laboratory and Waterworks Inspection System (LWIS) database. A "no" response indicates non-compliance. The maximum number of regulatory questions asked by an inspector varies by: system (i.e., distribution, stand-alone); type of inspection (i.e., focused, detailed); and source type (i.e., groundwater, surface water).

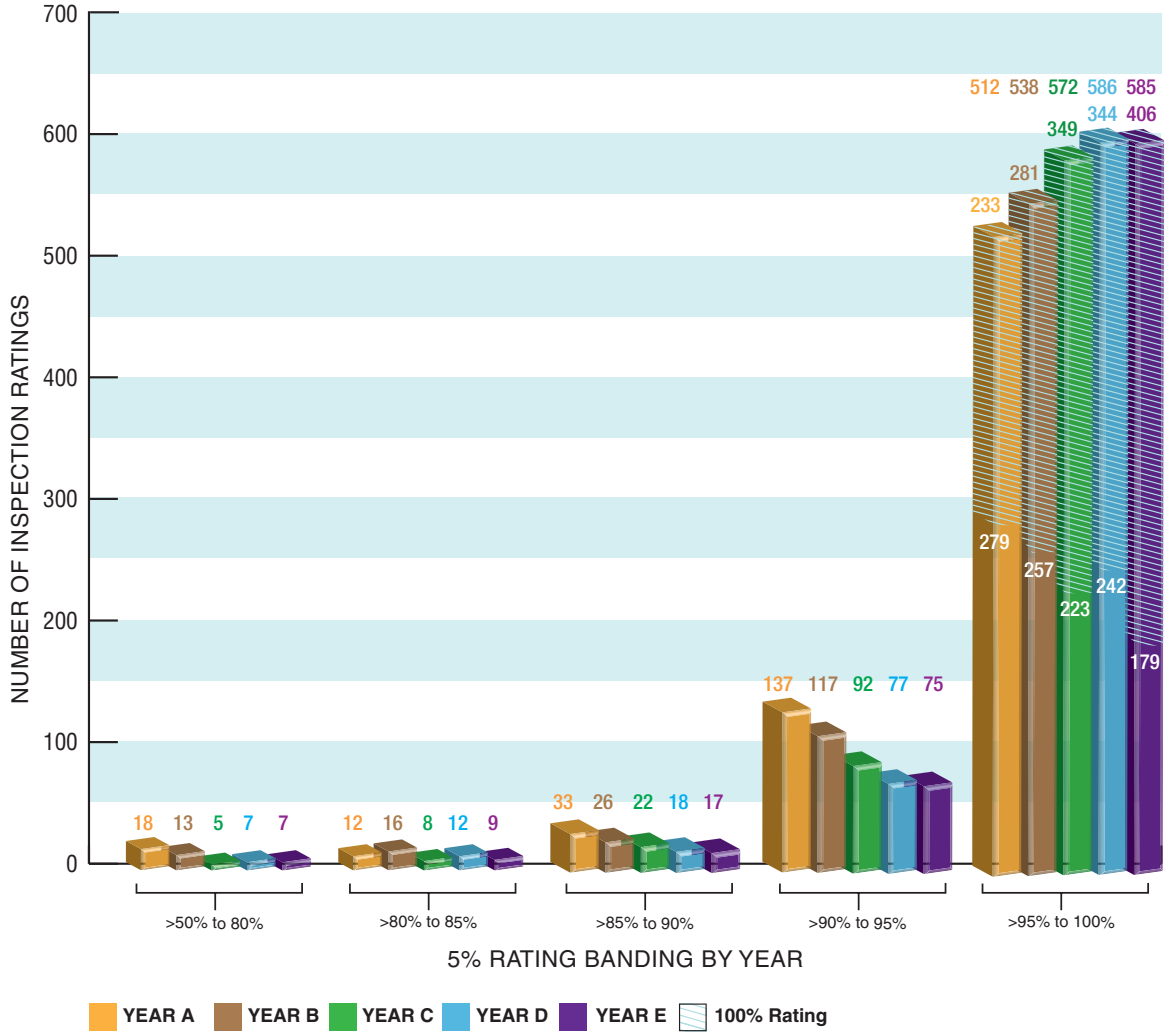
The risk ratings of all non-compliant answers are summed and divided by the sum of the risk ratings of all questions asked (maximum question rating). The resulting inspection risk rating (as a percentage) is subtracted from 100 per cent to arrive at the final inspection rating.

Application of the Methodology for Public Reporting

The individual MRDWS Total Inspection Ratings are published with the ministry's Chief Drinking Water Inspector's Annual Report.

Figure 1 presents the distribution of MRDWS ratings for a sample of annual inspections. Individual drinking water systems can compare against all the other inspected facilities over a period of inspection years.

Figure 1: Year Over Year Distribution of MRDWS Ratings



Reporting Results to MRDWS Owners/Operators

A summary of inspection findings for each system is generated in the form of an Inspection Rating Record (IRR). The findings are grouped into the 14 possible modules of the inspection protocol, which would provide the system owner/operator with information on the areas where they need to improve. The 14 modules are:

1. Source
2. Permit to Take Water
3. Capacity Assessment
4. Treatment Processes
5. Process Wastewater
6. Distribution System
7. Operations Manuals
8. Logbooks
9. Contingency and Emergency Planning
10. Consumer Relations
11. Certification and Training
12. Water Quality Monitoring
13. Reporting, Notification and Corrective Actions
14. Other Inspection Findings

For further information, please visit **www.ontario.ca/drinkingwater**

Ministry of the Environment, Conservation and Parks - Inspection Summary Rating Record (Reporting Year - 2025-26)

DWS Name:	PORT BURWELL AREA SECONDARY WATER SUPPLY SYSTEM
DWS Number:	260004735
DWS Owner:	PORT BURWELL AREA SECONDARY WATER SUPPLY SYSTEM JOINT BOARD OF MANAGEMENT
Municipal Location:	AYLMER
Regulation:	O.REG. 170/03
DWS Category:	DW Municipal Residential
Type of Inspection:	Focused
Compliance Assessment Start Date:	Sep-10-2025
Ministry Office:	London District Office

Maximum Risk Rating: 202

Inspection Module	Non Compliance Risk (X out of Y)
Certification and Training	0/42
Logbooks	0/14
Operations Manuals	0/14
Treatment Processes	0/81
Water Quality Monitoring	0/51
Overall - Calculated	**0/202**

Inspection Risk Rating:	**0.00%**

Final Inspection Rating:	**100.00%**

Ministry of the Environment, Conservation and Parks - Detailed Inspection Rating Record (Reporting Year - 2025-26)

DWS Name:	PORT BURWELL AREA SECONDARY WATER SUPPLY SYSTEM
DWS Number:	260004735
DWS Owner Name:	PORT BURWELL AREA SECONDARY WATER SUPPLY SYSTEM JOINT BOARD OF MANAGEMENT
Municipal Location:	AYLMER
Regulation:	O.REG. 170/03
DWS Category:	DW Municipal Residential
Type of Inspection:	Focused
Compliance Assessment Start Date:	Sep-10-2025
Ministry Office:	London District Office

All legislative requirements were met. No detailed rating scores.

Maximum Question Rating: 202

Inspection Risk Rating:	**0.00%**

FINAL INSPECTION RATING:	**100.00%**

REPORT NO. **AASWSS-25-12**

TO: Aylmer Area Secondary Water Supply System- Joint Board of Management
DEPARTMENT: Public Works
MEETING DATE: December 17, 2025
SUBJECT: **OCWA 2025 Third Quarter Operations Report**

RECOMMENDATION:

THAT Report No. AASWSS-25-12 entitled “OCWA Third Quarter Operations” be received.

PURPOSE & BACKGROUND:

The Ontario Clean Water Agency (OCWA) and the Staff of the Administering Municipality (Township Staff), formally meet on a quarterly basis to review the operations and maintenance of the AASWSS. OCWA and the Township Staff discuss recommended lifecycle/capital work, bacteriological/chemical sample results, regulatory compliance, and possible emerging issues. OCWA provides detailed operations reports and performance assessment reports at these meetings.

COMMENTS & ANALYSIS:

This report is a summary of the operations and maintenance for the third quarter of 2025. It also includes a summary of the first and second quarters of 2025. This report is submitted to the Joint Board of Management to satisfy specific requirements of the QEMS Operational Plan for the AASWSS. Additionally, this approach ensures that the Joint Board of Management is kept informed on the operational performance of the water system on a continual basis by Township Staff.

The Township Staff met with OCWA to discuss the attached operations report on November 20, 2025. At their meeting, Township and OCWA Staff reviewed the system operations for the third quarter of 2025. Some of the specific items that were discussed are outlined below.

Compliance Summary:

There were no compliance or exceedance issues during the third quarter of 2025. There have been no compliance issues to report thus far in 2025.

Inspections:

On September 10th, Angela Stroyberg of the MECP conducted an unannounced physical inspection of the Aylmer Secondary Distribution system, at the EMPS (Elgin Middlesex Pumping Station).

There were no MOL inspections conducted thus far in 2025.

QEMS Update:

First Quarter:

On February 11th, OCWA updated the Essential/Emergency Service and Supply Contact List. Updates were made to Client contacts along with OCWA Staff updates. This is the 38th revision to the list to date.

Second Quarter:

OCWA completed an Internal QEMS Audit on April 7th and 9 OFI's (Opportunity for Improvement) were identified. These OFI's were considered at the Management review held on May 20th. The Operational plan was updated on July 4th.

Third Quarter:

On September 4th the external reaccreditation audit was completed by Sandra Travares of Intertek. There were 5 OFI's identified, all of which will be considered at the next management review 2026.

Performance Assessment:

The average daily flow to the system from the Elgin Area Primary Water Supply System thus far in 2025 was 5,132.8m^3/d which is a 1.9% increase when compared to 2024 (5,034.4 m^3/d).

Weekly microbiological samples were taken by OCWA via sampling stations throughout the transmission main. Samples are collected at 3 separate locations each week. Samples are tested for E. coli, Total coliforms and HPC's. Samples are shipped to SGS laboratories which is an accredited laboratory.

OCWA tested for free chlorine residuals throughout the distribution system two times per week at 4 separate locations.

Quarterly samples were collected for Trihalomethanes (THMs) and Halo Acetic Acids (HAAs) in accordance with regulatory requirements. All sample results tested were well below the Maximum Allowable Concentrations (MAC) set forth in O.Reg. 170/03.

OCWA continues to meet or exceed the Provincial Regulations pertaining to microbiological sampling requirements.

Further information relating to water sampling results is outlined in the attached report.

General Maintenance:

OCWA conducted various maintenance activities during the first and second quarters of 2025. Activities include but are not limited to, regular readings and checks, the inspection and pumping of all chambers including air release chambers, and monthly alarm testing. Annual meter calibrations were completed in March 2025. OCWA completed spring and fall hydrant flushing and winterization of hydrants was also completed. Further information regarding maintenance completed in 2025 can be found in the attached report.

Alarms:

There were some alarms and emergency locates that occurred during the third quarter of 2025. These alarms were minor in nature and received the appropriate response from OCWA at the time they occurred. Further information regarding alarms can be found in the attached report.

Complaints & Concerns:

There were no complaints from the public that required a response thus far in 2025.

SUMMARY:

Quarterly meetings with OCWA are an effective tool used to keep the Township Staff well informed as to the operations and maintenance of the drinking water system. The information provided to the Board by OCWA is used to help the Joint Board of Management make well thought out decisions in an effort to provide a continual safe supply of potable water.

ATTACHMENTS:

1. Aylmer Area Secondary Water Supply System- 2025 OCWA Third Quarter Operations Report

Prepared by: S. Gustavson, Water/Waste Water Operations Manager

Reviewed by: J. Godby, Director of Public Works

Approved by: N. Dias, Chief Administrative Officer

Ontario Clean Water Agency
Agence Ontarienne Des Eaux

Aylmer Area Secondary Water Supply System Operations Report

Third Quarter 2025

Ontario Clean Water Agency, Southwest Region
Vitaliy Talashok, Sr. Operations Manager, Aylmer Cluster
Date: October 15, 2025

Facility Description

Facility Name:	Aylmer Area Secondary Water Supply System
Regional Manager:	Sam Sianas - (519) 319-2233
Sr. Operations Manager:	Vitaliy Talashok - (226) 378-8986
Business Development Manager:	Robin Trepanier - (519) 791-2922
Facility Type:	Municipal
Classification:	Class 2 Water Distribution
Drinking Water System Category:	Large Municipal Residential
Title Holder:	Municipality
Operation Status:	OCWA

Service Information

Area(s) Serviced:	Central Elgin, Malahide, and Aylmer
Population Serviced:	382
Malahide Direct Connections:	147
Central Elgin Connections:	101

Operational Description

This is an 18" watermain from St. Thomas to Aylmer with booster pumps at the Elgin Middlesex Pumping Station.

CLIENT CONNECTION MONTHLY CLIENT REPORT

Facility Name: Aylmer Area Secondary Water Supply System
ORG#: 6614

SECTION 1: COMPLIANCE SUMMARY

FIRST QUARTER:

There were no compliance issues to report for the first quarter.

SECOND QUARTER:

There were no compliance issues to report during the second quarter.

THIRD QUARTER:

There were no compliance issues to report during the third quarter.

SECTION 2: INSPECTIONS

FIRST QUARTER:

There were no MECP or MOL inspections conducted during the first quarter.

SECOND QUARTER:

There were no MECP or MOL inspections conducted during the second quarter.

THIRD QUARTER:

On September 10th an unannounced inspection was conducted by MECP Inspector Angela Stroyberg, for Aylmer Secondary DS, at the EMPS building. All requested documents have been submitted and questions answered. We are waiting for the final report and inspection rating.

SECTION 3: QEMS UPDATE

FIRST QUARTER:

On February 11th , the Essential/Emergency Service and Supply Contact List was updated to include changes to OCWA staff contacts as well as client contacts. The contact list is currently in its 38th revision and is reviewed annually.

SECOND QUARTER:

On April 7th an internal audit was completed for the Aylmer Secondary system. There were 9 OFI found that were discussed at the management review on May 20th. The operational plan was updated July 4th.

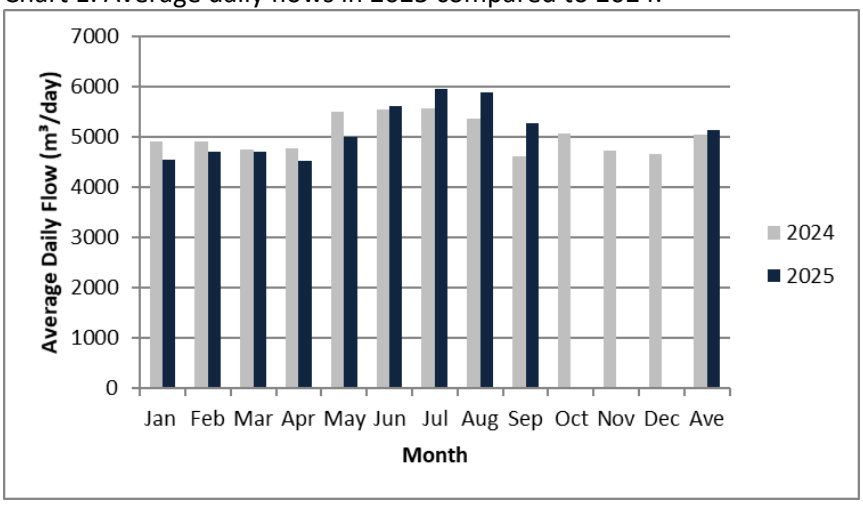
THIRD QUARTER:

On September 4th the External reaccreditation audit was held with Intertek's auditor Sandra Tavares. There were 5 opportunities for improvement to consider at the next management review in 2026.

SECTION 4: PERFORMANCE ASSESSMENT REPORT

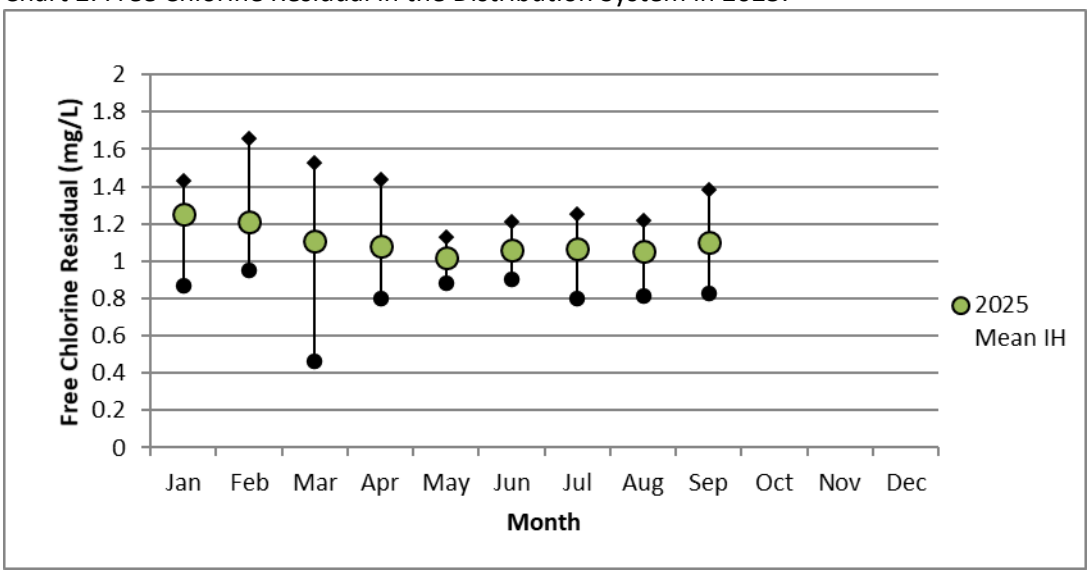
Flows are recorded at various points within the distribution system. The average daily flow to the system from the Elgin Area Primary Water Supply System in 2025 so far was 5,132.8m^3/d which is up 1.9% when compared to 2024 (5,034.4m^3/d). Chart 1 below depicts the average daily flows for 2025 compared to 2024.

Chart 1. Average daily flows in 2025 compared to 2024.



Chlorine residuals are obtained throughout the distribution system two times per week, with 4 residuals taken on sample days (usually Monday's) and three residuals taken at least 48 hours after the first set (usually on Friday's) to meet the regulatory requirements. The chart below depicts the minimum, maximum and average chlorine residuals taken in the distribution system for 2025. The concentration of free chlorine varies depending on the location that the sample taken (see chart below).

Chart 2. Free Chlorine Residual in the Distribution System in 2025.



Samples are obtained once per week at three locations along the transmission main. The following table summarizes the results of the microbiological sampling for 2025.

Month	# Samples	E. coli Range (cfu/100mL)	Total Coliform Range (cfu/100mL)	# Samples	Heterotrophic Plate Count Range (cfu/mL)

January	12	0 – 0	0 – 0	4	<10 - <10
February	12	0 – 0	0 – 0	4	<10 - <10
March	15	0 – 0	0 – 0	5	<10 - <10
April	12	0 – 0	0 – 0	4	<10 - 10
May	12	0 – 0	0 – 0	4	<10 - 40
June	15	0 – 0	0 – 0	5	<10 - <10
July	12	0 – 0	0 – 0	4	<10 - <10
August	12	0 – 0	0 – 0	4	<10 - <10
September	15	0 – 0	0 – 0	5	<10 - <10
October	-	-	-	-	-
November	-	-	-	-	-
December	-	-	-	-	-

Trihalomethanes (THMs) are sampled on a quarterly basis; the 2025 current running average is 22.00µg/L. When comparing the current running average to the 2024 average (23.00µg/L) there has been a decrease of 4.3%. The results remain well below the limit of 100 µg/L.

January 2025	-	17
April 2025	-	17
July 2025	-	24
October 2024	-	30
Running Average	**100**	**22.00**

Haloacetic Acids (HAAs) are required to be sampled on a quarterly basis. The 2025 current running average is 6.63µg/L. When comparing the current running average to the 2024 average (9.30µg/L) there has been a decrease of 28.8%. The results remain well below the limit of 80µg/L.

	Limit (µg/L)	HAA Result (µg/L)
January 2025	-	6.9
April 2025	-	5.3
July 2025	-	6.5
October 2024	-	7.8
Running Average	80	**6.63**

SECTION 5: OCCUPATIONAL HEALTH & SAFETY

FIRST QUARTER:

On February 28th, the annual occupational health and safety inspection was completed. There were no issues identified. There were no additional Health & Safety issues identified in the first quarter.

SECOND QUARTER:

There were no additional Health & Safety issues identified during the second quarter.

THIRD QUARTER:

There were no additional Health & Safety issues identified during the third quarter.

SECTION 6: GENERAL MAINTENANCE

FIRST QUARTER:

JANUARY

2: Chamber inspections and meter reads.

5: Received emergency locate request at 08:36 for 44330 elm line. Arrived on site at 09:40. Received locate instructions from crew on site for water main repair. Completed all clear locate. Sent locate via email at 10:00. Left site at 10:10.

FEBRUARY

6: Hawkins Electric on site for replacement of cabinet heater
13: Tested flood and power failure alarms at chambers 13 and 16

MARCH

11: -On site at 47222 Talbot Line for leak repair.
OMEGA and CC dance on site and are beginning to excavate area. Disinfected new stainless steel repair saddle and new service line saddle with 3/4-inch port for installation. Leak now exposed and air gap being maintained. Leaky saddle the reason for leak. Positive pressure being maintained. Throttled down water pressure at site of repair by opening up the 3" bypass isolation valve and closing 18inch watermain. Omega will be sliding on the new repair clamp and service repair clamp while main is at about 30psi. Flushed hydrant on Talbot for 10 minutes to reduce mainline pressure for service repair
Pressure remained above 30 psi. Water leak now repaired.
Two repair clamps now installed, and all repair parts disinfected before being put into place.
Still waiting on live tap for new service line to be installed. Opened back up the isolation valve at chamber 16 and closed 3inch bypass valves. Live tap completed, 10 ft of new PVC service line installed from corporation stop to old curb stop. All parts disinfected before installation.
Obtained a residual through site of repair at 14:07-1.09ppm free.
Excavation area now being filled, everything now returned to normal operation. Refer to service repair form for more details.
-Flowmetrix completed flow meter calibrations at chamber 13, chamber 16 and Rogers Road
19: Completed monthly alarm testing for chamber 16 and 13. All working as intended.

SECOND QUARTER:

APRIL:

22: Completed Spring hydrant flushing.

25: Completed monthly alarm testing for chamber 13 and 16. Alarms received and acknowledged.

MAY:

6: Completed live tap on 46268 New Sarum line.

8: completed monthly chamber inspections and pumped down chambers accordingly.

9: Completed monthly alarm testing for chamber 13 and 16

14: completed sample station install at 45024 Talbot line

29: completed chamber inspections and pumped out chambers accordingly

JUNE

3: completed chambers inspections for the month along with meter reads
23: completed chambers 13 and 16 flood and power failure alarm tests. Alarms acknowledged.
26: completed air relief valve chamber inspections and pump outs accordingly. Pumped out tower road chamber to inspect for a leak. No leak was detected after returning to the site 3 hours later. Water in chamber is likely due to rainwater from leaky manhole lid.

THIRD QUARTER:

JULY:

11: Completed chamber 13 and 16 monthly critical alarm testing.
31: Completed monthly air relief chamber inspections.

AUGUST:

6: Completed monthly meter reads and quarterly chamber checks, pumped all chambers that required to be.
15: Completed chamber 13 and 16 monthly critical alarm testing.
19: Met with East Link at chamber 16 to look into comms issues, after trouble shooting they determined issue is not on their end.
20: East Link onsite at chamber 16 to replace modem.

SEPTEMBER:

2: Completed monthly meter reads.
9: Suma onsite for chamber 13 and chamber 16 UPS inspections.
18: Turned off curbstop at 48333 Talbot line as requested by S.Gustavson.
25: Completed chamber 13 monthly critical alarm testing.
26: Completed chamber 16 monthly critical alarm testing.

SECTION 7: ALARM SUMMARY

FIRST QUARTER:

JANUARY

5: Completed emergency locate request for 44330 Elm Line

FEBRUARY

No alarms to report for the month of February.

MARCH

No alarms to report for the month of March.

SECOND QUARTER:

APRIL:

No alarms for the month of April.

MAY:

11: Comm alarm for chamber 13, arrived onsite to ensure readings were normal. Monitored site and ensured communications were coming through. Communications returned to normal and all appears normal.

13: Comm alarm at Chamber 16, arrived onsite to ensure readings were normal. No readings are present on SCADA. Communicated with Execuline and problems are believed to be caused by third party maintenance. Cycled power to modem and no change. Readings eventually returned to SCADA, and all appears normal.

17: Power fail alarm at chamber 13 and flow meter fault alarm at 0151. SCADA readings show all readings are normal. Power outage reported on Hydro One website. Power restored to site at 0845. Readings monitored throughout and all readings and pressure stayed within regulatory standards.

JUNE:

4: Comm failure for chamber 13 and 16. Both sites reading on SCADA. Pressures and readings normal.

19: Comm failure alarm for chamber 13. Arrived onsite, all appears normal. Cycled power to modem. Problem did not reoccur.

THIRD QUARTER:

JULY:

6: Received alarm call for chamber 16 communication fault, logged on remotely to inspect, site still had all readings and recording trending.
13: Received call for emergency locate, arrived onsite and completed locate.

AUGUST:

16: Received alarm call for emergency locate, completed locate and sent to client.
17: Received alarm call for comms fail at chamber 16, logged into SCADA and found site had no communication, arrived onsite, attempted to reset modem, cycle power to cabinet several times and found no change in comms, spoke with ORO who will contact client to look into further.

SEPTEMBER:

7: Received chamber 13 communication alarm, logged on remote SCADA and found site still has comms suspect to be running on backup, arrived onsite and reset modem, alarm is cleared and everything is reading.
13: Received chamber 16 comms alarm, logged on remote SCADA and saw site still has readings, all appears normal.

21: Received comms fault alarm for chamber 16, logged on to remote SCADA, found site still has readings and trending, continued to monitor site.

30: Received alarm call for chamber 13 comms fault, logged on remote SCADA and found site still has readings and is populating trending.

SECTION 8: COMMUNITY COMPLAINTS & CONCERNS

FIRST QUARTER:

There were no complaints or concerns reported during the first quarter.

SECOND QUARTER:

There were no complaints or concerns reported during the second quarter.

THIRD QUARTER:

There were no complaints or concerns reported during the third quarter.

AASWS01 Locates	
Month	**# of Locates Completed**
January	2
February	3
March	5
April	2
May	3
June	4
July	1
August	6
September	8
October	6
November	
December	

REPORT NO. **PBASWSS-25-12**

TO: Port Burwell Area Secondary Water Supply System- Joint Board of Management
DEPARTMENT: Public Works
MEETING DATE: December 17, 2025
SUBJECT: **OCWA 2025 Third Quarter Operations Report**

RECOMMENDATION:

THAT Report No. PBASWSS-25-12 entitled “OCWA Third Quarter Operations Report” be received.

PURPOSE & BACKGROUND:

The Ontario Clean Water Agency (OCWA) and the Staff of the Administering Municipality (Township Staff), formally meet on a quarterly basis to review the operations and maintenance of the PBASWSS. OCWA and the Township Staff discuss recommended lifecycle/capital work, bacteriological/chemical sample results, regulatory compliance, and possible emerging issues. OCWA provides detailed operations reports and performance assessment reports at these meetings.

COMMENTS & ANALYSIS:

This report is a summary of the operations and maintenance for the third quarter of 2025. It also includes a summary of the first and second quarters of 2025. This report is submitted to the Joint Board of Management to satisfy specific requirements of the QEMS Operational Plan for the PBASWSS. Additionally, this approach ensures that the Joint Board of Management is kept informed on the operational performance of the water system on a continual basis by Township Staff.

The Township Staff met with OCWA to discuss the attached operations report on November 20, 2025. At their meeting, Township and OCWA Staff reviewed the system operations for the third quarter of 2025. Some of the specific items that were discussed are outlined below.

Compliance Summary:

There were no compliance or exceedance issues during the third quarter of 2025. There have been no compliance issues to report thus far in 2025.

Inspections:

On September 10th, Jim Miller of the MECP conducted an unannounced inspection of the PBASWSS.

There were no MOL inspections conducted thus far in 2025.

QEMS Update:

First Quarter:

OCWA completed an Internal QEMS Audit on March 25th and 15 OFI's (Opportunity for Improvement) were identified. These OFI's were considered at the Management review held on May 20th.

Second Quarter:

The Management review for the Secondary system was held on May 20th. The Operational plan was updated to address the OFI's identified during the QEMS Internal Audit held on May 25th. Documents were sent to Intertek as required for the reaccreditation audit.

Third Quarter:

On July 4th the external audit was completed by Intertek with no OFI's. The reaccreditation audit was held on September 3rd. There were 6 OFI's identified, all of which will be considered at the next management review 2026.

On September 24th the Essential Emergency Supplier Contact List was updated. It is currently in its 40th revision.

Performance Assessment:

The average daily flow to the system from the Elgin Area Primary Water Supply System (recorded at MV1) thus far in 2025 was 845.9 m^3/d which is a 12.5% increase when compared to 2024 (751.8 m^3/d).

Weekly microbiological samples were taken by OCWA via sampling stations throughout the transmission main. Samples are collected at 3 separate locations each week. Samples are tested for E. coli, Total coliforms and HPC's. Samples are shipped to SGS laboratories which is an accredited laboratory.

OCWA tested for free chlorine residuals throughout the distribution system two times per week at 4 separate locations.

Quarterly samples were collected for Trihalomethanes (THMs) and Halo Acetic Acids (HAAs) in accordance with regulatory requirements. All sample results tested were well below the Maximum Allowable Concentrations (MAC) set forth in O.Reg. 170/03. OCWA continues to meet or exceed the Provincial Regulations pertaining to microbiological sampling requirements.

Further information relating to water sampling results is outlined in the attached report.

General Maintenance:

OCWA conducted various maintenance activities thus far in 2025. Activities include but are not limited to regular readings and checks, the inspection and pumping of air release chambers, and monthly alarm testing. Chemical feed system maintenance. Annual flow meter calibrations were completed. OCWA completed spring and fall hydrant flushing and winterization of hydrants was also completed. Further information regarding maintenance completed in 2025 can be found in the attached report.

Alarms:

There were a variety of alarms reported in the third quarter of 2025. Most of these alarms were minor in nature and received the appropriate response from OCWA when they occurred. The SCADA system allows Staff to effectively monitor and respond to alarms on a continuous basis. Further information regarding alarms can be found in the attached report.

Complaints & Concerns:

There were no complaints from the public that required a response thus far in 2025.

SUMMARY:

Quarterly meetings with OCWA are an effective tool used to keep the Township Staff well informed as to the operations and maintenance of the drinking water system. The information provided to the Board by OCWA is used to help the Joint Board of Management make well thought out decisions in an effort to provide a continual safe supply of potable water.

ATTACHMENTS:

1. Port Burwell Area Secondary Water Supply System- 2025 OCWA Third Quarter Operations Report

Prepared by: S. Gustavson, Water/Waste Water Operations Manager

Reviewed by: J. Godby, Director of Public Works

Approved by: N. Dias, Chief Administrative Officer

Ontario Clean Water Agency
Agence Ontarienne Des Eaux

Port Burwell Area Secondary Water Supply System Operations Report Third Quarter 2025

Ontario Clean Water Agency, Southwest Region
Vitaliy Talashok, Sr. Operations Manager, Aylmer Cluster
Date: October 15, 2025

Facility Description

Facility Name:	Port Burwell Area Secondary Water Supply System
Regional Manager:	Sam Sianas – 519-319-2233
Sr. Operations Manager:	Vitaliy Talashok – 226-378-8986
Business Development Manager:	Robin Trepanier – 519-791-2922
Facility Type:	Municipal
Classification:	Class 2 Water Distribution
Drinking Water System Category:	Large Municipal Residential
Title Holder:	Municipality
Operation Status:	OCWA

Service Information

Area(s) Serviced:	Municipality of Central Elgin, Malahide & Bayham
Population Serviced:	624
Malahide Direct Connections:	163
Central Elgin Connections:	61

Operational Description

This is a 12-inch watermain from the Elgin Area Water Treatment Plant to Port Burwell including an elevated tank west of Pt. Burwell. Includes re-chlorination at the tower, Dexter and at Lakeview Re-Chlorination Facility.

CLIENT CONNECTION MONTHLY CLIENT REPORT

Facility Name: Port Burwell Secondary - Lakeview, Dexter, Burwell tower, Valve house
ORG#: 5911

SECTION 1: COMPLIANCE SUMMARY

FIRST QUARTER:

There were no compliance issues to report for the first quarter.

SECOND QUARTER:

There were no compliance issues to report during the second quarter.

THIRD QUARTER:

There were no compliance issues to report during the third quarter.

SECTION 2: INSPECTIONS

FIRST QUARTER:

There were no MECP or MOL inspections conducted during the first quarter.

SECOND QUARTER:

There were no MECP or MOL inspections conducted during the second quarter.

THIRD QUARTER:

On September 10th MECP Inspector Jim Miller completed an unannounced inspection of the Port Burwell DS. All documents were supplied and questions were answered. We are waiting on the final report and rating.

SECTION 3: QEMS UPDATE

FIRST QUARTER:

On March 25th the internal audit was completed by Maegan Garber. No non-conformities were identified and fifteen (15) opportunities for improvement (OFI's). The management review is scheduled to be completed in May, 2025.

SECOND QUARTER:

On May 20th the management review for Port Burwell Secondary was held. The operational plan was updated and documents have been sent to Intertek for the reaccreditation audit scheduled for August 4th.

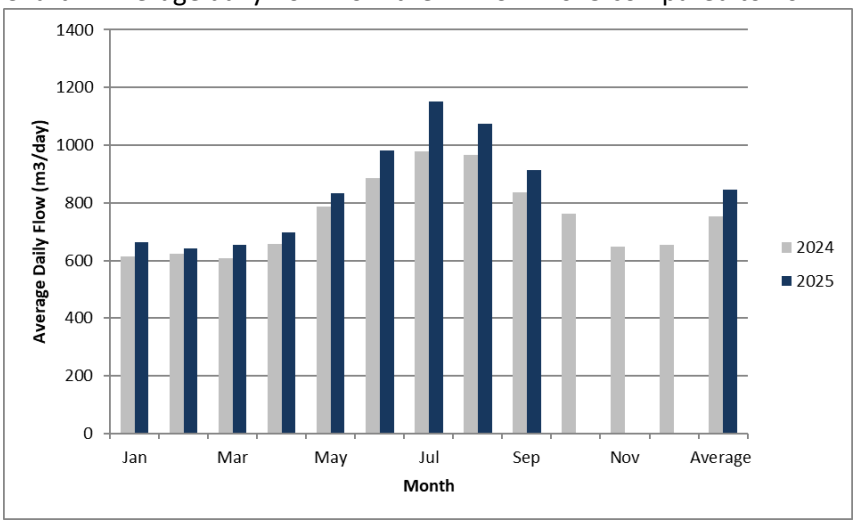
THIRD QUARTER:

On July 4th the external audit was completed with no opportunities for improvement. The reaccreditation audit was held on September 3rd with 6 OFI's to consider at the next management review. On September 24th the Essential Emergency Service and Supplier Contact List was updated and is currently in its 40th revision.

SECTION 4: PERFORMANCE ASSESSMENT REPORT

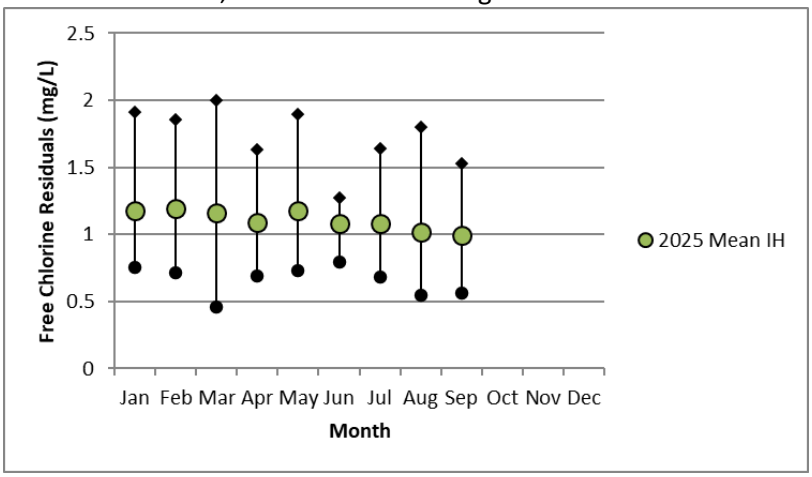
Flows are recorded at various points within the distribution system. The average daily flow to the system from the Elgin Area Primary Water Supply System (recorded at MV1) in 2025 so far is 845.9 m^3/d. This is up 12.5% when compared to 2024 (751.8 m^3/d). Chart 1 below depicts the average daily flow in 2025 compared to 2024.

Chart 1. Average daily flow from the EMPS in 2025 compared to 2024.



Chlorine residuals are obtained throughout the distribution system two times per week, with 4 residuals taken on sample days (usually Mondays) and three residuals taken at least 48 hours after the first set (usually on Fridays) to meet the regulatory requirements. Chart 2 below depicts the minimum, maximum and average chlorine residuals taken in the distribution system in 2025. The concentration of free chlorine varies depending on the location of sample taken. All results met regulatory requirements.

Chart 2. Minimum, maximum and average chlorine residuals in 2025.



The chlorine residuals are continuously monitored at the re-chlorination facilities at Dexter Line, the Tower and Lakeview. Chart 3 below provides the monthly average, minimum and maximum free chlorine residuals at the Dexter Line Re-Chlorination Facility in 2025.

Chart 3. Minimum, maximum and average chlorine residuals recorded at Dexter Line Re-chlorination in 2025.

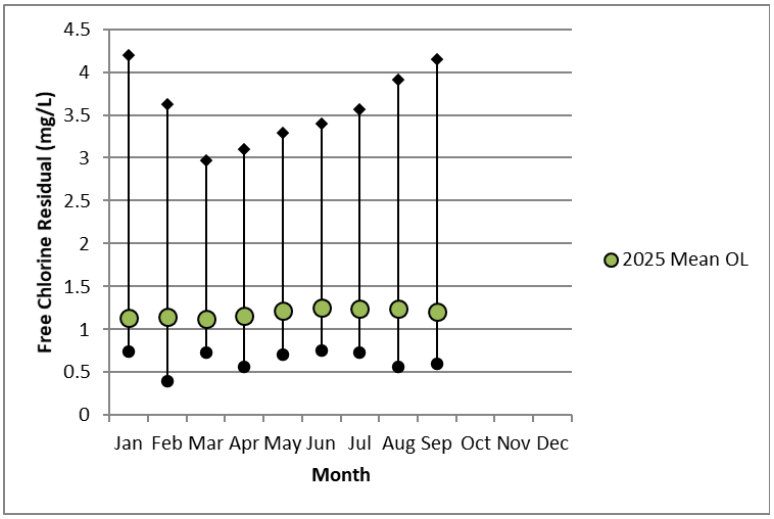


Chart 4 below provides the monthly average, minimum and maximum free chlorine residuals at the Port Burwell Tower in 2025. The residuals at the tower fluctuate depending on the fill cycles.

Chart 4. Minimum, maximum and average chlorine residuals recorded at Port Burwell Tower in 2025.

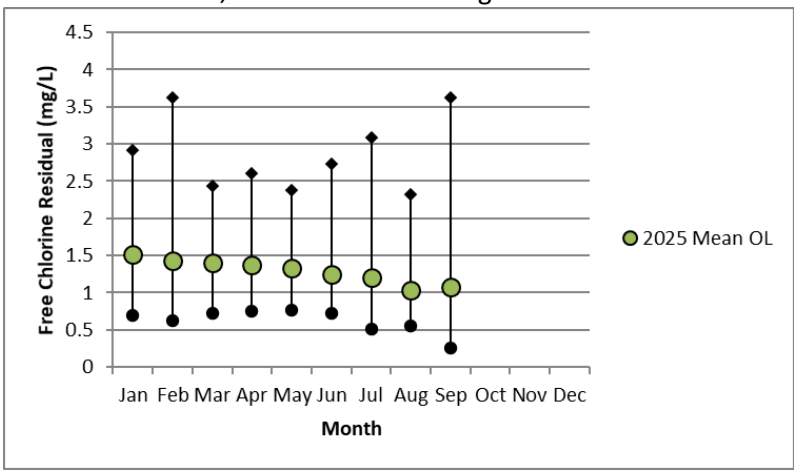
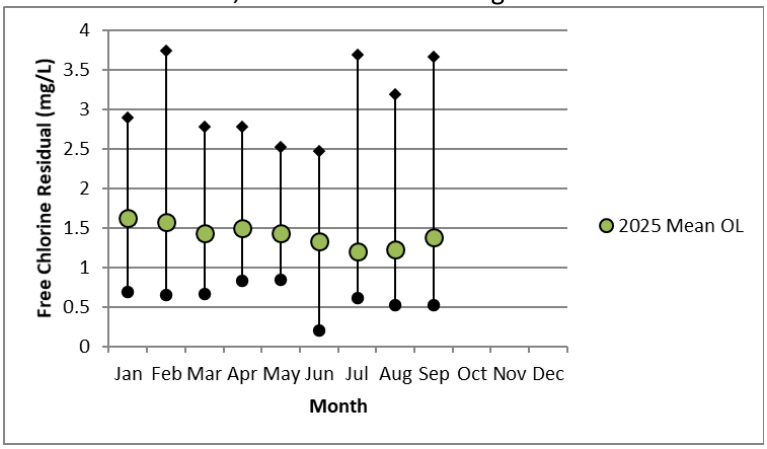


Chart 5 below provides the daily average, minimum and maximum free chlorine residuals at the Lakeview Re-chlorination Facility in 2025.

Chart 5. Minimum, maximum and average chlorine residuals recorded at Lakeview Re-chlorination in 2025.



Samples are obtained once per week at three locations in the distribution system. Table 1 summarizes the results of the microbiological sampling.

Table 1. Summary of microbiological sampling in 2025.

Month	# Samples	E. coli Range (cfu/100mL)	Total Coliform Range (cfu/100mL)	# Samples	Heterotrophic Plate Count Range (cfu/mL)
January	8	0 – 0	0 – 0	4	<10 - <10
February	8	0 – 0	0 – 0	4	<10 - <10
March	10	0 – 0	0 – 0	5	<10 - <10
April	8	0 – 0	0 – 0	4	<10 - <10
May	8	0 – 0	0 – 0	4	<10 - <10
June	10	0 – 0	0 – 0	5	<10 - 10
July	8	0 – 0	0 – 0	4	<10 - <10
August	8	0 – 0	0 – 0	4	<10 - 40
September	10	0 – 0	0 – 0	5	<10 - <10
October	-	-	-	-	-
November	-	-	-	-	-
December	-	-	-	-	-

Trihalomethanes (THMs) are sampled on a quarterly basis; the current running average is 33.75µg/L. When comparing the current running average to the 2024 average (35.75µg/L) there has been a decrease of 5.6%. The results are well below the limit of 100 µg/L (refer to Table 2).

Table 2. Summary of THM sample results

	Limit (µg/L)	THM Result (µg/L)
January 2025		34
April 2025		25
July 2025		29
October 2024		47
Running Average	**100**	**33.75**

Haloacetic Acids (HAAs) are required to be sampled on a quarterly basis. The current 2025 running average is 18.53µg/L (refer to Table 3). When comparing the current running average to the 2024 average (16.23µg/L) there has been an increase of 14.2%. The results are well below the limit of 80µg/L.

Table 3. Summary of HAA sample results

	Limit (µg/L)	HAA Result (µg/L)
January 2025		18.6
April 2025		16.6
July 2025		27.5
October 2024		11.4

Running Average	80	**18.53**

SECTION 5: OCCUPATIONAL HEALTH & SAFETY

FIRST QUARTER:

On February 28th, the annual occupational health and safety inspection was completed. There were no issues identified. There were no additional Health & Safety issues identified in the first quarter.

SECOND QUARTER:

There were no additional Health & Safety issues identified during the second quarter.

THIRD QUARTER:

There were no additional Health & Safety issues identified during the third quarter.

SECTION 6: GENERAL MAINTENANCE

FIRST QUARTER:

JANUARY

2: Dexter rechlor - Chlorine pump trending appeared off on scada
Pump 2 was running but chlorine residual was not increase
When on site pump 2 was running but could not increase residual over 1.20
Switched pumps to duty manual and pump 1 increased residual to stop point 1.30
While off advanced pump 2 and opened air valve. Looked like large air bubble in line
Closed air valve and reset panel valves.
Allowed pump 1 to run again
When pump 2 ran took a long time to get residual to stopping point 1.30
Will continue to monitor pump

15: Port Burwell tower, Dexter, Lakeview rechlor – Tested critical alarms

17: Landmark on site for annual ladder Safety inspection.

: MV1, Dexter, Port Burwell tower and Lakeview rechlor – Tested flood alarms

23: MV1 – On site for chlorine delivery

FEBRUARY

05: Installed new chlorine tank at lakeview
11: Port Burwell tower, Dexter, Lakeview rechlor – Tested critical alarms
12: MV1 and Dexter rechlor – Tested flood alarms
25: Logged onto SCADA at 03:10. Tower discharging with level of 9.73. Opened valve to start filling tower upon request from oro due to water plant shutdown. Logged off SCADA 03:25
26: Port Burwell tower - Changed hose connection where panel goes to injection hose due to connection leaking
27: Lakeview - Changed out hose connection on panel where panel connects to injector hose due to old connection leaking

MARCH

5: Port Burwell tower - Changed start fill setpoint for port Burwell from 9.0 to 9.31M to start filling tower before today's shutdown at the waterplant.
Tower starting to fill at 4-5l/sec, valve opening at MV1. Returned fill setpoint for tower back to 9.0M.

: MV1 and Dexter rechlor – Tested flood alarms

6: MV1 - On site for chlorine delivery

7: Port Burwell tower, Dexter, Lakeview rechlor – Tested critical alarms

11: VO01, EO38, Lakeview and Port Burwell tower – Flowmetrix on site to calibrate flow meters

12: Dexter rechlor, PB02, Wanetta beach and Dexter and imperial meter chambers - Flowmetrix on site to calibrate flow meters

13: Port Burwell tower - Logged onto SCADA to check status of Port Burwell tower due to EAWTP shutdown scheduled for 05:00. Tower at 9.33 m and discharging. Altered tower fill set point at MV1 from 9.00 to 9.40m to call for tower to fill. Once in fill mode returned set point to 9.00m

14: Port Burwell tower - Received tower plc communication alarm at 14:43. On call operator confirmed on scada did not have communication. Cycled power at tower back booth at 15:15 and did not resolve issue. Cycled power for tower at Lakeview at 15:25 and communication resolved

:MV1 – On site for chlorine delivery

SECOND QUARTER:

APRIL:

01: Found GFCI for sump pump at E038 had failed, duty OIC notified

02: Onsite with Koolen electric to replace GFCI at E038, unit replaced and now working properly

02: Port Burwell Tower, Dexter, Lakeview rechlore – Tested Critical alarms

10: MV1- Received chlorine delivery

18: Repaired chlorine leak on fitting for chlorine board at Port Burwell tower, primed panel and returned back to normal operation

22: Completed spring hydrant flushing

24: Onsite at 47581 Dexter Line at chamber ARC01 with Farmington Mechanical to remove, refurbish and re-install air relief valve

MAY:

22: Onsite with Farmington mechanical at chamber E015 to remove existing ARV and install new unit, later at chamber E004 removed existing ARV and installed refurbished unit

22: MV1- received chlorine delivery

28: Completed monthly critical alarm testing of Port Burwell tower, Dexter and Lakeview rechlore

JUNE:

12: MV1- received chlorine delivery from Jutzi

18: Found leak on chlorine discharge line at Dexter rechlore, cut line and installed fittings to repair leak, re pressurised system, held under pressure

19: Koolen Electric onsite at MV1 to replace power fuses

19: Onsite at lakeview rechlore after utility power restored to site from power outage, had issue with no power to chlorine pumps or analyzer, after troubleshooting contacted Hawkins Electric who found the PLC power supply box had failed, replaced unit with new one, power than restored to pumps and analyzer

26: Port Burwell tower, Lakeview, Dexter rechlore- completed monthly alarm testing

THIRD QUARTER:

July

2: Flowmatrix at cabinet at rush creek to give access to pressure data collector as well at hydrant at 48209 rush creek. Hydrant unbagged and back in service. Caps put on hydrant after pressure gauge and data collector were removed by Flowmatrix.

4: Farmington mechanical on-site at chamber E009 to replace air release valve

18: Fixed chlorine pump issue at lakeview. Pump 2 is now in duty 1. Both pumps in auto. Hawkins electric onsite to replace phase in plc panel. Readings returned to SCADA. All appears normal. Setpoint for tower fill set back to 1.30 from 1.50. Decreasing pump stroke 2% from last night. All sites returned to normal.

21: Completed rounds and readings. All appears normal. Noticed leak discharge end of pump. Replace fitting and turn back to normal operation at Tower.

Completed rounds and readings. Replaced tubing on suction line for pump#2 and returned to normal operation at Lakeview.

28: Communication restored to Dexter Rechlor.
Summa reset the site on their server and now it's visible on APAM.

29: Removed chlorine injector after discovering abnormal trending on SCADA at site. Discovered large blockage of chlorine buildup and removed. Injector put back into place and working as intended. Increased stroke on pumps from 58% to 60% at Lakeview.

31: On-site with Farmington Mechanical to replace ARV in chamber E028

August

8: On-site with Farmington mechanical to replace ARV in chamber E036

22: Changed out check valve going from pump 1 to hose into panel at Tower

25: Changed check valve from chlorine tank to pump on pump 2 based on trending at Tower

Changed out injection hose due to small leaks close to where it connects to chlorine panel at Lakeview

26: Changed air purge valve on chlorine pump 1 at Tower

Changed out connection nut from hose to panel on pump 1 and 2 to correct panel pressure issues at Lakeview

27: trade tech completed annual back flow preventer inspection at Dexter, Tower and Lakeview.

29: replaced connector from the panel to injection line at the Tower

September

17: Logged into SCADA at 0625 to manually fill tower for Elgin Water Plant shutdown.

24: Upon arrival noticed 2 pinhole leaks in pump 2 chlorine line. Isolated line and put pump in stop. Ran to lake view to grab replacement line. Replaced line and used fittings from old line to connect. Ran pump in fast advance to fill cylinder. Built pressure in chlorine board and no longer leaks. All appears normal

29: Arrived at tower to no pressure in panel. Pump 2 attempting to run but air locked. Stopped pump and oscillated chlorine board to run tests. found that check valve was not functioning in chlorine line coming out of pump2. Switched valve piece and noticed leaking out of new piece. Tried a different piece with different rubber gaskets. Built pressure in panel and watched pump 2 chlorine line fill. Put chlorine board back online.

Completed rounds and readings and watched pump 2 successfully dose for 20 min. All appears normal. Calibrated analyzer.

FOURTH QUARTER

OCTOBER

7: Cleaned all chlorine injectors at all rechlors, completed workorder.

8: Dexter Line chlorine calibration and electrolyte fluid switch, as well as pH probe calibration.

15: Port Burwell Tower: . Pressure chlorine line 10 psi, leak in chlorine line connection. Change connection, run chlorine pump in manual mode until pressure became 55psi. Chlorine analyzer 0.92 ppm, handheld kit 0.75 ppm. Calibrated analyzer. Monitored chlorine line pressure. Completed rounds and readings. Secured station.

22: Cleaned check valve on pump 2 and replaced line from chlorine panel to injector. Put pump 2 in duty and watched dose properly. Panel held good pressure and calibrated analyzer.

SECTION 7: ALARMS

FIRST QUARTER:

JANUARY

1: Received plc communication alarm at Port Burwell Tower 00:28. Logged into SCADA and alarm had already cleared. All appeared normal.

18: Received alert from call service for PLC communication failure at Port Burwell Tower. Logged onto SCADA. No alarms present in alarm banner. Phoned dialer and acknowledged alarm. All values present and refreshing. Reviewed trending. No loss of signal

19: Received alert from call service for PLC communication failure at Port Burwell Tower. Acknowledged alarm and logged onto SCADA. All values present and refreshing. Reviewed trending. No loss in communication

23: 02:10-Received notification of high Cl alarm at Dexter Re-Chlor. Residual spiked at end of chlorine pump cycle and briefly crossed 3.50mg/L from 01:43-01:47

27: At 18:43 received alarm for chlorine pump 1 lockout at Dexter. Logged onto SCADA at 18:46 and acknowledged alarm Reset chlorine pump 1 and alarm fault cleared Watched pump run through a few cycles

31: Received plc communication alarm at Port Burwell Tower 22:43

FEBRUARY

16: Received alert from call service for power failure at lakeview. Acknowledged alarm and logged onto SCADA. Observed hypochlorite pumps in operation. Site with power as pumps will not run on UPS power

19:12- Received alert from call service for UPS fault at dexter. Checked alarm banner on SCADA. Inactive. Alarm repopulated at 19:37. Hypochlorite feedback faults pump 1&2 @ 19:42. In contact with Hydro One. Team being dispatched to site. Estimated time of power restoration 22:00

19:18- Received alert from call service for power failure at port Burwell tower. Viewed site on SCADA. Level at 9.53 m and discharging at 8.19 l/s with a residual of 1.70ppm. In contact with Hydro One. Estimated time for power restoration 22:00

22:47- Received notification from call service (20:31) Port Burwell tower power now normal. Contacted by Hydro One power has been restored to Dexter Line (20:32) tower still in discharge mode. Checked on sites at 22:47. Tower now in discharge. Hypochlorite pumps running at both sites. Now normal

17:

05:25- Received alert from call service for power failure at Port Burwell tower as well as power failure and UPS fault alarms for Dexter. Logged onto SCADA. All alarms “out of alarm “ at 05:25:27

06:11- Received alert from call service for UPS fault at dexter. Reviewed SCADA alarm summary. Out of alarm. In alarm from 06:09:23 to 06:09:31. Continued power flickers due to inclement weather

12:42- Received alerts for power failure dexter and port Burwell tower. Checked sites via SCADA. Chlorine pumps in operation at both sites. Suspected power flushed due to inclement weather

20:

01:28-Received notification of Dexter Re-Chlor pump 2 fault @ 00:42. Reset fault from SCADA iPad and pump returned to function. Continued to monitor pump activity for 20 min - no further issues observed.

22: 07:44- Received notification of Port Burwell Tower PLC comm fault @ 07:41. Accessed Malahide SCADA @ 07:44

18:02- Received notification of PB Tower PLC comm fault @ 18:02.

23: Port Burwell tower - Received notification of PLC comm fault at 07:05 and 15:18. Trending reviewed each time. No loss of communication

MARCH

11: Received alert from call service for high level alarm at Port Burwell Tower. Acknowledged and logged onto SCADA. All values present and refreshing. Reviewed trending. No loss off signal. Repeat of earlier alarm. Tower at 10.37m and discharging.

14: Received tower plc communication alarm at Port Burwell Tower 14:43. On call operator confirmed on scada did not have communication. Cycled power at tower back booth at 15:15 and did not resolve issue. Cycled power for tower at Lakeview at 15:25 and communication resolved.

19: At 08:48 received port Burwell chamber panel failure alarm. Confirmed alarm was from water treatment plant testing their generator.

24: Received alert from call service for power failure at valve house. In contact with EAWTP. Site was running on generator power due to power failure. Site now back on utility power.

31: Received alert from call service for panel power failure at valve house. Acknowledged alarm. Now inactive. Re-entered facility. Operating as intended. In contact with EAWTP. Generator not being tested at this time. Alarm due to power flicker.

SECOND QUARTER:

APRIL:

24: Received alarm for utility power fail at Port Burwell Tower, Enbridge performing work near by that caused power outage, once power was restored ensured all equipment is operational.

27: Received alarm call or UPS fault at Dexter rechlore, logged into SCADA and acknowledged alarm which cleared it, everything appears normal.

28: Received notification of MV1 low inlet pressure alarm, accessed SCADA, pressure spiked before dropping to 0 PSI again, spoke with Port Stanley WTP operator and was informed they were performing pressure calibrations.

MAY:

10: Received Lakeview rechlore chamber panel power fail alarm, logged onto SCADA and acknowledged alarm, site still had comms and was reading, Hydro One app showed power outage in area, once hydro was restored inspected site all appears normal.

26: Received alarm for Lakeview chamber high level, arrived onsite and chamber had pumped down, sump pump working well, now out of alarm.

JUNE:

08: Received alarm call for Port Burwell tower communication alarm, logged on remote SCADA to inspect, site is showing that all items are reading, relayed information to S. Gustavson for possible SCADA issue.

19: Received Lakeview Rechlore power fail alarm, logged onto SCADA and called dialer to acknowledge, monitored SCADA and watched chlorine pump 1 go through run cycle, arrived onsite and site still had no power, UPS was running chlorine pumps and analyzer, at 04:00 UPS died, power restored to site at 13:00.

19: Received Port Burwell Tower PLC alarm, logged onto SCADA and acknowledged alarm which cleared it, site still had all readings.

23: Received alarm call for Port Burwell Tower PLC comm fault, accessed SCADA and found no readings for site, attempted to reset from PLC but was unsuccessful, arrived at Lakeview rechlore, cycled power to PB2 modem, checked SCADA and site has restored readings.

THIRD QUARTER:

July:

11: Received a call for Lakeview Rechlor power failure alarm. Logged onto SCADA. Readings visible and active. 2 alarms received on SCADA. Power fail now normal and chlorine pump 1 fault now normal. Alarms acknowledged on SCADA

11: Call received for Communication fault alarm E034 at Lakeview. Acknowledged alarm by dialer. Opened SCADA and readings were present. Will continue monitoring

12: Call received for Lakeview communication fault. Logged on remotely to SCADA, acknowledged alarm. System has current readings, and all appears normal. Will continue to monitor remotely

15: Power fail received for back up dialer (ID #1). Call from spectrum a few seconds later for power failure at chamber E034 Lakeview. Log in to Malahide SCADA. Only alarm present on SCADA is communication failure alarm for lakeview. Likely from power flicker. Acknowledged alarm. Readings present. Current readings are Pressure: 311.8 kpa, Cl: 1.54 mg/L, Current flow: 6.27 l/s. A few minutes later I got through to the back up dialer and acknowledged power failure alarm. Continuing to monitor SCADA readings and trending. All appears normal. No more alarms coming through. Logging off SCADA.

17: Received a call for Port Burwell tower PLC comm fault alarm. Logged into Malahide SCADA, no readings were present. Alarm acknowledged. Departing for site. When I arrived at the tower, there was still no readings on SCADA. Residual is at 0.84 @ 1757. Then when I arrived at Lakeview, back up UPS had run out officially; no power to facility. Likely the reason for the communication failure at tower.
Increased pump stroke under OIC from 78% to 80% to ensure residual stays up overnight. Departing tower now.

20: Received PLC comms failure alarm for Lakeview. I logged onto SCADA to see present and populating readings for lakeview. Facility readings are as follows: Pressure: 318.9, Chlorine: 0.87, Flow: 10.26
Will continue monitoring to ensure populating readings. After monitoring for a while, all appears normal and readings are present. Logging off SCADA now

24: Received notification of Port Burwell Tower PLC Comm Failure alarm. Accessed Remote Desktop and attempted to open Malahide SCADA. System began to boot up as normal but froze during loading process at "loading command server". Reset Remote Desktop connection but issue persisted. I then contacted Execulink regarding these issues - DSL connection for tower has been showing intermittent connection during the day, Execulink recommended a reset of comms equipment at site, but no comment on SCADA fault. Reset SCADA server. SCADA system now functioned normally upon startup from Malahide office. I then cycled power to the iPad and SCADA connection booted up as normal. Confirmed all readings at Port Burwell Tower were normal and reviewed trending. No issues were observed.

24: Received notification of Dexter Re-Chlor UPS fault alarm. Accessed Malahide SCADA. UPS fault now cleared, but CHP02 showing general alarm/lockout status. Acknowledged all alarms and reset CHP02 alarm/lockout status from SCADA. Pump returned to service and appeared to be functioning normally. Readings at all sites remain normal. Acknowledged all alarms and logged out of Malahide SCADA.

27: Received notification of Dexter CHP02 general alarm. Accessed Malahide SCADA. Pump 2 currently running at 18% speed, residual 1.29. Reset CHP02 alarm from SCADA screen. Monitored SCADA for site and there was no recurrence of issue observed. All appears normal. Logged off from Malahide SCADA.

27: Received notification of Dexter re-chlor Comm fault. Accessed Malahide SCADA. No readings present for site. Acknowledged alarm and proceeded to the site. On arrival all equipment appears to be running as normal and chlorine pumps are currently dosing. Cycled power to comms equipment. Contacted Execulink, and the technician tested all connections and found no issues on their end.
As per conversation with ORO, I returned to Dexter re-chlor and attempted to cycle power to the hard-wired PLC unit. Upon attempt to cycle the power, PLC faulted out. Both Hypochlorite pumps now showing “input signal <4mA” errors and stopped dosing. Notified ORO of issue and contacted Hawkins Electric for assistance. Hawkins Electric arrived on site at 21:41. PLC fault was cleared and hypochlorite pumps returned to normal function. Comms remain down for site. Left site running without comms until issue can be rectified on Monday. Hawkins now departing site.

<u>August:</u>

1: Received alarm call for Dexter high chlorine. Logged on remotely to SCADA. Acknowledged alarm. It is now out of alarm state but still reading high. There is no flow leaving the valve house going through Dexter rechlore. It appears the residual has climbed since flow stopped. It is likely the chlorine pump was dosing when the flow was stopped. Will continue to monitor. When flow resumed going past chamber again, chlorine residual came back down to normal operating level.

12: Received a call for hypochlorite pump 2 lock out. Logged onto SCADA and reset pump 2, and the alarm cleared. Watched pump 2 complete a pump cycle and continued to monitor site. Current residual was 1.26 mg/L. Left site after monitoring for about 30 minutes.

12: Received call for port Burwell chamber power failure alarm. Logged into SCADA and acknowledged alarm and alarm cleared. All values appeared normal. Called the Port Stanley water treatment plant and confirmed they had received a power flicker and were back on utility power. Logged off scada, as everything appeared normal.

14: Received E034 communication fault alarm. Logged into scada and acknowledged the alarm. Lakeview still had communications. Pressure was 308.5, flow was 8.82 and residual was 0.92 mg/L. Continued to monitor site. At 1723 pressure was 318.5, flow was 8.18 and residual was 0.93 mg/L. At 1733 pressure was 313.2, flow was 9.02 and residual was 0.94 mg/L. All appears normal and left site at 1740

17: Received Dexter high chlorine alarm at 1546. Logged into scada and acknowledged alarm. Residual was 3.44 mg/L at 1549 and out of alarm. Tower is discharging, so no flow through Dexter, and chlorine residual remained high. Continued to monitor site. Residual stayed under high alarm and at 1630 tower started to fill, flow started and residual dropped to normal levels. Logged off at 1640

20: Received Port Burwell tower plc communications fault alarm. Logged onto SCADA remotely to see readings populating. Flow: 5.86, Chlorine: 1.86, Level: 9.76. Will continue monitoring to ensure readings stay current. As readings continued populating. All appeared normal.

21: Received Port Burwell Lakeview Comm Fault alarm. L Logged into SCADA remotely. Readings present and updating. Current readings as follows: Flow: 4.59, Chlorine: 1.30, Pressure: 315.6. Will continue monitoring to ensure data stays current and continues populating. All appears normal, readings present and updating. Logging off SCADA now.

24: Received e034 communications alarm. Logged onto SCADA and acknowledged alarm. Still had communication to the site. Pressure was 307.7 while flow was 9.12. Continued to monitor site. At 1534 pressure was 314.2 and flow was 8.13. Continued to monitor site. At 1546 pressure was 314.4 and flow was 8.95. All appears normal and left SCADA

29: Received alarm call for Dexter chlorine pump fault. Will log on remotely. Acknowledged alarm on summary, on Dexter setpoint page. Cleared alarm for chlorine pump 2. Rotated pump duties back and forth, pump appeared to turn on and run fine, will inspect further on-site in the morning.

<u>September:</u>

4: Received a low chlorine alarm for Port Burwell Tower. Arrived at tower, flushed chlorine analyzer manifold after noting some air bubbles and reset back to normal flow rate. Chlorine analyzer currently reading 0.62ppm free, pressure in panel at 57psi. Ensured pumps are running properly after filling the cylinder on the panel. Currently set to 78% stroke, increased both to 80%.

6: Received low Chlorine at Tower. Arrived on site to find pump 1 which was running air locked, quickly removed air in diaphragm. Panel pressure at 54psi. Obtained a chlorine residual of 0.69ppm free from fire hydrant located at 52429 Nova Scotia Line. Tower residual currently showing 0.70ppm on analyzer and just started to fill. Will continue monitoring chlorine level through SCADA laptop.

10: Received call for e034 communication alarm. Logged into SCADA and acknowledged alarm. Still had readings at e034. At 2335 residual was 0.95 mg/L, pressure was 318.7 and flow was 4.99. Continued to monitor site. At 2345 residual was 1.39mg/L, pressure was 317.4 and flow was 3.83. Continued to monitor site. At 2355 residual was 1.14mg/L, pressure was 318.3 and flow was 4.20. All appears normal

12: Received low chlorine alarm for Port Burwell tower. At 1636 logged into SCADA and cl was 0.46mg/L with tower discharging and pump 1 running. Headed to site and continued to monitor via scada. Arrived on site at 1730 with cl at 0.51 mg/L. At 1731 tower stopped filling and started to discharge. Pressure in panel was 50 psi and panel didn't appear to have any leaks. Calibrated analyzer from 0.51mg/L to 0.69mg/L. Trending

showed chlorine spiked after tower stopped filling and then started to trend downward. Confirmed pump 2 was working by filling cylinder. Pump 1 appeared to pump chlorine when in fast advance but not when in normal operation. Took off pump 1, pump to panel line and cleaned it out. Pump 1 appeared to be working properly after cleaning the line. Due to tower filling, going to leave pump 1 out of rotation. Contacted ORO about findings. At 1901 cl was 1.14mg/L with the tower still filling. Left site at 1920

20: Received comm failure for Port Burwell chamber e034 at lakeview. Opened SCADA remotely. Acknowledged alarm and all readings were present and updating accordingly. Current readings are as follows: Residual: 1.11mg/L, Flow: 7.72, Pressure: 307.5. Reviewed trending, all appears normal. Comm fault banner still present but readings populating. All appears normal. Logging off SCADA.

21: Received 3 alarms for communication failures at dexter line, PB tower, and Springfield SPS. Opened SCADA remotely and no readings present for any of the 3 sites. Checked trending and looked like they all dropped out around 0615. Continued monitoring to see if readings populate. Dexter line and tower are back online. Readings are as follows:
DEXTER-Pressure: 254.1, Flow1: 0.35, Flow2: 0.00, Residual: 1.09mg/L
TOWER-Level: 9.25, Residual: 1.71, Flow: 5.35
Checked readings for lakeview and none present. At 0700 lakeview readings started to populate. Readings are as follows: Pressure: 311.6, Residual: 1.38, Flow: 2.97. Continued monitoring to ensure readings are populating. All readings appear normal and within parameters. Logging off SCADA now.

FOURTH QUARTER

OCTOBER:

1: Low Chlorine Alarm: Arrived onsite in response to low chlorine alarm floating at 0.48-0.5 ppm. Pump 2 was pushing air into panel. Re-fitted valves on pump 2 and purged air out of system. Panel held pressure and dosed properly using pump 2. Pump 2 in duty for the day and monitored and confirmed with on-call operator at EOD that al was functioning normally.

2: Power Failure Alarm: Arrived onsite to respond to power failure alarm. Checked hydro outage map, outage due to work in the area. First alarm at 0930, kept eye on SCADA with on call operator. Numbers still populating and pumps running off UPS. residual stayed within parameters for entirety of outage. Power back at 1300. Trending on SCADA looked unusual. Noticed chlorine was dosing partly through degassing line. Cleaned check valve on dosing line. Reattached fitting. Watched pressure build and dose successfully with pump 1. Trending back to normal with pump 1 in duty. Pumps back to alternating in auto on SCADA. All appears normal.

6: Lakeview Comm alarm: values present.

11: Two Lakeview Comm alarm: values present.

13: Two Lakeview Comm alarm: Values Present

15: Lakeview Comm alarm:. No readings present for the site. Looking like comms fell out just before 5AM. trending looks good until that point. Will continue monitoring.
0615: Comms back online, currently populating. Readings are as follows:
at1: 1.07
Ft1: 4.41
Pt1: 316.8
0620: All appears normal, trending looks good and system is operating as intended. logging off of SCADA now.

18: 9011: received 3 alarms - Chamber 13 power fail, chamber 13 flow transmitter F1 fail, and Port Burwell Chamber panel power fail.
0915: logged onto SCADA remotely, all readings populating for all PB sites and chamber 13. Likely due to power flicker. Continued monitoring on SCADA, system operating normally after the fact.

19: Dexter Line Low Chlorine

1610: Received call from a Dexter Line low chlorine
1615: logged into SCADA remotely to check the residual. Residual sitting at 0.50 mg/L left for site immediately
1644: arrived on site to chlorine pump to running and residual at 0.85. Checked, trending, and noticed chlorine was not spiking as high and was not reaching as high of a reading when pumping to sustain residual until next pumping cycle.
1700: took apart pump 2 pump valves to clean because of small chlorine leak that could be impacting problem over time. Put pump 1 in duty while doing so. Pump 1 able to reach a higher residual than pump 2 while pumping in duty, even after cleaning of pump 2 valves. Looked for check valve for pump 2 to replace but none to be found.
1750: contacted ORO of findings and asked permission to leave pump 2 out of duty for night until repairs can be done with proper parts. Permission confirmed and pump 1 is in duty with manual alternation.
1800: calibrated analyzer from 0.94 to 1.30 (confirmed twice) now leaving site.

22: Received alarm calls for ID#1 power fail, Lakeview panel power failure and Lakeview hypo pump fault, likely power outage in area, looked at online SCADA, site still currently has readings.

2059: Checked Hydro one app, showing that there is a power outage in Lakeview area, current estimated time of repair is 21:30

2121: While continuing to monitor SCADA alarms had cleared, assumed power has been restored, will call back up Dialer to acknowledge

SECTION 8: COMPLAINTS & CONCERNS

FIRST QUARTER:

There were no community complaints or concerns during the first quarter.

SECOND QUARTER:

There were no complaints or concerns reported during the second quarter.

THIRD QUARTER:

There were no complaints or concerns reported during the third quarter.

FOURTH QUARTER:

PBSW01 Locates	
Month	**# of Locates Completed**
January	5
February	4
March	9
April	2
May	0
June	0
July	1
August	2
September	2
October	3
November	
December	

Elgin Area
Primary Water Supply System

October 17, 2025

Via Email: vic.fedeli@pc.ola.org
todd.mccarthy@pc.ola.org
rob.flack@pc.ola.org

Hon. Victor Fedeli
Minister of Economic Development, Job Creation and Trade
18th Floor 777 Bay Street
Toronto, ON M7A 1S5

Hon. Todd J. McCarthy
Minister of the Environment, Conservation and Parks
5th Floor 777 Bay Street
Toronto, Ontario M7A 2J3

RE: Yarmouth Yards Industrial Development (PowerCo et. al.), St. Thomas ONT

Dear Ministers;

The Elgin Area Water Supply System treats and supplies drinking water to eight municipalities across a significant portion of Elgin County in southwest Ontario, including the City of London and the City of St. Thomas. Our water treatment plant is located near the community of Port Stanley in Central Elgin.

On March 13, 2023, we were pleased to learn of a significant economic investment in the region in the form of an electric vehicle battery manufacturing plant (PowerCo) in an area of St. Thomas that would become known as Yarmouth Yards.

While we had no concerns with the information related to the projected water needs for PowerCo that were provided to the Elgin Area Water System in 2023, water requirements provided by the Ministry of Economic Development, Job Creation and Trades and the City of St. Thomas in early 2025 are significantly higher than previously provided and have profound implications for the regional water system.

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Elgin Area Primary Water Supply System
235 North Centre Road, Suite 200
London, ON N5X 4E7

An initial assessment of the implications of these higher water demands suggests that the water treatment plant will need to be significantly expanded on a highly accelerated timeline, with construction starting no later than 2031. This is at least twenty years sooner than previously estimated.

A recently completed Master Plan for the regional water system estimates that the full cost of the plant expansion to meet the needs of all the communities served by the system, including Yarmouth Yards, is in the order of $400 million.

The water demand information provided earlier this year fundamentally changes the water system's financial plans and any plant expansion of this magnitude would have to be undertaken using debentures.

Any debt incurred by the Elgin Area Water Supply System must be proportionately held by each benefiting municipality of the regional water system, meaning that the debt capacity of each of the benefiting municipalities would be significantly and proportionately impacted by the debt incurred to expand the plant. Some municipalities may not have the debt capacity available to incur their proportionate share of the debenture at all, while others may be subsequently prevented from using their debt capacity to undertake planned infrastructure investments within their communities to address aging infrastructure and support growth.

The regional water system has no sources of funding except the unit rate charged to each member municipality. This is effectively a "wholesale" rate and increases to it result in corresponding increases to the rates charged by each municipality to their end consumer. It is reasonable to assume that a significant increase in the wholesale rate for water will have implications for residents, businesses and industries within those municipalities.

The unit rate for water supply charged to each municipality is currently $1.06 per cubic meter. In order to support the anticipated debt required for the plant expansion, a high-level assessment has estimated the required rate to increase to at least $1.79 per cubic meter of water in the short term.

We are committed to balancing the affordability of water in the region as an essential service while finding ways to support economic growth. Yarmouth Yards is an exciting development for the region, but its scale and timelines are well outside of what the Elgin Area Water Supply System's long-term asset management and financial plans contemplated or can accommodate in such a short timeframe. The Elgin Area Water Supply System is hopeful that we can discuss this matter with the Province of Ontario

and seek opportunities to minimize this financial burden on the region's municipalities while continuing to support this exciting new chapter in the growth of the region.

Respectfully,

Pete Barbour, Board Chair
Elgin Area Water Supply System Board of Management

c.c. Hon. Rob Flack, MPP Elgin-Middlesex-London
K. Scherr, Chief Administrative Officer

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November 20, 2025

The Honourable Victor Fedeli
Minister of Economic Development, Job Creation and Trade
18th Floor, 777 Bay Street
Toronto, Ontario M7A 1S5

The Honourable Todd J. McCarthy
Minister of the Environment, Conservation and Parks
5th Floor, 777 Bay Street
Toronto, Ontario M7A 2J3

Re: Support for the "Yarmouth Yards" Industrial Development – St. Thomas, Ontario

Dear Ministers,

On behalf of the Council of the Town of Aylmer, I am writing to express our strong support for the development of the "Yarmouth Yards" industrial site in St. Thomas, Ontario. Aylmer Council has reviewed the October 17, 2025 correspondence from the Elgin Area Primary Water Supply System Board of Management and wishes to echo its request that the Province work with regional partners to address these financial and infrastructure implications.

As a municipality in Elgin County and a community that shares many regional economic, infrastructure and service-delivery links, we believe this investment represents a significant opportunity for the broader area. The Council acknowledges that the project will enhance regional economic growth, create employment opportunities, and support Ontario's transition toward new-economy industries.

At the same time, Council notes and appreciates the concerns raised by the Elgin Area Primary Water Supply System regarding the accelerated water-treatment plant expansion, the magnitude of capital investment (~$400 million) and the impact on regional municipal debt-capacity and water costs. The Town of Aylmer shares a keen interest in ensuring that infrastructure needs to keep pace with industrial development, and that the burden placed on municipalities and residents is managed appropriately.

Council respectfully encourages your Ministries to engage collaboratively with the Elgin Area Primary Water Supply System, all affected municipalities, and the developers to ensure:

- transparent assessment of water-supply demands tied to the project, and alignment with service capacity;
- consideration of the debt capacity limits of small municipalities and our inability to locally address the advancement of the capital construction timeline as recently identified

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without significant negative impacts to our capacity and abilities to operate for the period of debt issuance.

- mechanisms to protect smaller municipalities (and their ratepayers) from disproportionate cost burdens;
- oversight or support (provincial or otherwise) to mitigate rate-shock to residents and businesses; and
- alignment of the development timeline with realistic infrastructure readiness, to safeguard service reliability and financial sustainability.

In this context, the Town of Aylmer supports the Elgin Area Primary Water Supply System Board in seeking opportunities for provincial involvement or assistance to minimize undue financial burden while enabling the region to seize the economic upside of the Yarmouth Yards initiative.

We look forward to working with the Province, the Elgin Area Primary Water Supply System and other regional partners to support responsible growth, sustainable infrastructure, and shared prosperity.

Thank you for your consideration. If you require further input from the Town of Aylmer, please do not hesitate to contact our office.

Yours sincerely,

DocuSigned by:
Jack Couckuyt
78A3E6BAFA44482...

Jack Couckuyt
Mayor, Town of Aylmer
On behalf of Council

cc: K. Scherr, Chief Administrative Officer
The Honourable Rob Flack, MPP Elgin-Middlesex-London
Board of Management, Elgin Area Water Supply System

87 John Street South
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November 28, 2025

Elgin Area Primary Water Supply System Master Plan

Sent via email:

Marcy McKillop, P.Eng., Environmental Service Engineer
Regional Water Supply
Lake Huron and Elgin Area Primary Water Supply Systems
mmckillop@huronelginwater.ca

Benny Wan, P.Eng., Consultant Project Manager
AECOM ULC
Benny.Wan@aecom.com

RE: Comments regarding the Elgin Area Primary Water Supply System Master Plan

We have reviewed the Elgin Area Primary Water Supply System Water Master Plan prepared by AECOM, dated October 2025 and offer the following comments:

As a small member municipality which represents a minor share of treated water flows from the EAPWSS, the capital expansions contemplated by this master plan are of significant concern to the Township of Malahide and the member municipalities whom we represent as the Administering Municipality for the Aylmer Area Secondary Water Supply System and the Port Burwell Area Secondary Water Supply System. Collectively, these Boards include the Municipality of Central Elgin, the Municipality of Bayham, the Town of Aylmer and the Township of Malahide.

The potential for drastic increase of purchased water rates by these secondary water boards from the primary water board will represent a significant financial hardship to all the water customers relying on water from these systems.

The capital costs associated with these capital expansions may further burden our collective municipalities by significantly and negatively impacting our municipal debt capacities. The potential negative impacts on our municipal debt capacity may be crippling.

Through review of the Master Plan document and associated appendices, it is concerning that the required expansions at the Elgin Terminal Reservoir and the Elgin Area Water Treatment Plant are both primarily, if not exclusively, required as a direct result of the needs of the City of St Thomas in order to support the provincially-sponsored development of the Yarmouth Yards Industrial Development.

Based on the review of AECOM's Technical Memorandum – Flow Projections Analysis for the Elgin Area Primary Water Supply System, in conjunction with correspondence between the City of St Thomas and Regional Water Supply staff, it is undeniable that the majority of these upgrades are required primarily to support local development contained within the City of St Thomas.

While the Township of Malahide, AASWSS and PBASWSS are supportive of the growth and development in our area, we remain concerned with the significant financial burden that will accompany this growth, and how a seemingly disproportionate share of these costs will be applied to our municipalities.

We respectfully request:

- That this letter be formally filed within the Master Plan documentation
- In light of the very low growth projections for the majority of the member municipalities, that a detailed explanation be provided as to how these proposed upgrades will positively benefit the AASWSS, PBASWSS and our member municipalities
- The EAPWSS complete a detail financial analysis of the future impacts on the water rates and associated debt capacities of each member municipality affected
- The EAPWSS advocate to the Province on behalf of its member municipalities to receive the required funding for these projects from a Provincial and/or Federal source

Additionally, we seek clarity on the following questions:

- If water storage is a responsibility of the local municipalities, will the Elgin Terminal Reservoir expansion be an expense to the City of St Thomas rather than the EAPWSS? How will this affect the existing joint occupancy and use agreement at the reservoir?
- 9.1.3.1 states that the Transmission A-Line Re-commissioning will result in lower operating pressure to the customers on both the A and B lines. How is this quantified? What is the extent of the decreased operating pressure? How will it be mitigated? What will the impacts be on the secondary boards and customers directly serviced by these lines?
- Recognizing that there has been uncertainty and inconsistency surrounding the overall water demands for the Yarmouth Yards Industrial Development, have these needs been finalized in order to ensure absolute confidence in the design and recommendations being contemplated in this study?

Sincerely,

Township of Malahide
Administering Municipality for the PBASWSS and AASWSS

Cc: AASWSS Joint Board of Management Members
PBASWSS Joint Board of Management Members