

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

Southwestern Region

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File# SI-ES-KI-540

February 11, 2021

Union Water Supply System 1615 Union Avenue Ruthven, ON NOP 2G0

Attention: Mr. Rodney Bouchard, Manager

rbouchard@unionwater.ca

Dear Mr. Bouchard:

Re: Union Area Water Supply System

Inspection Report

Please find enclosed the Drinking Water System Inspection Report for the Union Area Water Supply System (DWS#210000853). This year's inspection was conducted remotely and the telephone interview/questionnaire was held on January 28, 2021. There was no physical inspection conducted at your drinking water system this year.

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 on the Drinking Water Ontario website at <a href="https://www.ontario.ca/drinkingwater">www.ontario.ca/drinkingwater</a>.

In order to measure individual inspection results, the Ministry has established an inspection compliance risk framework based on the principles of the Inspection, Investigation & Enforcement (II&E) Secretariat and advice of internal/external risk experts. The Inspection Summary Rating Record (IRR), included as Appendix B of the inspection report, 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.

IRR ratings are published (for the previous inspection year) in the Ministry's Chief Drinking Water Inspectors' Annual Report. If you have any questions or concerns regarding the rating, please contact Marc Bechard, Water Compliance Supervisor, at (519) 490-0761.

Likewise, if you have any questions or concerns regarding this report, please call me at (226) 280-1556.

Yours truly,

Neil Gilbert, P.Eng.

Provincial Officer – Water Inspector

Med S. Heat

Southwestern Region

Ministry of the Environment, Conservation and Parks

Sarnia District – Windsor Area Office

#### Encl.

cc: Dr. Wajid Ahmed, Medical Officer of Health, Windsor-Essex County HU, <a href="mailto:wahmed@wechu.org">wahmed@wechu.org</a>
Theresa Marentette, CEO and Chief Nursing Officer, Windsor-Essex County HU, <a href="mailto:tmarentette@wechu.org">tmarentette@wechu.org</a>
Kristy McBeth, Director of Health Protection, Windsor-Essex County HU, <a href="mailto:kmcbeth@wechu.org">kmcbeth@wechu.org</a>
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Dale Dillen, Sr Operations Manager – Union AWSS, OCWA, <a href="mailto:dillen@ocwa.com">dillen@ocwa.com</a>
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#### **Ministry of the Environment, Conservation and Parks**

## UNION AREA WATER SUPPLY SYSTEM Inspection Report

Site Number: 210000853
Inspection Number: 1-0088M
Date of Inspection: Jan 28, 2021
Inspected By: Neil Gilbert



## Ministry of the Environment, Conservation & Parks Drinking Water System Inspection Report Table of Contents

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Appendix A: Stakeholder Appendix

Appendix B: Inspection Rating Record



#### OWNER INFORMATION:

Company Name: UNION WATER SYSTEM JOINT BOARD OF MANAGEMENT (LEAMINGTON,

KINGSVILLE, ESSEX, LAKESHORE)

Street Number: 1615 Unit Identifier:

Street Name: UNION Ave City: RUTHVEN

Province: ON Postal Code: N0P 2G0

#### CONTACT INFORMATION

**Type:** Operating Authority **Name:** Sam Wen **Phone:** (519) 326-4447 **Fax:** (519) 326-0450

Email: swen@owca.com

Title: Process & Compliance Technician

#### **INSPECTION DETAILS:**

Site Name: UNION AREA WATER SUPPLY SYSTEM
Site Address: 1615 UNION Avenue RUTHVEN ON NOP 2G0

County/District: KINGSVILLE

MECP District/Area Office: Windsor Area Office

Health Unit: WINDSOR-ESSEX COUNTY HEALTH UNIT

Conservation Authority: Essex Region Conservation Authority

MNR Office: Chatham Regional Office
Category: Large Municipal Residential

**Site Number:** 210000853

Inspection Type: Special Announced

Inspection Number: 1-0088M

Date of Inspection: Jan 28, 2021

Date of Previous Inspection: Jan 15, 2020

#### COMPONENTS DESCRIPTION

Site (Name): Union AWSS

Type: Other Sub Type: Other

Comments:

The Union Area Water Supply System (Union WSS) is located in Ruthven, Ontario. The drinking water system is owned by, and supplies water to, the municipalities of Kingsville, Leamington, Essex and Lakeshore via the Union Water System Joint Board of Management. Each of these respective municipalities forms part of the board, but each also owns and operates a separate standalone distribution system receiving water from the Union WSS. The drinking water system's total serviced population is approximately 66,600. The Union WSS system is considered a "large municipal residential system" under O. Regulation 170/03.

The communities of Kingsville, Leamington, Essex are equipped with elevated tanks. Other than the reservoirs onsite at the Union treatment plant, there is also a reservoir/booster station in the village of Cottam which serves the Town of Essex.



### Ministry of the Environment, Conservation and Parks Inspection Report

Site (Name): Union AWSS Low Lift Building

Type: Source Sub Type: Surface Water

**Comments:** 

The treatment facility in Ruthven, receives water from Lake Erie via a low lift pumping station. Seven low lifts pumps can draw water through two intake pipes and another emergency intake channel if needed. The low lift station is equipped with a zebra mussel control system consisting of two sodium hypochlorite chemical feed pumps to prechlorination lines retrofitted through both the #1 and 2 intake, extending to a diffuser within each intake crib. The low lift pumping station consists of a two cell interconnected pump-well, equipped with manually removed bar screens and automatic travelling screens. Low lift pump well #1 houses five low lift pumps and low lift pump well #2 houses the remaining two pumps. The low-lift also houses two surge tanks for pump pressure surges. Raw water flows through 24 inch and 36 inch raw transmission mains to the treatment plant approximately one kilometre inland.

Site (Name): Union AWSS WTP

Type: Treated Water POE Sub Type: Treatment Facility

Comments:

The Union WSS treatment plant is currently rated at 124,588 m3/d approved capacity. It is a conventional water treatment plant consisting of contact clarification via four solids upflow clarifiers after coagulant, coagulant aid (polymer) and activated carbon addition. Clarified water flows into eight dual media-type filters (sand and anthracite). Filter aid can be dosed on a contingency basis. The filters are equipped with backwash facilities via two backwash pumps. Sedimentation sludge and backwash from the filters is directed to a residue management pump station and is transferred to two settling/storage ponds. Supernatant overflow from the ponds is discharged into a storm sewer which discharges to Lake Erie.

Primary disinfection is provided via chlorine gas solution injection into the clarified effluent water (pre) and filtered effluent water (post) locations. Chlorine contact is achieved in two on-site reservoirs, operated in series. Interconnecting piping and valves allow taking individual reservoirs out of service. Beginning on June 4, 2018, the UWSS initiated a routine shutdown of their chloramination system for maintenance purposes. On December 23, 2019, UWSS notified the MECP that based on their Consultant's monitoring report, the Union Water Supply System Joint Board of Management had decided to permanently switch to free chlorine for secondary disinfection. The high-lift pump station consists of two wells. High-lift pump well #1 houses six high lift pumps and high-lift pump well #2 houses two pumps. There is also an emergency diesel-drive for one of the high-lift pumps. The high-lift also houses two surge tanks for pump pressure surges.



#### **INSPECTION SUMMARY:**

#### Introduction

The primary focus of this inspection is to confirm compliance with Ministry of the Environment,
Conservation and Parks (MECP) legislation as well as evaluating conformance with ministry drinking water
related policies and guidelines during the inspection period. The ministry utilizes a comprehensive,
multibarrier approach in the inspection of water systems that focuses on the source, treatment and
distribution components as well as management practices.

This drinking water system is subject to the legislative requirements of the Safe Drinking Water Act, 2002 (SDWA) and regulations made therein, including Ontario Regulation 170/03, "Drinking Water Systems" (O.Reg. 170/03). This inspection has been conducted pursuant to Section 81 of the SDWA.

This report is based on a "focused" inspection of the system and was conducted remotely. Although the inspection involved fewer activities than those normally undertaken in a detailed inspection, it contained critical elements required to assess key compliance issues. This system was chosen for a focused inspection because the system's performance met the ministry's criteria, most importantly that there were no deficiencies as identified in O.Reg. 172/03 over the past 3 years. The undertaking of a focused inspection at this drinking water system does not ensure that a similar type of inspection will be conducted at any point in the future.

This inspection report does not suggest that all applicable legislation and regulations were evaluated. It remains the responsibility of the owner to ensure compliance with all applicable legislative and regulatory requirements.

The Union Area Water Supply System (UAWSS) is located in Ruthven, Ontario and the treatment facility receives water from Lake Erie.

The drinking water system is owned by, and supplies water to, the municipalities of Kingsville, Leamington, Essex and Lakeshore via the Union Water System Joint Board of Management. Each of these respective municipalities forms part of the board, but each also owns and operates a separate standalone distribution system receiving water from the UAWSS. The drinking water system's total serviced population is approximately 66,600. The Union Area Water Supply System is considered a "large municipal residential system" under O. Regulation 170/03. This inspection was conducted remotely and the inspection review period was January 1, 2020 to December 31, 2020.

#### **Source**

• The owner had a harmful algal bloom monitoring plan in place.

The Union Area Water Supply System's Harmful Algal Bloom monitoring, sampling and reporting plan is detailed in the Standard Operating Procedure (SOP) #OCWA-C6-15.

From June 3 to October 31, 2020, raw and treated water samples were collected weekly (typically 2 - 3 times) and

tested for microcystins. All of the microcystin results were reported as below the Method Detection Limit (0.1 or 0.3 ug/L) with the exception of one raw sample collected on August 29, 2020 which had a concentration of 0.1 ug/L.

• The owner did have a harmful algal bloom monitoring plan in place that met the requirements of the Municipal Drinking Water Licence condition.

Condition 6.1 under Schedule C of the Union Area Water Supply System's Licence (#041-101) notes that the owner shall develop and keep up to date a Harmful Algal Bloom monitoring, reporting and sampling plan.

As previously noted, a Harmful Algal Bloom monitoring, reporting and sampling plan is detailed in SOP#OCWA-C6-15.



#### **Source**

#### **Capacity Assessment**

- There was sufficient monitoring of flow as required by the Municipal Drinking Water Licence or Drinking Water Works Permit issued under Part V of the SDWA.
  - Schedule C, Condition 2.1 of the Municipal Drinking Water Licence #041-101 requires that continuous flow measurement and recording shall be undertaken for:
  - 2.1.1 The flow rate (L/s) and daily volume (m3/day) of treated water that flows from the treatment subsystem to the distribution system.
  - 2.1.2 The flow rate (L/s) and daily volume (m3/day) of water that flows into the treatment subsystem. The Union Area Water Supply System has flow meters for both the raw water entering the treatment plant and for treated water flowing from the plant to the distribution system.
- The owner was in compliance with the conditions associated with maximum flow rate or the rated capacity conditions in the Municipal Drinking Water Licence issued under Part V of the SDWA.
  - Schedule C, Condition 1.1 of the Municipal Drinking Water Licence #041-101 states that the maximum daily volume of treated water that flows from the Union Area Water Supply System shall not exceed 124,588 m3/day. During the inspection review period (January 1 to December 31, 2020) the Union Area Water Supply System did not exceed the maximum rated capacity. Based on records, the average daily volume of treated water conveyed to the distribution system was approximately 51,720 m3/day. This is approximately 42% of the rated capacity of the drinking water system. A maximum daily volume of treated water conveyed to the distribution system was 97,115 m3/day (78% of the rated capacity) which occurred in July 2020.

#### **Treatment Processes**

- The owner had ensured that all equipment was installed in accordance with Schedule A and Schedule C of the Drinking Water Works Permit.
- The owner/operating authority was in compliance with the requirement to prepare Form 2 documents as required by their Drinking Water Works Permit during the inspection period.
- Records indicated that the treatment equipment was operated in a manner that achieved the design capabilities required under Ontario Regulation 170/03 or a Drinking Water Works Permit and/or Municipal Drinking Water Licence issued under Part V of the SDWA at all times that water was being supplied to consumers.
- Records confirmed that the water treatment equipment which provides chlorination or chloramination for secondary disinfection purposes was operated so that at all times and all locations in the distribution system the chlorine residual was never less than 0.05 mg/l free or 0.25 mg/l combined.
- Where an activity has occurred that could introduce contamination, all parts of the drinking water system were disinfected in accordance with Schedule B, Condition 2.3 of the Drinking Water Works Permit.
  - The system's representative was made aware that the updated Ontario Watermain Disinfection Procedure was issued on August 1, 2020. The representative was advised that the municipality is required to modify its watermain repair/commissioning procedures and forms to meet the updated procedure's documentation requirements by the date required in its DWWP.

#### **Treatment Process Monitoring**

Primary disinfection chlorine monitoring was conducted at a location approved by Municipal Drinking



#### **Treatment Process Monitoring**

Water Licence and/or Drinking Water Works Permit issued under Part V of the SDWA, or at/near a location where the intended CT has just been achieved.

Primary disinfection chlorine monitoring is conducted at the outlet of Reservoir #2 (chlorine monitor CRA-7) and this is at/near a location where the intended CT has just been achieved.

- Continuous monitoring of each filter effluent line was being performed for turbidity.
- Operators were examining continuous monitoring test results and they were examining the results within 72 hours of the test.
- All continuous monitoring equipment utilized for sampling and testing required by O. Reg.170/03, or Municipal Drinking Water Licence or Drinking Water Works Permit or order, were equipped with alarms or shut-off mechanisms that satisfy the standards described in Schedule 6.

Free chlorine is measured on the reservoir's outlet (CRA-7) for monitoring primary disinfection CT. Chlorine alarm setpoints for CRA-7 are currently LoLo: 1.00ppm, Lo: 1.15ppm, Hi: 1.75ppm and HiHi: 1.85ppm. Each filter effluent line is equipped for continuous measurement of turbidity. Filter turbidity alarm setpoints are Hi: 0.16 NTU and HiHi: 0.20 NTU. At 0.20 NTU, the filter is automatically directed to waste; however, this setting is operator modifiable between 0-0.9 NTU (i.e. to keep a filter online).

- Continuous monitoring equipment that was being utilized to fulfill O. Reg. 170/03 requirements was
  performing tests for the parameters with at least the minimum frequency specified in the Table in Schedule
  6 of O. Reg. 170/03 and recording data with the prescribed format.
  - O. Reg. 170/03, s 6-5 requires the continuous monitoring equipment to record the date, time, sampling location and result of every test for the parameter with at least the minimum frequency prescribed as follows:
  - 1. Free chlorine residual required to achieve primary disinfection: 5 minutes
  - 2. Filter effluent turbidity: 15 minutes.

Monitoring of free chlorine residual at CRA-7 and turbidity at each filter effluent was typically occurring at 2 minute intervals.

 All continuous analysers were calibrated, maintained, and operated, in accordance with the manufacturer's instructions or the regulation.

#### **Operations Manuals**

- The operations and maintenance manuals contained plans, drawings and process descriptions sufficient for the safe and efficient operation of the system.
- The operations and maintenance manuals met the requirements of the Drinking Water Works Permit and Municipal Drinking Water Licence issued under Part V of the SDWA.

Condition 16.2 under Schedule B of the Union Area Water Supply System's Licence (#041-101) notes that the operations and maintenance manuals shall include (at a minimum) the following:

- 16.2.1 The requirements of this licence and associated procedures:
- 16.2.2 The requirements of the drinking water works permit for the drinking water system;
- 16.2.3 A description of the processes used to achieve primary and secondary disinfection within the drinking water system including where applicable:
- a) A copy of the CT calculations that were used as the basis for primary disinfection under worst case operating conditions and other operating conditions, if applicable; and
- b) The validated operating conditions for UV disinfection equipment, including a copy of the validation certificate;
- 16.2.4 Procedures for monitoring and recording the in-process parameters necessary for the control of any



#### **Operations Manuals**

treatment subsystem and for assessing the performance of the drinking water system;

16.2.5 Procedures for the operation and maintenance of monitoring equipment;

16.2.6 Contingency plans and procedures for the provision of adequate equipment and material to deal with emergencies, upset conditions and equipment breakdown;

16.2.7 Procedures for dealing with complaints related to the drinking water system, including the recording of the nature of the complaint and any investigation and corrective action taken in respect of the complaint;

A review of the Union Area Water Supply System's Operation Manual suggests that these conditions appear to be satisfied.

#### **Logbooks**

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

#### **Security**

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

#### **Certification and Training**

- The overall responsible operator had been designated for each subsystem.
- Operators-in-charge had been designated for all subsystems which comprised the drinking water system.
- All operators possessed the required certification.
- Only certified operators made adjustments to the treatment equipment.

#### **Water Quality Monitoring**

All microbiological water quality monitoring requirements for treated samples were being met.

As per O.Reg. 170/03 s10-3, the owner/operating authority for the system shall ensure that a water sample (treated) is taken at least once every week and tested for E. coli, total coliforms and general bacteria population expressed as colony counts on a heterotrophic plate count (HPC).

During the inspection review period (January 1 to December 31, 2020) all microbiological water monitoring requirements for treated water samples were performed.

• All inorganic water quality monitoring requirements prescribed by legislation were conducted within the required frequency.

As per O.Reg. 170/03 s13-2, the owner/operating authority of a large municipal residential system that obtains water from a raw water supply that is surface water shall ensure that at least one water sample is taken every 12 months and tested for every inorganic parameter set out in Schedule 23.

During the inspection review period (January 1 to December 31, 2020) this sample was collected on January 7, 2020.

 All organic water quality monitoring requirements prescribed by legislation were conducted within the required frequency.

As per O.Reg. 170/03 s13-4, the owner/operating authority of a large municipal residential system that obtains



#### **Water Quality Monitoring**

water from a raw water supply that is surface water shall ensure that at least one water sample is taken every 12 months and tested for every organic parameter set out in Schedule 24.

During the inspection review period (January 1 to December 31, 2020) this sample was collected on January 7, 2020.

 All nitrate/nitrite water quality monitoring requirements prescribed by legislation were conducted within the required frequency for the DWS.

As per O.Reg. 170/03 s13-7, the owner/operating authority of a system shall ensure that at least one water sample is taken every three months and have the sample tested for nitrate and nitrite.

During the inspection review period (January 1 to December 31, 2020) these samples were collected on January 6, April 6, July 7 and October 5, 2020.

 All sodium water quality monitoring requirements prescribed by legislation were conducted within the required frequency.

As per O.Reg. 170/03 s13-8, the owner/operating authority of a drinking water system shall ensure that at least one water sample is taken every 60 months (+/- 90 days) and tested for sodium.

The operating authority is sampling and testing for sodium annually, which exceeds the testing requirements prescribed by O.Reg. 170/03. During the inspection review period (January 1 to December 31, 2020) a sodium test was performed on January 7, 2020 (7.83 mg/L) and no concerns were identified.

 All fluoride water quality monitoring requirements prescribed by legislation were conducted within the required frequency.

As per O.Reg. 170/03 s13-9, the owner/operating authority of a drinking water system shall ensure that at least one water sample is taken every 60 months (+/- 90 days) and tested for fluoride.

The operating authority is sampling and testing for fluoride annually, which exceeds the testing requirements prescribed by O.Reg. 170/03. During the inspection review period (January 1 to December 31, 2020) a fluoride test was performed on January 7, 2020 (0.09 mg/L) and no concerns were identified.

• All water quality monitoring requirements imposed by the MDWL or DWWP issued under Part V of the SDWA were being met.

Additional environmental discharge sampling parameters, locations and frequencies are noted in Table 7, Schedule C of the Municipal Drinking Water Licence #041-101. These additional parameters are total suspended solids (monthly composite), filtered and unfiltered aluminum (monthly grab) and total chlorine residual (monthly grab). During the inspection review period (Jan.1 - Dec. 31, 2020), TSS composite samples were collected monthly from the north and/or south waste management settling ponds. The TSS results ranged from <3 to 6 mg/L and the average being 3.4 mg/L which is well below the annual average limit of 25 mg/L (noted in Table 3, Schedule C of the Licence).

Filtered and unfiltered aluminum grab samples were collected from various lagoon sludge pile runoffs (SP#1, SP#2, SP#3 and SP#4) during the inspection review period. Due to the lack of runoff, no aluminum samples were collected/tested from April to September 2020 and November and December 2020. The total (unfiltered) aluminum results ranged from 0.06 to 1.85 mg/L and the dissolved (filtered) results ranged from <0.001 to 0.263 mg/L. There are no limits noted for aluminum in Table 3, Schedule C of the Licence.

Also during the inspection review period, grab samples were collected weekly from the north and/or south lagoon effluents and tested for total chlorine residual. The total chlorine residuals ranged from 0.02 to 0.25 mg/L with an average being 0.10 mg/L which exceeds the annual average concentration of 0.02 mg/L (noted in Table 3, Schedule C of the Licence). The ministry was notified of this non-compliance via letter on January 15, 2021. It was noted in this letter that a Pocket Colorimeter 2 test kit is being used to test the residuals and that test results below 0.02 mg/l may not be read properly and may be interfered by other factors and parameters. It was also noted that the operating authority is currently working on finding a more accurate way of testing for total chlorine residuals and that the owner/operating authority are also looking into treatment process options to alleviate the non-compliance issue.

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UNION AREA WATER SUPPLY SYSTEM Date of Inspection: 28/01/2021 (dd/mm/yyyy)



#### **Water Quality Monitoring**

 Records confirmed that chlorine residual tests were being conducted at the same time and at the same location that microbiological samples were obtained.

#### **Water Quality Assessment**

 Records showed that all water sample results taken during the inspection review period did not exceed the values of tables 1, 2 and 3 of the Ontario Drinking Water Quality Standards (O.Reg. 169/03).

#### **Reporting & Corrective Actions**

- Corrective actions (as per Schedule 17) had been taken to address adverse conditions, including any other steps that were directed by the Medical Officer of Health.
  - On April 2, 2020, the ministry was notified of a 1 count of clostridium perfringens in a filter effluent sample (Incident # 1-NQCZ5). Correction action performed by the operating authority included optimizing the coagulation and filtration process and then resampling. The resample results were all non-detect for clostridium perfringens.
- All required notifications of adverse water quality incidents were immediately provided as per O. Reg. 170/03 16-6.
- Where required continuous monitoring equipment used for the monitoring of chlorine residual and/or turbidity triggered an alarm or an automatic shut-off, a qualified person responded in a timely manner and took appropriate actions.

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#### NON-COMPLIANCE WITH REGULATORY REQUIREMENTS AND ACTIONS REQUIRED

This section provides a summary of all non-compliance with regulatory requirements identified during the inspection period, as well as actions required to address these issues. Further details pertaining to these items can be found in the body of the inspection report.

**Not Applicable** 

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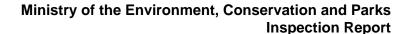
UNION AREA WATER SUPPLY SYSTEM Date of Inspection: 28/01/2021 (dd/mm/yyyy)



#### SUMMARY OF RECOMMENDATIONS AND BEST PRACTICE ISSUES

This section provides a summary of all recommendations and best practice issues identified during the inspection period. Details pertaining to these items can be found in the body of the inspection report. In the interest of continuous improvement in the interim, it is recommended that owners and operators develop an awareness of the following issues and consider measures to address them.

**Not Applicable** 





**SIGNATURES** 

Inspected By: Signature: (Provincial Officer)

Neil Gilbert Med S. Hert

Reviewed & Approved By: Signature: (Supervisor)

Marc Bechard

Review & Approval Date:

Note: This inspection does not in any way suggest that there is or has been compliance with applicable legislation and regulations as they apply or may apply to this facility. It is, and remains, the responsibility of the owner and/or operating authority to ensure compliance with all applicable legislative and regulatory requirements.



Ministry of the Environment, Conservation & Parks Drinking Water System Inspection Report Appendix A

**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 in the table 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/drinkingwater



PUBLICATION TITLE	PUBLICATION NUMBER
FORMS:	
Drinking Water System Profile Information	012-2149E
Laboratory Services Notification	012-2148E
Adverse Test Result Notification	012-4444E
Taking Care of Your Drinking Water: A Guide for Members of Municipal Councils	Website
Procedure for Disinfection of Drinking Water in Ontario	Website
Strategies for Minimizing the Disinfection Products Trihalomethanes and Haloacetic Acids	Website
Filtration Processes Technical Bulletin	Website
Ultraviolet Disinfection Technical Bulletin	Website
Guide for Applying for Drinking Water Works Permit Amendments, & License Amendments	Website
Certification Guide for Operators and Water Quality Analysts	Website
Guide to Drinking Water Operator Training Requirements	9802E
Community Sampling and Testing for Lead: Standard and Reduced Sampling and Eligibility for Exemption	Website
Drinking Water System Contact List	7128E01
Ontario's Drinking Water Quality Management Standard - Pocket Guide	Website
Watermain Disinfection Procedure	Website
List of Licensed Laboratories	Website



Principaux guides et documents de référence sur les réseaux résidentiels municipaux d'eau potable

De nombreux documents utiles peuvent vous aider à exploiter votre réseau d'eau potable. Vous trouverez ci-après une liste de documents que les propriétaires et exploitants de réseaux résidentiels municipaux d'eau potable utilisent fréquemment. Pour accéder à ces documents en ligne, cliquez sur leur titre dans le tableau cidessous ou faites une recherche à l'aide de votre navigateur Web. Communiquez avec le ministère au 1-866-793-2588, ou encore à waterforms@ontario.ca si vous avez des questions ou besoin d'aide.



Pour plus de renseignements sur l'eau potable en Ontario, consultez le site www.ontario.ca/eaupotable

TITRE DE LA PUBLICATION	NUMÉRO DE PUBLICATION
Renseignements sur le profil du réseau d'eau potable	012-2149F
Avis de demande de services de laboratoire	012-2148F
Avis de résultats d'analyse insatisfaisants et de règlement des problèmes	012-4444F
Prendre soin de votre eau potable - Un guide destiné aux membres des conseils municipaux	Site Web
Marche à suivre pour désinfecter l'eau portable en Ontario	Site Web
Stratégies pour minimiser les trihalométhanes et les acides haloacétiques de sous-produits de désinfection	Site Web
Filtration Processes Technical Bulletin (en anglais seulement)	Site Web
Ultraviolet Disinfection Technical Bulletin (en anglais seulement)	Site Web
Guide de présentation d'une demande de modification du permis d'aménagement de station de production d'eau potable	Site Web
Guide sur l'accréditation des exploitants de réseaux d'eau potable et des analystes de la qualité de l'eau de réseaux d'eau potable	Site Web
Guide sur les exigences relatives à la formation des exploitants de réseaux d'eau potable	9802F
Échantillonnage et analyse du plomb dans les collectivités : échantillonnage normalisé ou réduit et admissibilité à l'exemption	Site Web
Liste des personnes-ressources du réseau d'eau potable	Site Web
L'eau potable en Ontario - Norme de gestion de la qualité - Guide de poche	Site Web
Procédure de désinfection des conduites principales	Site Web
Laboratoires autorisés	Site Web



Ministry of the Environment, Conservation & Parks Drinking Water System Inspection Report Appendix B

**Inspection Rating Record** 

#### Ministry of the Environment - Inspection Summary Rating Record (Reporting Year - 2020-2021)

**DWS Name:** UNION AREA WATER SUPPLY SYSTEM

**DWS Number:** 210000853

**DWS Owner:** Union Water System Joint Board Of Management (Learnington, Kingsville, Essex,

Lakeshore)

**Municipal Location:** Kingsville

**Regulation:** O.REG 170/03

Category: Large Municipal Residential System

Type Of Inspection: Focused

**Inspection Date:** January 28, 2021 **Ministry Office:** Windsor Area Office

#### **Maximum Question Rating: 448**

Inspection Module	Non-Compliance Rating
Source	0 / 0
Capacity Assessment	0 / 30
Treatment Processes	0 / 81
Operations Manuals	0 / 28
Logbooks	0 / 14
Certification and Training	0 / 42
Water Quality Monitoring	0 / 75
Reporting & Corrective Actions	0 / 66
Treatment Process Monitoring	0 / 112
TOTAL	0 / 448

Inspection Risk Rating 0.00%

FINAL INSPECTION RATING: 100.00%

#### Ministry of the Environment - Detailed Inspection Rating Record (Reporting Year - 2020-2021)

**DWS Name:** UNION AREA WATER SUPPLY SYSTEM

**DWS Number:** 210000853

DWS Owner: Union Water System Joint Board Of Management (Leamington, Kingsville, Essex,

Lakeshore)

**Municipal Location:** Kingsville

**Regulation:** O.REG 170/03

**Category:** Large Municipal Residential System

Type Of Inspection: Focused

**Inspection Date:** January 28, 2021 **Ministry Office:** Windsor Area Office

**Maximum Question Rating: 448** 

**Inspection Risk Rating** 0.00%

FINAL INSPECTION RATING: 100.00%