



Union Water Supply System Inc.

Board of Directors Meeting

Wednesday, April 17th, 2024

9:00 am

Kingsville Arena, 1741 Jasperson

AGENDA

A. Call to Order:

B. Welcoming Remarks

C. Disclosures of Pecuniary Interest:

D. Approval of Minutes:

Minutes of the Board of Directors Meeting held on Wednesday, February 21st, 2024.

Pages 2 - 12

E. Business Arising Out of the Minutes

F. Items for Consideration:

1. UWSS/09/24 dated April 11, 2024 re: Status Update of UWSS Operations & Maintenance Activities and Capital Works from February 16th to April 11th, 2024
Pages 13 - 16

2. UWSS/10/24 dated April 11, 2024 re: MECP Drinking Water Inspection Report for the UWSS January 2024 Inspection
Pages 17 - 47

3. Verbal Update on:

- Asset Management Plan for Union Water Supply System Inc.

G. New Business:

H. Action Items:

I. Comments, Announcements, and Other Business:

J. Adjournment:

K. Date of Next Meeting: May 15th, 2024 - Kingsville Arena, 9:00 am

**Board of Directors
Meeting**

Wednesday, February 21, 2024
9:00 am
Kingsville Arena, 1741 Jasperson



MINUTES

Directors	Hilda MacDonald (Chair) Kim DeYong (Vice Chair) Lori Atkinson Sherry Bondy Tom Kissner Kirk Walstedt Dennis Rogers Mike St. Amant Sebastian Schmoranz John Tofflemire Larry Verbeke
Absent	Wayne Wharram
Also in Attendance: For UWSS	Rodney Bouchard, UWSS Inc. Chief Executive Officer Christine Johnson, UWSS Inc. Office Administrator
Guest	William Willis, Willis Business Law - UWSS Legal Counsel
OCWA Staff	Ken Penney, Sandra Reaume
Municipal Staff Present	Katie McLean, Shannon Belleau - Municipality of Leamington Rob Mackie - Town of Essex

Call to Order: 9:00 am

Welcoming Remarks:

The Chair welcomes everyone to the meeting.

Disclosure of Pecuniary Interest: none

Adoption of Board Minutes:

Moved by: Director DeYong

Seconded by: Director St. Amant

That the minutes of the Union Water Supply System Inc. Board of Directors meeting held January 17, 2024 is received.

Carried

Business Arising out of Minutes:

There was none.

Items for Consideration**Report UWSS/04/24 dated February 16th, 2024 re: Status Update of the UWSS Operations & Maintenance Activities and Capital Works from January 12th to February 16th, 2024**

The CEO reviews a multitude of capital works noting that warranty work was completed on the DAF #1 clarification unit, this included work to the scum troughs and reinstallation of the media in the saturation tank. DAF #1 was returned to service January 25th.

Filter #7 upgrades and maintenance were completed during the last month. This included the filter to waste valve and replacements of the 12" flow control valve. Also, level transmitters were installed on Filters 5-8 and the inlet channel #2. These updates should improve operation of the filters. Finally, a new electric actuator for Filter #8 flow control valve have been installed.

The CEO notes that modifications to the chlorine dosage for Cottam Booster Station (CBS) has been completed. This allows for better control of chlorine leaving the facility. A new chlorine residual analyzer has been installed and will be used to monitor low levels of chlorine in wastewater. The CEO reminds the Directors that this is part of the capital program to update the dichlorination program.

The five (5) year reservoir inspections of the reservoirs have been completed during the last month, this included CBS Reservoir #1, UWSS WTP Reservoir #1 and Essex Water Tower (EWT). Some maintenance issues were discovered at the WTP #1 Reservoir. A report is expected later this month.

The Quench Buggy approved with the capital budget is now ready for delivery. This will provide potable water at various community-based events going forward.

The Low Lift diesel generator had a small fuel leak during its January test run. Maintenance staff replaced the injector seals, and the generator was returned to service.

Minutes of Union Water Supply System Incorporated

Date: February 21, 2024

Page 3

Clarifier #4 was removed from service on February 12th to be cleaned and prepared for Napier Reid to complete its 3D scan. This is in preparation for Clarifier #4 being retrofitted to DAF #2. The CEO notes that all the lessons learned in the retrofitting of DAF #1 will be used during this conversion process.

A new piece of scanning equipment has been purchased to assist with monitoring many parameters in raw water, clarified water, filter effluent, and “finished” water. This will help operations staff optimize operations at the WTP.

The CEO updates the Directors on the Request for Proposal for a Construction Manager Advisor and Construction Manager at Risk (CMA/CMAR). He confirms that many firms have shown interest. This is in anticipation of the design for reservoir #3 at the WTP and the UV disinfection system. He also provides an update on the Municipal Class Environmental Assessment Study (EAS) for increased treatment capacity. He notes that the second Public Consultation Centre (PCC) will take place on March 7th, 2024 at the Kingsville Recreation Centre.

The CEO provides an update on the joint project with Winsor Utilities Commission (WUC) for emergency redundancy. He confirms that report TM1 &2 has been completed, but he will be speaking to this matter later on during the meeting.

Finally, the CEO notes that flows are up considerably since last year and over the last 4 year average. He believes this is due to greenhouses growing at this time of year, more than in the past. He believes there has been a bit of a shift of greenhouse water usage.

Director Rogers asks about the PCC for new treatment plant and what might the next steps look like. The CEO explains that there may be a blending of several projects and that is the purpose for retaining a construction manager. Director Rogers follows up by asking whether UWSS Inc. is eligible for any funding from the housing and water fund. The CEO believes that the municipalities are eligible but not sure if UWSS Inc. would be.

Director St. Amant is concerned about the fuel leak mentioned earlier. The CEO notes that it was a small leak, contained to a localized area surrounding the generator, but everything was captured.

Director Tofflemire is concerned about the increased flows and operationally if there is a concern. The CEO notes that at this time of the year the WTP is not at capacity, but that there has been a shift in the usage. This does present the issue of finding time to have maintenance completed.

Shannon Belleau, of Leamington Water, reminds members that UWSS Inc. is still supplying water to Wheatley.

No. UWSS Inc-05-24

Moved by: Director Schmoranz

Seconded by: Director Bondy

Minutes of Union Water Supply System Incorporated

Date: February 21, 2024

Page 4

That report UWSS/04/24 dated February 16th, 2024 re: Status Update of UWSS Operations & Maintenance Activities and Capital Works from January 12th to February 16th, 2024 is received.

Carried

Report UWSS/05/24 dated February 15th, 2024 re: 2023 Annual Report under the Safe Drinking Water Act and Ontario Regulation 170/03.

The CEO notes that this report is prepared by OCWA staff, who are present in the audience and can answer questions. He further notes that this report is to be provided to the municipalities as well as being posted on our website. This report provides the description of the system and process, as well as identifying capital works completed in 2023. He does note that within this report there is mention of the incident that took place on August 24th, 2023.

No. UWSS-06-24

Moved by: Director Verbeke

Seconded by: Director Kissner

That the Board of Directors receives the Annual Report for 2023 prepared under Section 11 of Regulation 170/03 and made under the Safe Drinking Water Act (SDWA).

Carried

Report UWSS/06/24 dated February 15th, 2024 re: 2023 Summary Report for Municipalities under Regulation 170/03 made under the Safe Drinking Water Act

The CEO notes that this report is prepared in a similar fashion to the Annual Report, however, this provides more details pertaining to each municipality that UWSS Inc. provides water to.

This report is also to be provided to the public and identifies any water quality incidents that may have taken place during the previous year. Again, there is a notation regarding the incident that took place of August 24th, 2023, identified as a low-pressure event within the Kingsville Water Tower (KWT) pressure zone.

This report also reviews the Permit to Take Water (PTTW) which sets a total volume of how much water the system can take from the lake, the volumes to each municipality and our peak flow values.

Director Atkinson is concerned with the renewal process for the PTTW in 2025. The CEO reassures members that the ministry provides ample notification. She is also concerned about the volume limits that the WTP is allowed to take and what would happen should

those numbers be exceeded. The manager looks to OCWA Operations Manager for that information and it is noted that we would contact the MECP and keep on pumping.

Director St. Amant asks for a bit of clarification on the low-pressure event and the CEO notes that it was the night of a terrible storm and heavy rains, he further explained that staff noted there should have been plenty of water within the KWT to maintain pressure. It was later discovered that there were many back flow pressure sump pumps that kicked on essentially draining the KWT within a few hours. He also notes that UWSS Inc. cannot be responsible for in home back up systems, using clean water for back up is not environmentally friendly solution. He is still hoping to work with the municipalities to develop a protocol regarding water powered sump pumps.

No. UWSS-07-24

Moved by: Director Rogers

Seconded by: Director Schmoranz

That the Board receive the Summary Report for 2023 which fulfils the requirements of Schedule 22 of Ontario Regulation 170/03; and

That the Summary Report has been forwarded to the four (4) participating municipalities namely the Town of Kingsville, Town of Essex, Municipality of Lakeshore, and the Municipality of Leamington

Carried

Report UWSS/07/24 dated February 16th, 2024 re: Terms of Reference for Finance & Audit Committee and Governance Committee

The CEO reminds members that at the January Board meeting members directed him to work with legal counsel to prepare Terms of Reference for the Finance & Audit Committee and the Governance Committee.

The CEO reviews the responsibilities of the committee and asks if the Directors find it prudent to invite some members of municipal staff to attend this committee as well. He notes that the Finance Committee (FC) will work with management to develop budgets, reports as well as advise on financial matters pertaining to UWSS Inc.

There is a discussion as to how the FC should work and whether it is advisory in nature. Both William Willis and the CEO confirm that the FC is advisory in nature and not formal decisions will come from their meetings.

Director DeYong acknowledges the benefit of having the local treasurers involved as they provide a level of expertise and Director Bondy supports bringing on the treasurers as well.

William Willis suggests an amendment to the recommendation that the financial directors/treasurers are invited and the FC is to act in an advisory capacity.

No. UWSS-08-24

Moved by: Director Rogers

Seconded by: Director DeYong

That the UWSS Inc. Board of Directors adopt the Term of Reference for UWSS Inc. Finance & Audit Committee; and

That the UWSS Inc. Finance & Audit Committee is to be advisory in nature; and

That the UWSS Inc. Finance & Audit Committee invite the local directors of finance to participate on said committee.

Carried

The CEO then suggests that there is a discussion on the Terms of Reference for the Governance Committee (GC). He acknowledges that creating these terms of reference at the same time as the FC would work well. The Chair would lead the GC.

Director Atkinson would like to see succession planning and recruitment as part of the duties of the GC. William Willis and the CEO note that this particular area falls to the duties of the municipalities and not necessarily UWSS Inc. as they need to determine who should be on the Board of Directors.

Director St. Amant seeks clarification on the duties of the CEO and whether this item should be included. The CEO notes that this item is also covered by the Chair and the Salary Policy is to be reviewed within a year.

Director Rogers raises a point that a municipal clerk or CAO on this committee would ensure that the rules of the Municipal Act followed properly. The CEO notes that this committee again is advisory in nature and is hesitant to have a CAO sit on it since it could affect the ability of UWSS Inc. to be "separated" from municipal administration. William Willis suggests that the committee has the flexibility to seek advice from legal experts when need be.

There is a small discussion as to the number of Directors required for the GC and Director DeYong suggests that shareholders and professional staff be involved rather than paid consultants, as you have more trust in those working so closely with the municipalities.

Director Walstedt is concerned about the wording on page 39 as he feels it sounds like executive committee with more power in making decisions than the actual board. The CEO and William Willis both express that that was not the intent. The Directors would like to see the amendments suggested in writing and updated Terms of Reference to include some of the small changes to the verbiage as well.

No. UWSS-09-24

Moved by: Director Verbeke

Seconded by: Director Tofflemire

That the UWSS Inc. Board of Directors adopt the Term of Reference for UWSS Inc. Governance Committee; and

That the UWSS Inc. Governance Committee is to be advisory in nature; and

That the UWSS Inc. Governance Committee invite the local directors of finance to participate on said committee.

Carried

The CEO notes that the Committees created were only intended to be advisory in nature, and the possibility of creating working groups as well.

Report UWSS/08/24 dated February 26th, 2024 re: Ontario Regulation 453-07 Financial Plan Update for the Union Water Supply System

The CEO begins by explaining to the Directors that this report is a requirement under Ont. Reg. 453-07. This report looks ahead 10 years to provide an overview of the Financial Planning for UWSS Inc. He notes that this item has previously been provided to the Directors in draft form at the November meeting. The report has now been amended to include that UWSS Inc. is now taken over management of the system.

The CEO notes that this document requires approval by the Board of Directors and must be submitted to the Ministry of Municipal Affairs & Housing, as well as the Ministry of Environment, Conservation & Parks.

The CEO points out that the Financial Plan will also be posted to the Union Water website. He also confirms that the Board can make changes throughout the 10 years if the need arises, as this is a living document.

The Financial Plan points out water rates, capital improvements, a potential agri-food industry rate, as growth should pay for growth.

Director Tofflemire questions why there is mention of an old sewage and water act, that is no longer relevant. The CEO explains that this is mentioned to show progression over time and how the Financial Plans have come to be the document they are now.

No. UWSS-10-24

Moved by: Director Schmoranz

Seconded by: Director Walstedt

That the Union Water Supply Inc. Board of Directors (Board) receives this report for information;

And further, The Union Water Supply System Water Financial Plan prepared by Watson & Associates Economists Ltd. dated February 16, 2024 be endorsed by the Board.

And further, that Notice of availability of the Financial Plan be advertised.

And further, that the Financial Plan and the Board Resolution approving the Financial Plan be submitted to the Ministry of Municipal Affairs and Housing. (O.Reg. 453/07, Section 3 (1) 6);

And further, that the Financial Plan and the Board Resolution approving the Financial Plan be submitted to the Ministry of Environment, Conservation and Parks, thus satisfying the requirements under the Safe Drinking Water Act. (SDWA Section 32 (5) 2 ii)

Carried

Verbal Update:

The CEO provides the Directors with an update on the Municipal Class EAS expansion to the WTP. He notes that he received a draft report at the end of January. This report provides aspects on what has been completed for the Environmental Assessment (EA). He can share this information with the directors. He notes that there will be a second public consultation, which will take place on March 7th, 2024 at the Kingsville arena.

He briefly runs through each of the alternatives reviewed as part of the process to determine the best type of technology/treatment process is ideal for the expansion of the UWSS. After careful review and assessment it was determined that a conventional WTP is the preferred alternative. He is hopeful that construction commences in 2026.

Director St. Amant asks if there is any approved funding to support the price tag of \$60-70 million. At this time there is not any approved funding. The CEO explains that part of the process is submitting everything to the Ministry and moving on to conceptual design and costs. The CEO also notes that this information will be brought back to the Board of Directors once the EA has been fully completed. He notes that the preferred option provides the water system with more reliance.

Director Verbeke asks the CEO to view an overhead map of the area in question; a view of the property at 1615 Union Avenue is then brought up on the screen.

Director Walstedt excuses himself from the meeting at 11 am.

Director Kissner asks if there has been much activity at the open Public Information Centres. The CEO notes that despite multiple news postings, social media posting and various other forms of publication there has not been much of a turnout.

Minutes of Union Water Supply System Incorporated

Date: February 21, 2024

Page 9

The CEO then discusses the study between UWSS and Windsor Utilities Commission (WUC) for emergency redundancy purposes. The CEO notes that the next step is the conceptual design and then return to the respective boards to determine where this project might go from there. An EA would be required and potentially a joint board meeting between UWSS and WUC

No. UWSS-11-24

Moved by: Director Atkinson

Seconded by: Director DeYong

That the verbal updates presented by the CEO of UWSS Inc. are received for informational purposes.

Carried

The CEO then mentions that UWSS Inc. requires a Shareholders meeting prior to August 24th, 2024. It is suggested that this takes place at the prior to the beginning of the next meeting.

Special Closed Meeting of the UWSS Joint Board of Management

Time: 11:58 am into closed session

No. C-UWSS Inc -01-24

Moved by: Director Schmoranz

Seconded by: Director Tofflemire

That the That the UWSS Inc. Board of Directors move into a Special Closed Meeting, pursuant to the Municipal Act Section 239 (2)(f)(j) for the following reason:

Matters for Consideration:

Legal discussion Under Municipal Act Sections 239 (2)(f)(j) wherein UWSS Inc.'s solicitor will provide (f) advice subject to solicitor-client privilege, including communications necessary for that purpose (j) a trade secret or scientific, technical, commercial or financial information that belongs to the municipality or local board and has monetary value or potential monetary.

- Existing Long-Term Debt for the Union Water Supply System
- New Financing for Union Water Supply System

Disclosures of Pecuniary Interest and General Nature Thereof

There was none.

Minutes of Union Water Supply System Incorporated

Date: February 21, 2024

Page 10

The CEO provides the members with a verbal update on the financing that UWSS Inc. will be undertaking soon. Legal counsel provides his opinions on the matter and notes that the terms are favourable for UWSS Inc. and sees no concerns.

The CEO provides the members with a verbal update on the long-term financial obligation of UWSS Inc. to Sun Life Assurance Co. He briefly describes how this item came to be, notes that he has spoken with Sun Life Assurance Co. representatives, and they are willing to allow UWSS Inc. to pay off this debt several years earlier than anticipated.

Adjournment of Special Closed Meeting

No. C-UWSS Inc.-02-24

Moved by: Director Tofflemire

Seconded by: Director Verbeke

That the UWSS Inc. Board of Directors moves out of closed session.

Report on Closed Session

UWSS Inc. Board of Directors entered closed session under the Municipal Act section 239 subsection 2, and parts (f) and (J) for the purposes of advice under solicitor-client privilege, and regarding financial information. The CEO of UWSS Inc. received directions from the Directors of the Board in reference to the existing Long-Term Debt and New Capital Financing for UWSS Inc. The CEO was directed to work with the legal counsel and the financial institutions involved and report back to the Board at the next meeting. The following motions were a result of closed session.

No. UWSS-12-24

Moved by: Director Rogers

Seconded by: Director St. Amant

That the CEO is directed to proceed with capital funding through a local financial institution, with terms discussed in closed session. The UWSS Inc. legal counsel will review the terms and conditions.

Carried

No. UWSS-13-24

Moved by: Director Kissner

Seconded by: Director Schmoranz

The UWSS Inc. CEO is directed to work with the Sun Life Assurance Co to proceed to pay off the outstanding debt. He is also directed to review the terms and conditions with legal counsel.

Carried

New Business:

There was none.

Comments, Announcements, and Other Business

The Chair and CEO suggest that the March meeting for the UWSS Inc. Board of Directors is cancelled.

No. UWSS-14-24

Moved by: Director DeYong

Seconded by: Director Rogers

That the March 2024 UWSS Inc. Board of Directors meeting is cancelled.

Carried

Adjournment:

No. UWSS-15-24

Moved by: Director Atkinson

Seconded by: Director Verbeke

Time adjourned: 12:21 pm

Date of Next Meeting: April 17th, 2024, Kingsville Arena - 9:00 am - 2pm, with Standard of Care training to follow, lunch provided.

/kmj

To: UWSS Inc. Board of Directors
From: Rodney Bouchard, UWSS Inc. CEO
Date: April 11, 2024
Re: Status Update of UWSS Operations & Maintenance
Activities and Capital Works from February 21 to April 11, 2024



Purpose:

To inform the UWSS Inc. Board of Directors about operational and maintenance activities and capital works projects for the Union Water Supply System since the last Board meeting on February 21, 2024.

Discussion:

UWSS management conducts regular meetings with OCWA Operations staff regarding on-going operations and maintenance programs for the UWSS facilities. The following provides an update on UWSS operations, regular maintenance and major maintenance and Capital Works at UWSS facilities:

1. On February 22, 2024 maintenance staff upgraded the level transmitter on Filter #5 with a new instrument that provides more accurate readings.
2. The 5-year reservoir inspections were completed by Watech Services Inc. for Cottam Booster Reservoir, Union Water Treatment Plant Reservoir #1 and Essex Water Tower. Leaks were noted in Cottam Booster Reservoir and some maintenance requirements noted for water treatment plant reservoir #1. Inspection reports have been with recommendations for repair. Significant patching repairs have been identified for Cell #2 in Cottam Booster reservoir. UWSS management is working with OCWA to establish a budget for the repairs. A report will be brought to the UWSS Board at the May 2024 Board meeting.
3. On March 11, 2024, OCWA maintenance staff turned on the sodium hypochlorite system at the Low Lift pumping plant that is used for zebra/quagga mussel control at the drinking water intakes. The system will remain in operation until late fall when Lake Erie water temperatures are too cold for mussel propagation.
4. The new Quench Buggy delivered to the Ruthven Water Treatment Plant on March 12, 2024. The unit is expected to be licensed by the end of April 2024 and will be available for use at various events in the municipalities of Leamington, Kingsville, Essex, and Lakeshore.
5. Clarifier #4 was returned to service on March 14th, 2024 to accommodate higher water demand in the UWSS drinking water system. Clarifier #4 had been taken out of service on February 12, drained and cleaned to allow Napier Reid and

Re: UWSS/09/24 - Status Update of UWSS Operations & Maintenance Activities and Capital Works from February 21 to April 11, 2024.

- their subconsultant to complete a 3D scan of the clarifier to help with the design of the DAF#2 unit that will be retrofitted in Clarifier #4.
6. On March 18th, 2024, OCWA maintenance staff installed a flow meter on the Cottam Booster Station reservoir fill pipe. This will help plant operators with issues they've been having with ensuring that the reservoir is full each morning.
 7. The final annual inspection report by the Ministry of Environment, Conservation and Parks (MECP) for the Union Water Supply System was received on March 20, 2024. The UWSS was given a final inspection rating of 98.15% for this inspection.
 8. During the week of March 18th, a contractor was on-site at the Low Lift pumping plant for the installation of new travelling screen #4. Evoqua Water Technologies designed and constructed the travelling screen. The new travelling screen was put into service on March 25th, 2024.
 9. Eaton Canada was on-site on March 20th, 2024 to complete the annual maintenance on the transformers for the treatment plant.
 10. Lekter Industrial Services was on-site on March 21st, 2024 to replace an existing rooftop HVAC system with a new Trane unit. The old unit was 30years old and was inefficient and unreliable.
 11. On March 30th, 2024, the on-duty operator noted that a scraper arm for DAF #1 was "catching" when going over some of the scum troughs. The issue became more noticeable over the next week and maintenance staff contacted the DAF design engineer, Napier-Reid, for advice. Napier-Reid staff were on site on April 9th to observe the issue and made recommendations on repairs/adjustments. OCWA maintenance staff initiated the repairs on April 11th.
 12. On April 8th, 2024, Town of Kingsville water distribution staff informed UWSS operations of a watermain break on the 300mm watermain at Upcott Side Road and County Rd. 34. The break was suspected when County of Essex road operations staff noted that part of the shoulder of County Rd 34 was eroding away and called it in to the Town of Kingsville water distribution staff. Repairs were completed the same day by Town of Kingsville staff and retained contractors.
 13. The Request for Proposal (RFP) for Construction Manager Advisor and Construction Manager at Risk (CMA/CMAR) for the Reservoir #3 and UV Disinfection Process was posted on MERX on February 2nd, 2024 and closed on March 15, 2024. Associated Engineering was retained to manage the RFP Process.

The RFP process was issued using a "two-envelope" process; one for the technical proposal and one for the pricing. Three proposals were received. On

Re: UWSS/09/24 - Status Update of UWSS Operations & Maintenance Activities and Capital Works from February 21 to April 11, 2024.

- March 26th, 2024 UWSS and staff completed a review workshop to review received proposals. Additional evaluation of proposals is still being completed as of the date of this report to ensure fairness with award of proposal. It is expected that the AE proposal review team will issue a recommendation of award the week of April 15th.
14. The UWSS Municipal Class Environmental Assessment Study (EAS) for increased treatment plant capacity for the Union Water Supply System is moving forward. The project consultant, Associated Engineering issued the Draft EAS report on January 29th, 2024 for review by UWSS staff. This report incorporates comments received during first public consultation period, identifies options to increase treatment plant capacity at Union Water and identifies a preferred alternative for treatment capacity expansion. The second public open house was held from 5-7pm on March 7th, 2023 at the Kingsville Recreation Complex to solicit public input on the preferred alternative for the treatment plant expansion. The public comment period for the Draft EAS report closed on April 8th. As of the date of this report, AE is awaiting final comments from Caldwell First Nation to complete the final EAS report so that it can be issued for the final 30-day comment period.
 15. The consulting team of CIMA+ (formerly C3 Water) and Stantec Consulting is making forward progress with the study for an emergency water supply sharing solution between UWSS and Windsor Utilities Commission (WUC). CIMA issued draft TM3: Central Reservoir Water Quality Considerations on March 11, 2024 for review by UWSS and ENWIN/WUC. A review workshop was held on March 27, 2024 to address comments on TM3 and to discuss next steps for this project. A report on next steps will be presented to UWSS Inc. Board of Directors at the May 15, 2024 Board meeting.
 16. CIMA+ is making forward progress on the design and engineering for the UWSS meter chamber rehabilitation project. Four initial chambers are included in the "pilot" project and serve as setting the engineering/design/construction standard for all 15 meter chambers. A 30% design review workshop is scheduled for April 15th, 2024. The engineer has noted some structural concerns with chamber #2, which is located at the intersection of County Rd. 34 and Albuna Town Line. Detailed structural inspection of this chamber is scheduled to be completed to address these concerns.
 17. UWSS has retained Deloitte to complete a review of UWSS contracted Operations and Maintenance services. The review was launched on March 15th, 2024 with a data/information sharing session between UWSS and Deloitte. The review kickoff meeting with Deloitte team and UWSS/OCWA leadership was held on March 26th, 2024. Stakeholder interviews were held on April 2nd with UWSS administration and on April 3rd with OCWA senior management. Stakeholder interviews with various municipalities and utilities are scheduled to start during the week of April 15th. To date, 6 municipalities/utilities have agreed to participate in stakeholder interviews. UWSS management is working to secure at least 4 more municipalities/utilities for interview purposes. This initial

Re: UWSS/09/24 - Status Update of UWSS Operations & Maintenance Activities and Capital Works from February 21 to April 11, 2024.

phase of the review will result in an assessment report that will be issued before the end of May 2024.

The first chart shows comparative flows for 2020 through 2024 in Mega Litres (ML) and the second chart shows Millions of Imperial Gallons (MIG) for the period January 1st to April 11th, 2024.

	2020	2021	2022	2023	2024
Flow to Date (ML)	3,807.30	4,528.70	4,288.17	4,664.43	5,604.34
Max Day (ML)	55.87	63.27	56.90	68.67	72.61
Min Day (ML)	25.44	26.74	27.58	32.48	33.68
Average Day (ML)	37.33	44.84	42.46	46.18	54.94
No of Days	102	101	101	101	102

	2020	2021	2022	2023	2024
Flow to Date (MG)	837.51	996.20	944.07	1026.05	1232.80
Max Day (MGD)	12.29	13.92	12.52	15.10	15.97
Min Day (MGD)	5.60	5.88	6.07	7.14	7.41
Average Day (MGD)	8.21	9.86	9.35	10.16	12.09
No of Days	102	101	101	101	102

Flows to date are up 939.91 ML (206.75 MIG) or 20.2% from last year. The 2024 flows to date are up 29.66% over the previous 4 year average.

Recommendation:

That this report be received by the UWSS Board for information purposes.

Respectfully submitted,



Rodney Bouchard, CEO
Union Water Supply System Inc.

/kmj

To: UWSS Inc. Board of Directors
From: Rodney Bouchard, UWSS Inc. CEO
Date: April 11, 2024
Re: MECP Drinking Water Inspection Report for the UWSS January 2024 Inspection



RECOMMENDATION

That the Union Water Supply System Inc. (UWSS Inc.) Board of Directors receives this report for information.

BACKGROUND

The UWSS is subject to annual inspections by the Ontario Ministry of Environment, Conservation and Parks (MECP) under the Safe Drinking Water Act, 2002 (SDWA) and its associated regulations.

The MECP inspection for UWSS was initiated on December 21, 2023 and completed on March 18, 2024. The on-site portion of the inspection was completed on January 23, 2024. The final report for the inspection was issued by the MECP on March 20, 2024.

DISCUSSION:

MECP inspection reports are written to identify actions that need to be taken due to non-compliance with regulations. The March 20, 2024 inspection report includes a section on page 3 titled ***Non-Compliance***. The following non-compliance item and corrective action was identified for the UWSS drinking water system during the inspection:

The process wastewater discharge monitoring program and discharge quality did not comply with requirements established in the Municipal Drinking Water Licence issued under Part V of the SDWA.

The MDWL limits the annual average for Total Residual Chlorine to 0.02 mg/l. The annual average Total Chlorine Residual for the 2023 operating year was 0.12 mg/L.

The owner has retained Associated Engineering Ltd. to design a system to address the ongoing limit exceedance. There are no further actions required at this time.

As a result of the non-compliance, the UWSS received an inspection rating of 98.15% out of 100%.

April 11, 2024 - UWSS/10/24

Re: MECP Drinking Water Inspection Report for the UWSS January 2024 Inspection

This non-compliance item is associated with effluent from the residuals settling ponds. Weekly grab samples are collected from the residuals settling ponds effluent for analysis of chlorine residuals. As noted on page 3 of the Inspection Report, the average annual pond effluent chlorine residual for 2023 was 0.12mg/L which exceeds the annual average concentration limit of 0.02 mg/L as noted in Table 3, Schedule C of the UWSS' Municipal Drinking Water License. The MECP had been notified of this non-compliance.

An on-line chlorine residual analyzer and temporary dechlorinating system was installed with hopes that it would address the on-going non-compliance. However, it was noted by OCWA operations staff that grab sample results collected in 2023 showed on-going exceedance. Based on this information, UWSS management retained Associated Engineering to design a de-chlorination system with intent to address the issue.

As required by the regulations under the SDWA, the municipal water systems which receive drinking water from the UWSS have been provided with copies of the inspection report for the January 2024 UWSS Inspection. Further, the inspection has been posted on the UWSS website www.unionwater.ca.

CONCLUSION

This report is being provided to the Board for information purposes.

Respectfully submitted,



Rodney Bouchard, CEO
Union Water Supply System Inc.

rb/kmj

Ministry of the Environment,
Conservation and Parks
1094 London Road
Sarnia, ON N7S 1P1
Tel.: 519 336-4030
Fax: 519 336-4280

Ministère de l'Environnement, de la
Protection de la nature et des Parcs
1094 chemin London
Sarnia, ON N7S 1P1
Tél.: 519 336-4030
Télééc.: 519 336-4280



File: SI-ES-KI-540
Union Area Water Supply System

March 20, 2024

Union Area Water Supply System
1615 Union Avenue
Ruthven, ON
N0P 2G0

Attention: Mr. Rodney Bouchard, Manager
rbouchard@unionwater.ca

Re: **January 2024 Inspection – Union Area Water Supply System**

Enclosed is a copy of the inspection report prepared for the Union Area Water Supply System. The report is based on conditions encountered at the time of inspection and subsequent follow-up.

There were no compliance issues identified during the inspection. Please review the report for detailed inspection findings. If you have any questions, please contact me at (519) 466-0281.

Regards,

A handwritten signature in black ink, appearing to read "David Dominelli".

David Dominelli
Water Compliance Officer
Sarnia/Windsor District
Ministry of the Environment,
Conservation, and Parks



UNION AREA WATER SUPPLY SYSTEM
Physical Address: 1615 UNION AVE, , KINGSVILLE,
ON N9Y 2G5

INSPECTION REPORT

Entity: ONTARIO CLEAN WATER
AGENCY
UNION WATER SYSTEM JOINT
BOARD OF MANAGEMENT
(LEAMINGTON, KINGSVILLE,
ESSEX, LAKESHORE)

Inspection Start Date: December 21, 2023
Inspection End Date: March 18, 2024
Inspected By: David Dominelli
Badge #: 1119
Inspected By: Marc Bechard
Badge #: 918



(signature)

NON-COMPLIANCE

The following item(s) have been identified as non-compliance, based on a "No" response captured for a legislative question(s). For additional information on each question see the Inspection Details section of the report.

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

Item	Question	Compliance Response/Corrective Action(s)
NC-1	<p>Question ID: DWMR1044000</p> <p>Does the process wastewater discharge monitoring program and discharge quality comply with requirements established in the MDWL issued under Part V of the SDWA?</p>	<p>The process wastewater discharge monitoring program and discharge quality did not comply with requirements established in the Municipal Drinking Water Licence issued under Part V of the SDWA.</p> <p>The MDWL limits the annual average for Total Residual Chlorine to 0.02 mg/l. The annual average Total Chlorine Residual for the 2023 operating year was 0.12 mg/L.</p> <p>The owner has retained Associated Engineering Ltd. to design a system to address the ongoing limit exceedance. There are no further actions required at this time.</p>

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	DWMR1001000	Question Type	Information
<p>Legislative Requirement(s): Not Applicable</p>			
<p>Question: What was the scope of this inspection?</p>			
<p>Compliance Response(s)/Corrective Action(s)/Observation(s): The primary focus of this inspection is to confirm compliance with Ministry of the Environment, Conservation and Parks (MECP) legislation as well as evaluating conformance with ministry drinking water policies and guidelines during the inspection period. The ministry utilizes a comprehensive, multi-barrier approach in the inspection of water systems that focuses on the source, treatment, and distribution components as well as management practices.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.Reg. 170/03.</p> <p>The inspection consisted of a review of the following documents:</p> <ul style="list-style-type: none"> - Municipal Drinking Water Licence (MDWL): 041-101, Issue Number: 8; - Drinking Water Works Permit (DWWP): 041-201, Issue Number: 6; - Union Area Water Supply System operating and maintenance procedures; - Operational logs, sample results, maintenance records, monitoring data, and other records related to the operation of the DWS for the period of January 1, 2023 to December 31, 2023. 			

The physical inspection of the DWS was conducted on January 23, 2024.

Question ID	DWMR1000000	Question Type	Information
Legislative Requirement(s): Not Applicable			
Question: Does this drinking water system provide primary disinfection?			
Compliance Response(s)/Corrective Action(s)/Observation(s): This drinking water system provides for both primary and secondary disinfection and distribution of water.			

Question ID	DWMR1010000	Question Type	BMP
Legislative Requirement(s): Not Applicable			
Question: Are trends in source water quality being monitored?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Trends in source water quality were being monitored.			

Question ID	DWMR1012000	Question Type	Legislative
Legislative Requirement(s): SDWA 31 (1);			
Question: Does the owner have a harmful algal bloom monitoring plan in place that meets the requirements of the MDWL?			
Compliance Response(s)/Corrective Action(s)/Observation(s): The owner had a harmful algal bloom monitoring plan in place.			

Question ID	DWMR1014000	Question Type	Legislative
Legislative Requirement(s): SDWA 31 (1);			
Question: Is there sufficient monitoring of flow as required by the MDWL or DWWP issued under Part V of the SDWA?			

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

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.

Condition 2.1.1 under Schedule C of the MDWL requires that continuous flow measurement and recording be undertaken to monitor the flow rate and daily volume of treated water from the treatment works to the distribution system.

Condition 2.1.2 under Schedule C of the MDWL requires that continuous flow measurement and recording be undertaken to monitor the flow rate and daily volume of water that flows into the treatment works.

Flow meters are in place to monitor raw water flow into the treatment works and treated water flow at POE to the distribution system.

Question ID	DWMR1015000	Question Type	Legislative
Legislative Requirement(s): SDWA 31 (1);			
Question: Are the flow measuring devices calibrated or verified in accordance with the requirements of the MDWL issued under Part V of the SDWA?			
Compliance Response(s)/Corrective Action(s)/Observation(s): The flow measuring devices were calibrated or verified in accordance with the requirements of the MDWL issued under Part V of the SWDA.			

Question ID	DWMR1016000	Question Type	Legislative
Legislative Requirement(s): SDWA 31 (1);			
Question: Is the owner in compliance with the conditions associated with maximum flow rate or the rated capacity conditions in the MDWL issued under Part V of the SDWA?			
Compliance Response(s)/Corrective Action(s)/Observation(s): 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. Condition 1.1 under Schedule C of the MDWL limits the volume of treated water from the Union Area Water Supply System to the distribution system to a maximum of 124,588 m3/day. A review of flow monitoring data provided by the operating authority confirmed that the above rated capacity was not exceeded over the inspection review period. The maximum recorded daily volume from the treatment plant to the distribution system was 108,676 m3 in June, which is approximately 87% of the rated capacity of the works.			

Question ID	DWMR1017000	Question Type	Legislative
Legislative Requirement(s): SDWA 31 (1);			
Question: Were appropriate records of flows and any capacity exceedances made in accordance with the MDWL issued under Part V of the SDWA?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Appropriate records of flows and any capacity exceedances were made in accordance with the Municipal Drinking Water Licence issued under Part V of the SDWA.			

Question ID	DWMR1013000	Question Type	Legislative
Legislative Requirement(s): OWRA 34 (3);			
Question: Is the owner in compliance with all conditions of the PTTW?			
Compliance Response(s)/Corrective Action(s)/Observation(s): The owner was in compliance with all conditions of the PTTW.			

Question ID	DWMR1018000	Question Type	Legislative
Legislative Requirement(s): SDWA 31 (1);			
Question: Has the owner ensured that all equipment is 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 had ensured that all equipment was installed in accordance with Schedule A and Schedule C of the Drinking Water Works Permit.			

Question ID	DWMR1029000	Question Type	BMP
Legislative Requirement(s): Not Applicable			
Question: Where a potential bypass of primary or secondary treatment equipment exists, have measures been taken to ensure that raw or partially treated water is not directed to the			

distribution system?
<p>Compliance Response(s)/Corrective Action(s)/Observation(s): Where a potential bypass of primary or secondary treatment equipment existed, measures were taken to ensure that raw or partially treated water was not directed to the distribution system.</p>

Question ID	DWMR1021000	Question Type	Legislative
Legislative Requirement(s): SDWA 31 (1);			
Question: Is the owner/operating authority able to demonstrate that, when required during the inspection period, Form 2 documents were prepared in accordance with their Drinking Water Works Permit?			
Compliance Response(s)/Corrective Action(s)/Observation(s): 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.			

Question ID	DWMR1114000	Question Type	Legislative
Legislative Requirement(s): SDWA 31 (1);			
Question: Does the owner have evidence that, when required, all legal owners associated with the DWS were notified of the requirements of the Licence & Permit?			
Compliance Response(s)/Corrective Action(s)/Observation(s): The owner had evidence that required notifications to all legal owners associated with the Drinking Water System had been made during the inspection period.			

Question ID	DWMR1028000	Question Type	Legislative
Legislative Requirement(s): SDWA 31 (1);			
Question: Are up-to-date plans for the drinking water system kept in place, or made available in such a manner, that they may be readily viewed by all persons responsible for all or part of the operation of the drinking water system in accordance with the DWWP and MDWL issued under Part V of the SDWA?			

Compliance Response(s)/Corrective Action(s)/Observation(s):
Up-to-date plans for the drinking water system were kept in a place, or made available in such a manner, that they could be readily viewed by all persons responsible for all or part of the operation of the drinking water system in accordance with the DWWP and MDWL issued under Part V of the SDWA.

Question ID	DWMR1025000	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 (added, modified, replaced or extended) 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 in accordance with a procedure listed in Schedule B of the Drinking Water Works Permit.			

Question ID	DWMR1023000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 1-2 (2);			
Question: Do records indicate that the treatment equipment was operated in a manner that achieved the design capabilities required under Ontario Regulation 170/03 or a DWWP and/or MDWL issued under Part V of the SDWA at all times that water was being supplied to consumers?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Records indicated that the treatment equipment was operated in a manner that achieved the design capabilities required under O. Reg. 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.			

Question ID	DWMR1027000	Question Type	Legislative
Legislative Requirement(s): SDWA 31 (1);			
Question: Does the owner have evidence indicating that all chemicals and materials which come in contact with water within the drinking water system have met all applicable AWWA and ANSI standards in accordance with the DWWP and MDWL issued under Part V of the SDWA?			

Compliance Response(s)/Corrective Action(s)/Observation(s):
The owner had evidence indicating that all chemicals and materials that come in contact with water within the drinking water system met the AWWA and ANSI standards in accordance with the Municipal Drinking Water Licence and Drinking Water Works Permit issued under Part V of the SDWA.

Question ID	DWMR1024000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 1-2 (2);			
Question: Do records confirm that the water treatment equipment which provides chlorination or chloramination for secondary disinfection purposes 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 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.			

Question ID	DWMR1036000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 6-7 (1);			
Question: Where continuous monitoring equipment is not used for chlorine residual analysis, are samples tested using an acceptable portable device?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Samples for chlorine residual analysis were tested using an acceptable portable device.			

Question ID	DWMR1030000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 7-2 (1); SDWA O. Reg. 170/03 7-2 (2);			
Question: Is primary disinfection chlorine monitoring being conducted at a location approved by MDWL and/or DWWP issued under Part V of the SDWA, or at/near a location where the intended CT has just been achieved?			

Compliance Response(s)/Corrective Action(s)/Observation(s):
 Primary disinfection chlorine monitoring was conducted at a location approved by Municipal Drinking 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.

Question ID	DWMR1031000	Question Type	BMP
Legislative Requirement(s): Not Applicable			
Question: Are operators aware of the operational criteria necessary to achieve primary disinfection within the drinking water system?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Operators were aware of the operational criteria necessary to achieve primary disinfection within the drinking water system.			

Question ID	DWMR1032000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 7-3 (2);			
Question: If the drinking water system obtains water from a surface water source and provides filtration, is continuous monitoring of each filter effluent line being performed for turbidity?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Continuous monitoring of each filter effluent line was being performed for turbidity.			

Question ID	DWMR1035000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 6-5 (1)1-4; SDWA O. Reg. 170/03 6-5 (1)5-10;			
Question: Are operators examining continuous monitoring test results and are they examining the results within 72 hours of the test?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Operators were examining continuous monitoring test results and they were examining the results within 72 hours of the test.			

Question ID	DWMR1038000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 6-5 (1)1-4;			
Question: Is continuous monitoring equipment that is being utilized to fulfill O. Reg. 170/03 requirements 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?			
Compliance Response(s)/Corrective Action(s)/Observation(s): 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.			

Question ID	DWMR1037000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 6-5 (1)1-4; SDWA O. Reg. 170/03 6-5 (1)5-10; SDWA O. Reg. 170/03 6-5 (1.1);			
Question: Are all continuous monitoring equipment utilized for sampling and testing required by O. Reg. 170/03, or MDWL or DWWP or order, equipped with alarms or shut-off mechanisms that satisfy the standards described in Schedule 6?			
Compliance Response(s)/Corrective Action(s)/Observation(s): 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.			

Question ID	DWMR1040000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 6-5 (1)1-4; SDWA O. Reg. 170/03 6-5 (1)5-10;			
Question: Are all continuous analysers calibrated, maintained, and operated, in accordance with the manufacturer's instructions or the regulation?			
Compliance Response(s)/Corrective Action(s)/Observation(s): All continuous analysers were calibrated, maintained, and operated, in accordance with the manufacturer's instructions or the regulation.			

Question ID	DWMR1108000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 6-5 (1)1-4; SDWA O. Reg. 170/03 6-5 (1)5-10; SDWA O. Reg. 170/03 6-5 (1.1);			
Question: Where continuous monitoring equipment used for the monitoring of free chlorine residual, total chlorine residual, combined chlorine residual or turbidity, required by O. Reg. 170/03, an Order, MDWL, or DWWP issued under Part V, SDWA, has triggered an alarm or an automatic shut-off, did a qualified person respond in a timely manner and take appropriate actions?			
Compliance Response(s)/Corrective Action(s)/Observation(s): 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.			

Question ID	DWMR1099000	Question Type	Information
Legislative Requirement(s): Not Applicable			
Question: Do records show 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)?			
Compliance Response(s)/Corrective Action(s)/Observation(s): 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).			

Question ID	DWMR1079000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 10-4 (1); SDWA O. Reg. 170/03 10-4 (2); SDWA O. Reg. 170/03 10-4 (3);			
Question: For LMR systems, are all microbiological water quality monitoring requirements for raw water samples prescribed by legislation being met?			
Compliance Response(s)/Corrective Action(s)/Observation(s): All microbiological water quality monitoring requirements prescribed by legislation for raw water samples were being met. Schedule 10-4. of O. Reg 170/03 requires that the owner of a drinking water system and the			

operating authority ensures that a water sample is collected at least once per week from the drinking water systems raw water supply and tested for E. Coli and total coliforms.

A review of sampling records for the inspection review period showed the owner and operating authority are meeting the raw water microbiological sampling requirements.

Question ID	DWMR1083000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 10-3;			
Question: For LMR systems, are all microbiological water quality monitoring requirements for treated samples being met?			
Compliance Response(s)/Corrective Action(s)/Observation(s): All microbiological water quality monitoring requirements prescribed by legislation for treated samples were being met. Schedule 10-3. of O. Reg 170/03 requires that the owner of a drinking water system and the operating authority ensures that a treated water sample is collected at least once per week and tested for E. Coli, total coliforms, and general bacteria as a heterotrophic plate count. A review of sampling records for the inspection review period showed the owner and operating authority are meeting the treated water microbiological sampling requirements.			

Question ID	DWMR1096000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 6-3 (1);			
Question: Do records confirm that chlorine residual tests are being conducted at the same time and at the same location that microbiological samples are obtained?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Records confirmed that chlorine residual tests were being conducted at the same time and at the same location that microbiological samples were obtained.			

Question ID	DWMR1084000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 13-2;			
Question: Are all inorganic water quality monitoring requirements prescribed by legislation conducted within the required frequency?			

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

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

Schedule 13-2. of O. Reg 170/03 requires that the owner and the operating authority of a drinking water system that has a surface water raw water supply collect at least one sample every 12 months and test for the inorganic parameters listed in Schedule 23 of the regulation.

A review of sampling records confirmed that the required samples are being collected and tested for the required inorganic parameters.

Sampling and testing was last completed in January of 2023.

Question ID	DWMR1085000	Question Type	Legislative
--------------------	-------------	----------------------	-------------

Legislative Requirement(s):

SDWA | O. Reg. 170/03 | 13-4 | (1); SDWA | O. Reg. 170/03 | 13-4 | (2); SDWA | O. Reg. 170/03 | 13-4 | (3);

Question:

Are all organic water quality monitoring requirements prescribed by legislation conducted within the required frequency?

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

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

Schedule 13-4. of O. Reg 170/03 requires that the owner and the operating authority of a drinking water system that has a surface water raw water supply collect at least one sample every 12 months and test for the organic parameters listed in Schedule 24 of the regulation.

A review of sampling records confirmed that the required samples are being collected and tested for the required organic parameters.

Sampling and testing was last completed in January of 2023.

Question ID	DWMR1088000	Question Type	Legislative
--------------------	-------------	----------------------	-------------

Legislative Requirement(s):

SDWA | O. Reg. 170/03 | 13-7;

Question:

Are all nitrate/nitrite water quality monitoring requirements prescribed by legislation conducted within the required frequency for the DWS?

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

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

Schedule 13-7. requires that the owner and the operating authority of a drinking water system

collect at least one water sample every three months and test for nitrate and nitrite.

A review of sampling records confirmed that the required sampling is being completed.

Question ID	DWMR1089000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 13-8;			
Question: Are all sodium water quality monitoring requirements prescribed by legislation conducted within the required frequency?			
Compliance Response(s)/Corrective Action(s)/Observation(s): All sodium water quality monitoring requirements prescribed by legislation were conducted within the required frequency.			

Question ID	DWMR1090000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 13-9;			
Question: Where fluoridation is not practiced, are all fluoride water quality monitoring requirements prescribed by legislation conducted within the required frequency?			
Compliance Response(s)/Corrective Action(s)/Observation(s): All fluoride water quality monitoring requirements prescribed by legislation were conducted within the required frequency.			

Question ID	DWMR1092000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 6-2;			
Question: Has the owner ensured that water samples are taken at the prescribed location?			
Compliance Response(s)/Corrective Action(s)/Observation(s): The owner ensured that water samples were taken at the prescribed location.			

Question ID	DWMR1094000	Question Type	Legislative
Legislative Requirement(s): SDWA 31 (1);			

<p>Question: Are all water quality monitoring requirements imposed by the MDWL and DWWP being met?</p>
<p>Compliance Response(s)/Corrective Action(s)/Observation(s): All water quality monitoring requirements imposed by the MDWL or DWWP issued under Part V of the SDWA were being met.</p>

Question ID	DWMR1098000	Question Type	Legislative
<p>Legislative Requirement(s): SDWA O. Reg. 170/03 13 (1); SDWA O. Reg. 170/03 13 (2); SDWA O. Reg. 170/03 13 (3);</p>			
<p>Question: Has the owner indicated that the required records are kept and will be kept for the required time period?</p>			
<p>Compliance Response(s)/Corrective Action(s)/Observation(s): The owner indicated that the required records are kept and will be kept for the required time period.</p>			

Question ID	DWMR1110000	Question Type	Legislative
<p>Legislative Requirement(s): SDWA O. Reg. 170/03 11 (6);</p>			
<p>Question: Was an Annual Report containing the required information prepared by February 28 of the following year?</p>			
<p>Compliance Response(s)/Corrective Action(s)/Observation(s): The Annual Report containing the required information was prepared by February 28th of the following year.</p>			

Question ID	DWMR1057000	Question Type	Legislative
<p>Legislative Requirement(s): SDWA O. Reg. 170/03 11 (2.1);</p>			
<p>Question: Has the owner of this system provided an Annual Report to the owner(s) of all standalone distribution systems connected to this system?</p>			
<p>Compliance Response(s)/Corrective Action(s)/Observation(s): The donor had provided an Annual Report to the receiver stand alone distribution system(s) connected to this system.</p>			

--

Question ID	DWMR1111000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 22-2 (1); SDWA O. Reg. 170/03 22-2 (2); SDWA O. Reg. 170/03 22-2 (3); SDWA O. Reg. 170/03 22-2 (4);			
Question: Have Summary Reports for municipal council been completed on time, include the required content, and distributed in accordance with the regulatory requirements?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Summary Reports for municipal council were completed on time, included the required content, and were distributed in accordance with the regulatory requirements.			

Question ID	DWMR1043000	Question Type	Legislative
Legislative Requirement(s): SDWA 31 (1);			
Question: Are the process wastewater and residual solids/sludges being treated, handled and disposed of in accordance with the design requirements approved under the Drinking Water Works Permit and the Municipal Drinking Water Licence?			
Compliance Response(s)/Corrective Action(s)/Observation(s): The process wastewater and residual solids/sludges were treated, handled and disposed of in accordance with the design requirements approved under the Drinking Water Works Permit and the Municipal Drinking Water Licence.			

Question ID	DWMR1044000	Question Type	Legislative
Legislative Requirement(s): SDWA 31 (1);			
Question: Does the process wastewater discharge monitoring program and discharge quality comply with requirements established in the MDWL issued under Part V of the SDWA?			
Compliance Response(s)/Corrective Action(s)/Observation(s): The process wastewater discharge monitoring program and discharge quality did not comply with requirements established in the Municipal Drinking Water Licence issued under Part V of the SDWA. The MDWL limits the annual average for Total Residual Chlorine to 0.02 mg/l. The annual average Total Chlorine Residual for the 2023 operating year was 0.12 mg/L.			

The owner has retained Associated Engineering Ltd. to design a system to address the ongoing limit exceedance. There are no further actions required at this time.

The MDWL limits the annual average for Total Residual Chlorine to 0.02 mg/l. The annual average Total Chlorine Residual for the 2023 operating year was 0.12 mg/L.

The owner has retained Associated Engineering Ltd. to design a system to address the ongoing limit exceedance.

There are no further actions required at this time.

Question ID	DWMR1045000	Question Type	Legislative
Legislative Requirement(s): SDWA 31 (1);			
Question: Has the owner updated the document describing the distribution components within 12 months of completion of alterations to the system?			
Compliance Response(s)/Corrective Action(s)/Observation(s): The owner had up-to-date documents describing the distribution components as required.			

Question ID	DWMR1053000	Question Type	BMP
Legislative Requirement(s): Not Applicable			
Question: Is the Owner able to maintain proper pressures in the distribution system and is pressure monitored to alert the operator of conditions which may lead to loss of pressure below the value under which the system is designed to operate?			
Compliance Response(s)/Corrective Action(s)/Observation(s): The owner was able to maintain proper pressures in the distribution system and pressure was monitored to alert the operator of conditions which may lead to loss of pressure below the value under which the system is designed to operate.			

Question ID	DWMR1047000	Question Type	BMP
Legislative Requirement(s): Not Applicable			
Question: Does the owner have a program or maintain a schedule for routine cleanout, inspection and maintenance of reservoirs and elevated storage tanks within the distribution system?			

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

The owner had a program or maintained a schedule for routine cleanout, inspection and maintenance of reservoirs and elevated storage tanks within the distribution system.

Question ID	DWMR1058000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 128/04 28;			
Question: Do operators and maintenance personnel have ready access to operations and maintenance manuals?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Operators and maintenance personnel had ready access to operations and maintenance manuals.			

Question ID	DWMR1059000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 128/04 28;			
Question: Do the operations and maintenance manuals contain plans, drawings and process descriptions sufficient for the safe and efficient operation of the system?			
Compliance Response(s)/Corrective Action(s)/Observation(s): The operations and maintenance manuals contained plans, drawings and process descriptions sufficient for the safe and efficient operation of the system.			

Question ID	DWMR1060000	Question Type	Legislative
Legislative Requirement(s): SDWA 31 (1);			
Question: Do the operations and maintenance manuals meet the requirements of the DWWP and MDWL issued under Part V of the SDWA?			
Compliance Response(s)/Corrective Action(s)/Observation(s): 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.			

Question ID	DWMR1061000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 128/04 27 (1); SDWA O. Reg. 128/04 27 (2); SDWA O. Reg. 128/04 27 (3); SDWA O. Reg. 128/04 27 (4); SDWA O. Reg. 128/04 27 (5); SDWA O. Reg. 128/04 27 (6); SDWA O. Reg. 128/04 27 (7);			
Question: Are logbooks properly maintained and contain the required information?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Logbooks were properly maintained and contained the required information.			

Question ID	DWMR1062000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 7-5;			
Question: Do records or other record keeping mechanisms confirm that operational testing not performed by continuous monitoring equipment is being done by a certified operator, water quality analyst, or person who meets the requirements of O. Reg. 170/03 7-5?			
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 being done by a certified operator, water quality analyst, or person who suffices the requirements of O. Reg. 170/03 7-5.			

Question ID	DWMR1063000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 6-10 (1);			
Question: For every required operational test and for every required sample, is a record made of the date, time, location, name of the person conducting the test and result of the test?			
Compliance Response(s)/Corrective Action(s)/Observation(s): For every required operational test and every required sample, a record was made of the date, time, location, name of the person conducting the test and result of the test.			

Question ID	DWMR1064000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 128/04 26 (2);			

<p>Question: Did the operator-in-charge ensure that records were maintained of all adjustments made to the processes within his or her responsibility?</p>
<p>Compliance Response(s)/Corrective Action(s)/Observation(s): The operator-in-charge ensured that records were maintained of all adjustments made to the processes within his or her responsibility.</p>

Question ID	DWMR1065000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 128/04 27 (6);			
Question: Are logs and other record keeping mechanisms available for at least five (5) years?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Logs or other record keeping mechanisms were available for at least five (5) years.			

Question ID	DWMR1066000	Question Type	BMP
Legislative Requirement(s): Not Applicable			
Question: Is spill containment provided for process chemicals and standby power generator fuel?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Spill containment was provided for process chemicals and/or standby power generator fuel.			

Question ID	DWMR1067000	Question Type	BMP
Legislative Requirement(s): Not Applicable			
Question: Are clean-up equipment and materials in place for the clean up of spills?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Clean-up equipment and materials were in place for the clean up of spills.			

Question ID	DWMR1068000	Question Type	BMP
Legislative Requirement(s): Not Applicable			
Question: If available, are standby power generators tested under normal load conditions?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Standby power generators were tested under normal load conditions.			

Question ID	DWMR1069000	Question Type	BMP
Legislative Requirement(s): Not Applicable			
Question: Are all storage facilities completely covered and secure?			
Compliance Response(s)/Corrective Action(s)/Observation(s): All storage facilities were completely covered and secure.			

Question ID	DWMR1070000	Question Type	BMP
Legislative Requirement(s): Not Applicable			
Question: Are air vents and overflows associated with reservoirs and elevated storage structures equipped with screens?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Air vents and overflows associated with reservoirs and elevated storage structures were equipped with screens.			

Question ID	DWMR1071000	Question Type	BMP
Legislative Requirement(s): Not Applicable			
Question: Has the owner provided security measures to protect components of the drinking water system?			
Compliance Response(s)/Corrective Action(s)/Observation(s): The owner had provided security measures to protect components of the drinking water			

system.

Question ID	DWMR1073000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 128/04 23 (1);			
Question: Has the overall responsible operator been designated for all subsystems which comprise the drinking water system?			
Compliance Response(s)/Corrective Action(s)/Observation(s): The overall responsible operator had been designated for each subsystem.			

Question ID	DWMR1078000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 128/04 23 (1); SDWA O. Reg. 128/04 23 (2); SDWA O. Reg. 128/04 23 (4); SDWA O. Reg. 128/04 23 (6); SDWA O. Reg. 128/04 23 (7);			
Question: In instances where the overall responsible operator was unable to act, was an adequately certified operator designated to act in place of the overall responsible operator?			
Compliance Response(s)/Corrective Action(s)/Observation(s): An adequately licenced operator was designated to act in place of the overall responsible operator when the overall responsible operator was unable to act.			

Question ID	DWMR1074000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 128/04 25 (1);			
Question: Have operators-in-charge been designated for all subsystems which comprise the drinking water system?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Operators-in-charge had been designated for all subsystems which comprise the drinking water system.			

Question ID	DWMR1075000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 128/04 22;			
Question: Do all operators possess the required certification?			
Compliance Response(s)/Corrective Action(s)/Observation(s): All operators possessed the required certification.			

Question ID	DWMR1076000	Question Type	Legislative
Legislative Requirement(s): SDWA O. Reg. 170/03 1-2 (2);			
Question: Do only certified operators make adjustments to the treatment equipment?			
Compliance Response(s)/Corrective Action(s)/Observation(s): Only certified operators made adjustments to the treatment equipment.			

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
DWS Category: DW Municipal Residential
Type of Inspection: Detailed
Inspection Date: Dec-21-2023
Ministry Office: Windsor Area Office

Maximum Risk Rating: 540

Inspection Module	Non Compliance Risk (X out of Y)
Capacity Assessment	0/42
Certification and Training	0/49
Distribution System	0/8
Effluent Quality and Quantity	10/20
Logbooks	0/30
Operations Manuals	0/42
Reporting & Corrective Actions	0/33
Source	0/12
Treatment Processes	0/213
Water Quality Monitoring	0/91
Overall - Calculated	10/540

Inspection Risk Rating: 1.85%

Final Inspection Rating: 98.15%

DWS Name:	UNION AREA WATER SUPPLY SYSTEM
DWS Number:	210000853
DWS Owner Name:	UNION WATER SYSTEM JOINT BOARD OF MANAGEMENT (LEAMINGTON, KINGSVILLE, ESSEX, LAKESHORE)
Municipal Location:	KINGSVILLE

Regulation:	O.REG. 170/03
DWS Category:	DW Municipal Residential
Type of Inspection:	Detailed
Inspection Date:	Dec-21-2023
Ministry Office:	Windsor Area Office

Non-Compliance Question(s)	Non Compliance Risk
Effluent Quality and Quantity	
Does the process wastewater discharge monitoring program and discharge quality comply with requirements established in the MDWL issued under Part V of the SDWA?	10
Overall - Total	10

Maximum Question Rating: 540

Inspection Risk Rating:	1.85%
--------------------------------	--------------

FINAL INSPECTION RATING:	98.15%
---------------------------------	---------------